KPESED
معیاری تعلیم... سب کیلئے!
Khyber Pakhtunkhwa Elementary & Secondary Education Department

English

اردو

Maths

WORKSHEETS



GRADE 1

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف با معنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوارات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہ نمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو اجاگر بھی کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا۔

گوہر علی خان
ناظمِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

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ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور مطالعے کے تسلسل کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کی توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو بطریقہ احسن سرانجام دینے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دی گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد ، استاد یا پھر نیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہ نمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اورا سکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1. انگلش	انعام اللہ خٹک	0333-9746976
2. ریاضی	عباس خان	0345-9419923
3. جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4. اُردو	تاج ولی خان	0313-9848959

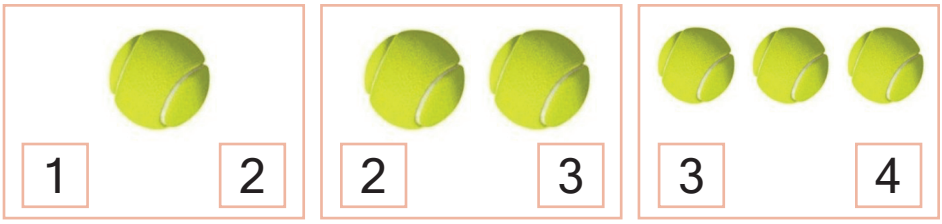
Mathematics

Worksheet
1a
Unit No: 1

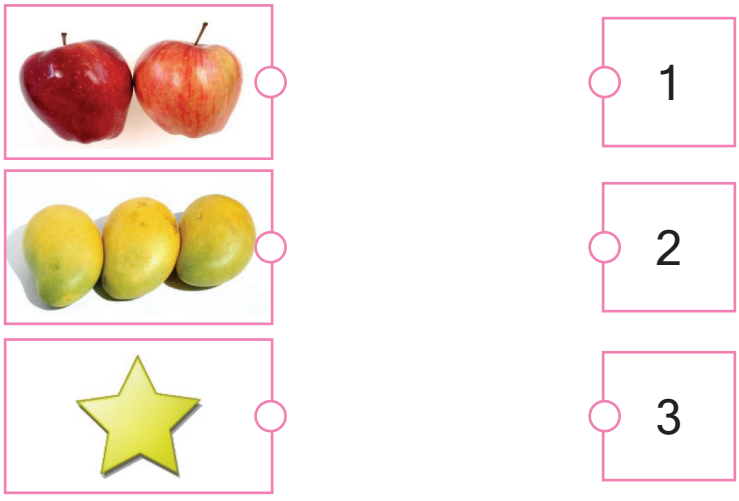
Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identify Numbers 1 – 9.

Instructions: Count the balls and ✓ the numbers below



Instructions: Count the objects and match with numbers



Instructions: Count and tick (✓) the correct numbers below the objects.



Worksheet
1b

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identify Numbers 1 – 9.

Instructions: Count and match the object



4

5

6

Instructions: Count and tick (✓)



4 5 6



4 5 6



4 5 6

Worksheet
1c
Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identify Numbers 1 – 9.

Instructions: Count and match the object







7

8

9

Instructions: Count and tick (✓) the correct number.



7 8 9



7 8 9



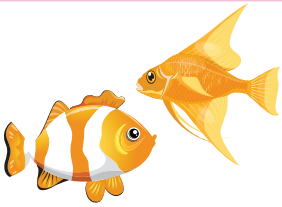
7 8 9

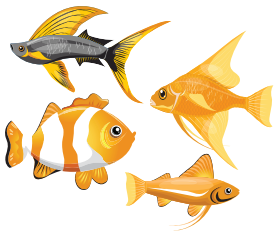
Worksheet
1d
Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identification of numbers 1-9

Instructions: Count the fish and write the numbers below.





Further practice: Solve exercises in your textbook at page No. 16 - 24

Worksheet
2a

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identify 0 as number

Instructions: Count and read below.









Instructions: Write the number of bulbs in each box





Worksheet
2b

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Identify 0 as number

Instructions: Count and Match





0



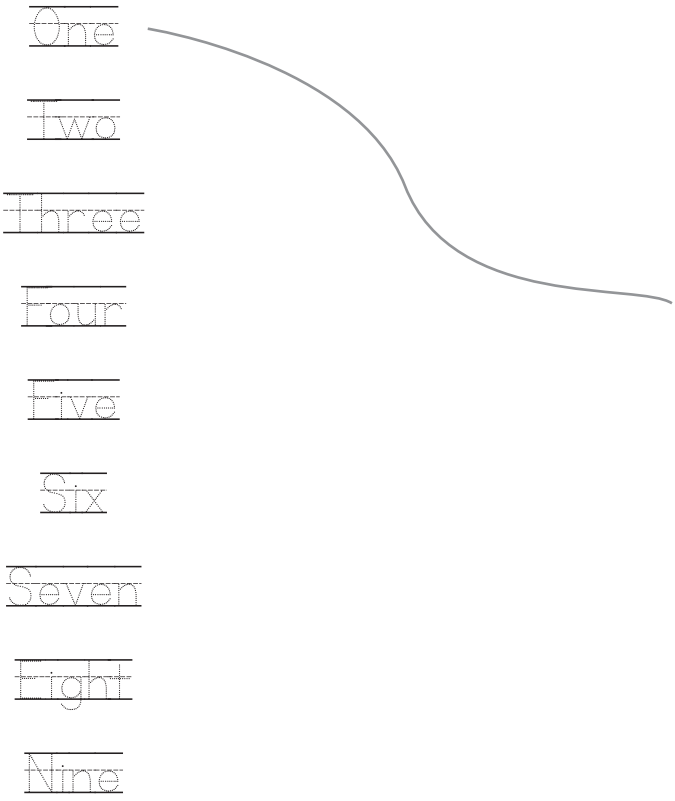
Further practice: Solve exercise in your textbook on page No. 15.

Worksheet 3

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Read numbers up to 9 in numerals and in words

Instructions: Draw a line from the **Word** to the matching **Number** and then trace on the words and numbers.



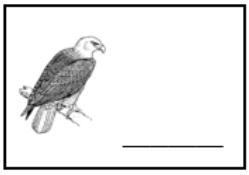
Further practice: Solve exercises in your textbook at page number 26 – 27.

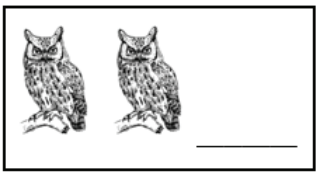
Worksheet
4a
Unit No: 1

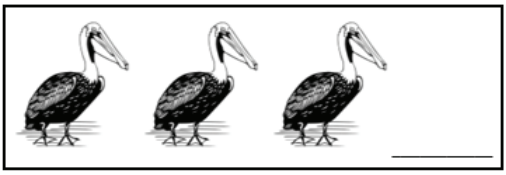
Concept of Whole Numbers
Identification of Numbers 1-9

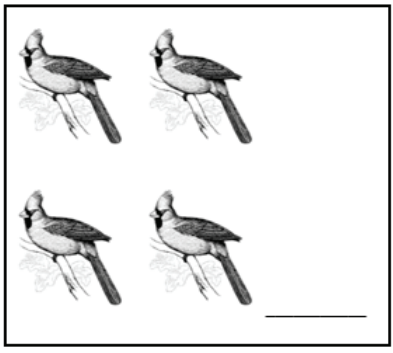
SLO: Count objects (up to 9) and represent in numbers

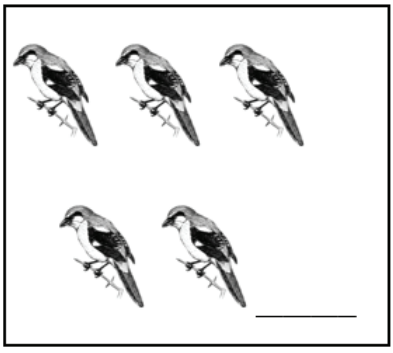
Instructions: In the blank space write the number of bird(s).

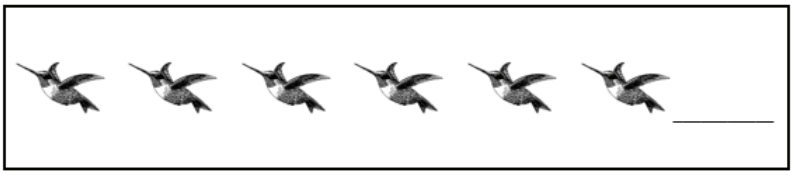








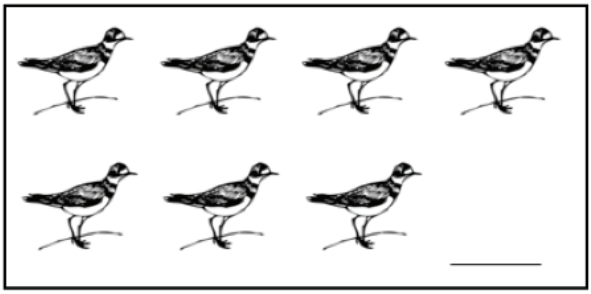


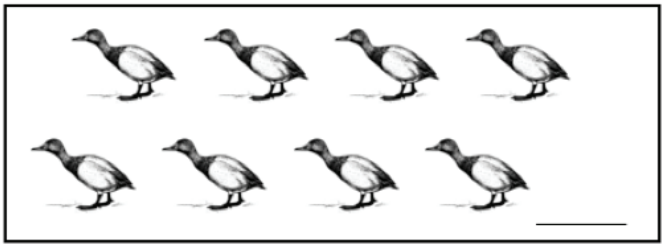


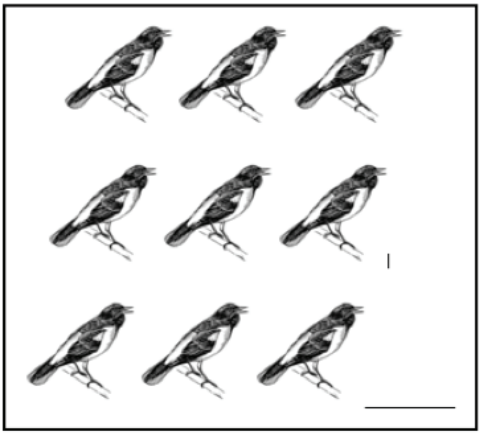
Worksheet
4b

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9







Further practice: Solve exercises in your textbook at page No. 13 - 14.

Worksheet 5

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9

SLO: Match the numbers 0-9 with objects

Instructions: Draw a line matching the number with the correct number of objects.

5

3

4

1

2

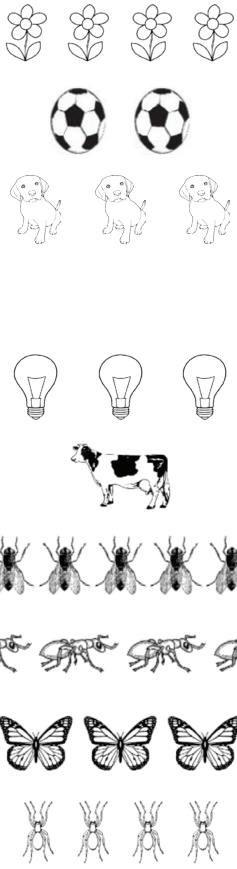
0

9

8

6

7



Further practice: Solve exercise In your textbook at page No. 33.

Worksheet 6

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9



SLO: Arrange numbers in ascending and descending order.

Instructions: Counting forward write the missing numbers.

		1			4			
	3						8	
		5	6					
1	2		4					

Instructions: Counting backward write the missing numbers

		5		3				
	8						3	
		7		5				
9				5	4			



Further practice: Solve exercises in your textbook on page No. 28 - 29

Worksheet 7

Unit No: 1

Concept of Whole Numbers
Identification of Numbers 1-9



SLO: Identify which numbers (up to 9) come: i) Before/ After a number; ii) Between two numbers

Instructions:

i. Tick (✓) the number which comes before 8.	9	7	6
ii. Tick (✓) the number which comes before 4.	3	5	6
iii. Tick (✓) the number which comes before 7.	6	8	9
iv. Tick (✓) the number which comes after 4.	2	3	5
v. Tick (✓) the number which comes after 6.	4	5	7
vi. Tick (✓) the number which comes after 5.	7	6	8

vii. vii. Write the missing number between the given numbers.

3		5
7		9
4		6
8		10

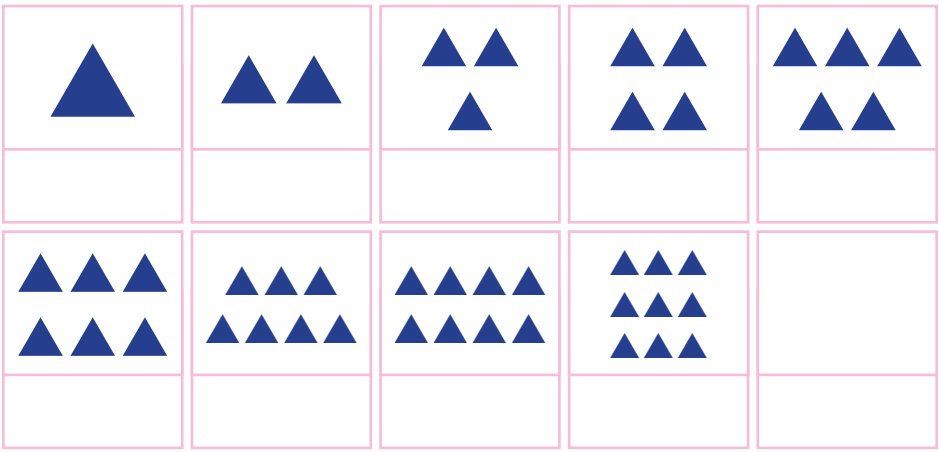
Worksheet 8

Concept of Whole Numbers

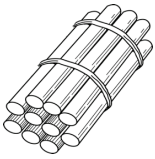
Unit No: 1

SLO: Identify 10 as number

Instructions: Count and write in the boxes



Instructions: Match the group of 10 objects with the number 10.





10





Further practice: Solve exercises in your textbook on page No. 35 and 37.

Worksheet 9

Unit No: 1

Concept of Whole Numbers

SLO: Read numbers up to 99

Instructions: Match the written numbers (in words) with correct numerals.

Eighty	0
Fifty	5
Five	19
Zero	23
Nineteen	31
Ninety-one	50
Seventy-five	64
Sixty-four	75
Thirty-one	80
Twenty-three	91

Instructions: Match the numerals with correct written numbers (in words).

4	Fifteen
15	Thirty-eight
22	Four
38	Eighty-seven
66	Seventy-nine
79	Sixty-six
87	Twenty-two

Instructions: Fill in the blanks by writing in numeral and words.

7	Seven		Forty-nine
14		56	
	Twenty-five	70	

Further practice: Solve exercise 'match' in your textbook on page number 50.

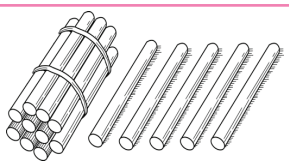
Worksheet 10

Unit No: 1

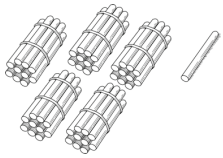
Concept of Whole Numbers

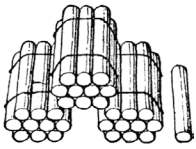
SLO: Count numbers up to 99

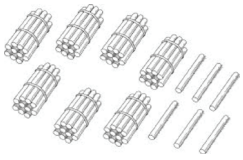
Instructions: Count and write number

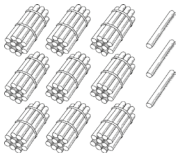


15









Further practice: Solve exercises in your textbook on page No. 39 – 49

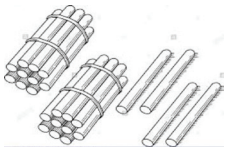
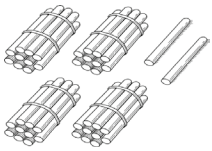
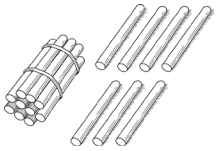
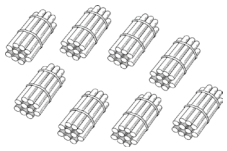
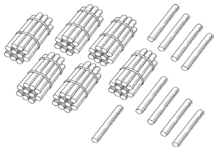
Worksheet 11

Unit No: 1

Recognize the Place Value of Numbers (tens and ones)

SLO: Recognize the place value of numbers (tens and ones)

Instructions: Write the place value of the given numbers.

	Tens	Ones	Number in words
	2	4	Twenty Four
			
			
			
			

Further practice: Solve exercises in your text book on page 38 and 53

Worksheet 12

Unit No: 1

Concept of Whole Numbers

SLO: Compare one and two digit numbers

Instructions: Circle the number that is larger.

	6	7	
	5	4	
	9	3	

Instructions: Circle the bigger numbers.

7 9	6 11	21 18	28 35	36 44	53 63

Instructions: Circle the smaller numbers.

9 19	15 51	45 54
23 32	42 47	60 30

Further practice: Solve exercises in your textbook on page 60-61.

Worksheet 13

Unit No: 1

Concept of Whole Numbers

SLO: Order the set of numbers from 0 to 99 in increasing and decreasing order

Instructions: Fill in the blanks with numbers from smallest to greatest

23 42 44 63 78 23	35 88 36 48 84	57 90 15 52 66
45 12 89 78 23	68 86 63 38 36	26 28 25 23 19

Instructions: Fill in the blanks with numbers from greatest to smallest

12	25	33	15	→	33	25	15	12
16	12	15	17	→				
24	28	18	55	→				
36	62	38	42	→				
65	75	55	45	→				

Further practice: Solve exercises in your textbook on page number 54 and 55.

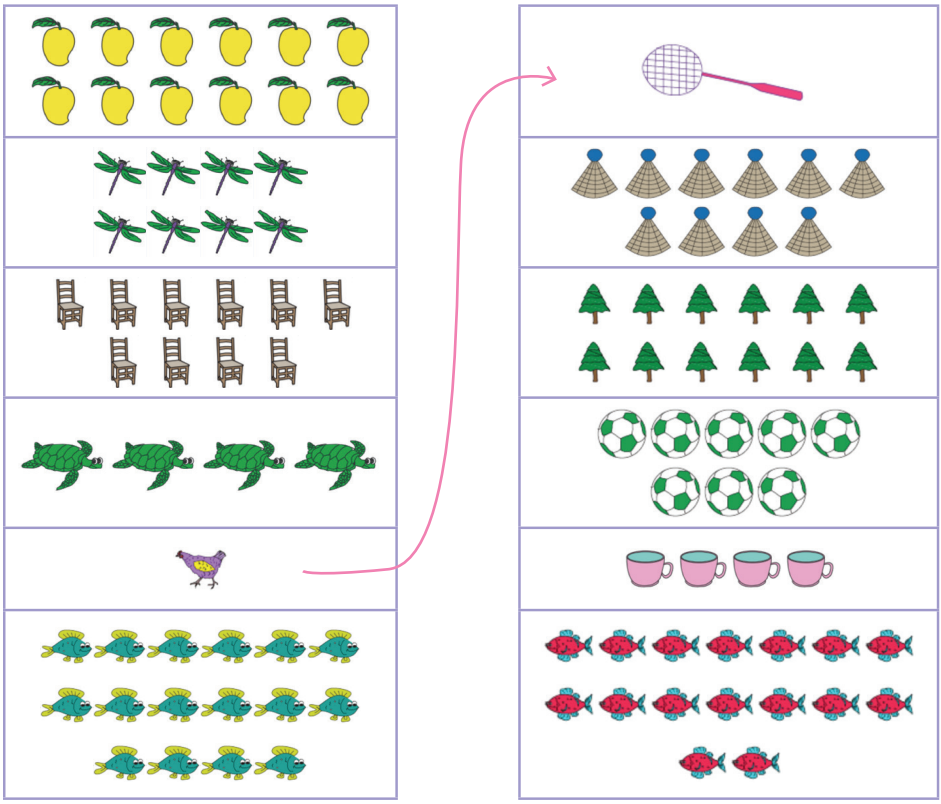
Worksheet
14

Unit No: 1

Concept of Whole Numbers

SLO: Compare two or more groups in terms of number of objects

Instructions: Match the pictures with the same number of objects



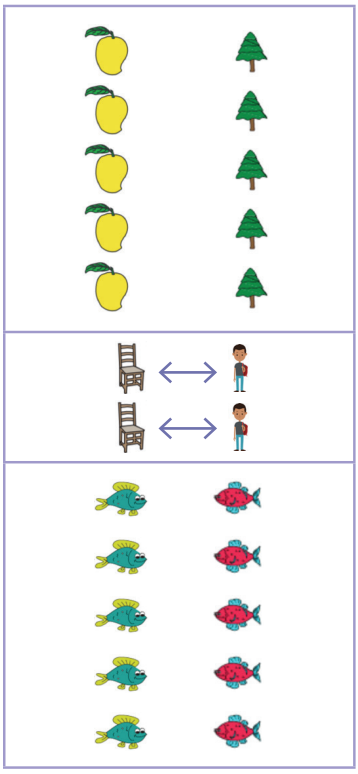
Further practice: Solve exercises in your textbook on page 60-61.

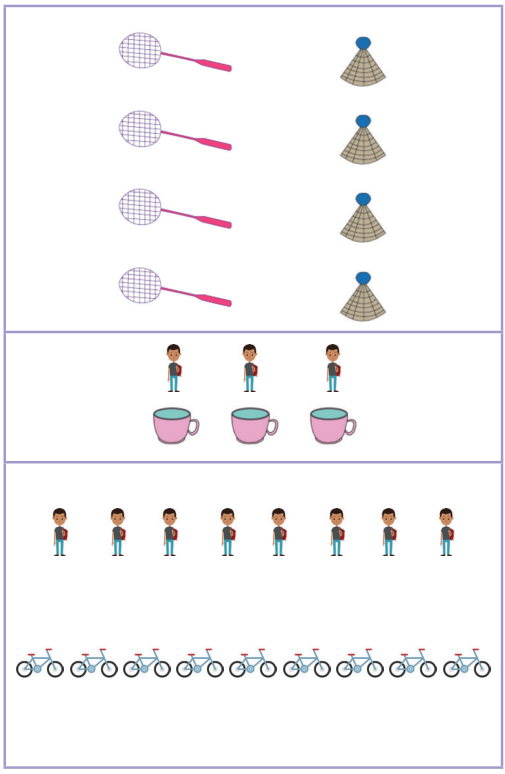
Worksheet
15
Unit No: 2

Number Operation

SLO: Match object having one to one correspondence

Instructions: Draw arrows joining objects that belong together





Further practice: Solve exercise in your textbook on page No. 62.

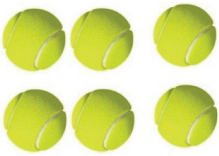
Worksheet
16
Unit No: 2

Number Operation

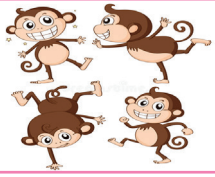
SLO: Identify the numbers of objects in two groups to show "more than" or "less than".

Instructions: Tick (✓) the group which has more objects than the other group.



Instructions: Tick (✓) the group which has less objects than the other group.



Further practice: Solve exercise in your textbook on page No. 63

Worksheet
17
Unit No: 2

Number Operation

SLO: Compare numbers from 1-20 to identify how much more one is from the others

Example:
Question: How much more is 11 than 6?
1. Start counting upwards from 6
2. Say aloud "7, 8, 9, 10, 11". Stop at 11.
3. How many numbers did you count? 5.

Answer: 11 is 5 more than 6

Instructions: Fill in the blanks with the correct number.

- 4 is _____ more than 1
- 7 is _____ more than 5
- 9 is _____ more than 3
- 11 is _____ more than 4
- 16 is _____ more than 12
- 16 is _____ more than 9
- 19 is _____ more than 9
- 20 is _____ more than 11
- 20 is _____ more than 9

Further practice: Solve exercises in your textbook on page No. 63.

Worksheet
18
Unit No: 2

Number Operation

SLO: Recognize and use symbols of addition "+" and equality "="

Instructions: Fill in the blanks

3	+	4	=	7
2		3	=	5
1	+	8		9
5	+	3		8
6	+	3	=	

Further practice: Solve exercise in your textbook on page No. 64.

Worksheet 19

Unit No: 2

Number Operation

SLO: Add two digit numbers

Instructions: Add the two numbers

i)

	tens	ones
	5	3
+	2	0

ii)

	tens	ones
	1	4
+	6	0

iii)

	tens	ones
	3	0
+	5	7

iv)

	tens	ones
	4	0
+	4	0

v)

	tens	ones
	2	0
+	6	9

vi)

	tens	ones
	4	4
+	2	0

vii)

	tens	ones
	1	3
+	1	3

viii)

	tens	ones
	8	1
+	1	6

ix)

	tens	ones
	6	4
+	3	3

x)

	tens	ones
	2	2
+	1	7

xi)

	tens	ones
	3	2
+	2	1

xii)

	tens	ones
	7	3
+	2	2

Further practice: Solve exercises in your textbook on page No. 63.

Worksheet
20
Unit No: 2

Number Operation

SLO: Add mentally the numbers using real life examples.

Instructions: Mentally add the numbers and write the answer in the space provided.

Example:

Ali has 

His brother gave him  more

Ali now has 7 books

A shopkeeper had 

He bought  more

The shopkeeper now has ____ bicycle

Amna had 

Her friend gave her 

Amna has _____ mangoes altogether

Further practice: Solve exercise in your textbook on page No. 64.

Worksheet 21

Unit No: 2

Number Operation Addition

SLO: Add mentally the numbers using real life examples.

Instructions: Mentally add the numbers and write the answer in the space provided.

Mina found  in the garden

Sana also found  in the garden

Sana and Mina found _____ ladybirds in the garden altogether

There were  at home

Ami bought  more

There are _____ bananas at home now

Further practice: Solve exercises in your textbook on page No. 73.

اردو

ورک شیٹ

ورک شیٹ
۱
یونٹ نمبر ۱

حروفِ تہجّی ’ا‘ تا ’خ‘

حاصل تعلم: الف سے خ تک حروفِ تہجّی درست طریقے سے لکھ سکیں۔

سرگرمی

ا تا خ تک حروف لکھیں۔

ا آ ب پ ت ٹ

ث ج چ ح خ

تصویر دیکھ کر تصویر کے نام کا پہلا حرف لکھیں۔









مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ا تا ۲ پر دیے گئے حروف تہجی لکھیں۔

ورک شیٹ
۲
یونٹ نمبر ۲

حروفِ تہجّی ’د‘ تا ’ش‘

حاصل تعلم: د سے ش تک حروفِ تہجّی درست طریقے سے لکھ سکیں۔

سرگرمی

د سے ش تک حروفِ تہجی درست طریقے سے لکھ سکیں۔

د ڈ ذ ر ڑ ز

ژ س ش

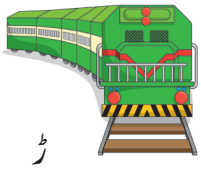
تصویر پہچانیں اور تصویر کے نام کے پہلے حرف پر درست ✓ کا نشان لگائیں۔



ش س



ذ ز



ر ڑ



د ذ



ڈ ژ



د ش

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۶ تا ۷ پر دیے گئے حروف تہجی لکھیں۔

ورک شیٹ
۳
یونٹ نمبر ۳

حروفِ تہجّی 'ص' تا 'گ'

حاصل تعلم: ص سے گ تک حروفِ تہجّی درست طریقے سے لکھ سکیں۔

سرگرمی

ص سے گ تک حروف لکھیں۔

ص ض ط ظ ع غ

ف ق ک گ

حرف کو تصویر سے ملائیں۔








ع
ک
ط

ف
ق
ض

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۰ تا ۱۱ پر دیے گئے حروف تہجی لکھیں۔

ورک شیٹ
۴
یونٹ نمبر ۴

حروفِ تہجّی 'ل' تا 'ے'



حاصل تعلم: ل سے ے تک حروفِ تہجّی درست طریقے سے لکھ سکیں۔

سرگرمی

ل تا ے تک حروف لکھیں۔

ل م ن و ہ ء ی ے

حروف تہجی مکمل کریں۔

ا		ب	پ		ٹ
	ج		ح	خ	
ڈ		ر	ڑ		
س		ص		ط	ظ
ع		ف	ق		
ل	م			ہ	ء
ی					



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۱۴تا ۱۵ پر دیے گئے حروف تہجی لکھیں۔

ورک شیٹ
۵
یونٹ نمبر ۵

آدھی اشکال

حاصل تعلم: پورے حروف کو آدھی شکل سے ملا سکیں۔

سرگرمی

آدھی اشکال پر پنسل پھیریں۔

ب پ ت ٹ ث ج چ ح
خ س ش ص ض ع غ ف
ق ک گ ل م ن ہ ی

حروف کی آدھی اشکال لکھیں۔

ب		پ		ت		ٹ	
ث		ج		چ		ح	
خ		س		ش		ص	
ض		ع		غ		ف	
ق		ک		گ		ل	
م		ن		ہ		ی	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۱۹ پر سوال نمبر ۱ اور ۲ مکمل کریں۔

ورک شیٹ
٦
یونٹ نمبر ٦

بھاری حروف

حاصل تعلم: حروفِ تہجی میں بھاری حروف درست طریقے سے لکھ سکیں۔

سرگرمی

بھ تا نھ تک بھاری حروف لکھیں۔

بھ پھ تھ ٹھ جھ چھ دھ ڈھ

رھ ڑھ کھ گھ لھ مھ نھ

تصویر کا نام جس بھاری حرف سے شروع ہوتا ہے وہ لکھیں۔









مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۲۲تا ۲۳پر دیے گئے بھاری حروف لکھیں۔

ورک شیٹ
۷
یونٹ نمبر ۷

زبر (ـَ)

حاصل تعلم: حرکت زبر (ـَ) کی تبدیلی سے الفاظ پڑھ سکیں۔

سرگرمی

زبر (ـَ) سے شروع ہونے والے الفاظ پڑھیں۔


سَر



بَس


ٹَب

دیے گئے الفاظ پر زبر (ـَ) لگائیں اور زبر سے شروع ہونے والے الفاظ پڑھیں۔

اَب	رب	دم
در	کل	پر
نل	سب	رش

پنسل کی مدد سے نقطہ دار لفظ مکمل کریں۔

یہ	یـــہ	یـــہ	یـــہ

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۲۶ پر موجود حروف تہجی کو زبر کے ساتھ ادا کریں۔

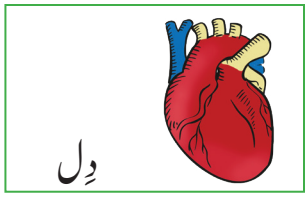
ورک شیٹ
۸
یونٹ نمبر ۸

زیر (ـِ)

حاصل تعلم: حرکت زیر (ـِ) کی تبدیلی سے الفاظ پڑھ سکیں۔

سرگرمی

زیر (ـِ) سے شروع ہونے والے الفاظ پڑھیں۔


دِل


جِن


نِب

دیے گئے الفاظ کے نیچے زیر (ـِ) لگائیں اور زیر سے شروع ہونے والے الفاظ پڑھیں۔

اِن	نب	دن
گن	مل	بل
تل	پن	جن

پنسل کی مدد سے نقطہ دار لفظ مکمل کریں۔

وہ	وہ	وہ	وہ

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۲۸ پر موجود حروف تہجی کو زیر کے ساتھ ادا کریں۔

ورک شیٹ
۹
یونٹ نمبر ۹

پیش (ُ)

حاصل تعلم: حرکت پیش (ُ) کی تبدیلی سے الفاظ پڑھ سکیں۔

سرگرمی

پیش (ُ) سے شروع ہونے والے الفاظ پڑھیں۔


پُل


دُم


گُڑ

دیے گئے الفاظ پر پیش (ُ) لگائیں اور پیش سے شروع ہونے والے الفاظ پڑھیں۔

اُس	تم	ان
سکھ	رخ	اٹھ
رک	دھن	پل

پنسل کی مدد سے نقطہ دار لفظ مکمل کریں۔

ہے	ہے	ہے	ہے

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۳۰ پر موجود حروف تہجی کو پیش کے ساتھ ادا کریں۔

ورک شیٹ
۱۰
یونٹ نمبر ۱۰

حروف علت

(’ا‘ اور ’و‘ سے الفاظ بنانا)

حاصل تعلم: الفاظ میں حروف کی ابتدائی،درمیانی اورآخری اشکال کی شناخت کر سکیں۔

سرگرمی

ارکان پڑھیں۔

با	پا	تا	ٹا	ثا	جا	چا	حا	خا	دا
ڈا	ذا	را	ڑا	زا	ژا	سا	شا	صا	ضا
طا	ظا	عا	غا	فا	قا	کا	گا	لا	ما
نا	وا	ہا	یا						
بو	پو	تو	ٹو	ثو	جو	چو	حو	خو	دو
ڈو	ذو	رو	ڑو	زو	ژو	سو	شو	صو	ضو
طو	ظو	عو	غو	فو	قو	کو	گو	لو	مو
نو	وو	ہو	یو						

دیے گئے ارکان کی مدد سے چھے(۶) الفاظ بنائیں اور لکھیں۔ جیسے با + جا= باجا، تو+ لا= تولا

_____ _____ _____ _____ _____ _____

پنسل کی مدد سے نقطہ دار لفظ مکمل کریں۔

ہیں	ہیں	ہیں	ہیں

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۳۳ پر موجود سوال نمبر ۲ مکمل کریں۔

ورک شیٹ
۱۱
یونٹ نمبر ۱۱

حروف علت

(’ی‘ اور ’ے‘ سے الفاظ بنانا)

حاصل تعلم: الفاظ میں حروف کی ابتدائی، درمیانی اورآخری اشکال کی شناخت کر سکیں۔

سرگرمی

ارکان پڑھیں۔

بی	پی	تی	ٹی	ثی	جی	چی	حی	خی	دی
ڈی	ذی	ری	ڑی	زی	ژی	سی	شی	صی	ضی
طی	ظی	عی	غی	فی	قی	کی	گی	لی	می
نی	ہی	یی							
بے	پے	تے	ٹے	ثے	جے	چے	حے	خے	دے
ڈے	ذے	رے	ڑے	زے	ژے	سے	شے	صے	ضے
طے	ظے	عے	غے	فے	قے	کے	گے	لے	مے
نے	ہے	یے							

دیے گئے ارکان کی مدد سے چھے(۶) الفاظ بنائیں اور لکھیں۔ جیسے پی + تی =پیتی، بے + ٹی= بیٹی

پنسل کی مدد سے نقطہ دار لفظ مکمل کریں۔

ہوں	ہوں	ہوں	ہوں

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۳۷ پر موجود سوال نمبر ۳ مکمل کریں۔

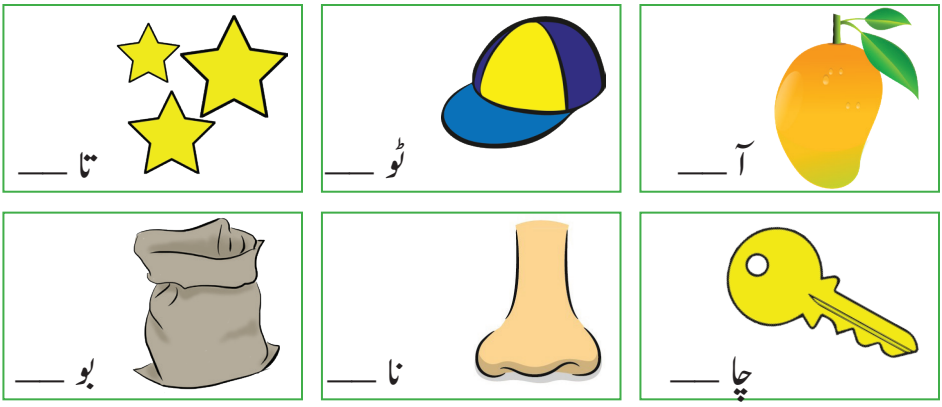
ورک شیٹ
۱۲
یونٹ نمبر ۱۲

الفاظ کے جوڑ توڑ

حاصل تعلم: حروف، الفاظ کو جوڑ توڑ کے ساتھ لکھ سکیں۔

سرگرمی

تصویر پہچانیں اور خالی جگہ میں حرف یا رکن لگا کر لفظ مکمل کریں۔



الفاظ کو حروف میں توڑ کر لکھیں۔

الفاظ	توڑ	الفاظ	توڑ
باغ	ب + ا + غ = باغ	تالے	
صحن		بارش	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۳۷ پر موجود سوال نمبر ۴ مکمل کریں۔

ورک شیٹ
۱۳
یونٹ نمبر ۱۳

بصری الفاظ

حاصل تعلم: بصری الفاظ کی مدد سے سادہ جملے لکھ سکیں۔

سرگرمی

جملے پڑھیں۔



وہ کتاب ہے۔



یہ میرے دادا ہیں۔



یہ دو پھول ہیں۔



میں لڑکا ہوں۔

جملے کے آخر میں 'ہیں، ہوں، ہے' لگا کر جملہ مکمل کریں۔

۱. یہ میرے بھائی _____۔

۲. میں کھانا کھاتی _____۔

۳. یہ بستہ _____۔

۴. وہ میرا گھر _____۔

۵. یہ چار بیل _____۔

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۴۳ پر موجود سوال نمبر ۲ مکمل کریں۔

Notes

ENGLISH

Worksheet 1

Unit No: 1

Shapes of Letters

SLO: Recognize shape of letters (similar and different) in print, colour, and tactile forms.

Instructions: Mark a cross through the alphabets that are out of place.

A	B	C	D	E	S
F	G	H	I	T	J
K	L	R	M	N	O
P	Q	R	S	Z	U
D	V	W	X	Y	Z

Instructions: Look at the picture and write the following letters on soil/ sand with your finger.

A D E

J S Q

W X Z



Further practice: Complete the exercise in your textbook on page number 2 and 6.

Worksheet 2

Small and Capital Letters

Unit No: 2

SLO: Trace and copy small and capital letters following appropriate writing models of regular shape and size.

Instructions: Trace capital and small letters given below.

Aa Bb Cc Dd

Ee Ff Gg Hh

Ii Jj Kk Ll

Mm Nn Oo Pp

Qq Rr Ss Tt

Uu Vv Ww Xx

Yy Zz

Further practice: Complete the exercise in your textbook on page numbers 32, 33, 34 & 35.

Worksheet 3

Unit No: 2

Sounds of Letters

SLO: Articulate the sounds of letters of the alphabet in series and in random order.

Instructions: a) Sing the song of alphabets sounds a-z in series. b) Say the object name. c) Circle the beginning sound of each picture.

	b t		w h
	c g		v b
	s r		b d
	r o		h t

Further practice: Complete the exercise in your textbook on page number 9 and 10.

Worksheet 4

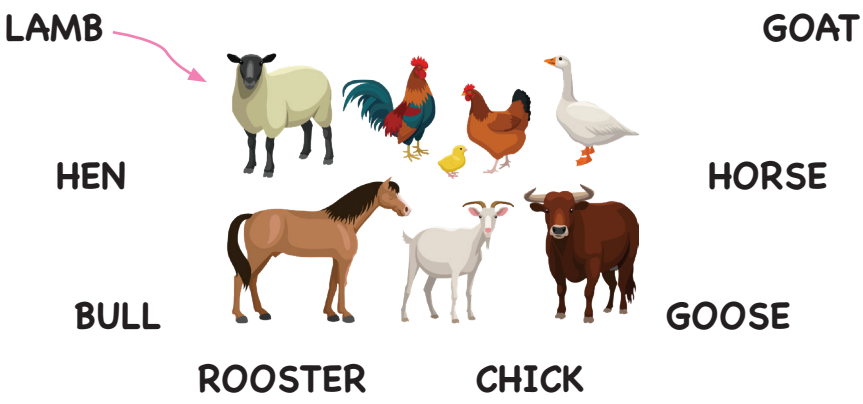
Unit No: 2

Matching Name

SLO: Recognize shape of letters (similar and different) in print, colour, and tactile forms.

Activity 1:

Instructions: Match the names with animals.



Activity 2:

Instructions: Write the names in small letters.

GOAT	HORSE	CHICK	LAMB	BULL	HEN
goat					

Further practice: Complete the exercise given in your textbook on page numbers 15, 16, 17, 18, 19 and 20.

Worksheet 5

Unit No: 2

Capital and Small Letters

SLO: Articulate, identify and match capital and small letters of the alphabet in a series and in random order.

Instructions: Write capital and small letters in empty spaces then say the sounds aloud.

a			B	c			D
	E		F	g		h	
	I	j			K	l	
	M	n			O		P
q			R	s		t	
u		v			W		X
y			Z				

Further practice: Dear student, kindly complete the exercise in your textbook given on page 32-33.

Worksheet 6

Unit No: 2

Order the Alphabets

SLO: Tell what comes before and after in an alphabet

Instructions: What comes before the following alphabets?

	C
	J
	N
	S
	Y

	B
	I
	M
	W
	U

Instructions: Write the missing letters. What comes after?

A		C		E		G
	I	J		L		N
	P		R		T	
V		X		Z		

Further practice: Complete the exercise in your textbook on page number 35.

Worksheet 7

Unit No: 2

Matching Sounds with Pictures

SLO: Match the initial sound of common words depicted in pictures with their corresponding letters.

Instructions: Say and write the beginning sound for each picture.



___at



___ar



___at



___un



___at



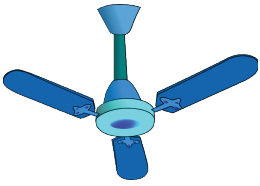
___ey



___at



___ag



___an

Further practice: Complete the exercise in your textbook on page number 29.

Worksheet 8

Unit No: 2

Small and Capital Letters

SLO: Write small and capital letters in series and in random order. Take dictation of alphabets.

Instructions: Fill in the blanks.

1.	What comes after J _____.
2.	What comes before _____o.
3.	What letter is between u _____ w.
4.	 starts with _____.
5.	Turn the letter W and make a new letter _____.
6.	What letter is a half-circle _____.
7.	What is the last letter of the alphabet _____.
8.	Write Q in small letter _____.

Further practice: Complete the exercise given in your textbook on page number 26 and 35.

Worksheet 9

Unit No: 5

Rhyming words

SLO: Copy rhyming words from a poem.

Instructions: Read the poems below and copy the rhyming words in your notebook.



Stop! Stop! That pot is hot!
Grab a lid. Put it on top!
There is a lot of pop-pop-pop
Hopping popcorn in that pot!

A B C D E
F G H I J
K L M N O
P Q R S T
U V W X Y

First Grade is the place to be
We do our best everyday Reading
Writing Watch us grow
Adding numbers 1, 2, 3
It's our goal to try try try
We finish with the letter Z (zee)
School is cool, do you agree?

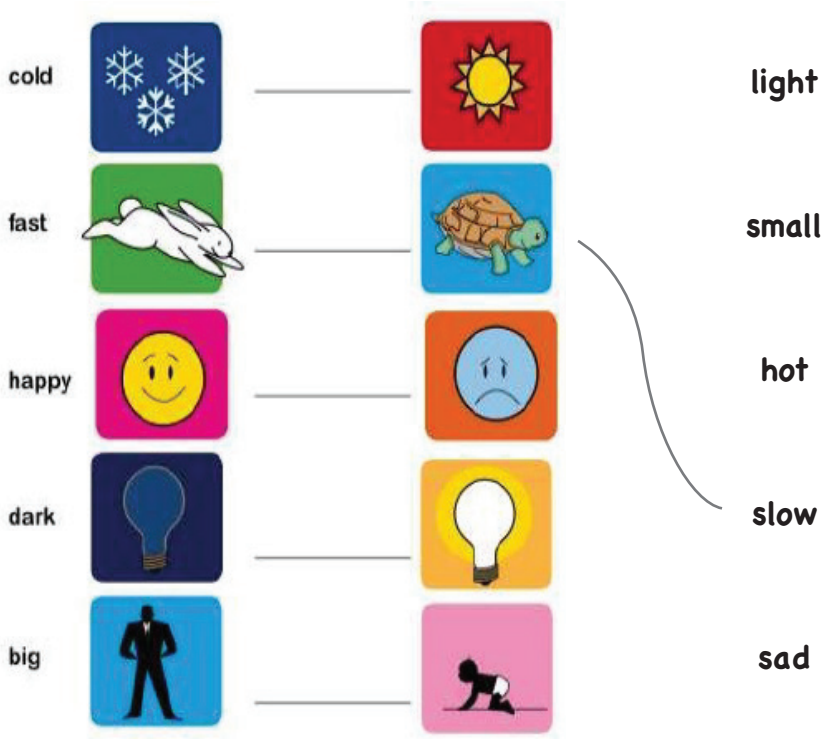
Further practice: Read the poem Twinkle Twinkle little Star in your textbook on page number 54 and copy the rhyming words in the spaces given below.

Worksheet
10
Unit No: 4

Matching Opposites

SLO: Write opposite of describing words (adjectives)

Instructions: Match the opposite, as shown in example.



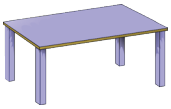
Further practice: Complete the exercise describing words in your textbook on page number 47, 48 and 49.

Worksheet
11
Unit No: 5

Identify the syllables

SLO: Copy rhyming words from a poem.

Instructions: a) Say the word and clap on each syllable. b) How many syllables does each word have? c) Circle the number of claps.

Cat		
Motorcycle		
Sunflower		
Table		
Car		
Dog		

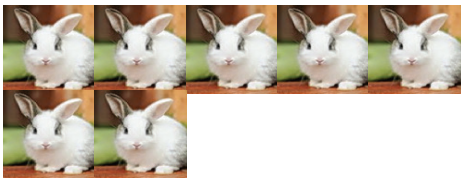
Further practice: Choose any two one syllable word animals on page 51 in your textbook and write in the spaces below:

Worksheet
12
Unit No: 3

Count and Read

SLO: Write numbers from 01 to 10 in words.

Instructions: Count the number of objects and then write the number in words in the space provided.

Further practice: Complete the exercise of your text book on page 39 and 40.

قومی ترانہ

پاک سرزمین شاد باد
کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
رہبر ترقی و کمال
ترجمان ماضی شان حال
جان استقبال!
سایۂ خدائے ذوالجلال

KHYBER PAKHTUNKHWA ELEMENTARY AND SECONDARY EDUCATION DEPARTMENT

KPESED
معیاری تعلیم... سب کیلئے!
Khyber Pakhtunkhwa Elementary & Secondary Education Department

English

اردو

Maths

WORKSHEETS



GRADE 2

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف با معنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوارات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہ نمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو اجاگر بھی کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا۔

گوہر علی خان
ناظمِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

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ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور مطالعے کے تسلسل کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کی توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو بطریقہ احسن سرانجام دینے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دی گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد ، استاد یا پھر نیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہ نمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اورا سکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1. انگلش	انعام اللہ خٹک	0333-9746976
2. ریاضی	عباس خان	0345-9419923
3. جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4. اُردو	تاج ولی خان	0313-9848959

Mathematics

Worksheet
1a
Unit No: 1

Numbers

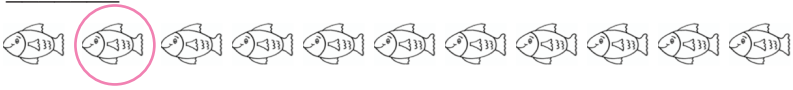
SLO: Write ordinal numbers from first to twentieth

Instructions: Fill in the blanks

The 5th apple has been circled



The _____ fish has been circled



The _____ star has been circled



The _____ tree has been circled



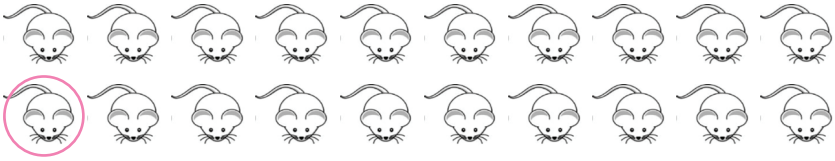
The _____ heart has been circled



The_____ flower has been circled



The_____ mouse has been circled



Further practice: Solve exercises in your textbook on page No. 4-5

Worksheet 2

Unit No: 1

Numbers

SLO: Write numbers 1-100 in words

Instructions: write each number in words

1	One	37		73	
3		39		75	
5		40		77	
7		42		79	
9		44		80	
10		46		82	
12		48		84	
14		50		86	
16		51		88	
18		53		90	
20		55		91	
21		57		92	
23		59		93	
25		60		94	
27		62		95	
29		64		96	
30		66		97	
31		68		98	
33		70		99	
35		71		100	

Further practice: Solve exercises in your textbook on page No. 6-9

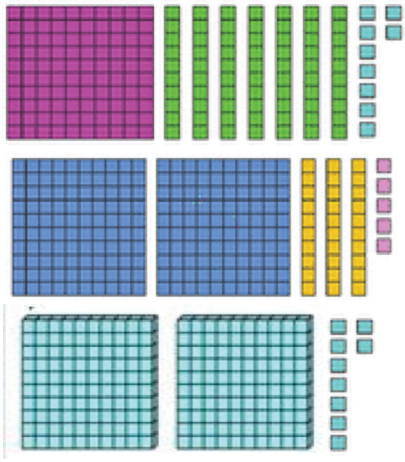
Worksheet 3

Unit No: 1

Numbers

SLO: Recognize the place value of three digit numbers.

Instructions: Count the hundred Tens and Ones and write the number



Hundreds	Tens	Ones
1	7	9

Instructions: Read hundreds, tens and ones and write the number in the box

1	4 hundreds, 3 tens, 7 ones	
2	5 hundreds, 7 tens, 9 ones	
3	3 hundreds, 9 tens, 5 ones	
4	1 hundred, 4 ones, 8 tens	
5	3 ones, 6 hundreds, 2 tens	

Further practice: Solve exercises from page number 17-21

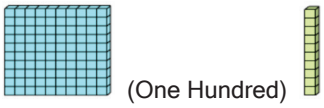
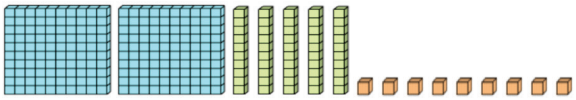
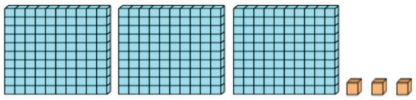
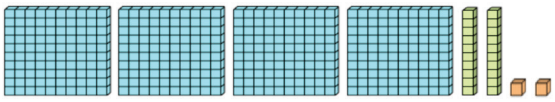
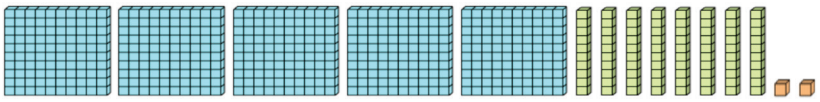
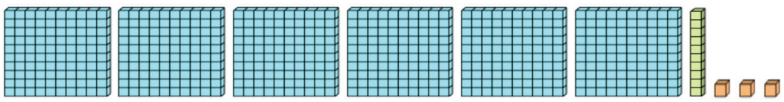
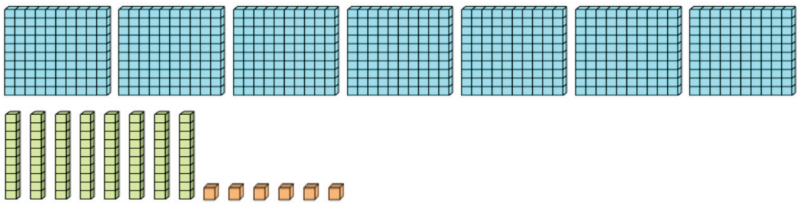
Worksheet
4

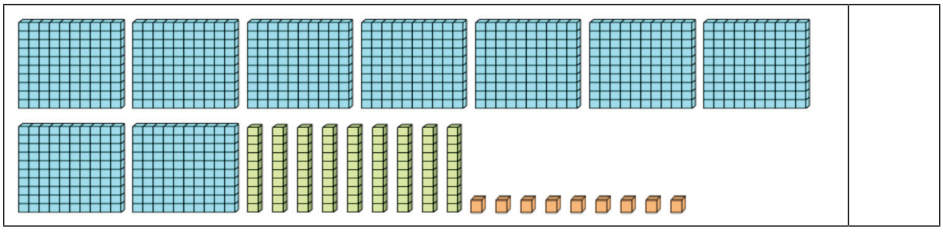
Unit No: 1

Numbers

SLO: Write numbers up to 999 in numerals

Instructions: Count the blocks and write the numbers

 (One Hundred) (One ten)  (One unit)	111
	
	
	
	
	
	



Further practice: Solve exercises in your textbook on page 18 and 19.

Worksheet 5

Unit No: 1

Numbers

SLO: Arrange numbers up to 999 written in mixed form in ascending or descending order.

Instructions: Write the numbers from smallest to largest in the blank spaces

875, 510, 257, 158, 860, 542

Smallest	158	257	510	542	860	875	Largest

635, 678, 492, 982, 309 529

Smallest							Largest

167, 608, 470, 544, 397, 316

Smallest							Largest

Instructions: Write the numbers from largest to smallest in the blank spaces

142, 554, 808, 202, 460, 100

Largest	808	554	460	202	142	100	Smallest

905, 914, 150, 338, 599, 169

Largest							Smallest

626, 380, 163, 274, 747, 846

Largest							Smallest

Further practice: Solve exercise in your textbook on page number 26.

Worksheet 6

Unit No: 1

Numbers

SLO: Identify the largest/smallest numbers in a given set of numbers.

Instructions: Write the smallest and largest number in the space provided

		Smallest	Largest
1	499, 454, 687, 947, 174, 791	174	947
2	310, 533, 804, 652, 817, 410		
3	183, 162, 415, 194, 524, 691		
4	708, 575, 875, 881, 826, 855		
5	599, 170, 436, 905, 435, 834		
6	305, 591, 350, 976, 899, 193		
7	343, 122, 314, 138, 852, 586		
8	275, 748, 143, 946, 292, 179		
9	265, 502, 330, 180, 183, 323		
10	275, 742, 438, 744, 108, 620		

Further practice: Solve exercise in your textbook on page number 29.

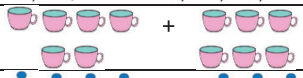
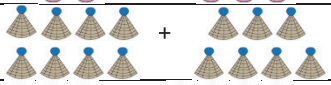
Worksheet 7

Unit No: 2

Number Operations

SLO: i)Add ones and ones ii)Add 2 digit numbers and 2 digits numbers with carrying

Instructions: Complete the table as shown in the example

1	Example: 	Sum **3 + 1**	Answer **4**
2			
3			
4			
5			
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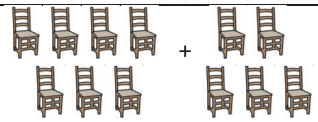
7			

Instructions: Add the two numbers

Example

	T	O
	1	
	2	8
+	1	3
	4	1

1.

	T	O
	4	7
+	2	6

2.

	T	O
	5	9
+	1	1

3.

	T	O
	3	4
+	2	7

4.

	T	O
	2	9
+	2	9

5.

	T	O
	3	3
+	5	9

6.

	T	O
	7	8
+	1	9

Further practice: Solve exercises in your textbook on page number 44 and 48.

Worksheet 8

Unit No: 2

Number Operations

SLO: Solve real life problems involving addition of 2 digits numbers with carrying.

Instructions: Read the questions and then find the answers.

1	Example: Ali had 28 books. He received 15 more books from his uncle. How many books does Ali have in total?	(1) T O 2 8 + 1 5 4 3
2	Ayesha found 37 small rocks from the river and 14 in her garden. How many rocks did Ayesha find altogether?	
3	A shopkeeper has 46 cricket bats and ordered 28 more. How many cricket bats will the shopkeeper have after the order arrives?	
4	Yesterday Naima read 28 pages from her English book. Today she read 55 more. How many pages did Naima read yesterday and today?	
5	14 birds were sitting on a tree. 18 more birds flew and sat on the same tree. How many birds are sitting on the tree altogether?	
6	There were 23 people on a bus. At a stop 19 more people got on the bus. How many people were on the bus?	

Further practice: Solve exercises in your textbook on page number 49.

Worksheet 9

Unit No: 2

Number Operations

SLO: Solve real life problems involving addition of 3 digits numbers without carrying.

Instructions: Read the questions and then find the answers

1	Example: In a school there are 387 girls and 410 boys. How many students are in the school?	H T O 3 8 7 + 4 1 0 7 9 7
2	Ali went to the store and bought a lamp for Rs. 620 and a bulb for Rs. 375. How much money did Ali spend altogether?	
3	A family drove 182 km from Peshawar to Islamabad and then 317 km from Islamabad to Faisalabad. How many kms did the family drive altogether?	
4	Abubakar collects stamps. He has 643 in a box and 245 in a book. How many stamps does Abubakar have altogether?	
5	A library has 546 books. A gift of 231 new books was given to the library. How many books does the library have now?	
6	A farmer grows carrots. Last year he grew 412 carrots and this year he grew 415. How many carrots did he grow in the two years combined?	

Further practice: Solve exercises in your textbook on page number 53.

Worksheet 10

Unit No: 2

Number Operations

SLO: Solve real life problems with carrying of tens & hundreds.

Instructions: Read the questions and then find the answers

1	Example: In a school there are 368 girls and 464 boys. How many students are in the school?	(1) (1) H T O 3 6 8 + 4 6 4 8 3 2
2	Sana went to the market and bought shoes for Rs. 599 and some jewelry for Rs. 265. How much money did Sana spend altogether?	
3	Imran drove 376 km from Islamabad to Lahore and then 376 km again from Lahore to Islamabad. How many kms did Imran drive altogether?	
4	A shopkeeper made Rs. 787 in one day and Rs. 144 the next day. How much money did he make on both days?	
5	On Eid Mina received Rs. 275 from her Baba and received Rs. 385 from her grandmother. How much money did Mina receive on Eid altogether?	
6	A truck weighs 576 kg. A load of 285 kg was put on the truck. What is the total weight of the truck and the load?	

Further practice: Solve exercise in your textbook on page No.57

Worksheet 11

Unit No: 2

Number Operations

SLO: Subtract ones from 2 digit numbers with borrowing.

Instructions: Subtract one digit number from two digit number.

Example

	tens	ones
	5	3
−		7

	tens	ones
	~~5~~ 4	~~3~~ 13
−		7
	4	6

1)

	tens	ones
	3	7
−		9

Symbol of subtraction: −

2)

	tens	ones
	4	0
−		7

3)

	tens	ones
	2	6
−		9

4)

	tens	ones
	2	4
−		5

5)

	tens	ones
	1	3
−		9

6)

	tens	ones
	6	1
−		6

7)

	tens	ones
	3	4
−		8

8)

	tens	ones
	2	1
−		9

9)

	tens	ones
	2	5
−		8

10)

	tens	ones
	3	2
−		6

Further practice: Solve exercise in your textbook on page number 64.

Worksheet 12

Unit No: 2

Number Operations

SLO: Solve real life problems of subtraction without borrowing.

Instructions: Read the questions, find the answers and fill in the blanks

1	Example: There are 468 children in s a school. 314 are boys. How many girls are in the school? There are **154** girls in the school	H T O 4 6 8 - 3 1 4 1 5 4
2	Mrs. Qurashi bought 413 dates from the store for Ramzan. Her family ate 102 of these dates. How many dates were left? There were _____ dates left.	
3	Qasim has 376 stamps in his collection. He gave away 55 to his younger brother as a present. How many stamps does Qasim have left? Qasim has _____ stamps left.	
4	For a school event a teacher decorated the school with 178 balloons. A misbehaving student used a needle and popped 5 balloons. How many balloons were left? There were _____ balloons left.	
5	On Eid Hasan received Rs. 275 from his Baba. He bought sweets for Rs. 162 from the market How much money did Hasan have left? Hasan had Rs. _____ left.	
6	Amal read 34 pages of her Urdu book. The total number of pages in the book are 145. How many pages does Amal have left to read? Amal has ____ pages left to read.	

Further practice: Solve exercises in your textbook on page number 62.

Worksheet
13

Unit No: 2

Number Operations

SLO: Solve real life problems of subtraction with borrowing.

Instructions: Read the questions, find the answers and fill in the blanks.

1	Example: In a school there are 425 students. 237 are boys. How many girls are in the school? There are **188** girls in the schools	H T O 3 ~~4~~ 11 ~~2~~ 15 − 2 3 7 1 8 8
2	Abbas has some oranges in a basket. His friend gave him 26 oranges. Now he has 33. How many oranges did Saleem have at the start? Abbas had _____ oranges at the start.	
3	Jalal Khan has 376 stamps in his collection. He gave away 48 to his younger brother as a present. How many stamps does Jalal Khan have left? Jalal Khan has _____ stamps left.	

4	The Head Teacher bought 413 pencils from the bookstore. He gave away 237 pencils to his students. How many pencils did he has left? There were _____ pencils left with the Head Teacher.	
5	On her birthday Fatima received Rs. 550 from her mother. She bought a book for Rs. 275. How much money did Fatima have left? Fatima had Rs. _____ left.	
6	Murtaza got 588 marks in an exam and Azam got 637. How many more marks did Azam get than Murtaza? Azam got _____ more marks than Murtaza.	

Further practice: Solve exercises in your textbook on page number 66 and 70.

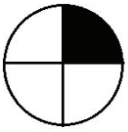
Worksheet 14

Unit No: 2

Number and Number Operations

SLO: i)Recognize fraction as equal parts of a whole.
ii) Represent half, one third and quarter in numerical forms as 1/2, 1/3 and 1/4

Instructions: Write the correct fraction under each figure

	Example:  The shaded portion of figure represents $\frac{1}{2}$		
1	 Fraction =	2	 Fraction =
3	 Fraction =	4	 Fraction =

Further practice: Solve exercises in your textbook on page number 34 and 36.

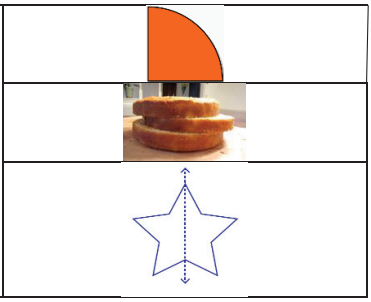
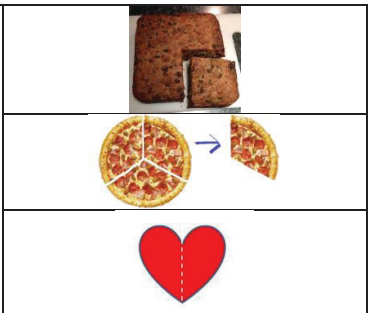
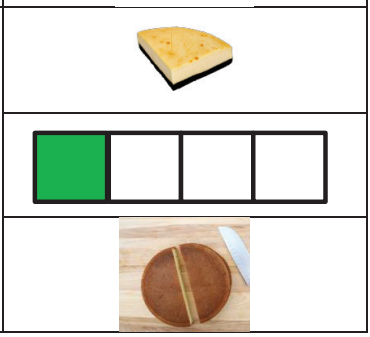
Worksheet
15

Unit No: 2

Number and Number Operations

SLO: Identify half, one third and quarter with the help of objects and figures (without writing 1/2, 1/3, 1/4)

Instructions: Match the picture/object with the correct fraction.

Half		
One Third		
Quarter		

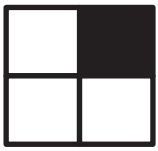
Further practice: Solve exercise in your textbook on page number 33.

Worksheet
16
Unit No: 2

Number and Number Operations

SLO: Represent half, one third and quarter in numerical forms as 1/2, 1/3, 1/4)

Instructions: Represent the shaded portion of the figure as 1/2, 1/3, 1/4

		
1/4		

Instructions: Represent the shaded portion of the figure as 1/2, 1/3, 1/4

1		
2		
3		

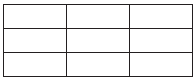
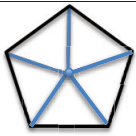
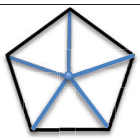
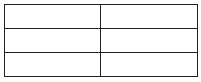
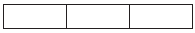
Further practice: Solve exercise in your textbook on page number 34.

Worksheet
17a
Unit No: 2

Number and Number Operations

SLO: Shade the equal parts of a given figure to match a given fraction.

Instructions: Shade the figure according to the given fraction

Example: 	$\frac{1}{2}$		$\frac{3}{8}$
	$\frac{1}{4}$		$\frac{3}{4}$
	$\frac{1}{3}$		$\frac{7}{9}$
	$\frac{1}{2}$		$\frac{4}{5}$
	$\frac{1}{5}$		$\frac{5}{8}$
	$\frac{1}{6}$		$\frac{1}{12}$
	$\frac{1}{8}$		$\frac{2}{3}$

Further practice: Solve exercise in your textbook on page number 37.

Worksheet
17b
Unit No: 2

Number and Number Operations

SLO: Complete number sequence in steps of 2, 3, 4, 5 and 10 (e.g. 2, 4, 6...)

Instructions: Fill in the blanks with the correct numbers.

a)	**2,**	**4,**	**6,**	___	___	___	___	___	___	___
b)	**3,**	**6,**	**9,**	___	___	___	___	___	___	___
c)	**4,**	**8,**	**12,**	___	___	___	___	___	___	___
d)	**5,**	**10,**	**15,**	___	___	___	___	___	___	___
e)	**10,**	**20,**	**30,**	___	___	___	___	___	___	___

f) **2, ___, ___, 8, 10, ___ 14, ___, ___ 20, ___, ___**

g) **3, 6, ___, 12, ___, ___, 21**

h) **4, 8, ___, ___, 20, ___**

i) **5, 10, ___, ___, ___, ___, 35**

j) **10, 20, ___, ___, ___**

Further practice: Solve exercises in your textbook on page number 25.

Worksheet 18

Unit No: 2

Number and Number Operations

SLO: Solve real life problems involving multiplication

Instructions: Read the questions and then give your answer in the space provided

	Problem	Solution
1	Every car has 4 wheels. 8 cars are parked outside a building. How many wheels do these cars have altogether? There are 32 wheels altogether	$\begin{array}{r} 4 \\ \times \quad 8 \\ \hline 3\ 2 \end{array}$
2	There are 5 bicycles parked outside a store. Each bicycle has 2 wheels. How many wheels do the bicycles have altogether? The bicycles have _____ wheels altogether.	
3	Pencils come in packs of 10. The teacher buys 4 packs for her students. How many pencils did the teacher buy? The teacher bought _____ pencils.	
4	Alina buys 7 sweets. Each sweet is for Rs. 3. How much money does she spend on sweets? Alina Spends _____ on sweets.	
5	Batteries / Cells come in packs of 4. Halima buys 3 packs. How many batteries / cells does Halima have altogether? Halima has _____ batteries / cells altogether	
6	Ali reads 9 pages every day of his English Book. How many pages will Ali read in 4 days? Ali will read _____ pages in 4 days.	

Further practice: Solve exercises in your textbook on page number 85.

Worksheet 19

Unit No: 2

Number Operation

SLO: Solve real life problems involving division

Instructions: Read the questions and then give your answer in the space provided

1	18 sweets are to be equally divided among 2 boys. How many sweets does each boy get? Repeated subtraction 18-9=9 and 9-9=0 Each boy gets **9** sweets.	09 2 | 18 - 18 0
2	A chocolate has 12 small pieces which have to be equally divided among 3 children. How many pieces does each child get? Each child gets _____ pieces of chocolate.	
3	20 balloons have to be equally divided among 4 students. How many balloons does each student get? Each student gets _____ balloons.	
4	Sanya buys a pack of 15 crayons to distribute equally among her 3 cousins. How many crayons does each cousin get? Each cousin gets _____ crayons.	
5	100 oranges have to be equally divided among 10 people. How many oranges does each person get? Each person will get _____ oranges.	
6	Sabah wants to divide 40 Rs. equally among her 5 brothers. How many rupees does each brother receive? Each brother gets _____ rupees from Sabah.	

Further practice: Solve exercises in your textbook on page number 88.

اردو
ورک شیٹ

ورک شیٹ
۱
یونٹ نمبر ۱

بصری الفاظ

حاصل تعلم: بصری الفاظ پہچان کر پڑھ سکیں۔

سرگرمی

الفاظ پڑھیں۔

یہ	وہ	ہے	ہیں	ہوں
میں	تم	میرا	ہم	مجھے
ہمارا	تمھارا	ہمیں	تمھیں	کیا
کہاں	گئے	بہت	ہوئے	ہمیشہ
اگر	چاہیے	اور	لیکن	بلکہ

عبارت پڑھیں اور اوپر دیے گئے الفاظ کے گرد دائرہ لگائیں۔

دارا کا بلاّ



میرا نام دارا ہے۔ میں نے ایک بلاّ پالا ہے۔ اُسکا نام تارا ہے۔ تارا کی آنکھیں گول گول اور دُم چھوٹی ہے۔ تارا کی چار ٹانگیں ہیں۔ اُس کے بال سفید اور کالے ہیں۔ تارا دو سال کا ہے۔ تارا ہمیشہ دودھ شوق سے پیتا ہے۔ تارا بہت تیز دوڑتا ہے۔

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۲ پر دیا گیا سوال نمبر ۲ مکمل کریں۔

ورک شیٹ
۲
یونٹ نمبر ۱

کلمہ اور مہمل

حاصل تعلم: کلمہ اور مہمل میں فرق سمجھ کر استعمال کر سکیں۔

سرگرمی

درست لفظ لگا کر جملے مکمل کریں۔

۱. میں دوسری جماعت میں پڑھتا ہوں۔ (پڑھتا، شڑھتا)

۲. چاند اور تارے _____ کو چمکتے ہیں۔ (وات، رات)

۳. ہم _____ اُڑاتے ہیں۔ (وتنگ، پتنگ)

۴. سورج کی روشنی _____ ہے۔ (تیز، ویز)

۵. کیا آج _____ ہے؟ (چھٹی، شٹی)

۶. نور بی بی تیز _____ ہے۔ (شوڑتی، دوڑتی)

۷. ہمیں گھر _____ جانا ہے۔ (ولدی، جلدی)

۸. ہم سب _____ سے کھانا کھاتے ہیں۔ (ووق، شوق)

دیے گئے الفاظ میں سے مہمل الگ کریں۔

الفاظ	مہمل	الفاظ	مہمل
شام وام	وام	بوٹی ووٹی	
روٹی شوٹی		پانی وانی	
دال شال		سکول شکول	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۳ پر دی گئی کلمہ اور مہمل کی تعریف پڑھیں اور سمجھیں۔ صفحہ نمبر۳ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

سوالات و جوابات

ورک شیٹ
۳
یونٹ نمبر ۲

حاصل تعلم: نظم پڑھ کر مختصر سوالات کے جوابات دے سکیں۔

سرگرمی

نظم پڑھیں اور سوالات کے جوابات لکھیں۔

میرے پسندیدہ پھل

ابّو آئے، مالٹے لائے — انار، امرود اور کیلا لائے
میٹھے میٹھے کیلے سارے — بانو نے پھر سب کو کھِلائے
کھٹّے میٹھے مالٹے لے کر — مانی سب کو جوس پلائے
رسیلے رسیلے میٹھے انگور — سب سے زیادہ مجھ کو بھائے
سب پھل ہی پیارے ہم کو — ہم نے مل کر مزے اڑائے



۱. ابو بازار سے کیا لائے؟ _____

۲. بانو نے سب کو کیا کھلایا؟ _____

۳. نظم میں دیے گئے پھلوں کے نام لکھیں؟ _____

۴. اپنے پسندید ہ پھل کا نام بتائیں؟ _____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۶ پر دیا گیا سوال نمبر ۱ مکمل کریں۔

ورک شیٹ
۴
یونٹ نمبر ۲

امر و نہی کے جملے


حاصل تعلم: امر و نہی کے جملوں میں فرق کر سکیں ۔

سرگرمی

جملوں میں امر و نہی کے جملوں کی نشان دہی ✓ لگا کر کریں۔

جیسے: امر: ثانیہ ادھر آؤ۔ نہی : چوری مت کرو۔ یا چوری نہ کرو۔

۱. استاد کی عزت کرو۔ ☐ امر ☐ نہی

۲. چھت پر پتنگ نہ اُڑاؤ۔ ☐ امر ☐ نہی

۳. بازار سے دہی لاؤ۔ ☐ امر ☐ نہی

۴. بڑوں کی بات مانو۔ ☐ امر ☐ نہی

۵. ہر وقت ٹی وی مت دیکھو۔ ☐ امر ☐ نہی

جملوں کو امر و نہی کے جملوں میں تبدیل کریں۔

آج اردو کی کتاب پڑھنی ہے۔

امر: _____

نہی: _____

ہم گھر سے باہر کھیلتے ہیں۔

امر: _____

نہی: _____


مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۶ پر دیا گیا سوال نمبر ۲ مکمل کریں۔

ورک شیٹ
۵
یونٹ نمبر ۲

مذکّر مؤنّث

حاصل تعلم: مذکّر مؤنث میں فرق کر سکیں ۔

سرگرمی

الفاظ پڑھیں اور درست مؤنث مذکّر کے سامنے لکھیں۔

بکری	بلّی	بچّی	خالہ	مُرغی
بھابھی	امّی	نانی	کبوتری	

مذکّر	مؤنث
بلّا	
کبوتر	
خالو	
بکرا	
بچّہ	
مُرغا	
بھائی	
ابّو	
نانا	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۷ پر دیا گیا سوال نمبر ۳ مکمل کریں۔

ورک شیٹ
٦
یونٹ نمبر ۳

پیغام پڑھنا

حاصل تعلم: پڑھی، سنی اور دیکھی ہوئی معلومات کو عملی زندگی سے جوڑ سکیں۔

سرگرمی

پیغام پڑھ کر درست تصویر کے ساتھ ملائیں۔

اسپرے بوتل آگ کے قریب نہ رکھیں۔	
آگ کے قریب مت جائیں۔	
ماچس کے ساتھ نہ کھیلیں۔	
بجلی کے سوئچ کو ہاتھ نہ لگائیں۔	

آپ کن دو پیغام پر عمل کریں گے ؟ لکھیں۔

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۲ کے آخر میں دیے گئے پیغام کو پڑھ کر عمل کریں۔

ورک شیٹ
۷
یونٹ نمبر ۳

تفہیم عبارت (سوالات و جوابات)

حاصل تعلم: سادہ عبارت پڑھ کر مختصر سوالات کے جوابات دے سکیں۔

سرگرمی

عبارت پڑھ کر سوالات کے جوابات لکھیں۔



موسم خزاں

برسات کا موسم تھم گیا تھا۔ دیکھتے ہی دیکھتے درخت کے پتّے زرد ہونے لگے تھے۔ اب درخت پریشان ہو گیا کہ اب اس کے پتّے گرنے لگیں گے اور بُلبُل بھی اپنا گھونسلا چھوڑ کر چلی جائے گی۔ یہ سوچتے ہی درخت اُداس ہو گیا۔ بُلبُل نے اُسے روتے دیکھا تو تسلّی دینے لگی۔ بُلبُل درخت سے موسم بہار میں دوبارہ واپس آنے کا وعدہ کر کے چلی گئی۔

1. عبارت میں دیے گئے موسموں کے نام لکھیں؟ _____

2. درخت کیوں پریشان تھا؟ _____

3. بُلبُل نے کیا وعدہ کیا؟ _____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۳ پر دیے گئے سوالات کے جوابات لکھیں۔

فعل، فاعل، مفعول

ورک شیٹ
۸
یونٹ نمبر ۳



حاصل تعلم: جملے میں فعل، فاعل اور مفعول کی پہچان کر سکیں۔

سرگرمی

جملوں میں فعل اور فاعل تلاش کریں۔

۱. مالی پودوں کو پانی دے رہا ہے۔

فاعل: مالی	فعل: پانی دے رہا ہے۔

۲. ہم سب کھانا کھا رہے تھے۔

فاعل:	فعل:

۳. استاد بچوں کو پڑھا رہا ہے۔

فاعل:	فعل:

۴. عالیہ تصویر بنا رہی ہے۔

فاعل:	فعل:

جملے میں مفعول کے گرد دائرہ لگائیں۔

۱. مالی پودوں کو پانی دے رہا ہے۔

۲. عالیہ تصویر بنا رہی ہے۔

۳. احمد کھانا کھا رہا ہے۔



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۴ پر دیا گیا سوال نمبر ۳ مکمل کریں۔

ورک شیٹ
۹
یونٹ نمبر ۳

مذکر مؤنث


حاصل تعلم: مذکر مؤنث میں فرق کر سکیں ۔

سرگرمی

پھل اور سبزیوں میں سے مذکر اور مؤنث الگ کریں۔

پھل			سبزیاں		
مالٹا	سیب	انار	بھنڈی	آلو	توری
امرود	ناشپاتی	فالسہ	مولی	بینگن	گوبھی

مذکّر	مؤنث
آلو	مولی


مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۱۴ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

ورک شیٹ
۱۰
یونٹ نمبر ۳

گا، گی، گے کا استعمال



حاصل تعلم: جملے میں گا، گی، گے کا استعمال کر سکیں۔

سرگرمی

جملے میں گا، گی اور گے لگا کر جملہ مکمل کریں۔

آج تیز بارش ہو _____۔	گا، گی، گے
میں موم کی گڑیا لاؤں _____۔	گا، گی، گے
اسلم آج شہر واپس جائے _____۔	گا، گی، گے
ہم بازار سے پھولوں کا ہار لائیں _____۔	گا، گی، گے
گرمی کے موسم میں پیاس زیادہ لگے _____۔	گا، گی، گے
بہار کا موسم ہر طرف ہریالی لائے _____۔	گا، گی، گے

عبارت میں گا، گی اور گے لگا کر جملہ مکمل کریں۔

عبارت

یاور اور صبا دادی کے گھر جائیں _____۔ دادی ان سے بہت پیار کریں _____۔ آج دادا ان کی پسند کے پھل لائیں _____۔ وہ دادا اور دادی کے ساتھ خوب کھیلیں _____۔ یاور دادا کو کہانی سنائے _____۔ صبا اپنی پسند کی نظم سنائے _____۔ ہم سب کو بہت مزا آئے _____۔



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۵ پر دیا گیا سوال نمبر ۵ مکمل کریں۔

ورک شیٹ
۱۱
یونٹ نمبر ۳

بے معنی الفاظ پڑھنا



حاصل تعلم: اختراعی ہجوں والے یا بے معنی ۴۰ الفاظ ۱ منٹ میں پڑھ سکیں۔

سرگرمی

الفاظ کو روانی سے پڑھیں۔

اب	جب	تب	ان	اس
اُس	سب	لب	مت	حد
پر	مت	وہ	تم	تو
ہم	یہ	پر	شر	رس
گی	ہو	گل	حل	گا
کر	اُن	کا	گے	ہوتی
کی	کب	ہوتا	ہوتے	پھر
سے	کہ	کے	سا	مل



مشق

پیارے بچّو! اوپر دیے گئے الفاظ کو تیزی سے ادا کرنے کی کوشش کریں۔

ورک شیٹ
۱۲
یونٹ نمبر ۴

تفہیم عبارت (سوالات و جوابات)

حاصل تعلم: سادہ عبارت پڑھ کر مختصر سوالات کے جوابات دے سکیں۔

سرگرمی

عبارت پڑھ کر سوالات کے جوابات لکھیں۔



چڑیا کی مدد

عامر کے گھر ایک چڑیا کا گھونسلا تھا۔ چڑیا کے بچّے چُوں چُوں کرتے رہتے تھے۔ چڑیا اُن کو اپنی چونچ سے کھانا کھلاتی تھی۔ ایک دن بارش ہوئی تو گھونسلا گیلا ہونے لگا۔ چڑیا بہت پریشان ہوئی۔ چڑیا کو پریشان دیکھ کر عامر نے مدد کرنے کا سوچا۔ اُس نے دوست کی مدد سے گھونسلے کو کپڑے سے ڈھانپ دیا۔ چڑیا بھی بچوں کے پاس بیٹھ گئی۔

۱. عامر کے گھر کس کا گھونسلا تھا؟ _____

۲. چڑیا کیوں پریشان ہوئی؟ _____

۳. عامر نے چڑیا کی مدد کیسے کی؟ _____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۷ پر دیے گئے سوالات کے جوابات لکھیں۔

ورک شیٹ
۱۳
یونٹ نمبر ۴

واحد جمع

حاصل تعلم: واحد کی جمع اور جمع کے واحد بنا سکیں۔

سرگرمی

واحد کو جمع سے ملائیں۔

واحد	جمع
کتاب	باغات
بکرا	لکڑیاں
کرسی	بکرے
باغ	کھیتوں
لکڑی	کتابیں
کھیت	کرسیاں

جملے میں جمع کو واحد میں تبدیل کریں۔

لڑکیاں سکول جا رہی ہیں۔	لڑکی سکول جا رہی ہے۔
کھیتوں کو پانی دو۔	
کرسیاں صحن میں رکھی ہیں۔	
کتابیں الماری میں ہیں۔	
لکڑیاں گیلی ہیں۔	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۷۱ پر دیا گیا سوال نمبر ۲ مکمل کریں۔

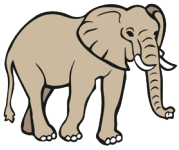
ورک شیٹ
۱۴
یونٹ نمبر ۴

الف بائی ترتیب سے الفاظ لکھنا

حاصل تعلم: الف بائی ترتیب سے الفاظ لکھ سکیں۔

سرگرمی

تصویروں کے نام الف بائی ترتیب سے لکھیں۔

الفاظ پڑھیں اور الف بائی ترتیب سے لکھیں۔

جال	چوٹ	گاجر	ساگ	بولی
روٹی	پری	لوری	حاجن	رات
شکر	خط	صابن	ٹولی	تارے

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر۱۸پر دیا گیا سوال نمبر۳ مکمل کریں۔

ورک شیٹ
۱۵
یونٹ نمبر ۴

جملوں کو ترتیب دینا



حاصل تعلم: بے ترتیب جملوں کو فاعل، فعل اور مفعول کے لحاظ سے درست ترتیب دے سکیں۔

سرگرمی

جملوں کی ترتیب درست کر کے لکھیں۔

روٹی ہم کھائی نے جَو کی۔	ہم نے جَو کی روٹی کھائی۔
بُھوک لگی ہم سب کو تھی۔	
ہم نے ڈھُونڈا چُوہے کو ہر جگہ۔	
بنائے مولی کے پراٹھے امّی نے۔	
چمکتے ہیں چاند اور تارے رات میں۔	
پڑھتے ہیں اخبار میرے ابّو۔	



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۸ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

Notes

ENGLISH

Worksheet 1

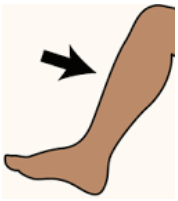
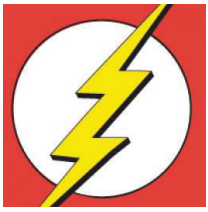
Unit No: 1

Match the Sound

SLO: Articulate, identify and differentiate between the sounds of individual letters, diagraphs and trigraphs in initial and final position in a word.

Instructions: Say the words aloud and identify sounds in the pictures.

Which words contain the sounds sh, ch, th. Write in the spaces underneath.

			
___ ___ ips	___ ___ in	fla ___ ___	eart___ ___
	3		
___ ___ ain	___ ___ ree	tee ___ ___	___ ___ ee se

Instructions: Encircle the pictures that begin with the sound in the row. Also, write the name of the encircled picture in the next column.

th 	***Thunder***
ch 	
sh 	
wh 	
ph 	

Further practice: Complete the exercise 'look at the pictures' given on page 5 in your textbook.

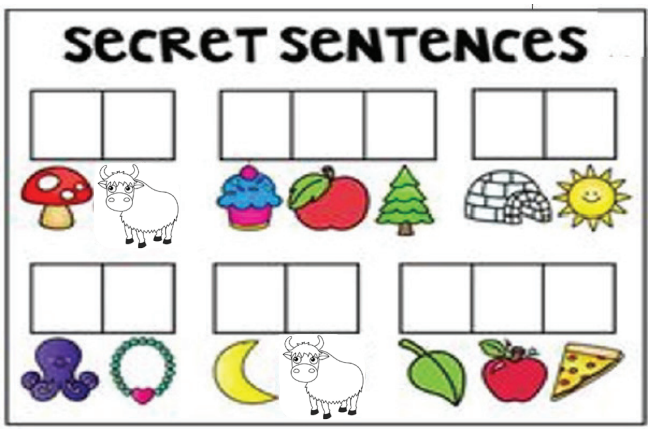
Worksheet 2

Unit No: 1

Sounds of Letters

SLO: Articulate the sounds of letters of the alphabet in random order.

Instructions: Look at the pictures below. Write the first sound of each word in the boxes. Write the secret sentence on the line given below.



Secret sentence: _____

Instructions: Read the story given below and identify the words which have /f/, /c/ and /b/ sounds. Write these words in the spaces below.

My friend Fahad likes animals. He has a beautiful black cat and five fish. We both play together with his cat in the backyard. His cat eats cake and drinks milk.

/f/_friend_____

/c/_____

/b/_____

/m/_____

Further practice: Complete exercise 'B, look at the pictures.' given on page number 4 in your textbook.

Key of first activity: My cat is on my lap

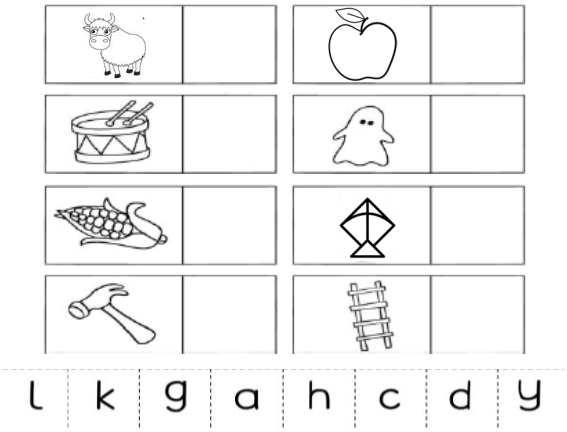
Worksheet 3

Unit No: 1

Match Sounds with Pictures

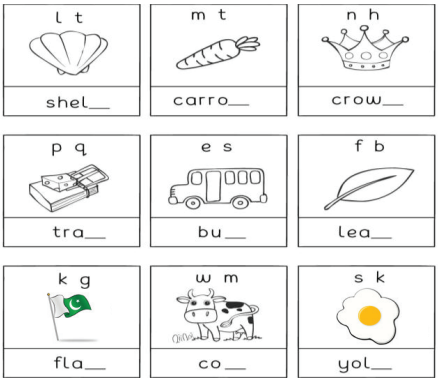
SLO: Match the initial and final sound of common words depicted in pictures with their corresponding letters.

Instructions: Identify and write the letters that represent the initial sounds in the pictures below.



l k g a h c d y

Instructions: Identify and write the letters that represent the initial sounds in the pictures below.



Further practice: Complete the exercise 'look at the pictures' given on page number 2 and 3 in your textbook.

Worksheet 4

Unit No: 1

Classify Sounds



SLO: Identify / classify words that begin with consonants or vowel sounds.

Instructions: Write "C" for consonants and "V" for vowel to identify the words that begin with Vowel or consonants sounds.

1. Rat	
2. Bat	
3. Orange	
4. Umbrella	
5. Frog	
6. Egg	
7. Ice cream	
8. Kite	
9. Chair	
10. Almonds	



Further practice: Complete the exercises 'vowel and consonants' given on page number 7 on your textbook.

Worksheet 5

Unit No: 1

Identify Sounds



SLO: Recognize and identify consonant and vowel sounds in the English alphabet.

Instructions: Find the vowels in the words below and write them in the squares. An example has been done for you.

Words	Vowels				
Cauliflower	a	u	i	o	e
Umbrella					
Zebra					
Violin					
Leopard					
Crocodile					
Airplane					
Brother					

Instructions: Write the consonant sounds of the following words.

Words	Consonants				
Crocodile	c	r	c	d	l
Umbrella					
Zebra					
Airplane					
Brother					



Further practice: Complete the exercise 'vowel sound and rhyming practice' given on page 8 in your textbook.

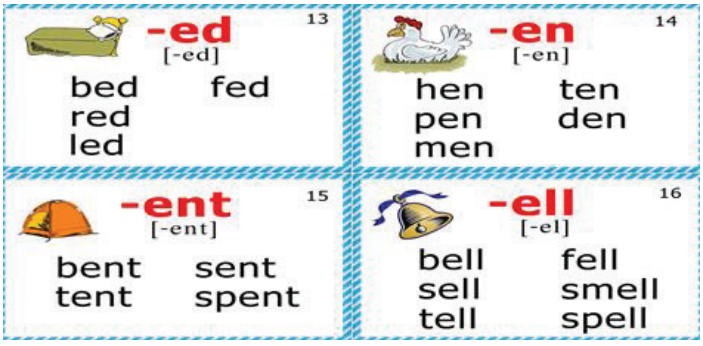
Worksheet 6

Unit No: 1

Sounds Change with Words

SLO: Recognize that as letters of words change so do the sounds.

Instructions: Read the words in the boxes below and recognize how sounds change with the change in letters.



Instructions: Look at the pictures given below by completing the ending sound 'et'/ 'en'/ 'ent'/.



T __ __



T __ __ __



J __ __



H __ __



N __ __



W __ __ __

Further practice: Complete the exercises given on vowel sounds and rhyming practice given on pages 8 and 9 in your textbook.

Worksheet 7

Unit No: 1

Matching Sounds with Pictures

SLO: Identify/classify words that begin or end with the same sound.

Instructions: Find the 'ch' sound words given below in the table. Colour the beginning 'ch' sound in red and the ending 'ch' sound in green.





f	j	c	h	o	p	c	v	b	n	c	h	e	s	s
b	e	n	c	h	l	p	a	c	h	a	t	c	x	z
s	c	h	i	c	k	q	p	u	n	c	h	k	y	t
o	b	u	e	h	l	u	n	c	h	m	q	w	r	j
c	h	p	i	n	c	h	g	o	d	z	c	h	i	n

Instructions: Add the beginning or ending sounds 'sh,' 'ch', 'wh', 'th' to complete the words below.

S.No.	Words	S.No.	Words
1	___ ___ ine.	6	___ ___ ile.
2	clo___ ___.	7	___ ___ y.
3	wi___ ___.	8	___ ___ under.
4	___ ___ ell.	9	___ ___ ain.
5	cat___ ___.	10	wa ___ ___

Further practice: Complete the exercises 'look, say and write the initial and ending sound given on pages 5 and 6 in your textbook.

Worksheet 8

Unit No: 2

Naming words with 's' and 'es'

SLO: Identify the number of simple naming word by adding or removing 's' and 'es'.

Instructions: Write the plural for each naming word by adding 's' or 'es.' Also circle the words in the word search.



cat _____



box _____



boat _____



bus _____

glass _____



pen _____

WORD SEARCH

A	P	E	N	S	A	N	H
D	Y	E	T	G	L	B	I
B	U	S	E	S	A	O	C
O	S	N	F	X	K	A	D
X	B	C	A	T	S	T	V
E	P	L	O	C	A	S	E
S	G	L	A	S	S	E	S
A	H	E	B	I	J	D	W

Instructions: Add 's' or 'es' where appropriate. One example has been done for you.

Singular	Plurals	Singular	Plurals
Potato	Potatoes	Apple	
Case		Match	
Nail		Spoon	
Apple		Hero	

Further practice: Attempt the exercises 'singular and plural' given on pages 13 and 14 in your textbook.

Worksheet 9

Unit No: 2

Naming Words

SLO: Recognize & match common singular naming words from the immediate environment. Classify naming words into different categories such as person, pet, animal, place or thing. Use naming words in their speech and writing.

Instructions: Read the dialogue below. Classify and write person, place and things in the relevant columns below:

1.
Hello Kabir, what did you bring for lunch from home, today?



2.
Hi Feroze, I have popcorn, would you like some?

3.
Yes, I do. I like popcorn very much but today I have some salad and an apple in my lunchbox. I can share my lunch with you.

4.
No, thank you but your lunch is very healthy. I will tell my mother not to give me chocolate, burger, pizza, and cake.
I will also bring some fruit and salad to school from tomorrow.

Person	Place	Things

Further practice: Complete the exercise 'naming words' given on page 12 in your textbook.

Worksheet 10

Unit No: 2

Sight Words

SLO: Identify, recognize and articulate more sight words.

Sight Words are the Words I can read quickly.



Instructions: Can you read the sight words in the box below? Fill in the blanks with suitable sight words to complete the sentences.

Sight Words

the	with	can	is
am	in	to	

1. The dog jumped _____ the pool.
2. Yasir spent the weekend _____ his family.
3. Amna and Ahmed went to _____ park.
4. I _____ a student.
5. Hasan _____ a police officer.
6. Ali and Akbar went _____ the football ground.
7. Farwa _____ write her name.

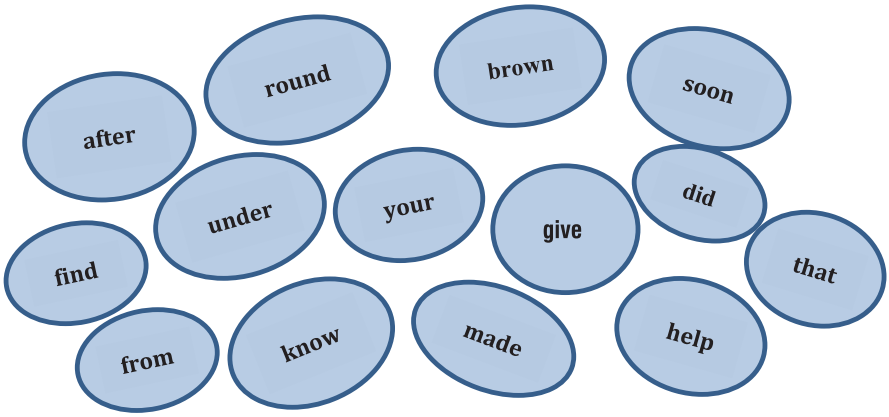
Further practice: Complete Worksheet 10B for reinforcement of sight words.

Worksheet
10a
Unit No: 2

Sight Words

SLO: Identify, recognize and articulate more sight words.

Instructions: Identify and select the words in the bubbles to complete the sentences below. Read aloud after completing each sentence.



1.	I got a biscuit _____ the store.
2.	I _____ a chappli kabab for my sister.
3.	Is that _____favourite book?
4.	My shoes are _____ the bed.
5.	He has a _____ coat.
6.	I like to _____ my mother cook dinner.
7.	Did you _____ my red hat?

Further practice: Choose any four words from the bubbles, which have not been used in the sentences above and use them in sentences of your own.

Worksheet 11

Unit No: 3

Action Words

SLO: Identify and use more common action words.

Instructions A: Write the given action words under the pictures.

Action words: eat, walk, work, run, write, listen, speak, drink, read, play













Instructions A: Choose any five actions words from the pictures above and make sentences in your notebooks.

Example: In the first picture, the boy is reading a book.

Further practice: Complete the exercise given on pages 18 and 19 of your textbook on action words (verbs).

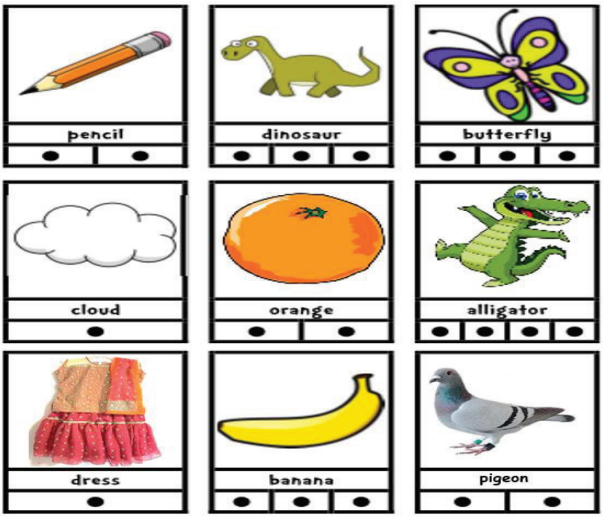
Worksheet
12a
Unit No: 3

Syllables

SLO: Write simple two / three syllable words with correct spellings. Leave space between words.

Instructions: Say each word in the table below by clapping on each syllable

Example: pen cil



Instructions: Write five words from your immediate environment and put dots for the number of syllables in the word.

Word	Syllables		
Classroom	●	●	

Further practice: Complete worksheet 12B to practice two/three syllable words.

Worksheet
12b

Unit No: 3

Syllables

SLO: Write simple two / three syllable words with correct spellings. Leave space between words.

Instructions: Recall the worksheet 12a on syllables.

Say the word Butterfly and with each break in the name, clap once: but👏ter👏fly👏. There are 3 syllables in Butterfly.

Now say your name and see how many times you have to clap.

Read each word aloud and write the number of syllables in correct spelling.

S. No	Words	Number of Syllables	Write and separate syllables
1.	remember	3	re/mem/ber
2.	window		
3.	uniform		
4.	computer		
5.	garden		
6.	student		

Further practice: Select any five words of your own choice and say them aloud. Count the claps. Write the words with the number of claps in the space below:

Word Number of Syllables (Claps)	Words
1.	
2.	
3.	

Note: Syllables are building blocks of words. Knowing the rules of syllable division can help students spell words correctly and read words more accurately and fluently.

Worksheet
13a
Unit No: 5

Routine Greetings

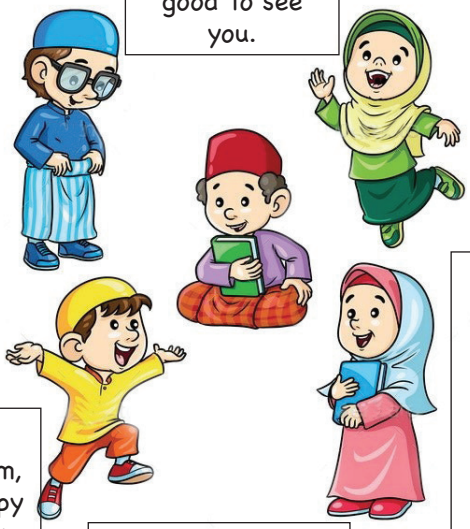
SLO: Exchange some routine greetings.

Instructions: Read the dialogues between friends. In the empty box greet a friend.

1. Good Morning everyone. How are you all?

2. Hello Ali, I am fine. It is so good to see you.

3. Assalam O Alaikum my friends, I am doing well too. I am so excited to see you.



4. Walaikum assalam, I am feeling happy and fresh thank you.

5. Walaikum Assalam! Good to hear your plans and nice to see you all.

Further practice: Practice greetings with your friends and ask them how they will spend their weekend. Complete the exercise given on page 35 of your textbook.

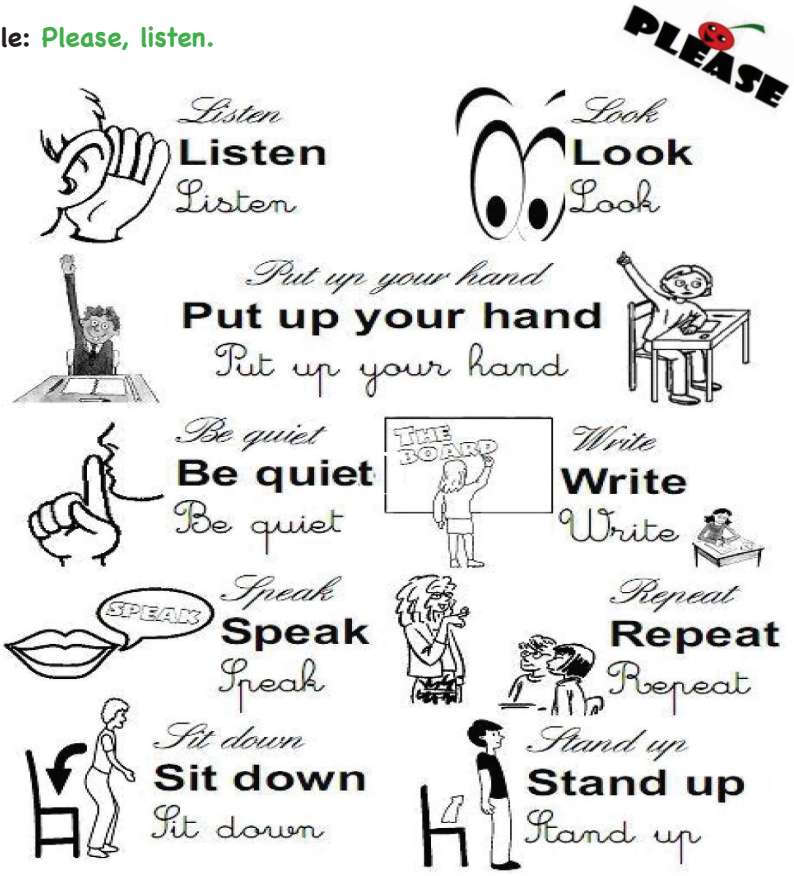
Worksheet
13b
Unit No: 5

Routine Courtesies

SLO: Exchange some routine courtesies.

Instructions: **Please** is a magic word. Before each command given below, say please. Practice these phrases at home.

Example: **Please, listen.**



Further practice: Practice courtesies given on pages 31 and 32 of your textbook.

Worksheet
14
Unit No: 5

Social Courtesies

SLO: Exchange some social courtesies.

Instructions: Read the dialogue below. List any four courtesy words in the space provided.



Sana: Thank you! Ami and Abu for bringing us to this beautiful park.
Abu: You are welcome my dear child.
Please take your sister to see the flowers.
Sana: Sure Abu. Come on Alina, let's go.
Ami: Sana, please take care of your sister.
Sana: Don't worry Ami. I will take care of her.
Ami: Thank you for being a good girl, Sana.
Sana: You are welcome Ami. See you, Allah hafiz.
Ami: Take care.

Social courtesies:

Further practice: Practice the courtesy words given on pages 31 & 32 of your textbook. Use the courtesy words with your family and friends.

Worksheet 15

Unit No: 4

Describing Words

SLO: Identify and match some pairs of describing words showing quality, size and colors, soft-hard, big-small, black white.

Instructions: Look at the pairs of describing words and list them in the correct columns below.









Big and Small



Hard and Soft



Black and White

Quality	Size	Colour
Example: hard & soft		

Further practice: Complete the exercise given on page 28 of your textbook.

Worksheet
16

Unit No: 17

Expressing likes & dislikes

SLO: Demonstrate use of common conventions and dynamics of group oral interactions to express likes and dislikes.

Instructions: Read the dialogue and answer the questions in complete sentences.







Ahmed: I like gardening, what do you like doing, Ali and Salman?

Ali: I like riding bicycles. Do you like bicycle rides?

Salman: No, I do not like outdoor activities.

Ahmed: Why?

Salman: Because I like to paint.

Ali: What else do you dislike?

Salman: I dislike riding bicycles and growing plants.

Ahmed: Oh! Then would you like to draw my plants?

Ali: Please draw my bicycle too.

Salman: Yes, I will draw your bicycle. Ali. Ahmed, I will draw your plants too.

1. Who likes to plant? _____
2. What does Salman dislike? _____
3. What does Ahmed like doing? _____
4. What does Ali request from Salman? _____
5. What two things will Salman draw? _____

Further practice: read the dialogue and attempt questions on Likes and dislikes given on pages 77 and 78 of your textbook.

Worksheet
17

Unit No: 7

Rhyming Words



SLO: Articulate and recognize simple rhyming words.

Instructions: Identify rhyming words in the given poem. Also say aloud the same words after writing them in the given space.

Little Boy Blue,
Come blow your horn.
The sheep's in the meadow,
The cow's in the corn.

Where is that boy?
Who looks after the sheep?
Under the haystack.
Fast asleep.

Rhyming words:

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____

_____ _____ _____ _____ _____



Further practice: Read the poem 'Directions' in your textbook on page 41 and copy the rhyming words in given space.

Rhyming words:

_____ _____ _____ _____ _____

قومی ترانہ

پاک سرزمین شاد باد
کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
رہبر ترقی و کمال
ترجمان ماضی شان حال
جان استقبال!
سایۂ خدائے ذوالجلال

KHYBER PAKHTUNKHWA ELEMENTARY AND SECONDARY EDUCATION DEPARTMENT

KPESED
معیاری تعلیم... سب کیلئے!
Khyber Pakhtunkhwa Elementary & Secondary Education Department

English

اردو

Maths

WORKSHEETS



GRADE 3

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف با معنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوارات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہ نمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو اجاگر بھی کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا۔

گوہر علی خان
ناظمِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور مطالعے کے تسلسل کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کی توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو بطریقہ احسن سرانجام دینے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دی گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد ، استاد یا پھر نیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہ نمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اورا سکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1. انگلش	انعام اللہ خٹک	0333-9746976
2. ریاضی	عباس خان	0345-9419923
3. جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4. اُردو	تاج ولی خان	0313-9848959

Mathematics

Worksheet 1

Unit No: 1

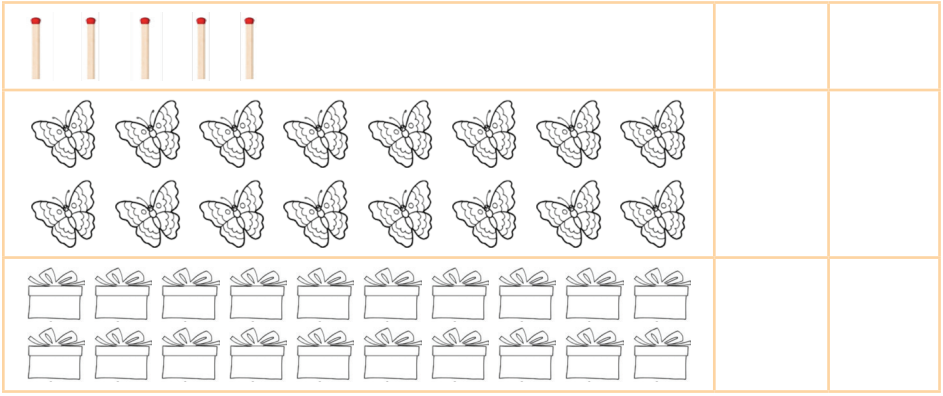
Numbers

SLO: i) Read Roman numbers up to 20
ii) Write Roman numbers up to 20

Instructions: Write decimal and roman numbers in front of the images

Remember: I or i = 1, V or v = 5 , X or x = 10, XV or xv = 15 and XX or xx = 20 Examples: to write 2, 4 and 16 in roman numbers II it means 1+1 hence 2 IV it one less than five, 5-1 hence 4 and XVI it means 6 more than 10, 10+5+1, hence 16	Decimal No.	Roman No.
	10	x
		
		
		
		
		

Numbers



Instructions: Write the following in Roman Numbers.

Arabic Number	15	4	17	8	19
Roman Number	XV				
Arabic Number	6	13	9	20	11
Roman Number					

Instructions: Write the following in Arabic Numbers.

Roman Number	XVI	X	XIV	XIII	XIX
Arabic Number	16				
Roman Number	X	VIII	V	XX	XIV
Arabic Number					

Further practice: Solve exercises in your textbook on page numbers 6 to 8.

Worksheet 2

Unit No: 1

Numbers

SLO: i) Identify even & odd numbers up to 99 within a given sequence. ii) Write even or odd numbers within a given sequence.

Instructions: Draw a tick next to even numbers and draw a circle around the odd numbers.

2 ✓	82	87
7	(87)	94
12	92	1
17	97	6
22	3	11
27	10	16
32	17	21
37	24	26
42	31	31
47	38	36
52	45	41
57	52	46
62	59	51
67	66	56
72	73	61
77	80	84

Numbers

Write all the even numbers from 70 to 84:			
70	72		

Write all the odd numbers from 21 to 35:			
21	23		



Further practice: Solve exercises in your textbook on page numbers 9-11

Worksheet 3

Unit No: 1

Numbers

SLO: i) Identify the place values of numbers up to 6 digits
ii) Compare two numbers using symbols < , > and =

Instructions: Write the place value of the underlined number

Number	Place value
4 2 3 <u>1</u> 7 8	1 hundreds
5 <u>7</u> 1 2 3 8	
<u>2</u> 1 3 8 7 4	
<u>3</u> 1 0 0 0 6	
3 5 2 7 <u>6</u> 1	
6 1 7 <u>2</u> 8 3	
5 4 <u>7</u> 6 9 8	

Remember

< is symbol of less than

> is symbol of greater than

Instructions: Compare the two numbers and write >, < or = in the space provided

i)	9	<	14	ii)	27		22
iii)	235		244	iv)	7643		7543
v)	786		420	vi)	567		589
vii)	9857		10412	viii)	75300		76719
ix)	684357		545722	x)	757322		757322
xi)	988757		724162	xii)	100000		99999

Further practice: Solve exercises in your textbook on page numbers 14 to 16.

Worksheet 4

Unit No: 2

Number Operations

SLO: Add numbers up to four digits (with and without carrying)

Instructions: Add the numbers and write the answers in the space

i

	Th	H	T	O
	6	5	3	4
+	1	3	4	5
	7	8	7	9

ii

	Th	H	T	O
		1		1
	3	4	6	7
+	4	3	7	5
	7	8	4	2

iii

	Th	H	T	O
	1	7	1	5
+	2	4	7	2

iv

	Th	H	T	O
	8	4	7	6
+	1	2	3	4

v

	Th	H	T	O
	1	2	1	2
+	3	6	3	6

vi

	Th	H	T	O
	1	8	6	8
+	5	2	1	9

vii

	Th	H	T	O
	4	4	6	8
+	2	1	2	1

iix

	Th	H	T	O
	3	0	0	1
+	5	2	8	4

ix

	Th	H	T	O
	2	4	8	8
+	4	3	7	9

x

	Th	H	T	O
	2	2	5	5
+	1	0	7	4

xi

	Th	H	T	O
	7	7	7	7
+	1	2	3	4

xii

	Th	H	T	O
	5	6	8	5
+	1	3	1	9

Further practice: Solve exercises in your textbook on page number 29 and 33.

Worksheet 5

Unit No: 2

Number Operations

SLO: Solve real life problems involving addition.

Instructions: Read the questions and then write the answers in the space provided

1	Example: A library in Peshawar had 2815 books. It received 3265 more books from a library in Abbottabad. How many books does the library in Peshawar have in total? The library in Peshawar has 6080 books in total	$\begin{array}{r} {\scriptstyle 1\quad\quad 1} \\ \text{Th H T O} \\ 2\ 8\ 1\ 5 \\ +\ 3\ 2\ 6\ 5 \\ \hline 6\ 0\ 8\ 0 \end{array}$
2	Ayesha counted 728 trees in a forest and 247 in a nearby park. How many trees did Ayesha count altogether? Ayesha counted _____ trees altogether	
3	A shopkeeper has 1673 items in his shop. He orders 1344 more. How many items will the shopkeeper have after the order arrives? The shopkeeper will have _____ items altogether	
4	Sahar received Rs. 2550 on Eid. She had previous savings of her own of Rs. 5780. How much money does Sahar have in total? Sahar has Rs. _____ in total	
5	A bus driver drove 1552 km from Peshawar to Karachi and then 1552 km back from Karachi to Peshawar. What is the total distance covered by the bus driver? The bus driver covered _____ kms in total.	
6	Three brothers Ali, Amir and Murtaza are saving money to buy a motorbike. Ali saved Rs. 4750, Amir saved Rs. 3575 and Murtaza saved Rs. 1535. How much money was saved for the motorbike in total? Ali, Amir and Murtaza saved Rs. _____ in total.	

Further practice: Solve exercise in your textbook on page number 33 (question 7 to 13).

Worksheet 6

Unit No: 2

Number Operations

SLO: Subtract numbers up to four digits with and without borrowing.

Instructions: Subtract the two numbers

i

Th	H	T	O
6	5	7	6
− 1	3	4	5
5	2	3	1

ii

Th	H	T	O
4	3 4	1 6	7
− 4	3	7	5
0	0	9	2

iii

Th	H	T	O
5	7	7	5
− 2	4	1	2

iv

Th	H	T	O
8	4	7	6
− 1	2	3	4

v

Th	H	T	O
5	7	5	8
− 3	6	3	6

vi

Th	H	T	O
9	8	6	9
− 8	2	1	9

vii

Th	H	T	O
4	5	6	1
− 2	1	8	8

iix

Th	H	T	O
5	0	0	1
− 4	2	8	4

ix

Th	H	T	O
5	4	6	8
− 4	3	7	9

x

Th	H	T	O
2	2	5	5
− 1	0	7	4

xi

Th	H	T	O
7	7	7	7
− 1	2	3	4

xii

Th	H	T	O
5	6	8	5
− 1	3	1	9

Further practice: Solve exercises in your textbook on page number 38 and 41 (top).

Worksheet 7

Unit No: 2

Number Operations

SLO: Subtract numbers up to 100 using mental calculation strategies.

Instructions: Mentally subtract the two numbers and write the answer

Example:
Mentally subtract 26 from 87.
Step 1: Subtract 20 from 87. You should mentally workout 87 – 20 = 67
Step 2: Subtract 6 from 67. You should mentally workout 67 – 6 = 61.
Step 3: Arrive at the final answer 87 – 26 = 61.

26 – 15 = _____

38 – 24 = _____

45 – 33 = _____

67 – 55 = _____

43 – 13 = _____

67 – 37 = _____

78 – 68 = _____

42 – 16 = _____

34 – 15 = _____

75 – 48 = _____

65 – 30 = _____

70 – 47 = _____

92 – 78 = _____

99 – 97 = _____

Further practice: Solve exercise in your textbook on page No. 42

Worksheet 8

Number Operations

Unit No: 2

SLO: Solve real life problems involving subtraction.

Instructions: Read the questions, find the answers and fill in the blanks

1	Example: In a stadium there are 4575 people. 3234 are men. How many women are in the stadium? There are 1341 women in the stadium.	Th H T O 4 5 7 5 − 3 2 3 4 1 3 4 1
2	Adil, a hardware store owner has some pipes in his shop. He ordered 1250. Now he has 3370. How many pipes did Adil have at the start? Adil had _____ pipes at the start.	
3	Jamal Khan, an avid stamp collector, has 3762 stamps in his collection. He gave away 1248 to another collector. How many stamps does Jamal Khan have left? Jamal Khan has _____ stamps left.	
4	The District Governor ordered 8790 books for students in his district. In one term, he gave away 5380 books to various students. How many books were still left? There were _____ books left with the District Governor.	
5	On her birthday Hajra received Rs. 3550 from her friends and family. She went shopping and spent Rs. 2540. How much money did Hajra have left? Hajra had Rs. _____ left.	
6	Murtaza deposited Rs. 9880 into a bank account in a given month. He took out Rs. 8475 the following month. How much money did Murtaza have left in his account? Murtaza had Rs. _____ left in his bank account.	

Further practice: Solve exercise in your textbook on page No. 41

Worksheet 9

Unit No: 2

Number Operations

SLO: i)Use the term 'product' for multiplication of two numbers. ii) Develop multiplication tables for 6,7,8,9.

Instructions: As 3 + 3 = 6 or 2 × 3 = 6. Hence the product of 2 and 3 is 6.

Q1. Find the product of 3 and 4

Solution: 3 × 4 = ☐

Q2. Find the product of the following numbers

i. 3 and 6= _____

ii. 4 and 5= _____

iii. 3 and 7= _____

iv. 4 and 8= _____

v. 5 and 9 = _____

Number Operations

Unit No: 1

Instructions: Develop the given tables with the help of numbers given

6 × 1 = 6	7 × 1 =	8 × 1 =
6 × 2 =	7 × 2 = 14	8 × 2 =
6 × 3 =	7 × 3 =	8 × 3 = 24
6 × 4 =	7 × 4 =	8× 4 =
6 × 5 =	7 × 5 =	8 × 5 =
6 × 6 =	7 × 6 =	8 × 6 =
6 × 7 =	7 × 7 =	8 × 7 =
6 × 8 =	7 × 8 =	8 × 8 =
6 × 9 =	7 × 9 =	8 × 9 =
6 × 10 =	7 × 10 =	8 × 10 =

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



Further practice: Solve exercises in your textbook on page No. 45 – 48 and 50.

Worksheet 10

Unit No: 2

Number Operations

SLO: Multiply 2-digits numbers by 1-digit numbers.

Instructions: Multiply the two numbers and write the answers in the space provided

Example:

	H	T	O
		2 5	3
×			7
	3	7	1

i)

	H	T	O
		3	7
×			9

ii)

	H	T	O
		4	0
×			7

iii)

	H	T	O
		2	6
×			9

iv)

	H	T	O
		2	4
×			5

v)

	H	T	O
		1	3
×			9

vi)

	H	T	O
		6	1
×			6

vii)

	H	T	O
		3	4
×			8

viii)

	H	T	O
		2	1
×			9

ix)

	H	T	O
		2	5
×			8

x)

	H	T	O
		9	9
×			9

Further practice: Solve exercise in your textbook on page No. 53

Worksheet 11

Unit No: 2

Number Operations

SLO: Solve real life problems involving multiplication of 2 digit numbers by 1 digit numbers.

Instructions: Read the questions and then give your answer in the space provided

1	Every car has 4 wheels. 26 cars are parked outside a building. How many wheels do these cars have altogether? There are 104 wheels altogether.	H T O 2 2 6 × 4 1 0 4
2	There are 15 bicycles parked outside a store. Each bicycle has 2 wheels. How many wheels do the bicycles have altogether? The bicycles have _____ wheels altogether	
3	Colour pencils come in packs of 16. The teacher buys 9 packs for her students. How many colour pencils did the teacher buy? The teacher bought _____ pencils	
4	Alina buys 27 sweets. Each sweet is for Rs. 5. How much money does she spend on sweets? Alina Spends _____ on sweets.	
5	Omer reads 15 pages every day of his English Book. How many pages will Omer read in 7 days? Omer will read _____ pages in 7 days.	
6	Batteries / Cells come in packs of 4. Laraib buys 18 packs. How many batteries / cells does Laraib have altogether? Laraib has_____ batteries / cells altogether	

Further practice: Solve exercise in your textbook on page No. 53.

Worksheet 12

Unit No: 2

Number Operations

SLO: Divide 2 digit numbers by 1 digit numbers (with zero remainder).

Instructions: Write division process and fill in the blank with correct answer

Divide 32 by 2 = 16 1 6 2 | 3 2 - 2 1 2 - 1 2 0	Divide 36 by 3 = ___	Divide 65 by 5 = ___	Divide 96 by 4 = ___	Divide 77 by 7 = ___
Divide 80 by 8 = ___	Divide 98 by 7 = ___	Divide 45 by 5 = ___	Divide 18 by 3 =	Divide 72 by 9 = ___

Further practice: Solve exercises in your textbook on page No. 60

Worksheet 13

Unit No: 2

Number Operations

SLO: Solve real life problems involving division of 2 digit numbers by 1 digit

Instructions: Read the questions and then give your answer in the space provided

1	24 sweets are to be equally divided among 2 boys. How many sweets does each boy get? Each boy gets 12 sweets.	12 2 ⟌ 24 2 04 − 4 0
2	A box of chocolates has 45 small pieces which have to be equally divided among 3 children. How many pieces does each child get? Each child gets ____ pieces of chocolate.	
3	40 balloons have to be equally divided among 4 students. How many balloons does each student get? Each student gets ____ balloons.	
4	Kiran buys a pack of 55 crayons to distribute equally among her 5 cousins. How many crayons does each cousin get? Each cousin gets ____ crayons.	
5	72 bananas have to be equally divided among 9 people. How many bananas does each person get? Each person will get ____ bananas.	
6	Abu wants to divide 84 sugarcanes equally among his 6 sons. How many sugarcanes does each son receive? Each son gets ____ sugarcanes.	

Further practice: Solve exercises in your textbook on page No. 60

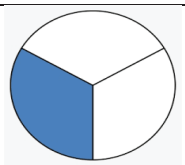
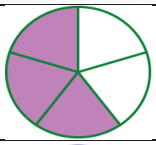
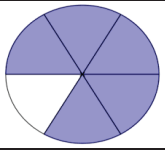
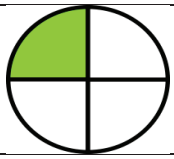
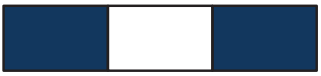
Worksheet 14

Unit No: 3

Fractions

SLO: Match Fractions with related figure

Instructions: Match the fraction for colour parts of a figure on the right side.

$\frac{1}{4}$	
$\frac{2}{3}$	
$\frac{4}{5}$	
$\frac{1}{3}$	
$\frac{3}{5}$	
$\frac{3}{6}$	
$\frac{5}{6}$	

Further practice: Solve exercises in your textbook on page number 65 and 66.

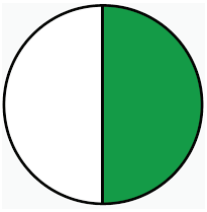
Worksheet
15

Unit No: 3

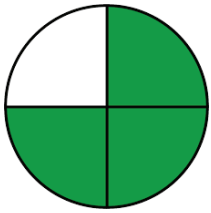
Fractions

SLO: Identify equivalent fractions from the given figures.

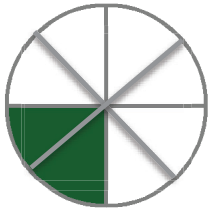
Instructions: Match equivalent fractions by joining them with a line.



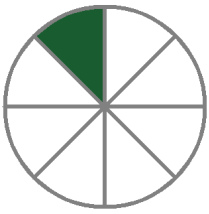
$\frac{1}{2}$



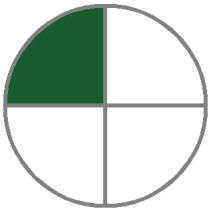
$\frac{3}{4}$



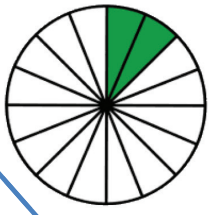
$\frac{2}{8}$



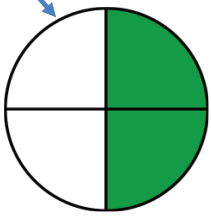
$\frac{1}{8}$



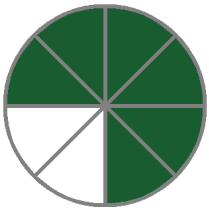
$\frac{1}{4}$



$\frac{2}{16}$



$\frac{2}{4}$



$\frac{6}{8}$

Further practice: Solve exercises in your textbook on page number 70 and 73.

Worksheet
16

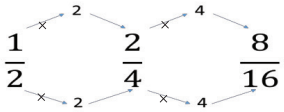
Unit No: 3

Fractions

SLO: Write three equivalent fractions for a given fraction.

Instructions: To write equivalent fractions multiply or divide the top number and bottom number with same number.

Find the equivalent fractions of the following fractions.



S. No	Fractions	Solution
1	$\frac{2}{4}$	
2	$\frac{2}{8}$	
3	$\frac{4}{5}$	
4	$\frac{3}{9}$	
5	$\frac{5}{8}$	

Further practice: Solve exercises in your textbook on page number 73 question 3 and 4.

Worksheet 17

Unit No: 3

Fractions

SLO: Compare fractions with same denominators using symbols < > and =

Instructions: For fraction with same denominator, compare the top numbers (numerator) to decide which fraction is larger or smaller.

Example: Compare $\frac{3}{4} \square \frac{1}{4}$	Step 1: Compare the numerator number; 3 > 1 Step 2: Place '>' symbol in the box	$\frac{3}{4}$ > $\frac{1}{4}$

Compare following fractions (Write <, > or =):

1	$\frac{2}{5}$		$\frac{6}{5}$
2	$\frac{3}{8}$		$\frac{1}{8}$
3	$\frac{1}{6}$		$\frac{3}{6}$
4	$\frac{4}{5}$		$\frac{3}{5}$
5	$\frac{3}{2}$		$\frac{1}{2}$
6	$\frac{5}{8}$		$\frac{3}{8}$
7	$\frac{4}{6}$		$\frac{2}{6}$

Further practice: Solve exercises in your textbook on page number 76.

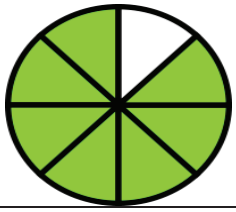
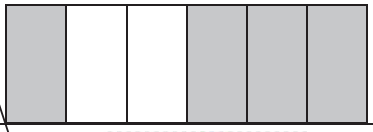
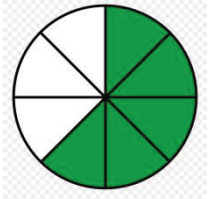
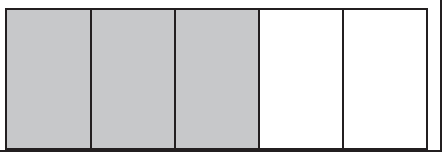
Worksheet
18

Unit No: 3

Fractions

SLO: Represent addition of fractions through figures.

Instructions: Match the following sums with figures

$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$	
$\frac{1}{4} + \frac{2}{4} = \frac{3}{4}$	
$\frac{3}{8} + \frac{4}{8} =$ ____	
$\frac{1}{6} + \frac{3}{6} =$ ____	
$\frac{2}{8} + \frac{3}{8} =$ ____	

Further practice: Solve exercises in your textbook on page number 78.

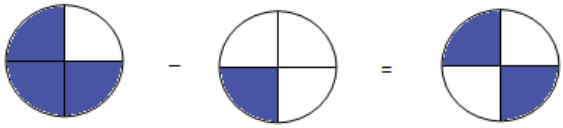
Worksheet
19

Unit No: 3

Fractions

SLO: Represent subtraction of fractions through figures.

Example:



$\frac{3}{4} - \frac{1}{4} = \frac{2}{4}$

Instructions: Match the following subtraction problem with figures.

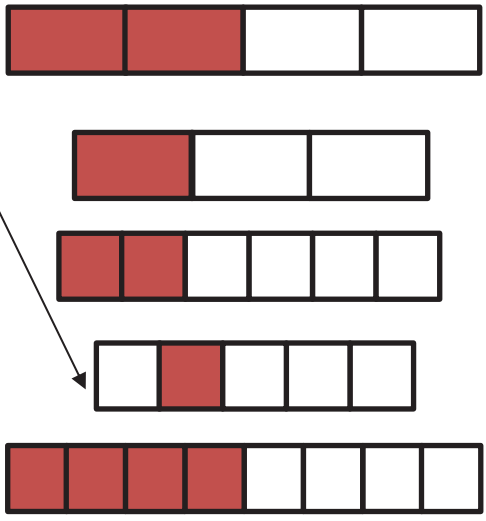
$\frac{2}{5} - \frac{1}{5} = \frac{1}{5}$

$\frac{5}{8} - \frac{1}{8} =$

$\frac{3}{4} - \frac{1}{4} =$

$\frac{3}{6} - \frac{1}{6} =$

$\frac{2}{3} - \frac{1}{3} =$



Further practice: Solve exercises in your textbook on page number 81.

اردو

ورک شیٹ

ورک شیٹ
۱
یونٹ نمبر ۱

منفی اور سوالیہ جملے

حاصل تعلم: مثبت جملوں کو منفی اور سوالیہ جملوں میں تبدیل کر سکیں۔

سرگرمی

دی گئی تصاویر کی مدد سے منفی اور سوالیہ جملے بنائیں۔



منفی:- موچی جوتا نہیں سی رہا ہے۔
سوالیہ: موچی جوتا کیوں سی رہا ہے؟



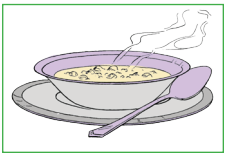
منفی: _____
سوالیہ: _____



منفی: _____
سوالیہ: _____



منفی: _____
سوالیہ: _____



منفی: _____
سوالیہ: _____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۴ پر دیا گیا سوال نمبر ۵ مکمل کریں۔

ورک شیٹ
۲
یونٹ نمبر ۱

اسم کی قسمیں



حاصل تعلم: اسم معرفہ اور اسم نکرہ میں فرق کر سکیں ۔

سرگرمی

جملوں میں سے اسم معرفہ اور اسم نکرہ کے نیچے لکیر لگائیں۔

نوٹ: درسی کتاب کے صفحہ نمبر ۴ سے اسم کی اقسام، اسم نکرہ اور اسم معرفہ کی تعریف پڑھیں۔

۱. ہمارے ملک کا نام پاکستان ہے۔
۲. عابدہ اچھی لڑکی ہے۔
۳. جنگل میں سب جانور شیر سے ڈرتے ہیں ۔
۴. کراچی سب سے بڑا شہر ہے۔
۵. پھول کے ساتھ کانٹے بھی ہوتے ہیں ۔
۶. یہ موتی بہت نایاب ہے۔
۷. اسلم ایک نیک بچّہ ہے۔
۸. ملتان کا حلوہ مشہور ہے۔

اُوپر دیے گئے جملوں میں سے اسم نکرہ اور اسم معرفہ لکھیں۔

اسم عام		اسم خاص	
ملک		پاکستان	



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۵ پر دیا گیا سوال نمبر ۶ مکمل کریں۔

ورک شیٹ
۳
یونٹ نمبر ۱

عہد نامہ

حاصل تعلم: پڑھی ہوئی معلومات کا اپنے دوستوں اور خاندان کے افراد سے تبادلہ کر سکیں۔

سرگرمی

ہدایات: عہد نامہ پڑھیں۔

آؤ بچّو ! یہ عہد کرتے ہیں کہ:

۱. راستے میں کسی اجنبی سے بات نہیں کریں گے۔
۲. کسی اجنبی سے کھانے پینے کی چیز نہیں لیں گے۔
۳. سڑک پار کرتے ہوئے احتیاط کریں گے۔
۴. راستے میں کوئی کھیل نہیں کھیلیں گے۔
۵. بارش میں گھر سے چھتری لے کر جائیں گے۔
۶. گھر کا ٹیلی فون یا موبائل نمبر یاد رکھیں گے۔
۷. کوئی پیچھا کرے تو فوراً کسی کو بتائیں گے۔
۸. کسی کی کوئی چیز بغیر اجازت نہیں اُٹھائیں گے۔

عہدنامہ کی کوئی سی تین باتیں جو آپ اپنے دوستوں کو بتائیں گے، لکھیں۔

۱. _____

۲. _____

۳. _____

مشق

پیارے بچّو! جن باتوں کا آپ نے وعدہ کیا ہے وہ اپنے بہن بھائیوں اور دوستوں کو ضرور بتائیں۔

ورک شیٹ
۴
یونٹ نمبر ۲

سوالات و جوابات

حاصل تعلم: نظم اور اشعار پڑھ کر مختصر تفہیمی سوالات کے درست جوابات دے سکیں۔

سرگرمی

نظم پڑھیں اور سوالات کے جوابات لکھیں۔



برسات کاموسم

کالی گھٹائیں آسمان پر چھائیں　　گَرج گَرج کر بادل آئیں
ہر کوئی دیکھے، ہر کوئی سوچے　　بارش رحمت لے کر آئے
ہائے ہائے اُف یہ گرمی ستائے　　مانگیں سب بارش کی دُعائیں
جھومتے جھومتے بادل آئیں　　اُڑتے پرندے گیت سُنائیں
رِم جِھم رِم جِھم بارش برسے　　بارش میں ہم خُوب نہائیں
گرمی سب کی دُور بھگائے　　برسات کاموسم جب بھی آئے

۱. نظم سے ہم آواز الفاظ تلاش کرکے لکھیں۔ جیسے : چھائیں۔ آئیں

---

۲. شاعر نے بارش سے پہلے منظر کو کیسے بیان کیا ہے ؟

---

۳. آپ کو کون سا موسم پسند ہے اور کیوں؟

مشق

پیارے بچّو! پیارے بچّو! درسی کتاب کے صفحہ نمبر ۸ پر دیے گئے سوالات کے جواب لکھیں۔

ورک شیٹ
۵
یونٹ نمبر ۲

الفاظ متضاد



حاصل تعلم: مترادف اور متضاد الفاظ کو پہچان سکیں۔

سرگرمی

الفاظ کو متضاد سے ملائیں۔

الفاظ	متضاد
بہار	کانٹے
پھول	زمین
تازہ	خزاں
آسمان	باسی

امدادی الفاظ کی مدد سے خالی جگہ پُر کریں۔

امدادی الفاظ: ذِلّت، رات، جاہل، کانٹے، بیماری

۱. عالم اور _____ برابر نہیں ہو سکتے۔

۲. صحت کی قدر _____ میں ہوتی ہے۔

۳. دن اور _____ کا نظام صرف اللہ کے ہاتھ میں ہے۔

۴. عزّت اور _____ اچھّے اور بُرے کام کی وجہ سے ہوتی ہے۔

۵. پھول کے ساتھ _____ بھی ہوتے ہیں۔

الفاظ کے متضاد لکھیں۔

عالم		عزت		صحت		دن	



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۸ پر دیا گیا سوال نمبر ۲ مکمل کریں۔

خیالات کا اظہار کرنا

ورک شیٹ
٦
یونٹ نمبر ۲

حاصل تعلم: کسی موضوع پر سادہ الفاظ میں اپنے خیالات کا اظہار کر سکیں ۔

سرگرمی

عبارت پڑھیں اور دی گئی صورتِ حال پر اپنی رائے دیں۔

صحت و صفائی



خالہ نسرین ہسپتال میں نرس ہیں۔ آج ہسپتال میں غیر معمولی رش تھا۔ جن میں زیادہ تعداد بچّوں کی تھی۔ خالہ نسرین نے آگے بڑھ کر وجہ معلوم کی تو اُنھیں پتا چلا کہ گندگی کی وجہ سے ہیضے کی بیماری پھیل رہی ہے۔ علاقے میں کوڑا اور گندے پانی کی نالیاں کھُلی پڑی ہیں۔ خالہ نے علاقے میں آگاہی مُہم چلائی۔ محلّے کے تمام لوگوں نے اُن کا ساتھ دیا۔ اِس مُہم میں لوگوں کو کوڑا کرکٹ، صاف پانی اور صفائی کے بارے میں بتایا گیا۔ سب نے مل کر علاقے کو صاف کیا۔ یہ مہم بیماریوں کی روک تھام میں مدد گار ثابت ہوئی۔

۱. علاقے میں ہیضے کی بیماری کیوں پھیل رہی تھی؟ _____

۲. بیماری کی روک تھام کے لیے علاقے کے لوگوں نے کیا کیا؟ _____

۳. ایسی صورتِ حال میں آپ اپنے علاقے میں کیا کریں گے؟ _____

مشق

پیارے بچّو! آپ اپنے محلّے کی صحت و صفائی کے بارے میں اپنی کاپی میں لکھیں۔

سوالات و جوابات

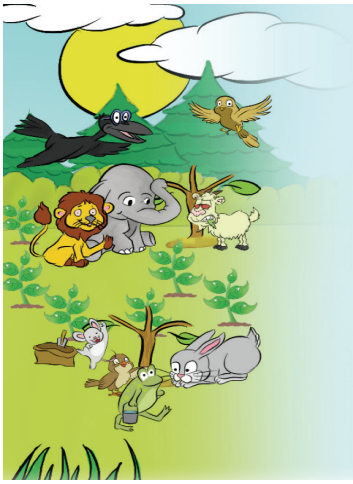
ورک شیٹ
۷
یونٹ نمبر ۳

حاصل تعلم: متن کی مناسبت سے مختصر سوالات کے جوابات دے سکیں۔

سرگرمی

عبارت پڑھیں سوالات کے جوابات دیں۔

آؤ پودے لگائیں



سب جانور مِل کر پودے لگانے لگے۔ چڑیا اور کوّا بیج لائے۔ خرگوش اور چوہے نے جلدی جلدی مٹّی کھودی۔ بندر بیج ڈالتا رہا اور ہاتھی مٹّی ڈالتا اور دباتا رہا۔ اب مینڈک اور کچھوا مل کر پانی ڈالنے لگے۔ سب بیج بوکر بہت خوش ہوئے۔ چند دنوں بعد ننھّے پودے نکلے اور شیر کو اُن کی نگرانی کا کام سونپا گیا۔ ایک دن بکری پودوں کو کھانے کے لیے آگے بڑھی۔ ہاتھی نے دیکھا تو سمجھایا، ہم ماحول کو خُوبصورت بنانا چاہتے ہیں۔ یہ ہمیں سایہ اور پھل دیں گے۔ زمین کی حفاظت کریں گے۔ اِس لیے ہمیں انھیں خراب نہیں کرنا چاہیے۔

۱. چڑیا اور کوّے نے کیا کام کیا؟ _____

۲. مینڈک اور کچھوے نے کیا کام کیا؟ _____

۳. شیر کو کیا کام سونپا گیا؟ _____

۴. بکری نے کیا کھانے کا ارادہ کیا؟ _____

۵. ہاتھی نے بکری کو کیا سمجھایا؟ _____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۲ پر دیئے گئے سوال ۱ کے تمام اجزا کے جوابات اپنی کاپی پر لکھیں۔

ورک شیٹ
۸
یونٹ نمبر ۳

سوالات و جوابات

حاصل تعلم: متن میں استعمال ہونے والے الفاظ کو اپنے جملوں میں استعمال کرتے ہوئے لکھ سکیں۔

ہدایات: عبارت پڑھیں۔

زلزلہ



ہم گرمیوں کی چھٹیوں میں بالاکوٹ گئے۔ وہاں پہنچ کر رِدا نے کہا، مجھے یہاں ہر طرف نئی عمارتیں نظر آرہی ہیں۔ احمد بولا، کچھ کھنڈرات بھی تو ہیں۔ امیّ بولیں، بیٹا ۲۰۰۵ء میں یہاں ہولناک زلزلے سے بہت زیادہ تباہی ہوئی تھی۔ بہت سے لوگوں نے اپنی جانیں گنوا دیں اور عمارتیں ملبے کا ڈھیر بن گئیں۔ ابوّ نے کہا، زلزلے کے بعد لوگوں کو قدرتی آفات سے بچنے کی تربیت دی گئی ہے، کہ زلزلے کی صورت میں گھر سے باہر نکلیں۔ دیوار یا کھمبے سے دُور رہیں۔ باہر نکلنے کا وقت نہ ہو تو گھر کے کونے میں کھڑے ہوں یا میز کے نیچے بیٹھ جائیں۔ رِدا بولی، ان باتوں پر ہمیں بھی عمل کرنا چاہیے۔

الفاظ	جملے
زلزلہ	
تباہی	
عمارتیں	
آفات	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۲ پر سوال نمبر ۳ میں دیے گئے الفاظ کے جُملے اپنی کاپی میں لکھیں۔

ورک شیٹ
۹
یونٹ نمبر ۳

کثیر رکنی الفاظ

حاصل تعلم: کثیر رکنی (کم از کم چار رکنی الفاظ) کی ادائیگی کر سکیں۔

سرگرمی

ہدایات: عبارت پڑھ کرتین اور چار رکنی الفاظ کی نشاندہی کریں اور نیچے لکیر لگائیں۔

قلعہ بالا حِصار



قلعہ بالا حِصار پشاور کے تاریخی مقامات میں سے سب سے اہم ہے۔ یہ قلعہ پشاور شہر کے وسط میں اُونچی ڈھلوان پر واقع ہے جو سطح زمین سے ۹۰ فٹ بلند ہے۔ بالا حصار فارسی زبان کا لفظ ہے جس کا مطلب "اُونچی یا بلند چار دیواری" ہے۔ اس کا نام پٹھان حکمران تیمور شاہ دُرانی نے رکھا تھا۔ وہ سردیوں میں یہاں قیام کرتے تھے۔ پاکستان بننے کے بعد از سرِ نو اس کی تعمیر و مرمت کی گئی۔ یہ اپنے خوبصورت محلّ وقوع کی وجہ سے نہ صرف پشاور شہر بلکہ پاکستان میں نمایاں حیثیت رکھتا ہے۔ پہلے دوردراز کے علاقوں سے سیّاح اس کی سیر کرنے آتے تھے۔ اب قلعہ بالا حصار فرنٹئر کور کا ہیڈ کوارٹر ہے۔ جس کی وجہ سے سیّاح کے لیے اس کی سیر و سیاحت ممکن نہیں۔

خانوں میں دیے گئے الفاظ پڑھیں اوران کے ارکان اگلے خانوں میں الگ الگ لکھیں۔

الفاظ	ارکان				الفاظ	ارکان			
چہچہانا	چہ	چَ	ہا	نا	راولپنڈی				
مُسکراتے					پسندیدہ				
کہانیاں					ریگستانی				

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۲ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

ورک شیٹ
۱۰
یونٹ نمبر ۳

الفاظ مترادف

حاصل تعلم: مترادف اور متضاد الفاظ پہچان سکیں۔

ہدایات: الفاظ میں سے درست مترادف پر (✓) کا نشان لگائیں۔

۱.	صفائی		گندگی	✓	پاکیزگی
۲.	مفلس		امیر		غریب
۳.	نرم		ملائم		سخت
۴.	دوست		یار		دشمن
۵.	پھول		کانٹا		گُل
۶.	دُکھ		غم		سُکھ

ہدایات : مترادف الفاظ کی مدد سے جملے مکمل کریں۔

امدادی الفاظ: مزے دار، دولت، رویّہ، غیر، مرضی

۱. جیسے: کسی اجنبی یا غیر انسان پر بھروسہ نہ کرو۔

۲. دشمن کے ساتھ اپنا سلوک اور _____ اچھا رکھو۔

۳. مال و _____ کی محبت انسان کو خودغرض بنا دیتی ہے۔

۴. ماں باپ کی اجازت اور _____ کے بغیر کوئی کام نہیں کرنا چاہیے۔

۵. میری دادی لذیذ اور _____ کھانا بناتی ہیں۔

الفاظ کے مترادف لکھیں۔

اجنبی	غیر	مال		لذیذ		سلوک		اجازت	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۳ پر دیا گیا سوال نمبر ۶ مکمل کریں۔

ورک شیٹ
۱۱
یونٹ نمبر ۴

سوالات و جوابات

حاصل تعلم: متن پڑھ کر خلاصہ مختصراً تحریر کر سکیں۔

ہدایات: عبارت پڑھیں۔

آنسُو جِھیل



پاکستان کواللہ تعالیٰ نے بے شمار قُدرتی نظاروں سے نوازا ہے۔ اُنہی میں سے ایک آنسُو جِھیل ہے۔ یہ جِھیل ضلع مانسہرہ کی وادی ماہ نُور میں واقع ہے۔ یہ کوہِ ہمالیہ اور نانگاپربت کے درمیان ہے۔ اِس جِھیل کا شمار دنیا کی خُوبصورت ترین جِھیلوں میں ہوتا ہے۔ اِس کی بناوٹ آنسُو کی طرح ہے۔ جھیل کے اِرد گرد پہاڑوں کی چوٹیاں بَرف سے ڈھکی ہوئی ہیں۔ جس کی وجہ سے موسم سرد رہتا ہے۔ اِس جِھیل کو ۱۹۹۳ء میں دریافت کیا گیا۔ یہ جولائی اوراگست کے مہینے میں سیّاحوں کے لیے بہترین سیر گاہ ہے۔

ہدایات: جھیل کے بارے میں پڑھی گئی معلومات کو اپنے الفاظ میں لکھیں۔

_____

_____

_____

_____

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۹ پر سوال نمبر ۵ میں دیے گئے متن کا خلاصہ اپنی کاپی میں لکھیں۔

تمثیلی کہانی

ورک شیٹ
۱۲
یونٹ نمبر ۵

حاصل تعلم: کہانی پڑھ کر اُسے تمثیلی انداز میں پیش کر سکیں۔

سرگرمی

ہدایات: دیے گئے الفاظ اور تصاویر کی مدد سے کہانی لکھیں۔ اور کہانی کو کوئی نام بھی دیں۔

الفاظ: الفاظ: چڑیا، گھونسلہ، درخت، پیار، لوری، دانہ، شرارت، بیل، غصہ، ٹکر، گھبرا، پکارا، چیل، شکریہ

کہانی کا نام _____

آغاز:



درمیان:



اختتام:



مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۲۰ تا ۲۲ پر دی گئی کہانی اپنے الفاظ میں اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۳
یونٹ نمبر ۵

اسم ضمیر

حاصل تعلم: اسم ضمیر میں ، ہم ،تم، وہ اور آپ کا درست استعمال کر سکیں۔

سرگرمی

ہدایات: عبارت پڑھیں اور میں، ہم ،تم، وہ اور آپ کی نشاندہی کریں اوران کی نیچے لکیر لگائیں۔



ایک دوپہر میں سو رہی تھی کہ میرے کان میں شور کی آواز سُنائی دی۔ میں اٹھی اور خبر لینے باہر گئی۔ ارم نے کہا، ہم بلّی تلاش کر رہے ہیں ۔آپ بھی ہمارے ساتھ بلّی کو ڈھونڈیں۔ اچانک ارم کی امّی کی نظر ایک ڈبّے پر پڑی۔ بلّی مزے سے ڈبّے کے اندر سو رہی تھی۔ ارم کے ابّو نے کہا، واہ !تم نے بلّی کو تلاش کر لیا۔ ڈبّے سے باہر نکالا تو وہ میاؤں، میاؤں کرنے لگی۔ سب نے سائرہ کا شکریہ ادا کیا۔

ہدایات: ''ہم، وہ، تم، میں اور آپ'' لگا کر خالی جگہیں پُر کریں۔

ارم نے کہا _____ بلّی تلاش کررہے ہیں۔ _____ بھی میرے ساتھ بلّی کو ڈھونڈیں۔ _____ مزے سے ڈِبّے کے اندر سو رہی تھی۔ ابّو نے کہا ، واہ ! _____ نے بلّی کو تلاش کرلیا۔

ہدایات: جملے بنائیں۔

میں	میں روزانہ صبح جلدی اٹھتا ہوں۔
ہم	
تم	
وہ	
آپ	

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۲۳ پر دیا گیا سوال نمبر ۳مکمل کریں۔

کہانی

ورک شیٹ
۱۴
یونٹ نمبر ۵

حاصل تعلم: تصویری کہانی دیکھ کر چند جملے لکھ سکیں۔

سرگرمی

ہدایات: تصاویر دیکھ کر کہانی لکھیں اور کہانی کو کوئی نام بھی دیں۔

کہانی کا نام _____



آغاز:



درمیان:



اختتام:

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۲۴ پر دیا گیا سوال نمبر ۵ مکمل کریں۔

ورک شیٹ
۱۵
یونٹ نمبر ۴

مذکر مؤنث

حاصل تعلم: مذکر کے مؤنث اور مؤنث کے مذکر بنا سکیں ۔

سرگرمی

ہدایات: خالی جگہ کو مذکر یا مؤنث لگا کر مکمل کریں۔

۱. استاد اور _____ کی عزت کرو۔

۲. شاعر اور _____ نے اشعار پڑھے۔

۳. _____ اور ملکہ تاج پہنے ہوئے تھے۔

۴. بچے _____ اور اونٹنی کے گرد جمع تھے۔

۵. مالی اور _____ نے مل جل کر پودے لگائے۔

۶. _____ اور ہرنی جنگل میں دوڑ رہے تھے۔

۷. ہم نے چڑیا گھر میں _____ اور بندریا کا تماشہ دیکھا۔

۸. ہمارے محلے میں _____ اور درزن مل کر عید کے کپڑے سیتے ہیں ۔

۹. چڑیا گھر میں شیر اور _____ پنجرے میں قید تھے۔

۱۰. ہمیں دادی نے راجا اور _____ کی کہانی سنائی۔

مذکر کے مؤنث اور مؤنث کے مذکر لکھیں۔

مذکر	مؤنث	مذکر	مؤنث	مذکر	مؤنث
مالی		بندر			ملکہ
	درزن	راجا			اونٹنی

مشق

پیارے بچّو! درسی کتاب کے صفحہ نمبر ۱۹ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

Notes

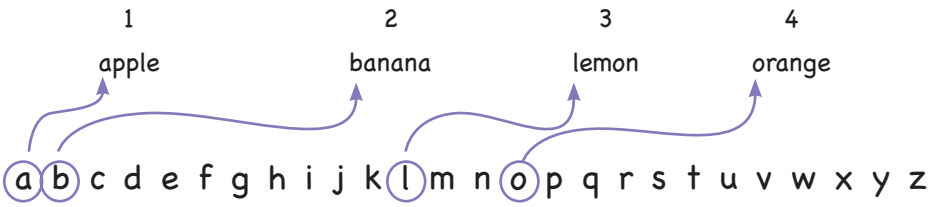
ENGLISH

Worksheet 1

Unit No: 2

Alphabetical Order

SLO: Use alphabetical order (first and second alphabet to arrange words)



To write in alphabetical order, start with the word that begins with the letter closest to the first letter of the alphabet. As in the example given above.

Instructions: Read the following words in alphabetical order.

First letter alphabetical order

Apple	Ball	Cloud	Drum	Elephant

Second Letter Alphabetical Order

Paint	Peak	Phone	Pink	Place

Instructions: Rewrite the following groups of words in alphabetical order first and second alphabet.

hair	nose	eyes	chin	arms
_____	_____	_____	_____	_____
white	stand	walk	sheep	wind
_____	_____	_____	_____	_____

Further practice: Read the list of words on worksheet 1.b and follow the instructions.

Worksheet 2

Unit No: 2

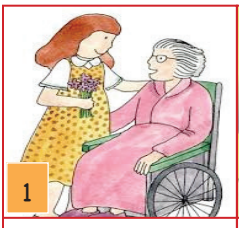
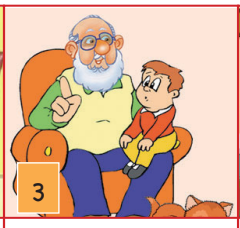
Sentences

SLO: Write with reasonable accuracy some sentences of their own on a given topic.

Instructions: Read the paragraph on grandparents. Look at the pictures below and write in a sentence what each child is doing.

Grandparents

We all love our grandparents. They are a blessing of Allah and we must take care of them. The parents of mother(s) (Nani and Nana) are called maternal grandparents. The parents of father(s) (Dadi and Dada) are called paternal grandparents. We must respect and look after them.

 1	 2	 3	 4
This is Salma's Nani (maternal grandmother)	This is Rehan's Nana (maternal grandfather)	This is Ali's Dada (paternal grandfather)	This is Aayan's Dadi (paternal grandmother)

1. Salma is giving flowers to her maternal grandmother

2.

3.

4.

Further practice: Read the text on 'Our School' given on pages 7 and 8 of your textbook. Write three sentences about yourself.

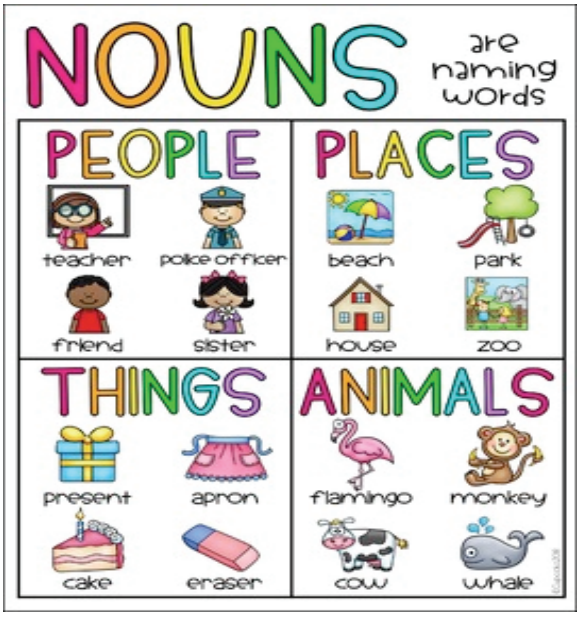
Worksheet 3

Unit No: 3

Nouns

SLO: Demonstrate use of some nouns from immediate and extended environment.

Instructions: Read the table below and fill all the empty blocks with at least two nouns of your choice from your immediate and extended environment.



People	Places
Things	Animals

Further practice: complete the given exercises on pages 19-23 of your textbook.

Worksheet 4

Unit No: 3

Naming words

SLO: Recognize naming words as nouns.

Instructions: Choose the correct noun to fill in the blanks. Colour the correct box.

1) Ali brushed the horse at the _____.



☐ shed ☐ den ☐ stable

2) He missed the catch and dropped the _____.



☐ bat ☐ ball ☐ stump

3) You would like to spend more time with your _____.



☐ friend ☐ enemy ☐ wild animals

4) A child puts its head on a _____ when he sleeps.



☐ bed ☐ blanket ☐ pillow

5) _____ is an animal with shell.



☐ home fly ☐ snail ☐ fish

Further practice: Complete the exercise given on page 24 of your textbook.

Worksheet 5

Unit No: 3

Countable & Uncountable Nouns

SLO: Identify and differentiate between countable and uncountable nouns.

Instructions: Look inside the fridge. Fill the columns below by writing **(C)** against countable and **(U)** for uncountable nouns. One example has been done for you.



No.	Nouns	Countable	Uncountable
1.	Water		U
2.	Eggs	C	
3.	Milk		
4.	Boxes		
5.	Juice		
6.	Bananas		
7.	Tomatoes		
8.	Carrots		
9.	Cheese		
10.	Honey		
11.	Butter		
12.	Sugar		

Further practice: Complete the exercise on countable and uncountable nouns given on page 27 of your textbook.

Worksheet 6

Unit No: 2

Introduce Self and Others

SLO: Introduce self and others.

Instructions: Read how Hassan introduces himself and his cousin Fatima. Then introduce yourself and anyone of your choice in your notebook.

Let me introduce you to my cousin sister Fatima.

She studies in grade 2.

She also gets up early in the morning.

She lives near my home. We both walk to school together.

Fatima is very caring.



Assalam u alaikum, I am Hassan.

I am in grade 3.

I go to a school near my home.

I rise early at Fajar and offer my prayers.

Then I take breakfast and go to school.

Further practice: Read the dialogue on page 9 on your textbook and answer questions on page 10.

Worksheet 7

Unit No: 3

Responding

SLO: Respond to simple instructions and directions.

Instructions: Look at the pictures. Choose the correct option from the box given below and answer the questions in complete sentences.

picking up	throwing in the bin	littering	cleaning up



What is the boy doing?



What do you see in the picture?



What is the man doing?



What is the boy doing?

Further practice: Complete the exercise given on page 29 of your textbook.

Worksheet 8

Unit No: 4

Factual Information

SLO: Locate specific factual information to answer short questions based on the text.

Instructions: Read the passage and answer the questions below:



Seeds come from plants. When seeds are ripe they leave the plants and find a new place to grow. Seeds are of many shapes and sizes. Seeds are moved in different ways. Some seeds are moved by the wind. These seeds are small and light and when the wind stops blowing, these seeds fall.

Some seeds are moved by animals. Some seeds stick to the fur or wool of animals. Other seeds are eaten by animals. Some seeds are moved by water. They float on the top of the water until they reach land. Seeds are moved in many ways. When the seeds stop moving they can start growing. Some seeds grow into new plants.

Answer the questions.

1. Where do the seeds come?

_____

2. Why do seeds leave the plants?

_____

3. What do the seeds do when they stop moving?

_____

Further practice: Read the text on page 33 and complete the exercise given on page 34 in your textbook.

Worksheet 9

Unit No: 4

Capitalization, Punctuation and Spellings

SLO: Write sentences of their own using correct capitalization, punctuation and spellings.

Punctuation



Capitalization



Instructions: Read the capitalization and punctuation rules carefully.

Capitalization Rules

- The first letter of a new sentence is always capitalized.
- The pronoun "I" is always capitalized.
- All proper people (names and titles), places (specific countries, states, cities, rivers, mountains, buildings, etc.), and things (specific brands, companies, and languages)
- Capitalize days of the week, months, and holidays.

Punctuation Rules

.	Full stop	Used to end a sentence - also called period.	This is my book.
?	Question mark	Used at the end of a question or interrogation.	Where is your book**?**
,	Comma	Used as a separator between words. Helps to make the meaning clear.	He has a book, a pencil, a pen and a ruler.
'	Apostrophe	**1**-Takes the place of missing letters. **2**-Used to show possession	He**'s** = he is don**'t** = do not Ajmal's Car Ayesha's Bag

Instructions: Rewrite the following sentences using correct capitalization, punctuation and spellings.

1. ali is always late for work.

_____

2. i like My city peshawar.

_____

3. Why didnt you come to school yesterday.

_____

4. She likes cooking shopping and plaing with her doll

_____

5. My friend is from swat.

_____

Further practice: Read and learn more about punctuation (apostrophe) given on pages 34 and 42 of your textbook.

Worksheet
10a
Unit No: 4

Hard & Soft 'G' sound

SLO: Articulate hard and soft sounds of the letter c and g.

Instructions: Read the words with the hard and soft g sound. Write H above the hard sound and S above the soft sound of g in the sentences given below.

The Hard & Soft 'G' sound.

The letter 'g' has two sounds- a 'hard' and a 'soft' sound. If the letter after the 'g' is i,e, or y the 'g' makes the /j/sound (soft sound) like in giraffe. If it is any other letter, the 'g' makes the /g/sound (hard sound) like in glass. The hard sound of 'g' occurs most often.

1. The goat is in a cage.
2. The boy was holding a glass.
3. She dropped the glue on the gym floor.
4. Ali is a good boy; everyone calls him an angel.
5. The giant fell in the gutter.

Further practice: Complete worksheet 10b on hard and soft 'C' sound.

Worksheet
10b
Unit No: 4

Hard and Soft 'C' sound

SLO: Articulate hard and soft sound the letter c and g.

Instructions: Read the rules of hard and soft 'c' sound.

Hard and Soft 'C' sound

The soft c sound is made when the letter c meets e, i or y (cell and city).
The hard c sound is made when the letter c meets a, o or u (cat and corn).

Instructions: Write the words given below in the correct box. Now make one sentence using one hard and one soft c sound.

cab	rice	car	cat
city	cow	face	cook
biscuit	pencil	spicy	mice
cake	case	corn	calf

Soft C Sound  ice	Hard C Sound 

Example sentence: My mother cooked rice today.

Sentence 1 (Hard sound of C): _____

Sentence 2 (Soft sound of C): _____

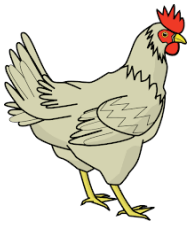
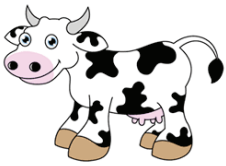
Worksheet 11

Unit No: 4

Masculine and Feminine

SLO: Classify and change the gender of nouns from immediate and extended environment.

Feminine nouns are words used for women, girls and female animals.

Masculine nouns are the words used for men, boys and male animals.






Instructions: Change all the genders in the sentences and rewrite them on the given lines.

1. My mother cooked meal. _____
2. The boys are playing cricket. _____
3. He is a good son. _____
4. I have a cow. _____
5. Her daughter plays football. _____

Further practice: Complete the exercises on pronouns given on pages 40 and 41 of your textbook.

Worksheet 12

Unit No: 4

Substitution Words



SLO: Recall substitution words learnt earlier.

Pronouns

Pronoun is a word that substitutes a noun in a sentence.

Example: Ali and I were walking along the river.
We saw some pretty flowers.

Instructions: Substitute the underlined words in each sentence below with a suitable pronoun from the box on the given lines. One example has been done for you.

he	she	him	I	you	we	his	her	them	they	us

Example: Mother cooked meal for Kabir and Sakina. (Them)

1. Mariam went to her school with her mother. _____

2. Father promised Zaraq and I that he would be home early. _____

3. The teacher told Imran and Iman to work quietly. _____

4. My brother and I read to our sister. _____

5. I don't know why Hassan's mother is always angry at Hassan. _____



Further practice: Complete the exercises on pronouns given on pages 40 and 41 of your textbook.

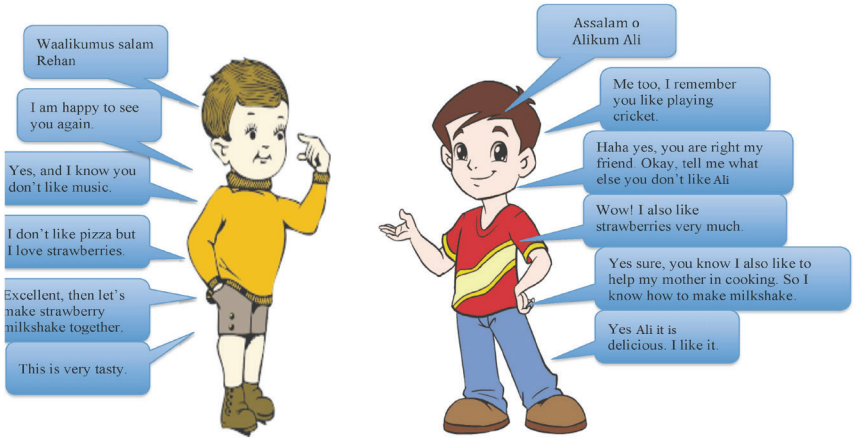
Worksheet 13

Unit No: 4

Likes and dislikes

SLO: Express likes and dislikes.

Instructions: Play with your friend. Greet him/her and practice the dialogue given below.



Instructions: Choose any three things you like, and any three that you don't like from the table. Write these in the appropriate columns below.



I like	I don't like.....

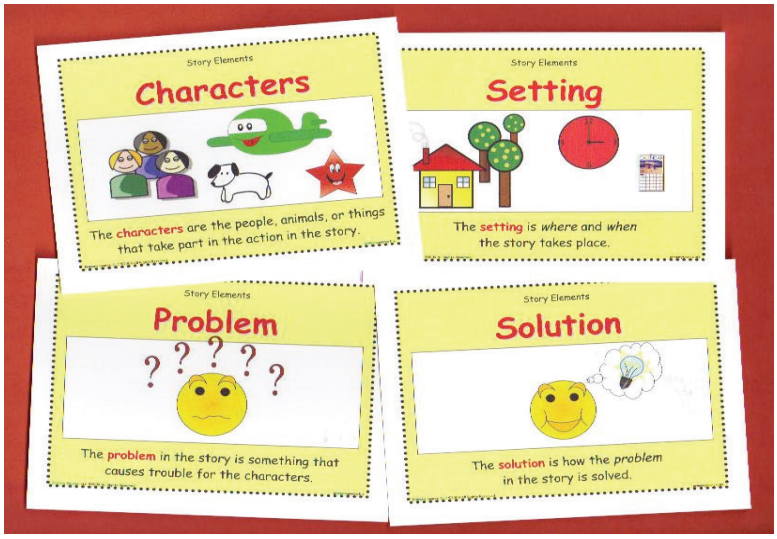
Further practice: Talk about a toy, which you like the most with your father or mother.

Worksheet
14a
Unit No: 5

Elements of a story

SLO: Identify the basic elements of a story: Beginning middle and end: Characters, Place and Time

Instructions: Read the elements of a story and understand the basic elements.



We can write a fairy tale with a beginning, middle and end...

B → Who are the characters?
What is the setting?

M → What happens to the characters?
What is the problem?
What are the main events?

E → How does the story end?
What is the solution?

Further practice: Read the story given on worksheet 14.b and identify its basic elements.

Worksheet
14b
Unit No: 5

Elements of a story

SLO: Identify the basic elements of a story: Beginning middle and end: Characters, Place and Time

Instructions: Read the story below and underline the basic elements in the story.

THE ANT AND THE DOVE



One hot day, an ant was searching for some water. After walking around for some time, she came to a spring. To reach the spring, she had to climb up a blade of grass. While making her way up, she slipped and fell into the water.

She could have drowned if a dove up a nearby tree had not seen her. Seeing that the ant was in trouble, the dove quickly plucked off a leaf and dropped it into the water near the struggling ant. The ant moved towards the leaf and climbed up there. Soon it carried her safely to dry ground. Just at that time, a hunter nearby was throwing out his net towards the dove, hoping to trap it.

Guessing what he was about to do, the ant quickly bit him on the heel. Feeling the pain, the hunter dropped his net. The dove was quick to fly away to safety.

One good turn deserves another.

OR

Do good, have good.

Further practice: Complete the activity given on pages 49 and 50 of your textbook.

Worksheet 15

Unit No: 5

Joining Words

SLO: Use joining words and, or and but to show addition, alternative and contrast within a sentence

Instructions: Read how two ideas combine to make a compound sentence using the joining words: and, or but.

TYPES OF SENTENCES

Simple Sentence: My city is beautiful.

Compound sentence: My city is beautiful, and I love my city.

A compound sentence combines two ideas

Idea 1: My city is beautiful. and **Idea 2:** I love my city. My city is beautiful, and I love my city.	**Idea 1:** Please listen to me. Or **Idea 2:** you will be in trouble. Please listen to me or you will be in trouble.

Idea 1: I don't like to eat vegetables.
but
Idea 2: My mother makes me eat them.
I don't like to eat vegetables, but my mother makes me eat them.

Instructions: Fill in the blanks with and or, but where appropriate.

1. The door is locked _____ I don't have the key.
2. I don't like having short nails, _____ I cannot stop biting them.
3. Father will either laugh at the joke, _____ he will get angry.
4. I was ready for school _____ found out it was a holiday.
5. It was a cold day_____ I started to shiver.
6. My friend will either come to my house to play, _____ he will remain in his own house.

Further practice: Practice conjunctions given on pages 51-52 and complete the exercise on page 53 of your textbook.

Worksheet
16a

Unit No: 6

Action words

SLO: Recognize doing words as verbs. Use action verbs in speech and writing.

Instructions: Read the words below and circle the words, which are verbs/action words.

bicycle  read book

tell story looks funny cat

fun  plays with child 

dog runs around the take

glass  drinks eat 

Further practice: Complete the exercise given on worksheet 16B.

Worksheet
16b
Unit No: 6

Action words

SLO: Recognize doing words as verbs. Use action verbs in speech and writing.

Instructions: Read and follow the instructions to fill in the blanks below.

Verbs

A **verb** is a doing or being word. Read these words. They are all **verbs**.

move jump cry help pull push

Which of the following words are **verbs**? Write them down.

jump	she	then	more	dig	he
hop	run	here	play	but	lie

....

....

Write **verbs** to complete these sentences. Use **verbs** from the list you made above.

Things I do



First I ..... with my dog.



I ..... as fast as I can.





I ..... over the wall.



Then I ..... on one leg.



Next I ..... in the sand.



After all that I ..... down.

Further practice: See page 68 as a reference.

Worksheet
17a
Unit No: 6

Consonant Clusters

SLO: Pronounce with reasonable accuracy, common two consonant clusters in initial and final position.

Instructions: Write the correct consonant cluster to complete the word for each picture. Read aloud each word.

 _____ide	fr sl tr fl bl sp
 _____ale	st sl bl br wh fl
 _____ail	ph sm ch sh sn wh
 _____ick	st sl bl br wh fl
 _____apes	ph sm gr sh sn wh

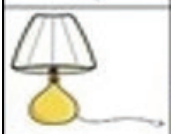
Further practice: Complete the Worksheet 17b for more practice of the ending consonant cluster sounds.

Worksheet
17b
Unit No: 6

Consonant Clusters

SLO: Pronounce with reasonable accuracy, common two consonant clusters in initial and final position.

Instructions: Look at the two consonant clusters at the end of the words below. Read aloud each word with correct pronunciation.

mp	nd	nk	lk	sk
				
lamp	hand	bank	milk	desk
ng	nt	ft	st	sh
				
ring	tent	gift	nest	fish
ck	ch	th	ld	lt
				
pack	bench	bath	sold	belt

Further practice: Complete the exercise on page 59 of your textbook.

Notes

قومی ترانہ

پاک سرزمین شاد باد
کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
رہبر ترقی و کمال
ترجمان ماضی شان حال
جان استقبال!
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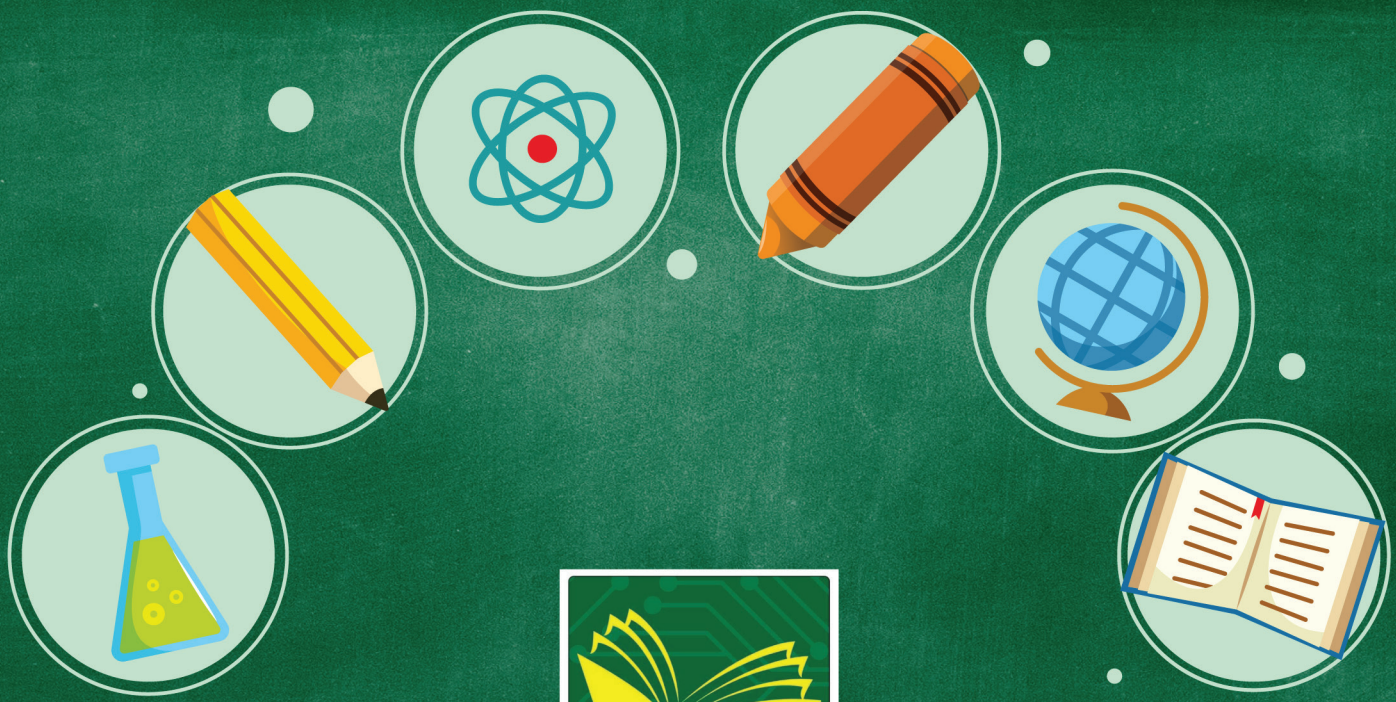
KHYBER PAKHTUNKHWA ELEMENTARY AND SECONDARY EDUCATION DEPARTMENT



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Khyber Pakhtunkhwa Elementary & Secondary Education Department

WORKSHEETS

GRADE 6

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے ۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے ۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف بامعنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوّرات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے ۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہنمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو بھی اجاگر کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا ۔

گوہر علی خان
ڈائریکٹر نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

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ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور تعلیمی سرگرمیوں کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کے توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو مکمل کرنے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دیے گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد، استاد یا پھرنیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہنمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اوراسکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1.	انگلش	انعام اللہ خٹک	0333-9746976
2.	ریاضی	عباس خان	0345-9419923
3.	جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4.	اُردو	تاج ولی خان	0313-9848959

General Science

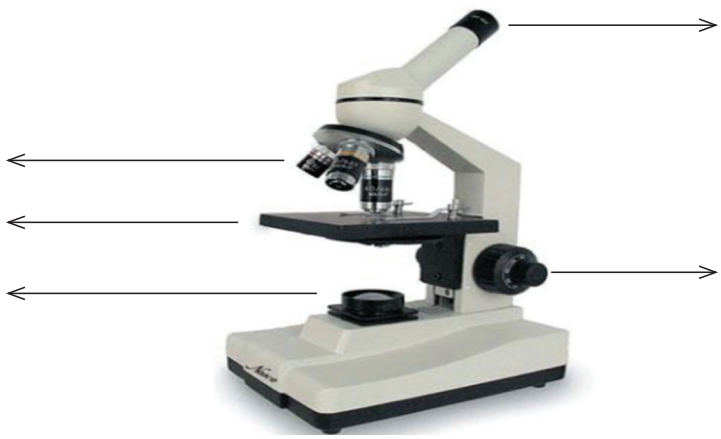
Worksheet 1

Unit No. 1

Parts of Microscope

SLO: Describe the different parts of a Light Microscope and its working

Activity 1: Following is the diagram of light microscope. Write the names of five parts of the microscope.



Activity 2: Read page number 2 of your textbook and write main functions of labelled parts of above microscope

S. No	Part of the microscope	Function of the part
1		
2		
3		
4		
5		

Activity 3: Read the working of the microscope from the book page no 3 to understand how the different parts work while using the microscope. Make a list of these steps

Reference G. Science Textbook Grade 6 Page. 02

Worksheet 2

Unit No. 1

Animal and Plant Cell

SLO: Compare and contrast an animal cell with a plant cell

Activity 1: Draw and label the basic structure of an animal cell and plant cell as given on page 5 of the book.

Animal cell	Plant cell

Activity 2: Read the activity 1.2 on page 5 of the book and identify similarities and difference in the structure and shape of the two types of cells.

Similarities	Differences

Reference G. Science Textbook Grade 6 Page. 05

Worksheet 3

Unit No. 1

Important Parts of a Cell

SLO: State the function of each part of the cell to indicate how the cell support life

Activity 1: Read page No 5 and 6 and complete the column by inserting the correct listed words;

Cell wall, Nucleus, Mitochondria, Centrioles, Chloroplast, Vacuole

No	Function of each part	Part of the cell
1.	Involve in cell division	
2.	Power house of the cell	
3.	The outermost covering in a plant cell	
4.	Control all the activities of the cell	
5.	Present in green plants and helps the plants in preparing their food	

Worksheet 4

Unit No. 1

Important Parts of a Cell

SLO: State the function of each part of the cell to indicate how the cell support life

Activity 1: Read each statement given in table and identify True/False (T/F)

Cell wall, Nucleus, Mitochondria, Centrioles, Chloroplast, Vacuole

No	Statement	T/F
1.	In plant cell outermost covering is cell wall.	
2.	Centriole is also called "Power house" of the cell.	
3.	Cell membrane is a non-living membrane.	
4.	All the activities of the cell are controlled by the nucleus of the cell.	
5.	The storage of wastes materials for some time in cell is performed by vacuole.	

Activity 2: Read from book page 5-6 and fill the functions of the parts of the cell

No	Part of the cell	Function of the part
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Reference G. Science Textbook Grade 6 Page. 06

Worksheet 5

Unit No. 1

Important Parts of a Cell

SLO: Differentiate between unicellular and multicellular organisms

Activity 1: Classify following animals and plants into unicellular and multicellular

Amoeba, Human being, Cow, Paramecium, Mango tree, Euglena

Unicellular	Multicellular

Activity 2: Read page 7 of the book and define unicellular and multicellular animals

Unicellular animals'	Multicellular animals'

Reference G. Science Textbook Grade 6 Page. 07

Worksheet 6

Unit No. 1

Organism – From Cell to System

SLO: Distinguish between tissues and organs

Activity 1: Read page 8 and 9 of the book and Fill in the blanks.

1. In unicellular organisms all functions are performed by _____ cell.
2. In multi cellular organisms different _____ perform different _____.
3. Cells performing similar function are grouped together to make a _____.
4. Examples of tissues are _____ and _____.
5. In plants the Mesophyll tissues perform the function of _____.
6. In plants water and mineral salts are transported by _____ tissues.
7. Different _____ work together to make a _____.
8. Examples of animal organs are _____, _____, _____, _____.
9. Organs are made up of different types of _____.
10. Examples of plant organs are _____, _____,_____,_____.
11. Many organs work together to make a _____.

Reference G. Science Textbook Grade 6 Page. 8-9

Worksheet 7

Unit No. 1

Major System in Human Beings

SLO: State the functions of the major systems in the human body.

Activity 1: Choose the correct answer and write it under the concept given below;

1. The system helps in the production of energy from the food.
2. The system removes the waste material from the body in the form of urine.
3. The system circulates blood in our body.
4. The system gathers information from the surrounding and responds accordingly.
5. The system helps in the digestion of food.

Answer:

1. Digestive System:_____

_____

2. Respiratory System: _____

_____

3. Excretory System: _____

_____

4. Circulatory System: _____

_____

5. Nervous System:_____

_____

Reference G. Science Textbook Grade 6 Page No 9- 10

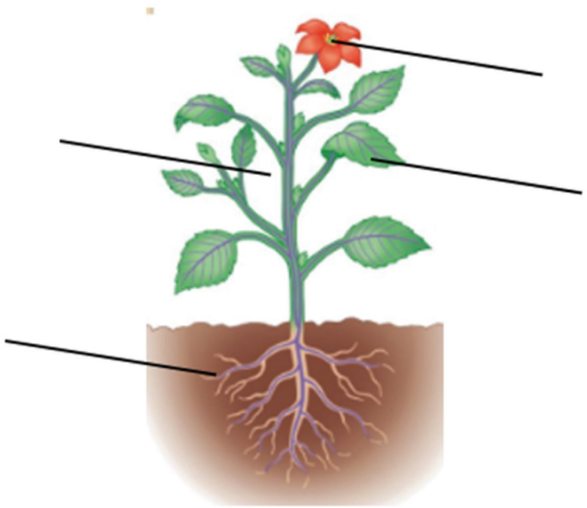
Worksheet 8

Unit No. 1

Plant Systems

SLO: Recognize root and shoot systems in a plant.

Activity 1: Label the following diagram of a Plant System, also identify the Root and Shoot system.



Activity 2: Read page 11 of the textbook and fill in the blanks

1. The root system is _____ the _____. It consists of _____ and _____.

2. The shoot system is _____ the _____. It consists of _____, _____, _____, _____, _____.

Reference G. Science Textbook Grade 6 Page No 11

Worksheet 9

Unit No. 1

Organization of Multicellular Organisms

SLO: Describe the cellular hierarchy from cell to organ systems in animal and plants.

Activity 1: Refer to page 12 of book and put the words in the blocks in correct sequence on the blanks given below.

Tissue	Organ system	Organ	Organism	Cell

Activity 2: Label the following diagram of organization of multicellular organisms

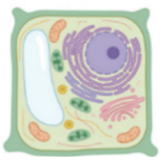
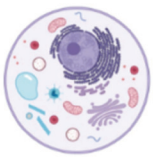
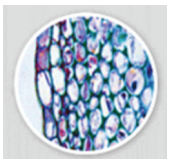
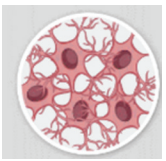
_____

_____

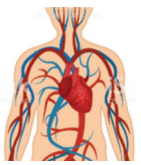
_____

_____

_____







Reference G. Science Textbook Grade 6 Page No 12

Worksheet 10

Unit No. 2

Sense Organs (Eyes and Ears)

SLO: Identify the sense organs of the human beings and draw them.

Activity 1: Write the names of the sense of organs.

1. _____
2. _____
3. _____
4. _____
5. _____

Activity 2: Name which organ is used to see things and hear different sound

1. _____
2. _____

Activity 2: Draw and label external diagram of human eye and ear, nose, tongue, skin

Reference G. Science Textbook Grade 6 Page. 17

Worksheet 11

Unit No. 2

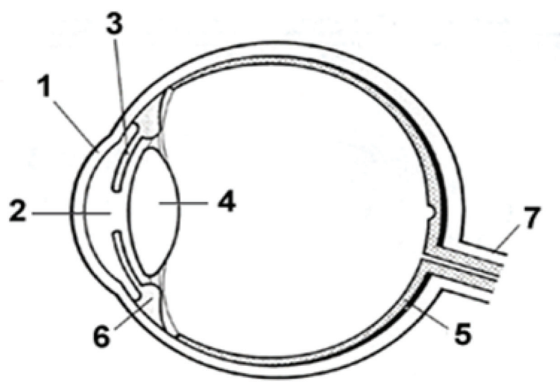
Sense Organs (Eyes)

SLO: Explain the structure and function of Eye

Activity 1: Label the diagram of human eye from the following given suitable words

Lens, aqueous humor, corona, sclerotic, retina, optical nerve, pupil

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____



Activity 2: Make a list of information that you gather with the help of your eye in daily life.

Reference G. Science Textbook Grade 6 Page. 17

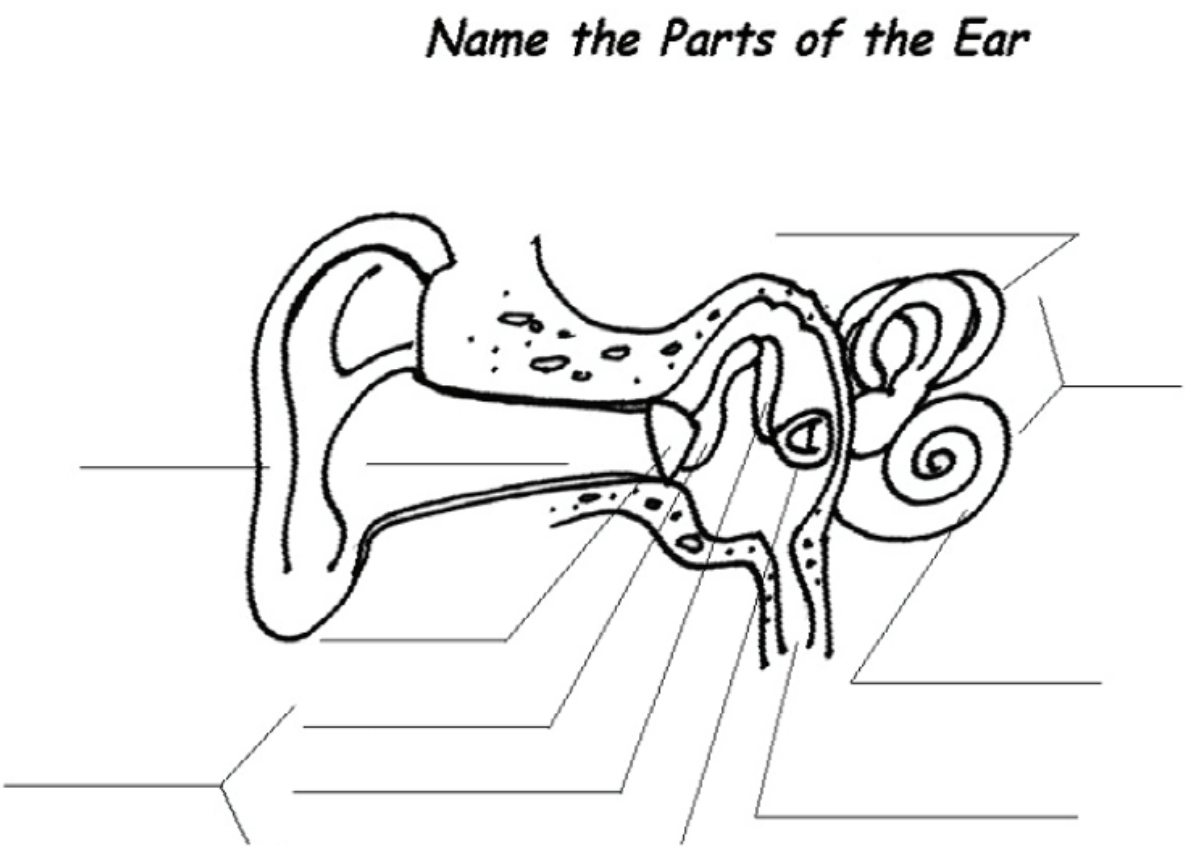
Worksheet 12

Unit No. 2

Sense Organs (Ear)

SLO: Explain the structure of Ear

Activity 1: Observe the diagram in the book and label the given figure of ear.



Use the following words:

Pinna, ear canal, set of ear bones, ear drums, auditory nerve, semi-circular canals, Cochlea

Reference G. Science Textbook Grade 6 Page. 18

Worksheet 13

Unit No. 2

Sense Organs –Topic Skin and Nose

SLO: Explain the structure of skin and nose

Activity 1:	Read the paragraph "c" Skin from text book page 19 and put the given words in suitable blanks.

Largest, Dermis, Receptors, Cover, Sweat, Epidermis, Protects

The Skin is the outer _____ of our body and is _____ sense organ. The outer layer _____ of skin and contains three layers of cells the outer layer of epidermis is hard and _____ the inner organs. The lower layer of skin is _____ which contain _____ and oil glands blood vessels, fat, nerve endings and sensory cells is called _____.

Activity 2:	Read the paragraph on page 20 section d about nose. Observe the structure of the nose in the given diagram and locate the nostrils and upper part of the nasal chamber on your own face.

Fill in the blanks from the given words. **(Receptors, nasal cavities, air, two, smell, nostrils.)**

Nose is the organ of _____ and passage for _____ into the lungs.it contains _____ cavities called _____ _____ or nostrils. Special cells called _____ are located in the upper part of the _____.

Activity 3:	Read the paragraph on how the nose functions and write in your own words how the nose can smell.

Reference G. Science Textbook Grade 6 Page. 19-20

Worksheet
14
Unit No. 2

Sense Organs –Topic Tongue

SLO: Explain the structure and function of tongue

Activity 1: Label the following diagram of human tongue with taste

(Bitter, sour, sweet, salty)

A. _____

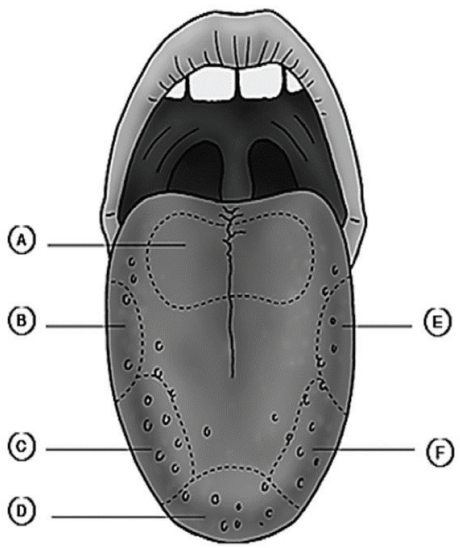
B. _____

C. _____

D. _____

E. _____

F. _____



Activity 2: Read the paragraph "e" tongue on page 21. And fill in the blanks.

The sense organ for taste is _____. It is _____ organ which is _____ at the back of the _____ and free in the _____ of the mouth. The tongue has taste _____ located on the taste buds as can be seen on the diagram.

Activity 3: Read the paragraph on "How do we taste" and write in your own words how we taste the food?

Reference G. Science Textbook Grade 6 Page. 21

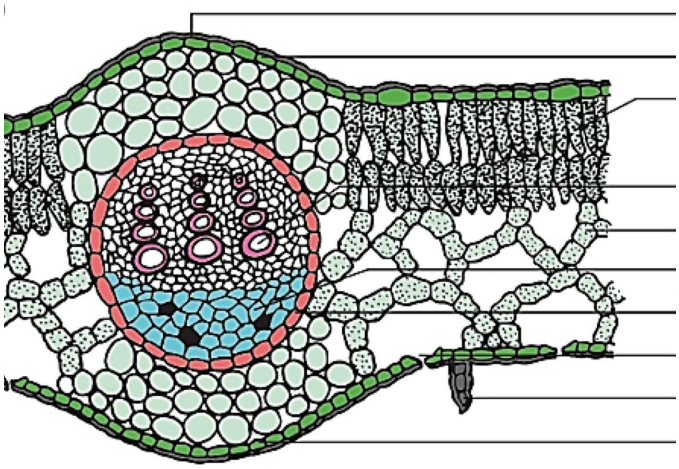
Worksheet 15

Unit No. 3

Internal Structure of Leaf

SLO: Explain the internal structure and function of each part of the leaf

Activity 1: Observe the diagram 3.1 given on page 26 and label the internal structure of leaf.



a. Explain Epidermis

_____

_____

b. Explain Upper Epidermis

_____

_____

c. Explain lower Epidermis

_____

_____

Reference G. Science Textbook Grade 6 Page. 26

Worksheet 16

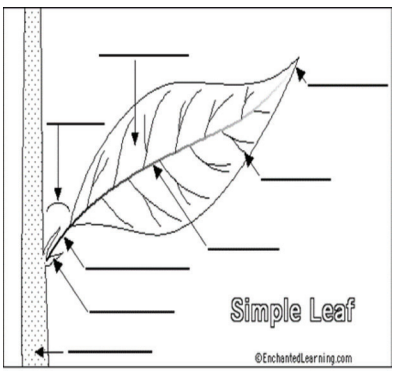
Unit No. 3

Photosynthesis and Parts of leaf

SLO: Explain that the structure of leaf and how it helps the process of photosynthesis.

Activity 1: Take the leaf and observe the parts of leaf. Write the names of parts in the following diagram.

Parts of a Leaf



1. _____
2. _____
3. _____
4. _____
5. _____

Activity 2: Read the passage on Photosynthesis on page 27 and 28. Fill in the blanks given below.

Plants prepare their own food by converting _____ energy in to _____ energy. During photosynthesis plants utilize _____ and _____ in the presence of sunlight to prepare their food. This food is in the form of _____ and is prepared with the help of _____ found in the leaves of the plant.

The flat and broad structure of leaf helps in the absorption of _____ and _____.The stomata at the lower surface of the leaf allow _____ to enter the leaf for photosynthesis.

Fill the Equation for photosynthesis

_____ + _____ ↔ _____ + _____

Reference G. Science Textbook Grade 6 Page. 26, 27 and 28

Worksheet 17

Unit No. 3

Photosynthesis and Respiration in Plants

SLO: Comparison between photosynthesis and respiration

Activity 1: Read page 29- 30 and 31 and write down the difference between photosynthesis and respiration in the columns given below.

Photosynthesis	Respiration

Reference G. Science Textbook Grade 6 Page. 29, 30, 31

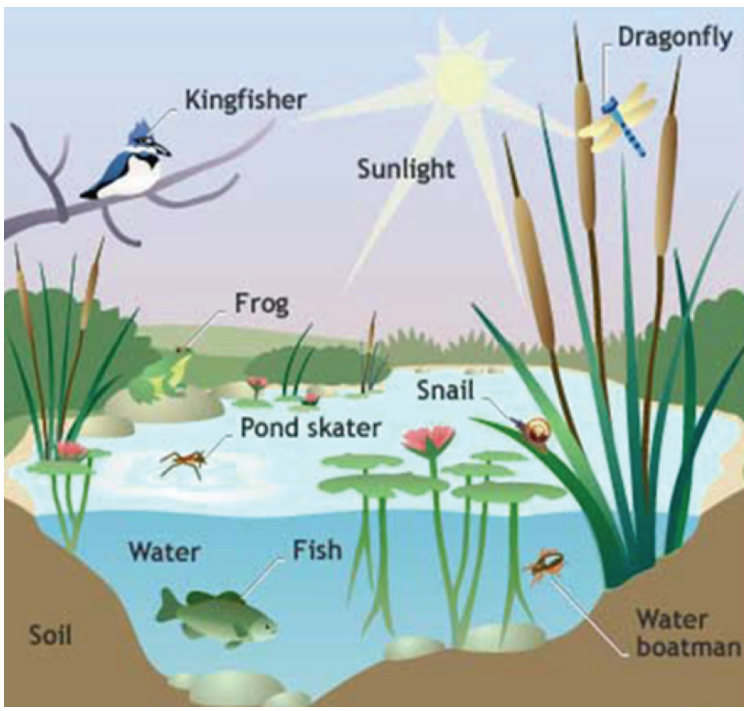
Worksheet 18

Unit No. 4

Components of Environment

SLO: Identify the components of environment

Activity 1: Following diagram shows pond environment. List the biotic and a biotic factors present in the diagram.



Biotic Factors	Abiotic Factors

Reference G. Science Textbook Grade 6 Page.35-36

Worksheet 19

Unit No. 4

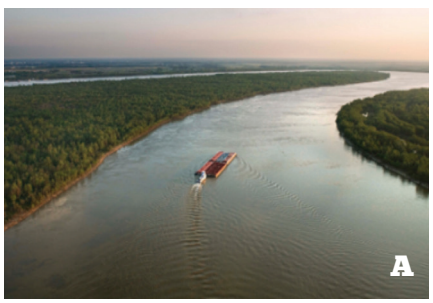
Environment and its Interaction

SLO: Compare the physical factors which make up the environment of a desert and a rainforest

Activity 1: Environments differ with respect to their physical features. Write four physical differences among Rainforest and Desert Environment and complete the following table.

Rainforest Environment	Desert Environment

Activity 2: Which of the following diagram showing desert environment?







Reference G. Science Textbook Grade 6 Page.39

Worksheet 20

Unit No. 4

Interdependence of Biotic and Abiotic Components

SLO: Describe the relationship between biotic and abiotic components of the environment

Activity 1: Which of the following statement is correct for plants?

- ☐ Plants do not produce food for their own use, and also not for other animals.
- ☐ Plants produce food for their own use, as well as for other animals.

Activity 2: Which of the following statement is correct for waste material of plants and animals?

- ☐ The waste material of plants and animals is again used by the plants and the cycle goes on.
- ☐ The waste material of plants and animals is not used by the plants and the cycle does not go on.

Activity 3: Draw diagram fig 4.4 of interdependence of biotic and abiotic components given on page.37

Reference G. Science Textbook Grade 6 Page.37

Worksheet 21

Unit No. 4

Components of the Environment

SLO: Identify the components of environment

Activity 1: a. Write names of two main components of the environment.

1. _____

2. _____

b. Identify the three components in the box associated with Abiotic component of environment.

1. _____

2. _____

3. _____

Sunlight, Stones, Bacteria, Water, Fungi, Deer, Owl, Air

c. Identify three components in the box associated with biotic component of environment

1. _____

2. _____

3. _____

Sunlight, Producer, Water, Consumers, Decomposers, Air

d. Biotic Components consists of

1. _____

2. _____

3. _____

Reference G. Science Textbook Grade 6 Page.35-36

Worksheet 22

Unit No. 4

Relationships Amongst Organisms

SLO: Explain the different relationships between organisms

Activity 1: Read page 40 of the book and complete the following table.

Type of interaction between organisms	Example
Predation: is the interaction between two animals in which one kills and feeds on the other.	
Parasitism: is the interaction in which one organism gets food from host and causes it harm.	
Mutualism: is the relationship between two organisms in which both are benefited and none of them is harmed.	

Reference G. Science Textbook Grade 6 Page.40

Worksheet 23

Unit No. 4

Dependence of One Living Thing on Another

SLO: Describe that living things depend on one another for food, shelter and protection.

Activity 1: Write the benefits which animals, birds and insets get from trees in the given three blank boxes.

S.No	Living Organisms	Benefit from Trees
1.	Animals	
2.	Birds	
3.	Insects	

Activity 2: Observe and write how humans are dependent on plants and animals?

Reference G. Science Textbook Grade 6 Page.38

اردو

ورک شیٹ

یونٹ نمبر: ۱

ورک شیٹ

۱

حمد

حاصلِ تعلّم: نظم کا مرکزی خیال بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: گلِ۔پھول، رنگت۔رنگ، جلوہ۔نظارہ، وسیلہ۔سبب

ہر گلِ تر میں ہے تِری رنگت

جلوہ گر ہے تو ہی بہاروں میں

تو وسیلہ ہے سب وسیلوں کا

تو سہارا ہے سب سہاروں کا

اوپر دیے گئےاشعار میں کس موسم کا ذکر کیاگیا ہے؟

جواب: _____

ان اشعار کے مطابق اللہ تعالیٰ کی کوئی سی ایک صفت بیان کریں؟

جواب: _____

"تو سہارا ہے سب سہاروں کا" کا مفہوم لکھیں۔

جواب: _____

_____

مشق: درسی کتاب کے صفحہ نمبر ۲ پر دیے گئے سوال نمبر ۲ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۲

ورک شیٹ
۲

نعت

حاصلِ تعلّم: رسول اللہ ﷺ کی عظمت محبت اور تعلیمات سے روشناس ہو سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: رضا۔مرضی، اخوت۔بھائی چارہ، حاجت روا۔ضرورت پوری کرنے والا

وہ مکہ کی سختی، وہ طائف کا منظر
محمد ﷺ خدا کی رضا بن کے آئے
امیروں کو رازِ اخوّت بتایا
غریبوں کے حاجت روا بن کے آئے

طائف کے لوگوں کے ساتھ رسول اللہ ﷺ نے کیا سلوک کیا ؟

جواب: _____

رسول اللہ ﷺ کو کس وجہ سے ان ناموں سے پکارا جاتا تھا؟

صادق: _____

امین: _____

رسول اللہ ﷺ غریبوں کے ساتھ کیسا سلوک کرتے تھے؟

جواب: _____

_____

مشق: درسی کتاب کے صفحہ نمبر ۴ پر دیے گئے سوال نمبر ۲ کا جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۳

یونٹ نمبر: ۳

اُمّ المومنین حضرت خدیجۃ الکبریٰ رضی اللہ عنہا

حاصلِ تعلّم: سبق پڑھ کر سوالات کا یک سطری جواب لکھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: برس۔سال، نبوت ۔ پیغمبری، بشارت۔خوش خبری

رسول پاک صلی اللہ علیہ وآلہ وسلم کی عمر چالیس برس ہوئی تو غارِ حرا میں اللہ تعالیٰ کی طرف سے جبرائیل علیہ السلام آپ ﷺ کے پاس آئے اور آپ ﷺ کو نبوت کی بشارت دی۔ اللہ کا پیغام سن کر آپ ﷺ کی عجیب حالت ہو گئی۔ گھر پہنچ کر آپ ﷺ بہت دیر تک خاموش لیٹے رہے ۔ جب سکون ہوا تو آپ ﷺ نے حضرت خدیجہ رضی اللہ عنہا کو غارِ حرا کا واقعہ سنایا۔

عبارت میں اللہ تعالیٰ کے کس فرشتے کا ذکر ہوا ہے؟

جواب: _____

حضور ﷺ پر پہلی وحی کہاں نازل ہوئی؟

جواب: _____

پہلی وحی میں حضور ﷺ کو کس بات کی بشارت دی گئی؟

جواب: _____

کوئی سے چار پیغمبروں کے نام لکھیں۔

_____ _____ _____ _____

مشق: درسی کتاب کے صفحہ نمبر ۹ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے مختصر جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۴

یونٹ نمبر: ۴

شیخ سعدیؒ شیرازی کی حکایتیں

حاصلِ تعلّم: شیخ سعدیؒ کی حکایات سے اخلاقیات کے مختلف پہلو اور حکمت کی باتیں سیکھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: بے وقوف۔ناسمجھ، سلوتری۔ حیوانات کا ڈاکٹر، چوپائیوں۔چار پاؤں کا مویشی ،حاکم۔حکم دینے والا، ناتجربہ کار۔ ناواقف، سونپ ۔حوالے، شرمندگی۔ افسوس، سپرد۔ حوالے، اہلیت۔ سمجھ

ایک بے وقوف آدمی کی آنکھ میں درد ہوا۔ وہ ایک سلوتری کے پاس گیا تاکہ دوا لے۔ سلوتری نے وہ دوا جو کہ چوپائیوں کی آنکھ میں ڈالتا تھا، اُس کی آنکھ میں لگا دی۔ وہ شخص اس دوا سے اندھا ہوگیا۔ لوگ اُسے حاکم کے پاس انصاف کے لیے لے گئے۔ حاکم نے کہا: سلوتری کا کوئی گناہ نہیں ہے۔ اگر یہ شخص گدھا نہ ہوتا تو سلوتری کے پاس نہ جاتا۔ مقصد یہ ہے کہ جو شخص ناتجربہ کار کو بڑا کام سونپ دیتا ہے وہ شرمندگی اُٹھاتا ہے۔ ہر آدمی ہر کام کا اہل نہیں ہوتا۔ کام سپرد کرنے سے پہلے اہلیت کا اندازہ کرلینا چاہیے۔

1. آدمی سلوتری کے پاس کیوں گیا؟ _____

2. سلوتری نے آدمی کا علاج کیسے کیا؟ _____

3. آدمی کو سلوتری کی دوا سے کیا نقصان ہوا؟ _____

4. حاکم نے سلوتری کو سزا کیوں نہیں دی؟ _____

مشق: درسی کتاب کے صفحہ نمبر ۱۷ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے جوابات اپنی کاپی میں لکھیں۔

ورک شیٹ
۵

یونٹ نمبر: ۴

شیخ سعدیؒ شیرازی کی حکایتیں



حاصلِ تعلّم: مترادف الفاظ کا محل استعمال اردو کے بنیادی الفاظ کے حوالے سے سیکھ سکیں۔

ہدایات: خطِ کشیدہ الفاظ کے مترادف لکھ کر جملے مکمل کریں

الفاظ معانی: اجنبی، سلوک، مال، اجازت، لذیذ، لڑائی، حاضر، تاریک

1. کسی اجنبی یا _____ انسان پر بھروسہ نہ کرو۔
2. دشمن کے ساتھ اپنا سلوک اور _____ اچھا رکھو۔
3. مال و _____ کی محبت انسان کو خودغرض بنا دیتی ہے۔
4. ماں باپ کی اجازت اور _____ کے بغیر کوئی کام نہیں کرنا چاہیے۔
5. میری دادی لذیذ اور _____ کھانا بناتی ہیں ۔
6. لڑائی اور _____ سے نقصان دونوں فریقین کا ہوتا ہے۔
7. حاضر اور _____ دور میں بیماری سے دور رہنے کے لیے ہاتھ دھونا ضروری ہے۔
8. اس وقت تاریک اور _____ گلی سے گزرنا مشکل ہے۔

ہدایات: الفاظ میں سے درست مترادف پر (✓) کا نشان لگائیں۔

آسمان		جنگل	✓	فلک
مفلس		امیر		غریب
شب		رات		دن
آنکھ		چشم		ہاتھ
بُھول		کانٹا		گُل
دُکھ		غم		سُکھ



مشق: درسی کتاب کے صفحہ نمبر ۱۷ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
٦

یونٹ نمبر: ۵

ہماری زراعت اور گھریلو صنعتیں

حاصلِ تعلّم: ملکی ترقی میں زراعت کی اہمیت سمجھ سکیں۔

ہدایات: دی گئی عبارت پڑھ کر سوالات کے جوابات لکھیں نیز عبارت کا نام بھی لکھیں۔

الفاظ معانی: زراعت ۔ کھیتی باڑی، دستکاری۔ہاتھ سے بنائی ہوئی چیزیں، حوصلہ افزائی۔ہمت دلانا، مصنوعات۔بنائی ہوئی چیزیں، مگس بانی۔ شہد نکالنے اور بیچنے کا کاروبار، مرغ بانی۔ مرغ پالنے اور بیچنے کا کاروبار، ماہی پروری۔ مچھلیاں پالنے اور بیچنے کا کاروبار

عبارت کا نام : _____

ایک زرعی ملک میں زراعت سے متعلق صنعتوں اور گھریلو دستکاریوں کا ہونا بہت ضروری ہوتا ہے۔ حکومت نے گھریلو دستکاریوں اور چھوٹی صنعتوں کی اہمیت کو شروع ہی سے محسوس کیا ہے اور ان کی ہمیشہ حوصلہ افزائی اور مدد کی ہے۔ ان چھوٹی صنعتوں اور گھریلو دستکاریوں میں مشروبات، مُربّے اور چٹنیاں تیار کرنا، لکڑی سے تیار ہونے والا سامان، چمڑے کی مصنوعات کی تیاری، مگس بانی، مرغ بانی اور ماہی پروری خصوصی اہمیت رکھتیں ہیں۔

عبارت میں موجود کوئی سی دو چھوٹی صنعتوں کے نام لکھیں؟

جواب: _____

ایک زرعی ملک کو زراعت کے لیے کون سی دو چیزوں پر زور دیا گیا ہے؟

جواب: _____

چھوٹی صنعتیں کن کاموں میں خاص اہمیت رکھتی ہیں ؟

جواب: _____

اپنے علاقے کی کسی ایک گھریلو صنعت کا نام اور کام بتائیں؟

جواب: _____

مشق: درسی کتاب کے صفحہ نمبر ۲۴ پر دیے گئے سوال نمبر ٦ اور ۷ کے جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۷

یونٹ نمبر: ۵

ہماری زراعت اور گھریلو صنعتیں

حاصلِ تعلّم: سماجی اور پیشہ وارانہ ضروریات کی تحریر پڑھ سکیں۔

ہدایات: عبارت پڑھ کر سوالات کے جوابات دیں۔

الفاظ معانی: زرخیز۔سر سبز و شاداب، سیراب کرنا۔ فصلوں کو پانی دینا ،آلات۔ سازو سامان

ایک زمانہ تھا جب انسان اپنے بنائے ہوئے ہل سے زمین کا سینہ چیرتا تھا۔ بیل چلا کر زمین کو بوائی کے لیے تیار کرتا تھا۔ رہٹ کی مدد سے کھیتوں کو سیراب کرتا تھا اور شدید گرمی میں درانتی سے فصل کاٹتا تھا۔ اتنی محنت کے بعد بھی زرخیز زمین سے ضرورت کی پیداوار بھی پوری نہیں کر پاتا تھا۔خوراک کی ضرورت پوری کرنے کے لیے دوسرے ملکوں سے اناج منگواتے تھے۔ حکومت نے اناج بڑھانے کے لیے سائنسی اور مشینی آلات کا استعمال کیا اور تجرباتی فارم بنائے۔کیمیائی کھاد، ٹریکٹر، ٹیوب ویل اور زرعی آلات سے فصلوں کی پیداوار میں اضافہ ہوا۔

پرانے زمانے میں کسان کیسے فصل کاشت کرتا تھا؟

جواب: _____

کن طریقوں میں تبدیلی سے کاشت میں اضافہ ہوا؟

جواب: _____

ہدایات: تصاویر دیکھ کے پیشوں کے نام لکھیں اور بتائیں کہ ان پیشوں سے ہمیں کیا فائدہ پہنچتا ہے ؟



_____

_____



_____

_____



_____

_____

مشق: درسی کتاب کے صفحہ نمبر ۲۴ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۶

ورک شیٹ
۸

مضمون نویسی



حاصلِ تعلّم: کتابوں اور رسالوں کی مدد سے موضوع پر مختصر مضمون لکھ سکیں۔

ہدایات: دیے گئے اشارات کی مدد سے "ورزش کے فوائد" کے عنوان پر کم از کم ۱۰۰ الفاظ پر مبنی مضمون لکھیں۔

1. تندرستی اور صحت کے لیے ورزش کا ضروری ہونا۔
2. جسمانی اور دماغی ورزش
3. ورزش کے بغیر جلدی تھک جانا،وزن کا بڑھ جانا ،کھانا صحیح طرح سے ہضم نہ ہونا، بیماریوں کا لگنا
4. مختلف کھیلوں میں حصّہ لینا،چہل قدمی ، ورزش باقاعدگی سے کرنا

نوٹ : اس کے علاوہ آپ کسی کتاب اور رسالے میں سے بھی ورزش کے فوائد پڑھ کر لکھ سکتے ہیں ۔

ورزش کے فوائد



مشق: درسی کتاب کے صفحہ نمبر ۲۷ پر دیے گئے سوال نمبر ۷ کا جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۹

یونٹ نمبر: ۶

بہادر کسان (نظم)

حاصلِ تعلّم: محنت کی عظمت کو سمجھ سکیں۔

ہدایات: درج ذیل اشعار کو پڑھ کر دیے گئے سوالات کے جوابات لکھیں۔

ہے دنیا کی جنت فقط اُس کے پاس — یہ محنت سے کرتا ہے سب کام راس
یہ ترکاریاں، یہ اناج اور کپاس — پھلوں کا مزہ اور پھولوں کی باس
اسی سے تو لیتا ہے سارا جہاں
بڑا محنتی ہے بہادر کسان

۱۔ کسان کون کون سے فصلیں اُگاتا ہے؟

جواب: _____

_____

۲۔ اگر کسان کھیتی باڑی نہ کرے تو ہمیں کیا نقصان ہو گا؟

جواب: _____

_____

۳۔ اپنی پسندیدہ سبزی کو گھر میں اُگانے کا طریقہ لکھیں؟

جواب: _____

_____

مشق: درسی کتاب کے صفحہ نمبر ۲۷ پر دیا گیا سوال نمبر ۴ مکمل کریں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۰

خطوط نویسی

حاصلِ تعلّم: اپنی ذات و ماحول سے متعلق مسائل و امور پر خط وغیرہ تحریر کر سکیں۔

ہدایات: دیے گئے اشارات کی مدد سے دوست کو کرونا وائرس سے بچاؤ کی احتیاطی تدابیر اختیار کرنے کے لیے خط مکمل کریں۔

اشارات

شہر_____ محلہ_____، گلی کا نام_____

_____ _____ ۲۰۲۰

السلامُ و علیکم! اُمید ہے خیریت سے _____

آج کل کرونا وائرس کی وبا نے پورے ملک _____ ۔ ڈاکٹر کی ہدایات پر عمل _____ حکومت نے بازار اور دکانیں بند _____ صرف کھانے پینے کی اشیا کی دکانیں _____ ہمیں بھی گھر میں _____ اور لوگوں سے گلے ملنے _____ ہاتھوں کو بیس سیکنڈ تک _____ اپنی پڑھائی کو جاری رکھنے کے لیے کتابیں، رسالے _____۔

میں امید کرتا ہوں کہ آپ میری _____ دعاؤں میں _____۔

والسّلام

تمہارا دوست _____

_____

مشق: درسی کتاب کے صفحہ نمبر ۳۳ پر دیے گئے سوال نمبر ۶ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۱

صحت و صفائی

حاصلِ تعلّم: اسلام میں صفائی کی اہمیت کو جان سکیں۔

ہدایات: درج ذیل مکالمے کو پڑھ کر دیے گئے سوالات کے جوابات لکھیں۔

ابّا: صحت کے بغیر انسان محنت نہیں کر سکتا اور محنت کے بغیر دنیا میں کچھ بھی حاصل نہیں ہوتا۔ صحت کے کچھ بنیادی اُصول ہیں جن پر عمل کرنا ہم سب کے لیے ضروری ہے۔

ثمینہ: کیا آپ وہ اُصول بتائیں گے؟

ابّا: ہاں ہاں! کیوں نہیں! سب سے پہلے یہ کہ انسان صاف ستھرا رہے۔ ہر روز نہائے، ناخن اور دانت صاف رکھے، صاف ستھرے کپڑے پہنے، ہوادار کمرے میں سوئے اور روزانہ صبح اُٹھ کر ورزش کرے۔ پاک صاف رہنا ہر مسلمان کا فرض ہے۔ حضرت محمد ﷺ کا ارشاد ہے کہ "صفائی نصف ایمان ہے"۔ اللہ تعالیٰ کی عبادت کے لیے صفائی اور پاکیزگی کے اصولوں کا خیال رکھنا بہت ضروری ہے۔

صفائی کا خیال رکھنے کے لیے کن باتوں پر عمل کرنا چاہیے۔

۱ _____

۲ _____

۳ _____

حضور ﷺ نے صفائی کے بارے میں کیا ارشاد فرمایا؟

_____

آپ اپنی صفائی کا خیال کیسے رکھتے ہیں؟

_____

مشق: درسی کتاب کے صفحہ نمبر ۳۳ پر دیے گئے سوال نمبر ۲ کے تمام اجزا کے مختصر جوابات اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۲

یونٹ نمبر: ۸

علاقائی کھیل



حاصلِ تعلّم: مختلف علاقائی کھیلوں کو پہچان سکیں۔

ہدایات: درج ذیل سوالات کے جوابات لکھیں۔

1. آپ کے علاقے میں کون کون سے کھیل کھیلے جاتے ہیں؟

_____

_____

2. آپ کو کون سا کھیل کھیلنا پسند ہے اور کیوں؟

_____

_____

3. گھر میں کھیلے جانے والے کم از کم پانچ کھیلوں کے نام لکھیں۔

۱ _____

۲ _____

۳ _____

۴ _____

۵ _____



مشق: درسی کتاب کے صفحہ نمبر ۴۱ پر دیے گئے سوال نمبر ۲ کے تمام اجزا کے مختصر جوابات اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۳

یونٹ نمبر: ۸

علاقائی کھیل

حاصلِ تعلّم: جسمانی اور ذہنی صحت کے لیے کھیلوں کی اہمیت سے آگاہ ہو سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: نظم و ضبط۔ترتیب، تحمل۔ برداشت کرنا، تعاون۔ مدد کرنا، منصوبہ بندی۔ کسی کام کو مکمل کرنے کے لیے پلان ترتیب دینا، نشوونما۔بڑھنا، چاق و چوبند۔ ہوشیار، ہشاش بشاش۔تروتازہ

کھیل انسان کو نظم وضبط کا عادی بناتے ہیں، ضبط و تحمل پیدا کرتے ہیں، مقابلہ ، حوصلہ مندی اور برداشت کا جذبہ پیدا کرتے ہیں۔ تعاون اور ایک دوسرے سے مل جُل کر کام کرنے کا عادی بناتے ہیں۔کھیل بہتر منصوبہ بندی کرنے اور صلاحیتوں کو اُجاگر کرنے کا موقع مہیّا کرتے ہیں۔ کھیل انسانی جسم کی نشوونما اور صحت کے لیے مفید اور ضروری ہیں۔ کھیل کُود سے جسم چست اور چاق و چوبند رہتا ہے۔ جسم کے مختلف حصّے مضبوط ہوتے ہیں۔ طبیعت ہشاش بشاش رہتی ہے۔ کام کاج میں دل خوب لگتا ہے۔

کھیلوں کے کوئی سے تین فائدے لکھیں؟

۱ _____

۲ _____

۳ _____

اپنے پسندیدہ کھیل کے بارے میں کم از کم ۵ جملے لکھیں۔

_____

_____

_____

مشق: درسی کتاب کے صفحہ نمبر ۴۲ پر دیے گئے سوال نمبر ۶ کا جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۴

یونٹ نمبر: ۸

جملوں کی درستی



حاصلِ تعلّم: غلط فقرات کو درست کر سکیں۔

ہدایات: درج ذیل غلط جملوں کو درست کرکے دوبارہ لکھیں۔

غلط جملے	درست جملے
میں نے خواب دیکھی۔	میں نے خواب دیکھا۔
وہ گہرے سوچ میں پڑگیا۔	
کراچی یہاں سے کتنا دور ہے؟	
یہ ہمارے نانے کی دکان ہے۔	
میلے میں کئ مرد اور عورتیں آئے۔	
ہم کو آج چھٹی ہے۔	
حارث، آمنہ ، ایمن سکول میں گئے۔	
مری میں تیز برف باری ہوئی۔	
روزانہ صفائی کا عادت اپنائیں۔	
صابن سے بار بار ہاتھ دھوئے۔	



مشق: درسی درسی کتاب کے صفحہ نمبر ۴۱ پر دیے گئے سوال نمبر ۹ کا جواب اپنی کاپی میں لکھیں۔

English

Worksheet 1

Unit No. 1

Use of ‘a’, ‘an’ and ‘the’

SLO 1: Recall and apply rules for use of ‘a’, an’ and ‘the’ in speech and writing.

Activity 1: Put the correct article (a, an, the) in each sentence.

i. Muhammad (ﷺ) was looked after by __a__ foster mother.

ii. He never told _____ lie.

iii. Muhammad (ﷺ) visited _____ city of Taif.

iv. There was _____ old man who used to bring water.

v. Ali is _____ most intelligent student of the class.

Note for students: an article is an adjective, which is any word that modifies a noun. Usually adjectives modify nouns through description, but articles are used instead to point out or refer to nouns. There are two different types of articles that we use in writing and conversation to point out or refer to a noun or group of nouns: definite and indefinite articles.

Definite article: is the word ‘the,’ and it refers directly to a specific noun or groups of nouns. For example: the grade 6 students were ready for their presentation. In this sentence ‘the,’ is referring to a direct and specific noun: ‘grade 6 students’.

Indefinite articles are the words ‘a’ and ‘an.’ Each of these articles is used to refer to a noun, but the noun being referred to is not a specific person, place, object, or idea. It can be any noun from a group of nouns. For example: a school is a place where students go to learn. Here the noun ‘school’ is not specific, it could be any school. Another example: an apple. Here ‘an’ has been used for any apple, not any specific apple.

Activity 2: Fill in the correct article (a, an or the) where necessary - or leave blank.

1. _____ moon goes round _____ earth every 27 days.
2. I’m not very hungry, I had _____ big breakfast.
3. What is _____ highest mountain in _____ world?
4. Look at _____ apples on that tree. They’re very large.
5. We had a very nice meal. _____ Naans were especially good.
6. I know someone who wrote a book about _____ life of Jinnah.
7. _____ life would be very difficult without _____ electricity.
8. People only have parks, where they can enjoy _____ nature.
9. The countryside is _____ best place for living.

Activity 3: NOW TRY THIS! Complete the following postcard by adding a, an or the where necessary.

Dear Salahuddin,



I am writing to you from_____ city of Madinah. This city is 210 miles (340 km) north of Makkah. At _____ time of _____Prophet (PBUH), Madinah was approximately _____size of _____ present masjid and _____surrounding white tiled area. _____ interesting fact I didn’t know about this holy city is that our beloved Prophet (PBUH) is buried here. I am enjoying_____ sweet dates and I bought _____ lovely gift for you.

Missing you my friend and praying for your health and happiness.

Your friend,
Arsalan

Further practice: Complete the exercise on ‘articles’ given on page 5 of your textbook.

Worksheet 2

Unit No. 1

Use of Collective, Common and Proper Noun

SLO 2: Apply the rules of use of collective, common and proper noun.

Note for students: Collective nouns: Remember that nouns are words naming people, animals, places, and things. Collective nouns are words for single things that are made up of more than one person, animal, place, thing, or idea. You can't have a team without individual members; even so, we discuss a team as a single unit.

Activity 1: Underline the collective noun in the sentences below:

- The herd of cattle ran across the fields, leaving a massive dust cloud behind them.
- We waited anxiously for the jury to come to a verdict.
- This year's basketball team includes three players who are over six feet tall.
- Prophet Muhammd's (PBUH) army defeated the Quraish on the battlefield of Badar.
- The town council has approved plans to create a new park.
- He comes from a huge family: he is the oldest of eleven kids.
- The group of young scientists has been on tour for months.
- Everyone in the audience applauded loudly when the boy won first prize in the debating competition.
- Our class took a field trip to Fort Balahasaar in Pehawar.

Activity 2: Choose proper nouns from the given words and write down in boxes.

i.	**City, village, Peshawar.**	
ii.	**Boy, man, Yahya.**	
iii.	**Pakistan, Country, Province.**	
iv.	**Girl, Anum, mother**	
v.	**Computer, pen, Ahmed**	

Activity 3: identify five common nouns and four proper nouns in the paragraph below and write them under the appropriate column.

Hazrat Muhammad (PBUH) was kind to the poor slaves. He loved them as his own children. To the Muslims he said, "Feed your slaves with such food as you eat yourself and clothe them with such clothes as you wear yourself. If they do wrong, pardon them. If you cannot pardon, part with them. But never treat them unkindly." Hazrat Khadija had a slave named Zaid, Hazrat Muhammad (PBUH) always treated him like his own child.

Common Nouns	Proper Nouns

Further practice: Attempt exercises A & B on page 8 and exercises G & H on page 11 given in your textbook.

Worksheet 3

Unit No. 1

Specific Word, Vivid Verbs and Modifiers

SLO 3: Analyse features of an effective topic sentence i.e. specific word, vivid verbs and modifiers.

Important definitions:		
A modifier changes, clarifies, qualifies, or limits a particular word in a sentence in order to add emphasis, explanation, or detail. Modifiers tend to be descriptive words, such as adjectives and adverbs.	Limiting modifiers such as only and always enforce restrictions on the subject, noun, or pronoun they immediately precede.	A vivid verb is a verb that a reader will find more interesting and is more specific to the common, verbs we use all the time, like "walk". By using vivid verbs, will help you avoid repeating the same (common) verb in your writing.

Note for students: A vivid verb, is a verb that is really descriptive. When using vivid verbs in a text, the person reading it will be able to visualize the action in their own mind.

Activity 1: Examine the topic sentence given below and see how: a). specific word, vivid verbs and modifiers have been used to make the topic sentence effective b). paragraph develops to support and extend upon the idea presented in the topic sentence

Specific word 'run'

Vivid verbs dash, bolt, stroll, sprint, jog, rocket, plod, trudge, dart, bound, race, limp, stagger, saunter, tiptoe,

How would someone walk if they:

had a stone in their shoe	were in a hurry	were being followed by a wolf	walking in a park	were dead tired	did not want to disturb their sleeping baby

Topic Sentence

- He raced through the woods, as he constantly looked behind to check the distance between himself and the wolf. Detail 1
- The dangerous animal was almost at Abdullah's heels, when the sharp sound of a gunshot echoed in the silence of the forest. Detail 2
- With a shrill cry of extreme pain, the ferocious animal took its last breath. Detail 3
- Abdullah could hardly believe that his trouble was over, and he had been saved from being eaten up by the wolf. Concluding sentence
- Specific word/ vivid verb: run limiting modifier: only modifier: angry hungry

Activity 2: Write a paragraph for the following topic sentence. Make sure you use at least one limiting modifier, two vivid verbs and two modifiers.

Topic Sentence: My teacher combed the sky to spot the crescent for the blessed Islamic month of Shawwal.

- Detail 1: _____
- Detail 2: _____
- Detail 3: _____
- Concluding sentence : _____

_____

Further practice: Complete the exercise given on page 7 of your textbook.

Worksheet 4

Unit No. 1

Nouns

SLO 4: Change the number of regular and irregular nouns, and nouns with no change in number.

Activity 1: Separate singular and plural nouns from the given list.

Book, Knives, Key, Pencil, Foot, Mice, Baby, Teeth, Bags, Wife

Singular	Plural

Note for students: Base Plurals and Collective Nouns- In the no-change or base plural, the singular noun has the exact same form as the Most no-change plurals are types of animals:

Activity 2: Change the underlined singular nouns into plural.

i. He won the heart of his friend. friends

ii. He treated his enemy with kindness. _____

iii. His enemies threw a stone at him. _____

iv. He loved him as his own child. _____

v. The angel asked him to curse his enemies. _____

Activity 3: Read the following base- plurals and the relevant collective nouns. Make sentences using the plural form and collective nouns written in the table below:

Singular	Plural	Collective Nouns	Sentences
Sheep	Sheep	Herd	I saw a herd of sheep grazing in the fields.
Deer	Deer	Herd	
Fish	Fish	School	

Activity 4: Write a paragraph using the plural forms of: 1. Foot, 2. Child, 3. Fish, 4. Bag, 5. Knife.

Further practice: Complete exercise D on page 9 and E and F on page 8 of your textbook.

Worksheet 5

Unit No. 2

Prereading Strategies

SLO 1: Use prereading strategies to predict the content of a text from a picture by asking questions and contextual clues.

Activity 1: Look carefully at the picture and answer questions in complete sentences:



1. What is the boy watching outside the window?

---

2. Why is he not playing with the other kids?

---

3. What might the boy be thinking?

---

4. How can the children, playing football, include this boy?

Activity 2: Read the given paragraph carefully and write short answers to the questions given at the end.

I was glad. I hoped the new boy Naseebullah would be someone really good. Then my teacher said," Our new student is a very special kid. He can't walk, so he uses a wheelchair. I want you all to be very kind and gentle towards him to make him feel at home".

i. What was the name of the new boy?

Ans : The name of the new boy was Naseebullah .

ii. Why did Naseebullah use a wheelchair? _____.

iii. What is the advice of the teacher about the new boy? _____.

iv. Write any three pronouns from the above paragraph. _____.

Further practice: Read pages 14 and 15 and complete exercises given on page 16 of your textbook.

Worksheet 6

Unit No. 2

Sentence

SLO 2: recognize that other sentences in the paragraph support the topic sentence.

Activity 1:	Read the following paragraph carefully and observe the different elements of the paragraph and how they support the topic sentence.

'I love summers because'

I can play with water and eat my favourite fruits. **Detail 1:** During the summer holidays, my cousins come to stay with us and we have a lot of fun having water fights and playing hide and seek. **Detail 2:** In addition to this, the summer season brings with it a variety of fruits. My number one choice are mangoes, the king of all fruits, that are available in abundance throughout summers. **Detail 3:** My cousins and I usually put the sweet and juicy fruit in a bucket of ice -cold water and then eat the mangoes once they are nice and cold. Detail 4: Next are peaches, apricots, grapes, watermelons, and honey dew, which are special fruits of this season. **Conclusion:** I have not missed a single summer since I was born and make sure I am in my hometown during the fruity warm months of summer.

Activity 2:	Write a paragraph about your 'Best Friend' with the help of the given word bank. The topic sentence has been provided for you.

Name, lives, home, family, play, help, honest, hardworking, caring, loving

Best friends are a gift from Allah, and I am blessed to have Khan Zaman as my most trusted friend.

_____

_____

_____

_____

_____

Further practice: complete the exercises given on page 17 of your textbook.

Worksheet 7

Unit No. 2

Animate and Inanimate Nouns

SLO 3: Differentiate between and demonstrate use of possessive forms of animate and inanimate nouns

Activity 1: Separate animate and inanimate nouns from the word bank.

Word bank: Apple boy dog pen glass teacher chair baby bee bag

Remember:
Animate Noun: A noun which shows living things like man, cow, horse etc.
Inanimate Noun: A noun which shows non-living things like pencil, table, shirt etc.

Animate nouns: _____

Inanimate nouns: _____

Activity 2: Read the sentences below and write the possessive forms of animate and inanimate nouns in the appropriate columns below:

1. You need to paint the window's frame in one colour.
2. The bird's chirping sounded sweet.
3. I laughed when I saw Ali's new haircut.
4. The gardener's landscaping was beautiful.
5. Her school's name was among the first five to top in the Matriculation Board.
6. Her room's flooring was in beautiful mosaic.

Animate Nouns	Inanimate Nouns

Further practice: Complete exercises given on page 21 of your textbook.

Worksheet 8

Unit No. 2

Gender of Nouns

SLO 4: Change the gender of nouns

Activity 1: Write the masculine and feminine of the given words.

Masculine	Feminine
Boy	
	Mother
King	
Headmaster	

Activity 2: Read the paragraph given below and write the correct gender in the appropriate column.

My friend Jannat invited me to a party with the rest of the class and some of her cousins. Her father and mother had made a lovely lunch for us and we all enjoyed the cake and the food. Jannat's grandparents were also present at the party. Her pet cat also enjoyed the party and played with us outside Jannat's house. Unfortunately, my close friend Zainab fell and hurt herself but Jannat's mother who is a doctor cleaned her wound and bandaged her. Jannat's parents had also invited a clown and a magician to make children laugh and have fun.

Masculine	Feminine	Common	Neuter

Activity 3: Change the gender in the following sentences

The boy liked to play with his sister.	
Amna's mother cooks delicious food.	
My Aunt lives in Chitral and she invites my family to her place every summer.	
Ahmed's grandmother always has a story to tell us.	
Her brother is fond of growing plants and vegetables.	

Further practice: Complete exercises given on pages 18 and 19 of your textbook.

Worksheet 9

Unit No. 3

Pronouns as Subject and Object

SLO 1: Demonstrate use of pronouns as subject and object.

Activity 1: Change the underlined nouns into the most suitable pronouns.

Ahmad is very smart.	He is very smart_____.
Sana reads in class six.	
Sana and **Yahya** are siblings.	
Aisha helps **Fatima** in studies.	
Saqib and **I** are friends.	

Activity 2: Choose the correct pronoun from the table given below and fill in the blanks to complete the sentences.

Remember: Pronouns are words that are used in place of a noun.

Subject Pronouns	Object Pronouns
I	me
you	you
he	him
she	her
it	it
we	us
they	them

1. Do you know that man? Do you know _____?
2. My friend and I have money, _____can go shopping.
3. Ali and Omar are late, _____ should hurry.
4. She gave _____ a birthday gift. I really like it.
5. Elephants are huge animals, _____ eat a lot of food.
6. _____ told _____ that we were in the wrong parking lot.
7. I am busy right now, can you call _____ in an hour?
8. My friend's cat was not well, _____ died yesterday.

Further practice: Complete the exercises given on page 27 of your textbook.

Worksheet 10

Unit No. 3

Possessive and Reflexive Pronouns

SLO 2: Recognize function of and use possessive and reflexive pronouns

Activity 1: Choose the correct reflexive or possessive pronoun from the table below and fill in the blanks to complete the sentences.

Remember: Pronouns are words that are used in place of a noun.

Possessive Pronouns	Reflexive Pronouns
Mine His Hers Theirs Its Ours	Myself Himself Herself Yourself/yourselves Themselves Itself Ourselves

1. Do you like this cake? I made it _____.
2. Look at that man. He is talking to _____.
3. The pen is _____. She can give it whosoever she wishes.
4. We don't need any help. We'll do it _____.
5. The problem is _____. We have to solve it on our own.
6. I told her the jacket was _____ but she gave it to her friend.
7. She looked at _____ in the mirror.
8. The cat hurt _____ when it jumped over the wall.
9. The children organized the party _____.
10. Hello, everybody. Help _____ to some food. It's on the table.
11. Salman, you have to do the homework _____. I don't have time to help you.
12. He _____ told me that he was going to Swat over the weekend.

Activity 2: Identify pronouns in the given sentences and write them at the end.

1. He bought it himself.
2. There is something in your pocket.
3. I read in class six.
4. They know each other.
5. The book belongs to him.
6. We planted the trees ourselves.

i. _____
ii. _____
iii. _____
iv. _____
v. _____
vi. _____

Further practice: Complete exercises given on page 28 of your textbook.

Worksheet 11

Unit No. 3

Writing Main Idea

SLO 3: Read a poem and give orally or in writing main idea.

Activity 1: Read the poem below and (☑) the option that best captures the main idea.

Spring is Here!

Spring is here,
in the air,
you can smell it coming,
on the trees,
leaves are green,
Caterpillars sunning
Birds are back,
grass is out,
busy bees are humming
on the trees,
leaves are green,
Caterpillars sunning



Q 1. You can smell it coming means (the smell of spring is in the air/ spring has a smell).

Q 2. On the trees, leaves are green, caterpillars sunning means (caterpillars are eating the leaves/caterpillars are relaxing in the sun).

Q 3. Busy bees are humming on the trees means (bees are singing happily because now they have work to do/ bees are busy singing).

Main Idea: When spring comes the birds, insects and plants become happy as they can be busy.

Activity 2: Read the poem titled 'Little Things' and write the main idea of the poem in your notebook.

Little drops of water,
Little grains of sand,
Make the mighty ocean
And the pleasant land.

And the little moments,
Humble though they be,
Make the mighty ages
Of eternity.

Little deeds of kindness,
Little words of love,
Make our earth on Eden,
Like the heaven above

Further practice: Read the poem on page 23 and complete the exercise given on page 24 of your textbook.

Worksheet 12

Unit No. 3

Conversation

SLO 4: Use conventions and dynamics of group discussion and interact to engage in conversation.

Activity 1: Read the poem by Ralph Waldo Emerson on page 23 of your textbook and discuss with your friends the following ideas from the poem:

Not gold but only men can make
A people great and strong
Men who for truth and honor's sake
Stand fast and suffer long

Price: noun: the amount of money expected, required, or given in payment for something.
Value: noun: principles or standards of behaviour; one's judgement of what is important in life.

Why does the poet compare gold with men?

Engage in a conversation with your friends and family members about:

Price and Value:
- Gold has a price. What are the things that have a cost attached to them?
- what kind of men would have a price? Is this a good sign? Give reasons for your response.
- What makes people/men valued? Can one buy honour or truth or steadfastness or endurance? Give reasons for your answer.

Hard work and Daring:
- Why is hard work important?
- Why has the poet compared people who work with people who sleep?
- What does the poet mean when he says that the ones who dare are better than the ones who fly?
- How are the people who work and people who dare able to lift the nation's pillars high?
- What does the poet imply when he says that pillars that are deep can be lifted to the sky?

Activity 2: Write answers in complete sentences to the below questions in the spaces provided:

Q1. Who did you have the discussion with?

Q 2. What were some of the points that grabbed your interest?

Q 3. What were some of the points that conflicted with the views in the poem?

Q 4. What problems did you face while having the above discussion?

Further practice: Read the table given on page 26 of your textbook and complete the activity on dialogues.

Worksheet 13

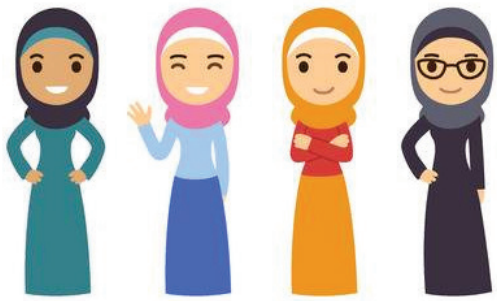
Unit No. 4

Communicative Purpose and Context

SLO 1: Write short texts in speech bubbles using vocabulary, tone, style of expression appropriate to the communicative purpose and context.

Activity 1: Before doing this activity, read pages 34, 35 and 36 of your textbook. Now read the dialogue between four friends and answer the questions that follow:

1. Khadija:
Assalamualaikum my friends, did you feel the earthquake today?



2. Hajra:
Walaikumasalm, Oh yes! it was a terrifying experience. How was your experience Khadija?

3. Khadija:
My father asked us to rush outdoors immediately and stand under the open sky. What about you two Amna and Fatima?

4. Amna and Fatima:
Well, you see my father is a meteorologist, he had warned us that there might be an earthquake. We were prepared, when the earthquake struck. We were instructed by him to race outside the home and stand under the sky.

5. Khadija:
I wish you had told us Amna, we were totally shocked. Suddenly, our ceiling fan fell down that we ran outdoors. Thanks to Allah Almighty we all are safe. We then prayed Salat ul Ayat.

Q 1. What are the four friends talking about?

Q 2. What words do they use to show their experience of the earthquake?

Q 3. In this dialogue, what three vivid verbs have been used for the word 'walk?

Q 4. Out of the four friends, whose tone seemed most relaxed. Give two reasons for your response.

Further practice: Complete the exercises given on page 38 and 40 of your textbook.

Worksheet 14

Unit No. 4

Minimal Pairs

SLO 2: Identify and pronounce in minimal pairs common problem consonants including /v/, /w/, /ya/, /th/, /l/, /r/ etc.

Activity 1: There are twelve minimal pairs given below. Write a poem using any 3 pairs. An example has been done for you:

Thick / Sick	Arrive / Alive	Bent / Vent
Birthday / Bath day	Light / Right	Fan / Van
Math / Mass	Grow / Glow	Vine / Fine
Mouth / Mouse	Lice / Rice	Save / Safe

Example poem with minimal pairs:

The soup was **thick**, it made me **sick**

I had to skip the **math** class, and was happy as I did not know BODMAS

It was so hot in the school **van**, I remembered my cool **fan**

And was thankful to **arrive** home **alive.**









MY POEM WITH MINIMAL PAIRS

Further practice: Complete the exercises given on pages 41 and 42 of your textbook on minimal pairs.

Worksheet 15

Unit No. 8

Use of Adverbs

SLO 3: Illustrate the use of adverb of time, place, and degree.

Activity 1: Read the three types of adverbs given below and write three sentences using one adverb from each category:

Adverbs of PLACE	Adverbs of TIME	Adverbs of DEGREE
There	Already	A little
Here	Later	Really
Away	Soon	Totally
Out	Yet	Nearly
Far away	Then	Partly
Nearby	Now	Enough
Upstairs	Tonight	Hardly

Example Sentences:

i. Please bring the English book here.
ii. We are already late for our exam.
iii. I hardly got time to study for my exam due to the Corona virus.

1. _____

2. _____

3. _____

Activity 2: Underline the adverb in each sentence given below:

1. I went to the market in the morning.
2. The lamb sat lazily in the shade of the tree.
3. The man grumbled loudly while cleaning the table.
4. I often visit my grandparents.
5. It is extremely hot today.
6. Please wait patiently.
7. The technician fixed the problem easily.
8. They serve tasty hot nans there.
9. I am waiting here for my daughter.
10. He laughed merrily.
11. We will leave today.
12. She is standing outside.

Worksheet 16

Unit No. 5

Main Verb and Helping Verb

SLO 1: Demonstrate use of be, have, do and need as main or helping verb in sentences.

Activity 1: Use one of the helping verbs in the box to complete the sentences.

am	are	is	will

A **main verb** shows the action or state of being in a sentence for example go, run etc. A **helping verb** such as am, is, are, have, has, or will works with the main verb to show when the action or state of being occurs.

1. I _____ reading a book about Jehangir Khan's journey to fame.
2. Jehangir Khan _____ known for his outstanding performance in international squash.
3. She and her mother _____ travelling to the nearest hospital.
4. In spite of the challenges, she _____ fight back.
5. I _____ sure Jehangir Khan's name _____be remembered for a long time.

Activity 2: In each sentence, underline the helping verb and encircle the main verb.

EXAMPLE: I am reading about the War of (Independence.)

1. She was racing in a wheelchair race.
2. Sarah had cooked the best namkeen gosht.
3. The builders were using special security equipment.
4. They are training several times a week.
5. They have lifted weights too.
6. Ali has wrestled for many years.
7. He will fight many more times.
8. She is practicing for the annual debates.
9. The PSL matches are held every summer.
10. The games were started by the famous cricketers.

Further practice: Complete the exercise given on page 52 of your textbook.

Worksheet 17

Unit No. 5

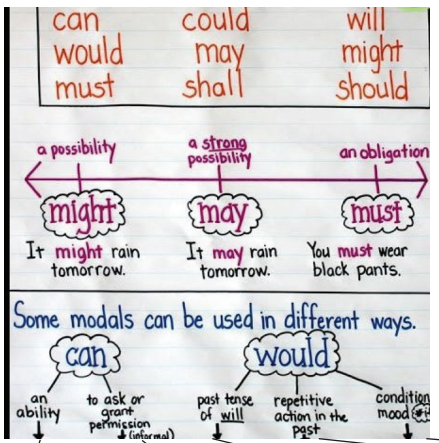
Use of Modal Verb

SLO 2: Demonstrate use of modal verb in sentences.

Activity 1: Put the most appropriate model verbs from the box in given sentences. One has been done for you.

Modal Verb: Modal verbs show permission, ability, possibility and obligation.

shall	**can**	**could**	**may**	**might**
must		**should**		



1. We **should** obey our parents.
2. _____ I take your pen?
3. I _____ speak English.
4. _____ I come in sir?
5. You _____ follow the orders.
6. He _____ visit us next year.
7. We _____have visited the museum yesterday if the weather was dry.
8. I _____ not attend her wedding.

I can paint

Can I borrow your pencil?

Father said he would buy me a new shirt.

My cousins would come to stay with us every summer when we lived in Malam Jabba.

If I had enough courage, I would climb the K2.

Activity 2: Choose the appropriate modal verbs given below and fill in the blanks.

Modal verbs: can must, might, couldn't, will, shouldn't, have to, should

1. It's very cold today. Do you think it _____ snow later?
2. You _____ lock your door when you leave.
3. My mother says we _____ watch TV after we have finished our homework.
4. You don't _____ pick me up at the bus stop. I _____ get a taxi.
5. This is impossible, it _____ be a mistake.
6. You _____ worry about anything. It _____ all be taken care of.
7. We _____ visit our grandmother in the hospital yesterday, but we must go to meet her today.
8. It _____ rain today, so we ought to be prepared and carry our umbrellas when we go out today.

Further practice: Complete the exercise given on page 54 and 59 of your textbook.

Worksheet 18

Unit No. 4

Use of Preposition of Position, Time and Direction

SLO 3: Illustrate the use of preposition of position, time and direction.

Activity 1: Put the appropriate preposition from the box in the given sentences.

at	under	on	to	from	into

1. He goes **to** school
2. The book is _____ the table.
3. The cat is _____ the chair.
4. The boys jump_____ river.
5. He is _____ home.

Activity 2: Write a few sentences on the importance of games with the help of the following word bank. Make sure you use at least five prepositions.

play, fun, rules, exercise, build, confidence, healthy society, friends, excitement

1. I play cricket in the evening.
2. _____.
3. _____.
4. _____.
5. _____.

Activity 3: Look at the map of treasure island and follow instructions to reach to the treasure. Underline all prepositions of position and direction.



You are at the tree, near the elephants. Go straight ahead, past the elephants towards the statues. At the mountain turn left. Take a left turn and keep walking straight ahead till you spot a palm tree. Jump into the river to reach the stranded boat. Climb the boat and steer it towards south until you get to the island. Go around the mountains to reach a cave hidden behind them. The treasure is inside the cave.

Further practice: Complete the exercise given on page 38 of your textbook.

Worksheet 19

Unit No. 5

Main Idea and Supporting Detail

SLO 4: Read silently and with comprehension and extract the main idea and supporting detail.

Activity 1: Read the poem 'Little Things,' by Julia Carney and write the main idea and supporting details.

Little drops of water
Little grains of sand,
Make the mighty ocean,
And the pleasant land.

So the little moments,
Humble though they be,
Make the mighty ages
Of eternity.

So our little errors
Lead the soul away
From the path of virtue,
Far in sin to stray.

Little deeds of kindness,
Little words of love,
Make our earth Happy,
Like the heaven above.

Main Idea:

Supporting details:

Activity 2: Using your understanding of context comparison clues, complete the following exercise. You may make sentences with the synonyms or with the original words.

Word	Deduced meaning	Synonym	Sentence
Mighty			
Humble			
Path of virtue			
Stray			

Further practice: Complete the exercises given on pages 47 and 48 of your textbook.

Mathematics

Worksheet 1

Unit No. 1

SETS

Subject	Mathematics
Grade	VI
Unit	1
Topic	Sets
Page Reference of the textbook	1-10

Worksheet 1 Unit 1 — **SETS**

SLO: Define set. Recognize notation of a set and its objects/elements.

Set: A set is a collection of well defined and distinct objects. The objects in a set are called its elements or members.

Q1: Write the name of items you wear.

Ans. (1)_____ (2)_____ (3)_____

Q2: Write the Natural numbers up to 10.

Ans. _____

Q3: Write the name of items/objects in your geometry box.

Ans. _____

Q4: Write the name of furniture items/objects in your classroom.

Ans. _____

Q5: Match the column below.

Brackets	Name of a bracket
[ ]	Parenthesis
( )	Vinculum
{ }	Braces or curly bracket
_____	Square bracket

Q6: Write name of the brackets

Names	Symbols
	[ ]
Parenthesis	( )
	{ }

Q7: Are the following sets?

i. {a, b, c} Yes/No

ii. {2, 3, 4, 2} Yes/No

iii. {x, y, z} Yes/No

iv. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Yes/No

Worksheet 2
Unit 1

Tabular Form of Set

SLO: Describe tabular form of a set and demonstrate through examples.

Sample question:

Q1: Write set of first five odd numbers.

Ans. Let 'A' denote the set, then

A = {1, 3, 5, 7, 9}

Task:

Q2: Write the set of first five even numbers in tabular form.

Ans. _____

Q3: Write in tabular form the set of vowels denoted by P.

Ans. _____

Q4: Write the set of four objects/items in your classroom denoted by C.

Ans. _____

Worksheet 3
Unit 1

Notation for Membership of a Set

SLO: Describe tabular form of a set and demonstrate through examples.

Tip: $\in$ stands for belongs to and $\notin$ stand for does not belong to.

Q1. A = {1, 2, 3, 4, 5, 6, 7}

State whether the following statements are true or false (circle the correct answer)

i.	$3 \in A$	**True**	**False**
ii.	$8 \notin A$	**True**	**False**
iii.	$5 \in A$	**True**	**False**
iv.	$7 \notin A$	**True**	**False**
v.	$9 \notin A$	**True**	**False**

Worksheet 4 — Unit 1 — Equal and Equivalent Sets

SLO: Define
- **Finite and infinite set.**
- **Empty/Void/Null set.**
- **Singleton set.**
- **Equal and Equivalent sets.**
- **Subset and superset of a set.**
- **Proper and improper subsets of a set, and demonstration through examples.**

Q1. Which set are equal and which are equivalent?

		Tick the correct one (✓)
i.	A = {□, ○, △} , B = {a, b, c}	Equal/Equivalent
ii.	A = {Sunday, Monday} , B = {a, b}	Equal/Equivalent
iii.	A = { } , B = φ	Equal/Equivalent
iv.	A = {Yellow, Blue, Green}, B ={Green, Yellow, Blue}	Equal/Equivalent

Q2. If A = {1, 2, 3, 4} and B = {3, 4}. Tick (✓) the correct answer

Then i. $A \subseteq B$ ii. $B \subseteq A$ iii. None of these

Q3. If X = {a, b, c} and Y = {c}, then tick (✓) the correct answer

Then i. $Y \subset X$ ii. $X \subset Y$ iii. $Y \subset Y$

Worksheet 5 — Unit 1 — Types of Sets

Q1. Match the correct one with each other in the following

A set whose element can be listed	Empty set
A set which has no element	Finite set
A set that is not finite	Singleton set
A set having only one element	Infinite set
Two sets that have same elements.	Equivalent set
Two sets that has same number of elements	Equal set
If all elements of a set A are also elements of set B then	$A \subset B$
If all elements of a set A are in set B but there is at least one element of B which is not the element of A	$A \subseteq B$

Worksheet 6
Unit 1

Subsets

Sample question:

Find all subsets of P = {a, b, c}

Sol: Subsets of P = {a, b, c} are
φ, {a}, {b}, {c}, {a, b}, {b, c}, {a, c}, {a, b, c}

Task:

Q1. Find all subsets of A = {orange, mango, apple}

Ans: _____

_____

_____

Q2. Find all subsets of B = {i, j, k}

Ans: _____

_____

Worksheet 7
Unit 1

Proper and Improper Subsets

Sample question:

Find Proper and Improper subsets of A = {1, 3, 5}

Ans: The proper subset of set A are { }, {1}, {3}, {5}, {1, 3}, {1, 5}, {3, 5}

Improper subset of set A is {1, 3, 5}

Task:

Q1. Find proper and Improper subsets of X = {a, b, c}

Ans: _____

_____

Unit 2

WHOLE NUMBERS

Subject	Mathematics
Grade	VI
Unit	2
Topic	Whole Numbers
Page Reference of the text book	13-21

Worksheet 8 Unit 2

Natural and Whole Numbers

SLO: a. Differentiate between natural and whole numbers. b. Identify natural and whole numbers, and their notations. c. Writing whole numbers in figures and words

1. Write the following in numbers
   i. Three hundred million, two hundred ninety six.
   Ans: _____
   ii. Four hundred ninety five million six hundred thirty five thousand, two hundred ninety two.
   Ans: _____
2. Write the following in words.
   i. 764, 253, 463
   Ans: _____
   ii. 930, 405, 800
   Ans:_____
3. Verify the following
   $(5 + 3) \times 7 = (5 \times 7) + (3 \times 7)$
   Ans: _____ = _____ + _____
   _____ = _____

2.1: Natural Numbers:
Notation = $\mathbb{N}$
$\mathbb{N} = \{1, 2, 3, 4 \ldots\}$

Whole numbers:
Notation = W
$W = \{0, 1, 2, 3, 4 \ldots\}$

Task: Identify the difference between the two sets.

Ans: _____

Worksheet 9
Unit 2

Representation on Number Line

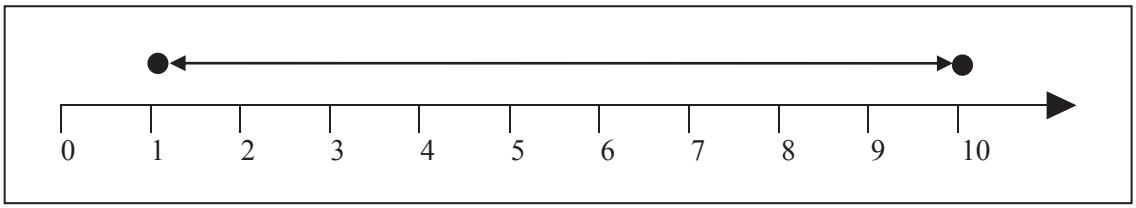
SLO: Represent

- A given list of whole numbers,
- Whole numbers $<$ (or $>$) a given whole number,
- Whole numbers $\geq$ (or $\leq$) a given whole number,
- Whole number $>$ but $<$ a given whole number,
- Whole number $\geq$ but $\leq$ a given whole number,
- Sum of two or more given whole numbers, on the number line.

Representation of numbers from 1 to 10
Method # 1: Set Notation

N = {1, 2, 3, 4 . . . . . 10}

Method # 2: Number line



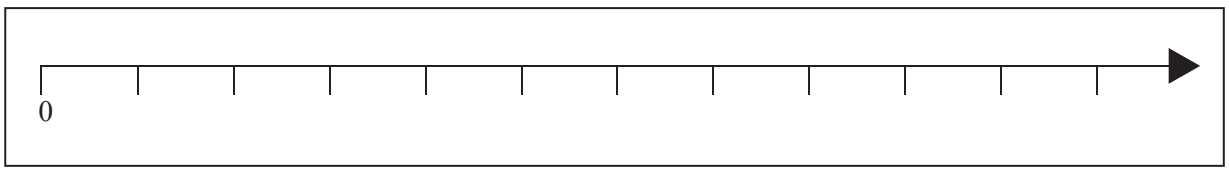
Task: Identify the differences between the two methods. Write the things that differentiate them.

Ans: _____

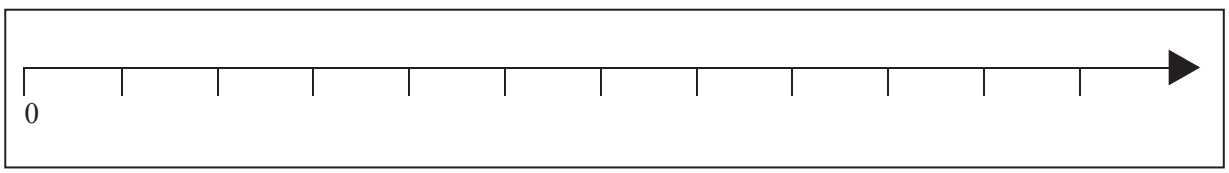
_____

Task:

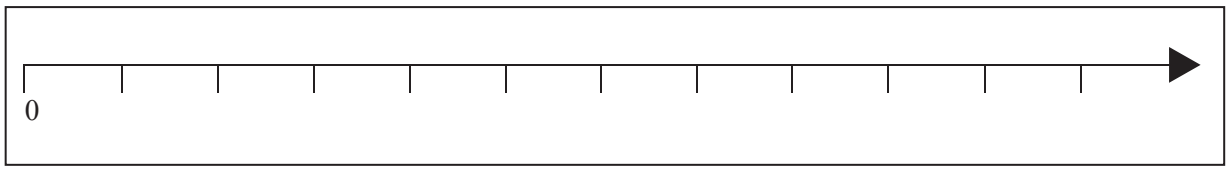
1. Write the numbers 3, 5, 11 on the number line below



2. Express all whole numbers $<$ 6.



3. Express all whole numbers ≥ 1 but ≤ 8 on the number line



4. Fill in the blanks with < or >

   a. 3 < 4 but 3 _____ 2.

   b. 12 > 7 but 12 _____ 30.

   c. 6 _____ 8.

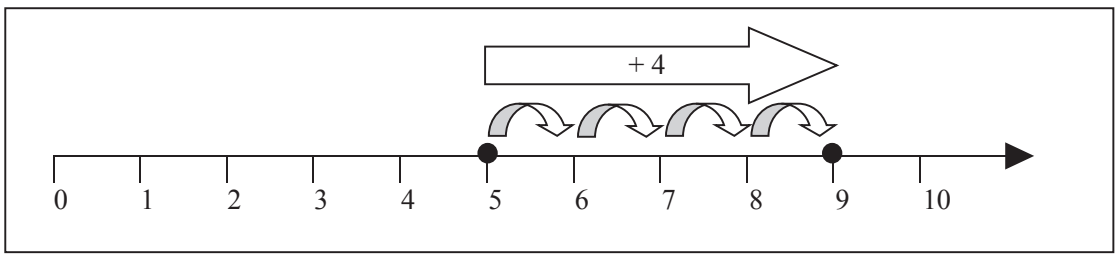
   d. 0 _____ 4.

Worksheet 10
Unit 2

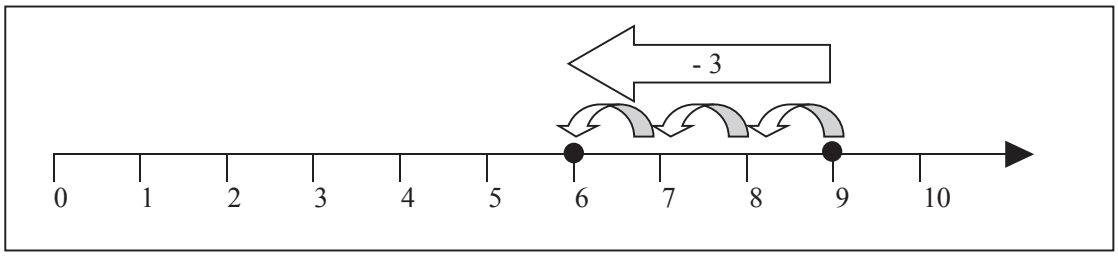
Add on Number Line

SLO: Sum of two or more given whole numbers, on the number line. Add and subtract two given whole numbers.

Sample question :
Add 5 and 4 on number line:
Solution:
Step 1: Start with **5** on the number line.
Step 2: Move **4** units to the right.
Step 3: Note the number that you arrive at. That is your final answer. 5 + 4 = 9



Subtract on number line
Sample question:
Subtract 3 from 9 on number line:
Solution:
Step 1: Start with **9** on the number line.
Step 2: Move **3** units to the left.
Step 3: Note the number that you arrive at. That is your final answer. 9 – 3 = 6



Task:

1. Draw a number line and then find the sum of the following
   i. 8, 4

   ii. 9, 5

2. Draw a number line and then subtract the first number from the second number
   i. 3, 6

   ii. 5, 9

Worksheet 11
Unit 2

Commutative Law of Whole Numbers w.r.t Addition

SLO: Verify commutative and associative law (under addition) of whole numbers. Recognize '0' as additive identity.

Commutative Property of Addition:
You have two numbers 3 and 4. Fill in the blanks.
3 + 4 = _____ and 4 + 3 = _____.

What did you find in both answers? Does it matter which number you write first?

Ans : _____

Associate Property of Addition:
You have three numbers 3, 5 & 6 you can group them like

(3 + 5) + 6 = 3 + (5 + 6)

L.H.S = (3 + 5) + 6 = _____

R.H.S = 3 + (5 + 6) = _____

What did you conclude?

Ans: _____

Task:
1: Fill in the blanks.

i. 5 + 7 = ☐ + 5

ii. 4 + ☐ = 3 + 4

iii. 2 + (3 + 5) = (☐ + 3) + 5

2: Tick ✓ (T) for true and (F) for false in each of the following statements.

i.	3 + (2 + 1) = (3 + 2) + 1	(T)	(F)
ii.	9 + 8 = 8 + 9	(T)	(F)
iii.	0 + 9 = 9 + 0	(T)	(F)

Worksheet 12
Unit 2

Multiplication and Division of Whole Numbers

SLO: Multiply and Divide two given numbers. Verify commutative and associative law (under multiplication) of whole numbers.

Commutative Property of Multiplication:
You have two numbers 7 and 8. Fill in the blanks by finding the product below.

i. 7 x 8 = _____

ii. 8 x 7 = _____

What did you conclude?

Ans: _____

Associative Property of Multiplication:
You have three numbers 7, 5 and 3, you can group them like
$(7 \times 5) \times 3 = 7 \times (5 \times 3)$

Task: Solve L.H.S and R.H.S separately

L.H.S = $(7 \times 5) \times 3$ = _____

R.H.S = $7 \times (5 \times 3)$ =_____

What did you conclude?

Ans: _____

_____

Task:

1. Verify the commutative law under multiplication using the following numbers.
   i. 4,7

Solution:

   ii. 9,8

Solution:

2. Verify the Associative Law under multiplication using the following numbers.
   i. 2, 5, 8

Solution:

ii. 7,3,2

Solution:

3. Name the property represented by each statement

i. $5 \times 2 = 2 \times 5$ _____ property.

ii. $6 \times (2 \times 3) = (6 \times 2) \times 3$ _____ property.

Worksheet 13
Unit 2

Important Properties of Division

Solve the following:

1.

a. $9 \div 1 =$ _____ b. $25 \div 1 =$ _____

c. $21 \div 1 =$ _____ d. $13 \div 1 =$ _____

i. What is common in all answers?

Ans: _____

ii. What did you find after getting the answer to each question?

Ans: _____

2.

a. $2 \div 2 =$ _____

b. $6 \div 6 =$ _____

c. c. $100 \div 100 =$ _____

What did you find common in all the three answers?

Ans: _____

3.

a. $\frac{0}{7}$ = _____

b. $\frac{0}{11}$ = _____

d. if $a \neq 0$ then $\frac{0}{a}$ = _____

What did you find?

Ans: _____

Worksheet 14 Unit 2

Multiplication Identity Property

SLO: Recognize "1" as multiplicative identity.

Multiplicative Identity Property:

a. 1 x 5 = _____ b. 1 x 11 =_____

c. 5 x 1 = _____ d. 64 x 1 = _____

What is common in all answers?

Ans: _____

Worksheet 15 Unit 2

Distributive Law of Multiplication Over Addition

SLO: Verify distributive law of multiplication over addition.

Sample Question:
If you have three numbers 6, 2 and 4 and you can write them like

$6\ (2 + 4) = 6 \times 2 + 6 \times 4$

Task:
Solve L.H.S and R.H.S separately.

L.H.S = $6\ (2 + 4)$ = _____

R.H.S = $6 \times 2 + 6 \times 4$ = _____

What did you find in your answer and what does it means?

Ans: _____

Worksheet 16
Unit 2

Distributive Law of Multiplication Over Subtraction

SLO: Verify Distributive law of multiplication over subtraction (with positive difference)

Sample Question:
You have three numbers like 2, 5 and 1. You can write them like
$2\ (5 - 1) = 2 \times 5 - 2 \times 1$

Task 1:
Solve L.H.S and R.H.S separately

L.H.S = $2\ (5 - 1)$ = _____

R.H.S = $2 \times 5 - 2 \times 1$ = _____

What did you find in your answer and what does it mean?

Ans: _____

Task 2:

1. Name the property shown by each statement of the following equations

i. $3 \times 2 = 2 \times 3$ _____

ii. $(2 \times 5) \times 7 = 2 \times (5 \times 7)$ _____

iii. $7 \times 1 = 7$ _____

iv. $7\ (8 + 2) = 7 \times 8 + 7 \times 2$ _____

v. $2\ (5 - 1) = 2 \times 5 - 2 \times 1$ _____

2. Find each sum or product mentally of the following and write in the blanks

i. $8 + 5 + 11$ = _____

ii. $10 \times 0 \times 2$ = _____

iii. $5 + 10 + 15 + 20$ = _____

iv. $2 \times 9 \times 5$ = _____

v. $8 + 11 + 22 + 4$ = _____

3. Amjad and Najma are using the associative property of addition and multiplication to write equations. Tick ✓ the correct statements.

Amjad	Najma
i. $(4 + 1) + 7 = 4 + (1 + 7)$ ☐	i. $(2 + 7) \times 5 = 2 + (7 \times 5$ ☐
ii. $(3 + 5) \times 2 = 3 + (5 \times 2)$ ☐	ii. $(6 \times 8) \times 9 = 6 \times (8 \times 9)$ ☐

Unit
3

FACTORS AND MULTIPLES

Subject	Mathematics
Grade	VI
Unit.	3
Topic	Factors & Multiples
Page Reference of the text book	25-42

Worksheet 17
Unit 3

Factors

SLO: Define a factor as a number which divides the dividend completely leaving no remainder.

Factor: A factor is a number which divides the dividend completely leaving no remainders e.g. 6/3 = 2

Task:

1. Circle the prime numbers from the following.

   5, 3, 8, 7, 10, 13, 14, 6, 19, 17, 12

2. Circle the composite numbers from the following

   5, 3, 8, 7, 10, 13, 14, 6, 19, 17, 12

3. Circle the numbers which are divisible by all 2, 3, 5, and 10 in the following list?

   810, 780, 340, 500, 857, 430, 677, 547, 720

4. Write factors of the following

   i. 40

Factors of 40 = _____

   ii. 45

Factors of 45 = _____

   iii. 55

Factors of 55 = _____

Worksheet 18
Unit 3

Multiple

SLO: Define even numbers as the numbers which are multiple of 2. Define odd numbers as the number which are not multiples of 2.

Definitions:
Even Number: Numbers which are multiples of 2 are called even numbers. e.g. 2, 4, 6, 8...
Odd number: Number which are not the multiples of 2 are called odd numbers. e.g. 1, 3, 5....

Task:

1. Write first five multiples of

i. 3

Ans: _____

ii. 6

Ans: _____

iii. 7

Ans: _____

iv. 8

Ans: _____

2. Complete the table below:

S. No	Number	Multiple of 3	Factor of 30
i	6	Yes	Yes
ii	5	No	Yes
iii	10		
iv	12		
v	15		
vi	18		
vii	20		

3. Separate even and odd numbers.

1, 2, 7, 10, 13, 14, 6, 19, 17, 12

Even Numbers: _____

Odd Numbers: _____

Worksheet 19 — Unit 3
Divisibility Rules

SLO: Test by inspection whether the numbers 2, 3, 4, 5, 6, 8, 9, 10, 11, 12, 15 and 25 can divide a given number.

1. Write the numbers which are divisible by 11, 12 and 15 from the following list?
   5247, 6314, 4524, 27684, 121, 256, 450, 635, 749

Number divisible by 11_____

Number divisible by 12_____

Number divisible by 15_____

Worksheet 20 — Unit 3
Prime Factorization

SLO: Define prime factorization as the process of factorizing a number into its prime factors.

Task:

1. Find the prime factors of

i. 56

Ans. _____

ii. 124

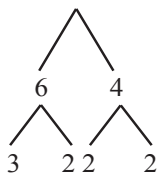
Ans._____

Prime Factorization: When a composite number is expressed as the product of prime factor, it is called the prime factorization of the number.

2. Make a factor tree to find all prime factors

Sample question:

i. 24



$24 = 3 \times 2 \times 2 \times 2$

ii. Task: Find all prime factors of 36.



Worksheet 20a — Unit 3
Index Notation

SLO: Recognize index notation.

Sample question:

Write in index form

$3 \times 7 \times 5 \times 2 \times 2 \times 3 \times 7$

Solution:

$3 \times 7 \times 5 \times 2 \times 2 \times 3 \times 7$

$= 2 \times 2 \times 3 \times 3 \times 5 \times 7 \times 7$

$= 2^2 \times 3^2 \times 5 \times 7^2$

Task:
Write in index form

1. $2 \times 5 \times 5 \times 2 \times 2 \times 5 \times 3$

Ans:

2. $3 \times 7 \times 8 \times 3 \times 3 \times 7$

Ans:

Worksheet 21
Unit 3

HCF by Prime Factorization

SLO: Find HCF of two or more than two numbers by
i. Prime factorization,
ii. Long division method.

Sample Question:
Find HCF of 20 and 30 by prime factorization.
Solution:
$20 = 10 \times 2$
$= 5 \times 2 \times 2$

$30 = 10 \times 3$
$= 5 \times 2 \times 3$

$\{The\ common\ prime\ factors\ are\ 5\ and\ 2\}$

The HCF of 20 and 30 is $5 \times 2 = 10$

Task:
Find HCF by prime factorization of:

i. 40 and 60
Solution:

ii. 75 and 80
Solution:

3. Find HCF by prime factorization and write correct answer in the box

i.	22, 16	
ii.	30, 75, 85	
iii.	35, 45, 80	

Worksheet 22 — HCF by Division Method

Unit 3

Sample question:
Find HCF of 525, 1155, 840 by division method.
Solution:

```
840 | 1155 | 1
  - 840
    315 | 840 | 2
        - 630
          210 | 315 | 1
              - 210
                105 | 210 | 2
                    - 210
                      0
```

HCF of 840 and 1155 is 105
Now we find HCF of 105 and 525

```
105 | 525 | 5
  - 525
    0
```

Hence HCF of 525, 840, 1155 is 105.

Task:
Find HCF by division method of the following

i. 24, 64, 128

Solution:

ii. 120, 240, 1290

Solution:

Worksheet 23 — Least Common Multiple (L.C.M)

Unit 3

SLO: ind LCM of two or more numbers by
- **Prime factorization**
- **Division method**

Find LCM by prime factorization.

Sample question:
Find LCM of 9, 18 and 27 by prime factorization.

Solution:
Prime factorization of 9, 18 and 27 is:

$9 = 3 \times 3$

$= 3^2$

$18 = 3 \times 3 \times 2$

$= 3^2 \times 2$

$27 = 3 \times 3 \times 3$

$= 3^3$

Factors include the numbers 2 and 3.
The greatest exponents of 2 and 3 that are used in any of these three factorizations are 1 and 3 respectively.
Therefore,

$LCM = 2^1 \times 3^3$

$= 2 \times 27$

$= 54$

Task:
Find LCM by prime factorization of 21, 27, 54
Solution:

Worksheet 24
Unit 3

LCM by Division Method

Sample Question:

Find LCM of 12, 20, 35, 75 by division method

Solution:

2	12,	20,	35,	75
2	6,	10,	35,	75
3	3,	5,	35,	75
5	1,	5,	35,	25
5	1,	1,	7,	5
7	1,	1,	7,	1
	1,	1,	1,	1

LCM = 2 × 2 × 3 × 5 × 5 × 7

Task:
Find LCM by division method

i. 12, 24, 32, 36

Solution:

ii. 30, 60, 95, 105

Solution:

Unit

4

INTEGERS

Subject:	Maths
Grade:	VI
Unit.	4
Topic:	Integers
Page Reference of the text book:	47-58

Worksheet 25
Unit 4

Representation of Integers on Number Line

SLOs:

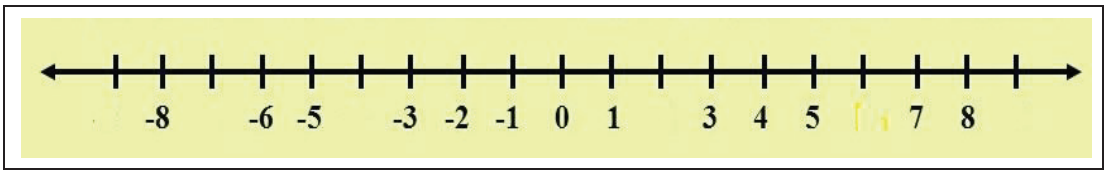
- Represent integers on number line.
- Know that on the number line any number lying
  - i. To the right of zero is positive
  - ii. To the left of zero is negative

Tip

- The natural numbers 1, 2, 3,… are also called positive integers and the corresponding negative numbers -1, -2, -3,… are called negative integers.
- '0' is an integer which is neither positive nor negative.

Sample Question:

-9, -7, -4, 2, 6, 9 on the number line in the missing places

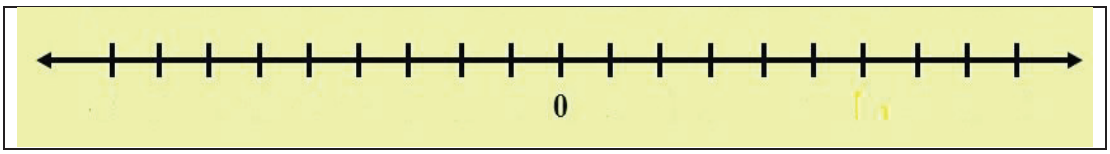


1. What did you conclude? Are negative integers on the right side of zero or the left side of zero? Where did positive integers lie?

Ans: _____

_____

2. Use red colour to represent negative numbers on the number line and blue colour to represent the positive numbers on the number line from – 9 to 7



3. What is the sign of '0' on the number line? Is it positive or negative?

Ans: _____

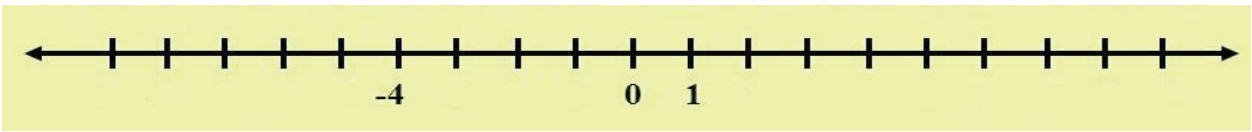
Worksheet 26
Unit 4

Comparing and Ordering Integers

SLO:

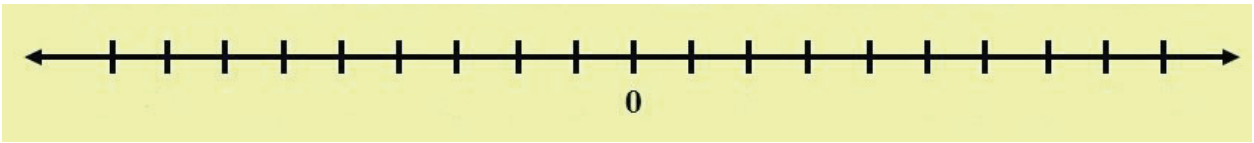
- Know that every positive integer is greater than a negative integer.
- Know that every negative integer is less than a positive integer

1. Circle the greater number



2. Show the place of -2 and 7 on the number line. Indicate which number will be on left side and which will be on the right side of the number line.

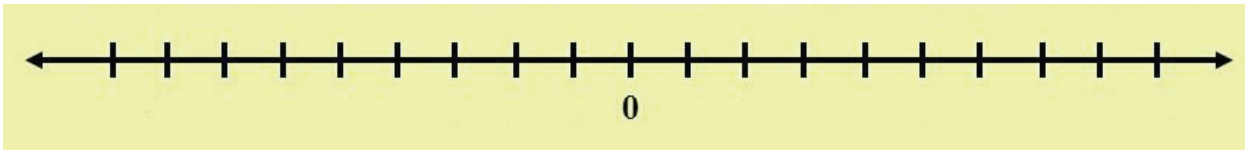
Ans: _____



How many units are between - 2 and 7? _____
Conclude whether – 2 is less than 7 or greater than 7.

Ans: _____

4.2.1: Comparing of negative integers with a positive integer.
Indicate – 3 and +3 on the number line



Which number is less than '0' _____

Which number is greater than '0' _____

What did you conclude – 3 is less than or greater than + 3
Fill in the blank with >, < or =

−3 _____ + 3

Task:

1. Fill in the blanks with < or >

   i. 0 _____ −22

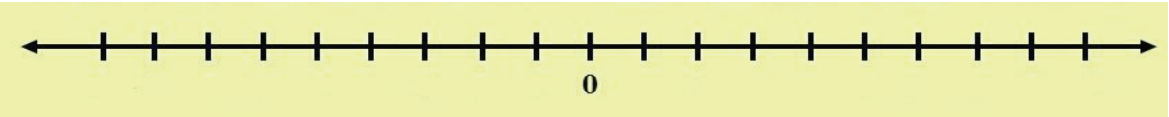
ii. 0 _____ 4

iii. − 86 _____ −84

2. Indicate the opposite (additive inverse) of the following on the number line.

i. + 5

ii. – 7



3. Write the opposite of the each integer.

23	−4	72	-20

Worksheet 27
Unit 4

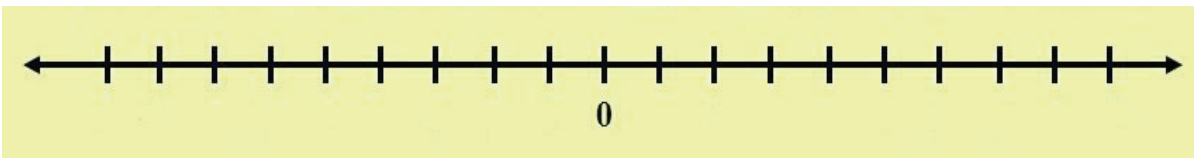
Display Sum of Two Integers

SLO:

- **Use number line to display:**
  - i. **Sum of two or more given positive integers,**
  - ii. **Difference of two given positive integers,**
  - iii. **Sum of two given integers.**

Display the sum of + 8 and – 5 on a number line.
Solution:
Step1: Move +8 units to right number line and identify 8
Step2: Move back to – 5 units from + 8 on the number line you will be on the unit 3.

Task: Show whether +3 is the answer of + 8 – 5 or not? Use the number line below

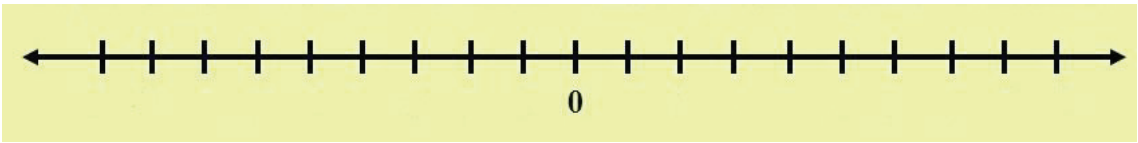


Task:

1. Display the sum (+4) + (+6) on the number line



2. Display the differences of (5) – (+ 6) on a number line.



3. Find each sum.
   i. 7 + (- 5) = _____
   ii. (-7) + (- 4) = _____

Task: Addition of positive and negative integers in three steps

Add (- 3) + (+2)

Step 1:

i. Write absolute value of given integers

Ans: _____ , _____

ii. Subtract the absolute value.

Ans: _____

iii. Write the sign of the number with the larger absolute value.

Ans: _____

In how many steps was the above task performed?

i. One
ii. Two
iii. Three

Task:

1. By three steps method, find the sum of

i. (+7) + (- 9)

Steps: 1. _____

2. _____

3. _____

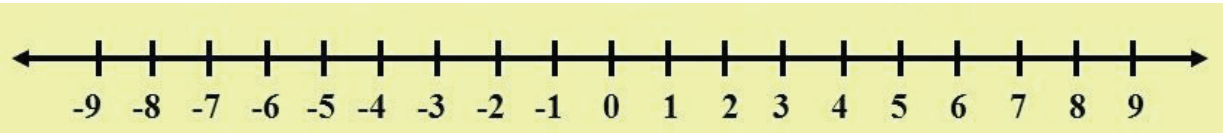
ii. (- 8) + (+3)

Steps: 1. _____

2. _____

3. _____

2. **Look at the given Number line and write the**



i. The absolute value of – 4 is _____

ii. The absolute value of +4 is _____

iii. The absolute value of – 3 is _____

iv. The absolute value of +3 is _____

v. The absolute value of – 6 is _____

vi. The absolute value of +6 is _____

3. What can you say about the absolute values of the numbers above? What is the distance of the absolute value of the integers from '0'?

Ans: _____

Worksheet 28
Unit 4

Operations on Integers

Task: Division of Integers

Match the question in Column A with the correct answer in Column B"

Column A	Column B
16 ÷ 4	5
(-10) ÷ 2	2
(-14) ÷ (-7)	-4
(+30) ÷ (-5)	4
(-16) ÷ 4	-6
10 ÷ 2	-5
14 ÷ -7	6
-(-30) ÷ (-5)	-2

Task: Multiplication of Integers

Match the question in Column A with the correct answer in Column B"

Column A	Column B
(-2) × (-4)	- 18
(+6) × (-3)	-8
(-7) × (+4)	20
(+5) × (+4)	8
(+2) × (- 4)	28
(+6) × (+3)	-28
(+7) × (+4)	-20
(-5) × (+4)	18

Task: Multiply and divide Integers

Complete the table.

1	$9 \times 2 = 18$ $18 \div 2 =$ $18 \div 9 =$	**6**	$18 \times 8 =$ $144 \div 18 =$ $144 \div 8 =$
2	$7 \times 8 =$ $56 \div 7 =$ $56 \div 8 =$	**7**	$17 \times 4 =$ $68 \div 17 =$ $68 \div 4 =$
3	$5 \times 6 =$ $30 \div 6 =$ $30 \div 5 =$	**8**	$13 \times 11 =$ $143 \div 13 =$ $143 \div 11 =$
4	$12 \times 6 =$ $72 \div 6 =$ $72 \div 12 =$	**9**	$21 \times 12 =$ $252 \div 21 =$ $252 \div 12 =$
5	$15 \times 5 =$ $75 \div 5 =$ $75 \div 15 =$	**10**	$19 \times 17 =$ $323 \div 19 =$ $323 \div 17=$

Task: Add or subtract Integers

Complete the table.

1	$5 + 2 =$
2	$+7 + (-5) =$
3	$+7 + (-2) =$
4	$8 + 3 =$
5	$+11 + (-8) =$
6	$+11 + (-3) =$
7	$6 + 8 =$
8	$+14 + (-8) =$
9	$+14 + (-6) =$
10	$+10 + (-7) =$
11	$+17 + (-10) =$
12	$+17 + (-7) =$

قومی ترانہ

پاک سرزمین شاد باد
کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
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WORKSHEETS

GRADE 7

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے ۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے ۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف بامعنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوّرات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے ۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہنمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو بھی اجاگر کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا ۔

گوہر علی خان
ڈائریکٹر نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

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ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور تعلیمی سرگرمیوں کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کے توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو مکمل کرنے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دیے گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد، استاد یا پھرنیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہنمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اوراسکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1.	انگلش	انعام اللہ خٹک	0333-9746976
2.	ریاضی	عباس خان	0345-9419923
3.	جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4.	اُردو	تاج ولی خان	0313-9848959

General Science

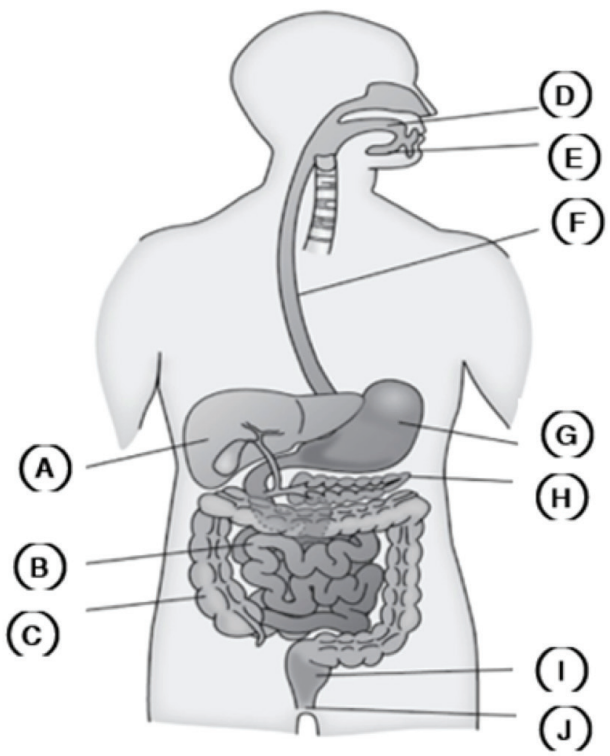
Worksheet 1

Unit No. 1

Human Organs System

SLO: Identify the various components of human digestive system

Activity1:	Observe the diagram on page 5 of the G.Sc. textbook and label the different parts of digestive system in the following diagram and fill mentioned blanks.



A. _____

B. _____

C. _____

G. _____

H. _____

I. _____

J. _____

Reference: G. Science Textbook Grade 7 Page. 5

Worksheet 2

Unit No. 1

Human Organ System

SLO: Describe various components of human digestive system. Describe how digestive system helps in the digestion of various kinds of foods.

Activity 1: Read the paragraph of topic "Human Digestive System" text book page 2-5 of the G.Sc. textbook carefully and complete the given sentences with suitable components of digestive system given below.

Stomach, Esophagus, Anus, Small Intestine, Saliva, Mouth, pancreas, large Intestine, Rectum, Bolus, Bile, Mouth chyme.

1. Food enter for digestive system through _____
2. A watery fluid which make the food soft and slippery is _____
3. Soft paste of food in mouth is called _____
4. Mechanical breakdown of food occur in _____
5. The long, narrow and hollow muscular tube which carry food from mouth cavity to the stomach is _____
6. The secretion of digestive juice from lever is called _____
7. The undigested food is also stored in _____and excrete through _____.
8. The _____ which help the digestion of food in the small intestine.
9. Breaking of fats into small molecules is due to_____
10. When the food leave from stomach _____

Reference: G. Science Textbook Grade 7 Page. 2-6

Worksheet 3

Unit No. 1

Disorders of the Human Digestion System

SLO: Identify common disorders of the digestive system. List the factors that lead to constipation and diarrhea and the measures that can be taken to prevent them.

Activity 1: Read pages 6-7 of the G.Sc. textbook and answer the questions given below.

a. Write three (3) disorders of digestive system.

1. _____

2. _____

3. _____

b. Write the symptoms of diarrhea and constipation.

_____

_____

_____

c. Write two treatments for diarrhea and constipation.

1. _____

2. _____

3. _____

4. _____

Reference: G. Science Textbook Grade 7 Page. 6-7

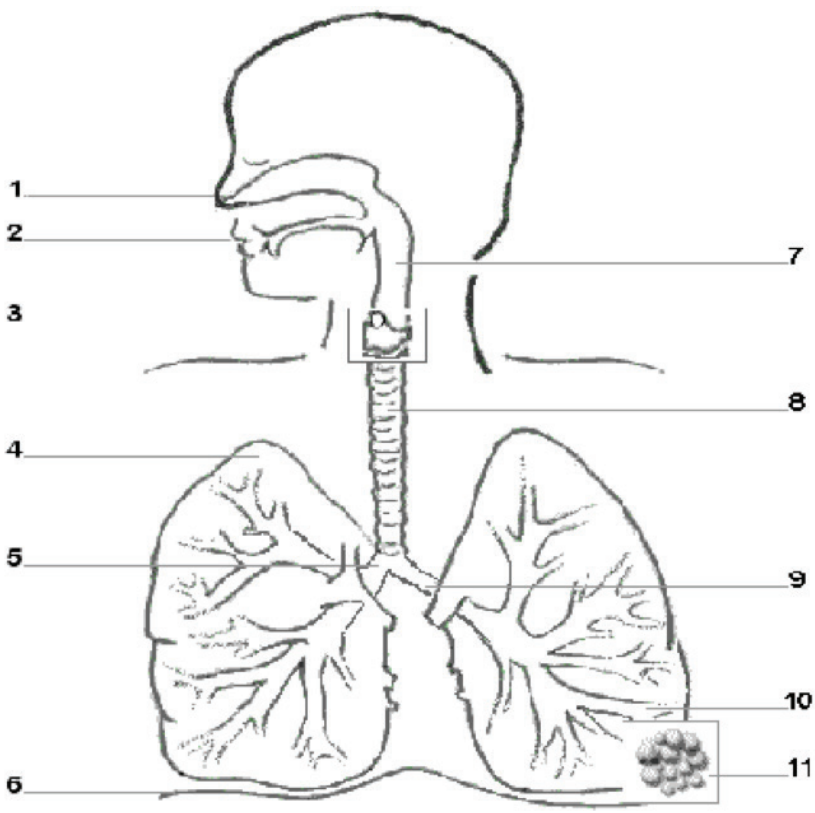
Worksheet 4

Unit No. 1

Respiratory System

SLO: Identify the parts of the respiratory system.

Activity 1: Observe the diagram on page 8 and label the parts of respiratory system from the words given below.



Nose, mouth, glottis, bronchus, lungs, diaphragm, pharynx, trachea, lungs and bronchioles, alveoli.

Reference: G. Science Textbook Grade 7 Page. 8

Worksheet 5

Unit No. 1

Respiratory System

SLO: Describe the mechanism of respiration in humans.

Activity 1:	Read the topic "Respiratory System" from G. Science Book page 7-10 and give the answers of following questions.

a. Define breathing

---

b. Define Respiration

---

c. Write the main organs which are involved in respiratory system.

---

d. What is a diaphragm?

---

e. Write the role of diaphragm in inhalation and exhalation.

---

f. Explain cellular respiration.

Reference: G. Science Textbook Grade 7 Page. 7-10

Worksheet 6

Unit No. 1

Respiratory System

SLO: Differentiate between breathing and burning process

Activity 1: Write the differences between breathing and burning processes in human and complete the following table. Refer to Table 1.2 page 11 of the G.Sc. textbook.

S. No	Breathing (Respiration) Process	Burning Process
1		
2		
3		
4		
5		
6		
7		
8		

Reference: G. Science Textbook Grade 7 Page. 10-11

Worksheet 7

Unit No. 1

Common Disease of the Respiratory System

SLO: Identify the common diseases of respiratory system and discuss their causes and preventive measures.

Activity 1: Answer the following questions.

1. Write the common diseases of respiratory systems.

_____

_____

_____

2.What are the cause of Tuberculosis (TB)?

_____

_____

_____

3. Which organ is infected by TB?

_____

_____

_____

4. How T.B spreads among people?

_____

_____

_____

5. What are the symptoms of T.B?

6. What is the treatment of T.B?

7.Write the causes of Pneumonia?

8. What are the symptoms of Pneumonia?

9. What is treatment of Pneumonia?

Reference: G. Science Textbook Grade 7 Page. 11-12

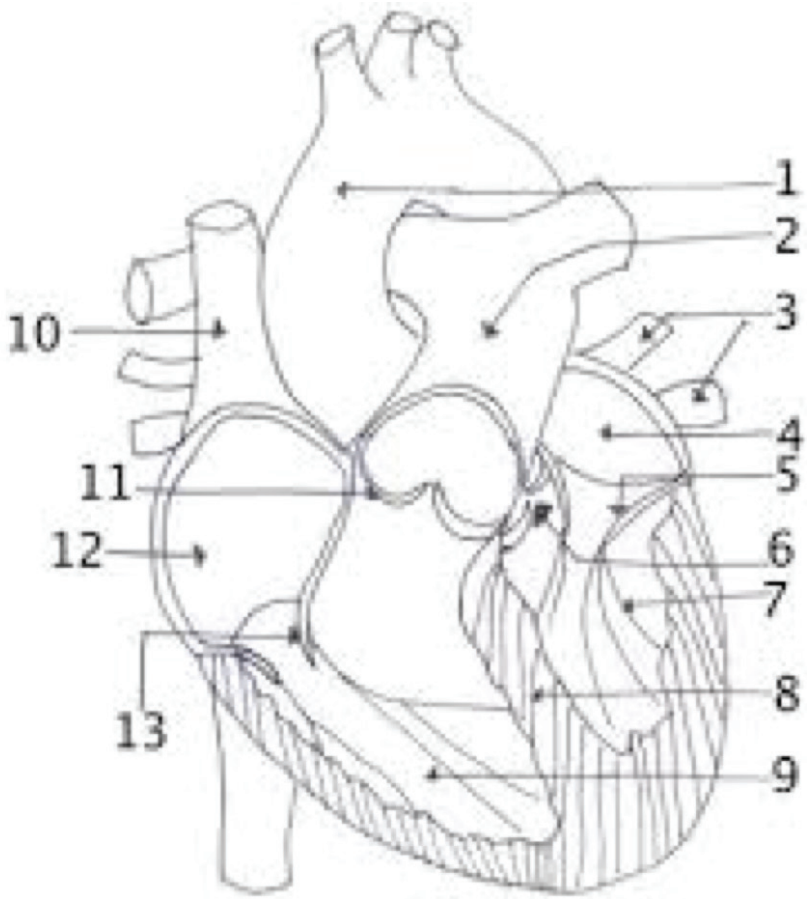
Worksheet 8

Unit No. 2

Transport in Humans and Plants

SLO: Identify and label the parts of Heart

Activity 1:	Observe the structure of heart and blood vessels in the G.Sc. textbook fig 2.2 page 17 and label the given diagram



Word bank: use the following words to label the diagram.

Pulmonary artery, Pulmonary vein, atrioventricular valve, Left ventricle, right ventricle, inferior vena cava, valve, right atrium, semi lunar valve, superior vena cava, aorta

Reference: G Science book fig 2.2 Page 17

Worksheet 9

Unit No. 2

Transport in Humans and Plants

SLO: Describe the function of heart and blood vessels

Activity 1: Fill in the blanks with the correct word from the given words.

Vein, Arteries, Cardiac muscles, Pericardium, Four, Heart

1. Pumping organ inside the human body is _____.

2. A tough double membrane covering the heart is _____.

3. The muscles which keep on working day and night is called _____.

4. Taking of blood away from the heart is performed by _____.

5. The total numbers of chambers in heart is _____.

Reference: G. Science Textbook Grade 7 Page. 17

Worksheet 10

Unit No. 2

Transport in Humans and Plants

SLO: Describe the structure and function of heart and blood vessels.

Activity 1: Read page 17 of the G.Sc. textbook and Match column A with column B.

Column A	Column B
Tough double walled membrane	Vena cava
Bring blood towards heart	Ventricle
Pumping organ	Aorta
Largest vein	Veins
Largest artery	Heart
	Pericardium

Reference: G. Science Textbook Grade 7 Page. 17

Worksheet 11

Unit No. 2

Transport in Plants

SLO: Describe the absorption of water in plants through roots
Explain how the structure of root, stem and leaves of a plant permit the movement of food, water and gases.

Activity 1: Read the following statements carefully and identify it as true or false.

S. No	Statement	T	F
1.	The evaporation of water from leaves is called transportation.		
2.	Plants absorb water from soil with the help of their leaves.		
3.	Evaporation of water from the leaves is the main force which moves the water through plant body.		
4.	Prepared food in plant is present in the vacuoles of leaves cells in the form of Glucose solution.		
5.	The underside of leaves bear small openings called Stomata is used for absorption of gases.		

Reference: G. Science Textbook Grade 6 Page. 17

Worksheet 12

Unit No. 2

Transport in Plants

SLO: Explain how the structure of root, stem and leaves of a plant permit the movement of food, water and gases.

Activity 1: Read page 24 -25 of the G.Sc. textbook and briefly answer the following questions.

Q 1. What is the role of xylem tissues?

_____

_____

Q 2. What kind of material in plants is transported by Phloem tissues?

_____

_____

Q 3. What is meant by transpiration in plants?

_____

_____

Q4. What do you mean by translocation in plants?

_____

_____

Q 5. What is the function of stomata in leaves?

_____

_____

Reference: G. Science Textbook Grade 7 Page. 24-25

Worksheet 13

Unit No. 3

Reproduction in Plants

SLO: Differentiate between sexual and asexual reproduction

Activity 1: Read page 31 -32 of the G.Sc. textbook and differentiate between sexual and asexual reproduction and complete the following table.

Sexual Reproduction	Asexual Reproduction

Activity 2: Read page29-31 and fill in the blanks given below.

A sexual reproduction occurs in plants through several methods. Name the methods in the blanks below.

1. _____

2. _____

3. _____

4. _____

5. _____

Reference: G. Science Textbook Grade 7 Pages. 31-32

Worksheet 14

Unit No. 3

Reproduction in Plants- Internal Structure of Dicot Seed

SLO: Describe the seed and fruit formation

Activity 1:	Read page 35 of the G.Sc. textbook and describe the seed and fruit formation.

a. Define Seed.

_____

_____

b. Define Fruit.

_____

_____

c. Define Endosperm.

_____

_____

Observe, draw and label fig 3.14 page 35 Seed and fruit formation	Observe, draw and label fig 3.15 on page 35. Internal structure of the dicot seed.

Reference: G. Science Textbook Grade 7 Page. 35

Worksheet 15

Unit No. 3

Reproduction in Plants- Pollination

SLO: Define Pollination. List various factors involved in cross-pollination.

Activity 1: Define Pollination and agents of Pollination.

Define Pollination

_____

_____

Read page 33- 34 of the G.Sc. textbook and fill in the blanks.
Different agents of pollination are

1. _____
2. _____
3. _____
4. _____
5. _____

Activity 2: Indentify Pollination by insects and birds

a. Name the plants pollinated by insects

_____

b. Name the plants pollinated by birds

_____

Reference: G. Science Textbook Grade 7 Page. 33- 34

Worksheet 16

Unit No. 3

Reproduction in Plants- Parts of Flower

SLO: Describe the process of fertilization in plants

Activity 1: Read the passage 3.3 on fertilization page 34 of the G.Sc. textbook, and fill in the blanks given below.

Fertilization is the fusion of _____and _____ cells to form _____. The pollen grain produces a _____ after falling on the _____.

The pollen tube grows in to the _____ of the _____ and reaches the _____ containing an_____. The male _____ from the pollen grain reaches the egg through the _____. The male nucleus fuses with the egg and as a result _____ occurs.

Activity 2: First study fig 3.6 Parts of a flower on page 31 of the G.Sc. textbook, then take few flowers and observe them. Can you see different parts of flower? Are these parts same in number in all flowers?

Write your observations below

Flower 1 _____

_____

Flower 2 _____

_____

Flower 3 _____

_____

Reference: G. Science Textbook Grade 7 Page. 31

Worksheet 17

Unit No. 3

Reproduction in Plants- Pollination

SLO: Compare self and cross-pollinations in plants.

Activity 1: Differentiate between self-pollination and cross pollination.

1. Self-Pollination:

_____

_____

Draw fig 3.7 page 33. To show self pollination

2. Cross Pollination:

_____

_____

Draw fig 3.7 page 33. To show cross Pollination.

Draw fig 3.8 on page 33 to show cross pollination.

Worksheet 18

Unit No. 4

Environment and Feeding Relationship- Ecosystem

SLO: Explain the Ecosystem

Activity 1: Define an Ecosystem and identify its biotic components.

a. Define an ecosystem.

_____

_____

_____

_____

Activity 2: Match each of the words in the box with one of the definition given below.

Producers, Carnivores, Decomposers, Herbivores

1. They get food from other animals_____.
2. They make their own food_____.
3. They depend directly on plants for their survival_____.
4. They are very essential recycling of nutrient to be used again by producers _____.

Activity 3: Give two examples of herbivores and consumers in your environment.

_____

_____

_____

_____

Reference: G. Science Textbook Grade 7 Page. 39 -40

Worksheet 19

Unit No. 4

Environment and Feeding Relationship
Habitat and Types of Habitat

SLO: Define the term habitat and compare different types of habitat.

Activity 1: Define the term Habitat and identify the characteristics of different habitats given below.

_____

_____

_____

_____

Activity 2: Match each of the words in the box with one of the features given below.

Desert, Grass Land, Tundra, Forest

1. In this habitat few trees and bushes provide shelter and used as home by some animals_____.
2. In this habitat there is a layer of soil and potentially decomposed organic matter that is frozen year-around_____.
3. In this habitat there is enough rainfall and have warm temperature for lot of trees to grow _____.
4. In this habitat most animals sleep during the day due to hotness of the soil _____.

Reference: G. Science Textbook Grade 7 Pages. 41- 44

Worksheet 20

Unit No. 4

Environment and Feeding Relationship-Types of Habitat

SLO: Compare different kinds of habitats.

Activity 1: Draw the diagram of water land.

Activity 2: Write two differences between desert and grass land habitat.

Desert Habitat	Grass Land Habitat

Reference: G. Science Textbook Grade 7 Page. 41-42

Worksheet 21

Unit No. 4

Environment and Feeding Relationship- Habitat

SLO: Investigate the various features that allow animals and plants to live in a particular habitat.

Activity 1: Write one characteristics of the following types of habitats.

Type of habitat	One characteristics
Water/Wet Land	
Forest	
Desert	
Grass Land	
Tundra	

Activity 2: Read column A and B carefully and write correct name in the column of habitat in which these animals and plants are found.

A. Animals	B. Plants	Habitat
Monkey, Tiger, Spider	Fungi, Mosses	
Fish, Shark, Turtles	Cotton, Wheat	
Rabbit, Elephant, Giraffes	Wild oats	
Camel, Snake, Lizard	Cactus, Ziziphus	
Polar bear, Snow fox	Willow, Bearberry	

Reference: G. Science Textbook Grade 7 Page. 42 -44

Worksheet 22

Unit No. 4

Adaptations of the Living Things to Changing Environment

SLO: Explain how living things adopt to daily and yearly changes in their habitat

Activity 1: Define adaptation.

_____

_____

_____

_____

Activity 2: Write two examples of daily adaptation.

_____

_____

Activity 3: Complete the following table.

Behavioral Adaptation	
Types of Behavioral Adaptation	Give one example of each type
Migration	
Hibernation	
Aestivation	
Camouflage	
Dormancy	

Reference: G. Science Textbook Grade 7 Page. 45-48

Worksheet 23

Unit No. 4

Environment and Feeding Relationship-Food Chain

SLO: Explain why food chain always begin with a producer.

Activity 1: Define Food chain and illustrate the linked food chain.

a) Why food chain always begin with a producer?

b) Define link.

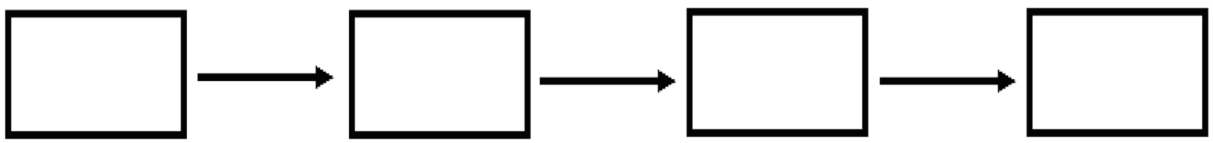
c) Place the following three words in proper box and complete the linked food chain.

Owl, Rat, Corn



d) Place the following four words in proper box and complete the linked food chain.

Rabbit, Carrots, Lion, Fox



Reference: G. Science Textbook Grade 7 Page. 50

Worksheet 24

Unit No. 4

Environment and Feeding Relationship-Food Chain

SLO: Describe two food chains in the environment around them.

Activity 1:	Collect as many pictures as you can from magazines and divide them into producers, consumers and decomposers. Make food chains (two) from the pictures you have collected.

Food Chain 1

Food Chain 2:

Reference: G. Science Textbook Grade 7 Page. 50

Worksheet 25

Unit No. 4

Environment and Feeding Relationship-Food Web

SLO: Explain the food web.

Activity 1: Define food web and illustrate your answer with a diagram.

b) Draw and label food web in a forest given in General Science Textbook for Grade VII at page No. 51.

Reference: G. Science Textbook Grade 7 Page. 51

اردو

ورک شیٹ

یونٹ نمبر: ۱

ورک شیٹ

۱

حمد

حاصلِ تعلّم: حمد کی تعریف کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: تعریف۔خوبی بیان کرنا، تلے۔ نیچے، فرش خاکی۔ مٹی کا فرش یعنی زمین، لاجوردی۔نیلا رنگ ، سائباں۔دھوپ اور بارش سے بچانے والا یعنی آسمان

تعریف اُس خدا کی جس نے جہاں بنایا　　کیسی زمین بنائی، کیا آسماں بنایا
پیروں تلے بچھایا کیا خوب فرشِ خاکی　　اور سر پہ لاجوردی اِک سائباں بنایا

دیے گئے اشعار میں شاعر نے اللہ تعالیٰ کی کن نعمتوں کا ذکر کیا ہے؟ کوئی سے دو کے نام لکھیں۔

1. _____　　2. _____

"سائباں" اور "فرش خاکی" سے شاعر کی کیا مراد ہے؟

سائبان: _____

فرش خاکی: _____

نظم حمد پڑھ کر اللہ تعالیٰ کی کوئی سی تین صِفات لکھیں۔

1. _____

2. _____

3. _____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲ پر دیے گئے سوال نمبر ۱ کے جوابات اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۱

ورک شیٹ
۲

ہم قافیہ الفاظ



حاصلِ تعلّم: قوافی (ہم قافیہ) کی پہچان کر سکیں۔

ہدایات: ہم قافیہ /ہم آواز الفاظ کی پہچان کریں۔

سوال: لفظ 'بچھایا' کے ہم قافیہ الفاظ بنائیں اور دی گئی جگہ پر لکھیں۔

بچھایا:۔ سجایا _____

ہدایات: دیے گئے الفاظ کو ہم آواز الفاظ سے ملائیں۔

الفاظ	ہم آواز الفاظ
تعریف	دواں
چہکتی	وہاں
رواں	ضعیف
مکاں	تاک
خاک	مہکتی

درسی کتاب کے صفحہ نمبر ۱ اور ۲ پر دی گئی نظم 'حمد' میں سے لفظ آسمان کے تمام ہم آواز الفاظ تلاش کر کے لکھیں۔

آسمان: _____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳ پر دیے گئے سوال نمبر ۴ اپنی کاپی میں لکھیں۔

ورک شیٹ
۳

یونٹ نمبر: ۲

روزمرہ اور محاورہ

حاصلِ تعلّم: روز مرہ اور محاورہ میں امتیاز کر سکیں۔

ہدایات: درسی کتاب کے صفحہ نمبر 3 سے "روز مرہ" اور صفحہ نمبر 7 سے "محاورہ" کی تعریف پڑھیں اور سمجھیں۔

روز مرہ کے مطابق جملے درست کر کے دی گئی جگہ پر لکھیں۔

مثال : پھل بکثرت سے خریدے جا رہے ہیں۔ درست جملہ: پھل بکثرت خریدے جا رہے ہیں ۔

1. اس نے آج دعوت پر جانا ہے۔ _____

2. میں نے کچھ ضروری کام مکمل کرنے ہیں۔ _____

3. اسد، احمد اور رامین سب کو امتحان دینا ہے۔ _____

خطا کار سے درگزر کرنے والا

بد اندیش کے دل میں گھر کرنے والا

مفاسد کا زیر و زبر کرنے والے

قبائل کو شیر و شکر کرنے والا

پہلے شعر میں خط کشیدہ لفظ "دل میں گھر کرنے والا" محاورہ کے طور پر استعمال ہوا ہے۔ آپ دوسرے شعر میں آنے والے محاورات کو ذیل میں دی گئی جگہ پر لکھیں۔

محاورہ نمبر 1: _____

محاورہ نمبر 2: _____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳ سے سوال نمبر ۶ اور صفحہ نمبر ۷ سے سوال نمبر ۳ اپنی کاپیوں میں مکمل کریں۔

ورک شیٹ
۴

یونٹ نمبر: ۲

نعت

حاصلِ تعلّم: حمد اور نعت کا فرق بیان کر سکیں۔

ہدایات: دی گئی مثالوں سے حمد اور نعت کا فرق سمجھیں۔

ا۔ حمد میں شاعر اللہ کی بنائی ہوئی نعمتوں کا ذکر کرکے اللہ تعالیٰ کی تعریف بیان کرتا ہے۔ جیسے؛

تعریف اُس خدا کی جس نے جہاں بنایا　　کیسی زمین بنائی کیا آسمان بنایا

ب۔ نعت میں شاعر حضرت محمد ﷺ کی خوبیوں کا ذکر کرتے ہوئے آپ ﷺ کی تعریف بیان کرتا ہے۔ جیسے؛

وہ نبیوں میں رحمت، لقب پانے والا　　مرادیں غریبوں کی، بر لانے والا

دیے گئے اشعار پڑھ کر بتائیں کہ یہ حمد سے لیے گئے ہیں یا نعت سے

شعر:۱	تو نے ہی انسان بنائے تو نے ہی حیواں بنائے	حمد
شعر ۲:	جنھوں نے بدل دی ہیں تاریکیاں بھی وہ روشن ستارے نبی ﷺ آخری ہیں	
شعر ۳:	بلند نبیوں میں نام اُن ﷺ کا فلک سے اُونچا مقام اُن ﷺ کا	
شعر ۴:	ساری دنیا تو نے بنائی پھولوں اور پھلوں سے سجائی	
شعر ۵:	زندگی تیرے لیے اور بندگی تیرے لیے اُلفتیں تیرے لیے سب چاہتیں تیرے لئے	
شعر ۶:	ہمارے نبی ﷺ احمد مصطفیٰ ﷺ ہیں فدا اُن پہ ہم وہ رسول ﷺ خدا ہیں	

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ے پر دی گئی سرگرمی اپنی کاپی میں لکھیں۔

ورک شیٹ
۵

یونٹ نمبر: ۳

غازی علم دین شہیدؒ

حاصلِ تعلّم: کسی بھی چیز کو مخصوص تلفّظ اور لہجے کے ساتھ پڑھ سکیں۔

ہدایات:
۱. نیچے لکیر لگے ہوئے الفاظ پر اعراب لگائیں اور عبارت کو درست تلفظ سے دو بار پڑھیں۔
۲. اعراب لگانے کے لیے درسی کتب یا اردو لغت سے راہ نمائی لے سکتے ہیں
۳. پڑھنے کے بعد کسی فرد کو پڑھ کر سُنائیں۔

قیام پاکستان سے قبل جب برصغیر پاک وہند کے مسلمان غلامی کی زندگی بسر کر رہے تھے۔اور انگریزوں سے آزادی حاصل کرنے کے لیے ہاتھ پیر مار رہے تھے۔ لاہور میں راجپال نامی کتب فروش نے انگریزوں کی ہمدردی اور حمایت سے رسول ﷺ کی ذات اقدس کے بارے میں دل آزار کتاب شائع کی۔ جوکہ ایک ہندو پروفیسر چھپاوتی نے لکھی تھی لیکن اس ملعون کو بچانے کے لیے مصنف کا نام نہیں لکھا گیا تھا۔

ہدایات: عبارت پڑھنے کے دوران مشکل الفاظ یا غلط پڑھے جانے والے الفاظ لکھیں۔

مشکل الفاظ	غلط پڑھے جانے والے الفاظ

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۸ تا ۱۱ سبق غازی علم دین شہیدؒ پڑھیں اور مشکل الفاظ پڑھنے میں کسی سے رہنمائی لیں۔ پڑھنے کے بعد گھر کے کسی فرد کو درست تلفظ کے ساتھ سُنائیں۔

یونٹ نمبر: ۴

ورک شیٹ
۶

الفاظ معنی لکھنا

حاصلِ تعلّم: الفاظ معنی لغت میں تلاش کر کے لکھ سکیں۔

ہدایات: درج ذیل الفاظ کے معانی درسی کتاب کے صفحہ نمبر ۱۴۱ پر دی گئی فرہنگ سے تلاش کر کے لکھیں اور معانی سمجھ کر الفاظ کو جملوں میں استعمال کریں۔

الفاظ	معانی	جملے
سپوت	بیٹا	پاکستان بہادر سپوتوں کی دھرتی ہے۔
قفسِ عنصری		
کچھار		
برسرِ پیکار		
نامساعد		
جواں مردی		

ہدایات: اردو لغت کی مدد سے درج ذیل الفاظ کو درست معانی کے ساتھ ملائیں۔

عزم	لڑنے والا
جنگ جو	مضبوطی کے ساتھ
منہ کی کھانا	برف سے ڈھکے ہوئے
معرکہ	ارادہ
دل جمعی	حیران ہونا
برف پوش	شکست کھانا
دنگ رہ جانا	لڑائی

پیارے بچو! درسی کتاب کے صفحہ نمبر ۱۹ پر دیے گئے سوال نمبر ۳ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۵

ورک شیٹ

۷

حروف فجائیہ اور حروف استفہامیہ

حاصلِ تعلّم: حروف فجائیہ اور حروف استفہامیہ کا استعمال کر سکیں۔

ہدایات: حروف فجائیہ وہ حروف ہوتے ہیں جو خوشی، غم، حیرت یا پکارنے کے لیے استعمال کیے جائیں۔ مثلاً: سبحان اللہ، ماشاءاللہ، آہ، ارے، واہ وغیرہ اور ان الفاظ کے فوراً بعد "!" کی علامت لگائی جاتی ہے۔

ہدایات: درج ذیل جملوں میں جہاں ضروری ہو حروف فجائیہ کی علامت لگا کر جملے دوبارہ لکھیں۔

ماشاءاللہ کتنا خوب صورت بچہ ہے۔	ماشاءاللہ! کتنا خوب صورت بچہ ہے۔
اُف اتنا لمبا راستہ	
ارے آپ کہاں جا رہے ہیں؟	
واہ پاکستان کی ٹیم نے کیا شاندار گول کیا ہے۔	
آہ کانٹا چُبھ گیا۔	

حروف استفہامیہ: وہ الفاظ ہیں جو کچھ پوچھنے یا معلوم کرنے کے لیے استعمال کیے جاتے ہوں۔ جیسے کیا، کہاں، کون، کب، کیسے وغیرہ

ہدایات: درج ذیل استفہامیہ الفاظ کے جملے بنائیں۔

کب	
کون	
کہاں	
کیا	
کیسے	

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۵ پر دیے گئے سوال نمبر ۶ کا جواب کاپی میں مکمل کریں۔

یونٹ نمبر: ۶

ورک شیٹ
۸

دھنک

حاصلِ تعلّم: نظم کو درست آہنگ اور لب و لہجے کے ساتھ پڑھ سکیں۔

ہدایات: نظم کے درج ذیل اشعار کو درست تلفظ اور ترنم سے پڑھیں اور بار بار دہرائیں تاکہ یاد ہو سکیں۔

آج بادل خُوب بَرسا اور بَرس کر کُھل گیا
بُوٹا بُوٹا، ڈالی ڈالی، پتّا پتّا دُھل گیا

دیکھنا! کیا دُھل گیا سارا کا سارا آسماں
اُودا اُودا، نیلا نیلا، پیارا پیارا آسماں

ہٹ گیا بادل کا پردہ مل گئی کرنوں کو راہ
سلطنت پر اپنی پھر خورشید نے ڈالی نگاہ

دھوپ میں ہے گھاس پر پانی کے قطروں کی چمک
مات ہے اس وقت ہیرے اور موتی کی دَمک

جب نظم یاد ہو جائیں تو گھر میں کسی فرد کو سُریلی آواز سے ترنم کے ساتھ سنائیں۔

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۶ اور ۲۷ سے نظم دھنک درست لب و لہجے سے پڑھیں اور گھر میں کسی کو ترنم کے ساتھ سنائیں۔

یونٹ نمبر: ۶

ورک شیٹ
۹

متلازم اور مترادف الفاظ



حاصلِ تعلّم: مترادف اور متلازم الفاظ کے بارے میں جان سکیں اور ان کا استعمال کر سکیں۔

ہدایات: درسی کتاب کے صفحہ نمبر 28 سے متلازم کی تعریف سمجھیں اور دیے گئے الفاظ کے متلازم لکھیں۔

الفاظ	متلازم		
گرمی	دھوپ	پسینہ	پیاس
درخت			
صحرا			
سمندر			
شہر			
مسجد			

ہدایات: درج ذیل الفاظ کے مترادف لکھیں۔

الفاظ	مترادف
آغاز	ابتدا
تکلیف	
خورشید	
باغ	
ضروری	
جنت	



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۸ پر دیے گئے سوال نمبر ۴ اور ۵ کے جواب کاپی میں مکمل کریں۔

یونٹ نمبر: ۶

ورک شیٹ

۱۰

دھنک

حاصلِ تعلّم: نظم کا خلاصہ اپنے الفاظ میں تحریر کر سکیں۔

ہدایات:

1. نظم "دھنک" کے نئے الفاظ کے معانی صفحہ نمبر ۱۴۱ پر دی گئی فرہنگ سے پڑھ کر سمجھیں۔
2. نظم کو غور سے پڑھیں اور ہر شعر کا مطلب سمجھیں۔

دیے گئے سوالات کی روشنی میں نظم کا خلاصہ لکھیں۔

- بارش کے بعد کے منظر کے بارے میں شاعر نے کیا بتایا ہے ؟
- شاعر نے پانی کے قطروں کو موتی کیوں کہا ہے؟
- شاعر نے آسمان پر دھنک کی شکل، رنگ اور خُوب صورتی کے بارے میں کیا کہا ہے؟
- دھنک کچھ دیر بعد کیسے مِٹ گئی؟

نظم کا خلاصہ اپنے الفاظ میں تحریر کریں۔

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۹ پر دی گئی سرگرمی مکمل کریں اور دھنک کے بارے میں پانچ جملے اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۱

تفہیمی سوالات

حاصلِ تعلّم: سبق سے اخذ شدہ سوالات کے جوابات تحریر کر سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جواب لکھیں۔

پاکستان میں چار موسم ہیں۔ اس کی زمین سال میں دو دو اور کہیں تین تین فصلیں پیدا کرتی ہے۔ اس ملک کے مختلف مقامات کے درجۂ حرارت میں نمایاں فرق ہوتا ہے۔اگر سبی اور نواب شاہ میں شدید گرمی ہے تو اسی وقت سیاچن، گلگت اور سکردو میں سردی کا موسم ہوتا ہے۔ اس کے علاوہ یہ ملک کہیں تو سطح سمندر کے برابر اور کہیں سطح سمندر سے بلندترین ہے۔ یہ ملک قدرتی وسائل سے مالامال ہے۔ یہاں کئی قسم کی معدنیات پائی جاتی ہیں۔ ہر طرح کے پھل، میوے اور سبزیاں پائی جاتی ہیں۔ اب یہ ہمارا کام ہے کہ نہ صرف ان وسائل سے فائدہ اٹھائیں بلکہ ان کی حفاظت بھی کریں۔ اگر ہم اپنے ماحول کی حفاظت کریں گے تو یہ سب وسائل محفوظ رہیں گے۔

سوال: درج بالا عبارت میں پاکستان کے کون کون سے گرم ترین اور سرد ترین مقامات کا ذکر کیا گیا ہے؟ نام لکھیں۔

1. گرم ترین علاقے: _____

2. سرد ترین علاقے: _____

قدرتی وسائل کو محفوظ رکھنے کے لیے کوئی سے تین اِقدامات لکھیں۔

1. _____

2. _____

3. _____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳۰ تا ۳۷ سے سبق 'فطرت کے خلاف بغاوت' غور سے پڑھیں اور صفحہ نمبر ۳۸ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے جواب کاپی میں مکمل کریں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۲

عبارت خوانی

حاصلِ تعلّم: عبارت کو روانی، زیر و بَم لہجے، شدت اور رفتار کے ساتھ مسلسل پڑھ سکیں۔

ہدایات: درج ذیل پیرا گراف کو تین بار درست لہجے اور رفتار سے پڑھیں اور پڑھتے ہوئے موبائل میں موجود اسٹاپ واچ آن کریں تاکہ وقت نوٹ کر سکیں۔ اس مشق کے بعد گھر میں کسی فرد یا دوست کو سُنائیں۔

احمد چچا نے بتایا کہ وہ تقریباً بیس بائیس سال بعد ایبٹ آباد جا رہے ہیں۔ اور جب وہ پاکستان میں آئے تھے تو اکثر گرمیوں کی چھٹیاں وہیں گزارتے تھے۔ کیوں کہ انھیں وہاں کا ماحول اور موسم بے حد پسند تھا۔ وہ اکثر وہاں کی خاموش اور پُر سکون سڑکوں پر گھنٹوں پیدل گھومتے رہتے تھے۔ وہ ہمیں ماضی کے قصے سُنا رہے تھے۔ انھیں دیکھ کر خُوشی ہو رہی تھی کہ سڑکوں کا نظام بہتر ہو رہا ہے۔ ہم تقریباً آخری اذان کے وقت ایبٹ آباد پہنچے۔

سوال پڑھیں اور ہاں یا نہیں کے خانے میں ✓ کا نشان لگائیں۔

الفاظ	ہاں	نہیں
کیا آپ نے یہ پیرا گراف تین بار خود پڑھا؟		
آپ نے پڑھنے کے بعد کسی کو سنایا؟		
کیا آپ روانی سے پیرا گراف کو پڑھ سکے؟		
کیا آپ پڑھتے ہوئے الفاظ پر اٹک رہے تھے؟		
آپ نے یہ پیرا گراف کتنے وقت میں پڑھا؟	۱۰ سیکنڈ	۲۰ سیکنڈ

پڑھے گئے پیرا گراف کی روشنی میں سوال کا جواب لکھیں؟

احمد چچا کو ایبٹ آباد کا موسم کیوں پسند تھا؟ _____

مشق: پیارے بچو! درسی کتاب کے سبق فطرت کے خلاف بغاوت کے بقیہ پیرا گراف بھی پڑھیں اور صفحہ نمبر ۳۷ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۳

یونٹ نمبر: ۸

بارش کا پہلا قطرہ

حاصلِ تعلّم: نظم اور نثر میں فرق کر سکیں۔

نثر: ہر ایک سے ان کا اونچا مقام ہے۔
شعری صورت: نظم میں شاعر ایک خیال اور تصور کو اشعار میں مسلسل بیان کرتا ہے۔ایک شعر کا دوسرے شعر سے ربط ہوتا ہے ۔ جیسے؛
میں کھیت کی پیاس کیا بجھاؤں
اپنی ہی ستیاناس کرنا
نثری صورت: نثر میں خیال کا اظہار مکمل جملے کی صورت میں کیا جاتا ہے یعنی عام بات چیت کے انداز میں خیال یا بات کو بیان کرتے ہیں ۔جیسے؛ میں کھیت کی پیاس کیا بجھاؤں گا، اپنی ہی ستیاناس کروں گا۔

دیے گئے اشعار کو نثر میں لکھیں۔

ہر قطرے کے دل میں تھا یہ خطرہ
ناچیز ہوں میں حقیر قطرہ
تر مجھ سے کسی کا لب نہ ہوگا
میں اور کی گوں نہ آپ جوگا

نثر: _____

_____

_____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴۳ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں مکمل کریں۔

یونٹ نمبر: ۸

ورک شیٹ
۱۴

بارش کا پہلا قطرہ



حاصلِ تعلّم: نظم کا مرکزی خیال تحریر کر سکیں۔

ہدایات:

۱۔ نظم بارش کا پہلا قطرہ کے معانی درسی کتاب کے صفحہ نمبر ۱۴۱ پر دی گئی فرہنگ سے پڑھیں۔

۲۔ نظم دو یا تین بار پڑھیں اور گھر میں کسی کو سنائیں۔

۳۔ دیے گئے سوالات کی روشنی میں نظم کا مرکزی خیال اپنے الفاظ میں لکھیں۔

- بارش برسنے سے پہلے ہر قطرہ کیا سوچ رہا تھا؟
- بارش کے پہلے قطرے نے سب کو کیسے ہمت دلائی؟
- اس نظم میں شاعر نے کیا پیغام دینے کی کوشش کی ہے ؟

مرکزی خیال: _____



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴۲ پر دیے گئے سوال نمبر ۱ کے پہلے چار اجزاء کے جواب اپنی کاپی میں لکھیں۔

ورک شیٹ
۱۵

یونٹ نمبر: ۸

الفاظ کا جملوں میں استعمال



حاصلِ تعلّم: الفاظ کو جملوں میں استعمال کر سکیں۔

ہدایات: درج ذیلالفاظ کے معانی درسی کتاب کے صفحہ نمبر ۱۴۱ پر دی گئی فرہنگ سے پڑھیں، سمجھیں اور اپنے جملوں میں استعمال کریں۔

الفاظ	معانی	جملے
نہال	خوش	سردی سے ٹھٹھرا بچہ آگ کے پاس پہنچ کر نہال ہو گیا۔
ستیا ناس		
ہچر مچر		
کھچڑی پکنا		
جوگا		
شناور		
خیابان		
گھنگھور گھٹا		
بساط		



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴۲ پر دیے گئے سوال نمبر ۴ کا جواب اپنی کاپی میں لکھیں۔

English

Worksheet 1

Unit No. 1

Specific Words, Vivid Verbs and Modifiers

SLO 1: Analyse features of an effective topic sentence i.e. specific words, vivid verbs and modifiers.

Important definitions:		
A modifier changes, clarifies, qualifies, or limits a particular word in a sentence in order to add emphasis, explanation, or detail. Modifiers tend to be descriptive words, such as adjectives and adverbs.	Limiting modifiers such as only and always enforce restrictions on the subject, noun, or pronoun they immediately precede.	A vivid verb is a verb that a reader will find more interesting and is more specific to the common, verbs we use all the time, like "walk". By using vivid verbs, will help you avoid repeating the same (common) verb in your writing.

Activity 1: Read the paragraph below and answer the questions that follow:

Topic sentence: states the main idea of the paragraph. It is like a map that tells your reader what the paragraph is about.

Topic sentence- When I visited Nathiagali with my friends during my last summer vacation, I least expected it to be as beautiful and breathtaking as it appeared in pictures I had seen. **Detail 1-** I had never been to a hill station before, so it was a new experience for me. There were a large number of visitors. **Detail 2-** The fantastic cool weather and the lush green trees and greenery made the scenery all round very charming. **Detail 3-** We visited all the beauty spots of this hill station and enjoyed the delicious food. **Conclusion-** The memory of this visit is still fresh in my mind.

1. What is the main idea in the topic sentence? _____
2. Identify the vivid verbs and modifiers in the topic sentence._____
3. What features make this an effective topic sentence?_____
4. Why has the author used least in the last sentence?

Activity 2: The following 8 sentences are part of one paragraph, but they have been jumbled up. Rearrange the sentences in order starting with the topic sentence in your notebook.

1. He quit smoking cigarettes since whenever he climbed stairs, he would quickly stop several times and cough loudly.
2. In conclusion, my father is in better shape than most children.
3. He also has good health as a result of careful eating.
4. To make sure he stays fit, my father sets aside at least one hour in a day for fitness.
5. First, he is in excellent condition because he has stopped smoking cigarettes.
6. For example, in contrast to the unhealthy food he ate earlier such as red meat, junk food and fatty stuff, he now eats more vegetables and fruits.
7. There are several reasons why my father is in excellent health, even though he is over seventy years of age.
8. Another reason for my father's health is his exercise regime.

Further practice: Complete the exercise given on page 8 of your textbook.

Worksheet 2

Unit No. 1

Use of Common Proper, Collective Countable and Uncountable Nouns

SLO 2: Demonstrate the use of common proper, collective countable and uncountable nouns

Activity 1: Put a tick (✓) against the correct option below:

1. **The book was lying on the table.**
   - ☐ Book is a common noun
   - ☐ Book is a proper noun
   - ☐ Book is a collective noun.

2. **Quaid e Azam was a courageous leader.**
   - ☐ Quaid e Azam is a common noun
   - ☐ Quaid e Azam is a proper noun
   - ☐ Quaid e Azam is a collective noun

3. **The flock of birds circled the sky.**
   - ☐ Flock is a common noun
   - ☐ Flock is a proper noun
   - ☐ Flock is a collective noun

4. **We cannot live without water**
   - ☐ Water is a common noun
   - ☐ Water is a proper noun
   - ☐ Water is a collective noun

5. **The jury has given its verdict.**
   - ☐ Jury is a common noun
   - ☐ Jury is a proper noun
   - ☐ Jury is a collective noun

6. **Abdullah's son was suffering from Corona.**
   - ☐ Corona is a common noun
   - ☐ Corona is a proper noun
   - ☐ Corona is a collective noun

Activity 2: In each of the sentences below identify if the noun is countable or uncountable. Write in the relevant columns below:

Example: This boy is my friend. (In this sentence **'boy'** is countable noun.)

1. The students understood everything the teacher explained.
2. A teacher commands respect.
3. The child likes that balloon.
4. A verb is an action word.
5. This activity is boring.
6. This story is wonderful.
7. There is less salt in the curry.

Countable Nouns	Uncountable Nouns

Further practice: Complete the exercise given on page 9 of your textbook.

Worksheet 3

Unit No. 1

Greetings, Compliments, Invitations, Introductions and Farewells

SLO 3: Offer and respond to greetings, compliments, invitations, introductions and farewells.

Activity 1: Read the dialogue between two friends, Fauzia and Kashmala and answer questions at the end.

Asslam O Alaikum Fozia, how are you?

Congratulation of achieving first position in exams.

Oh wow! This party must on your great success. Isn't it?

I will love to come over. Thank you for the kind invitation.

You know Razia? your class fellow, she told about your result.

It would be awesome to meet all friends.

Nice taking to you Fouzia. Khuda Hafiz.



Walikum Salam! Kashmala, I am well. Alhamdulillah

Thank you very much. Allah is very kind on me. I worked very hard.

It will be great if you could join the party my parents have arranged.

Yes exactly! They are celebrating my achievement. On coming Sunday at 6pm.

Oh I see! Yes, Razia my good friend. She will also be coming in the party.

Off course! I will be waiting you both. See you! Allah Hafiz

Q1. How Kashmala greeted Fouzia?

_____

Q2. What compliment Kashmala give to Fouzia?

_____

Q3. Why parents of Fouzia arranged party?

_____

Q4. How Fouzia invited Kashmala in party?

_____

Q5. How Kashmala introduced Razia?

_____

Further practice: Complete the exercise given on page 14 of your textbook.

Worksheet 4

Unit No. 1

Summary Skills

SLO 4: Use summary skills to extract salient points and develop a mind map to summarize text.

Activity 1: Read the paragraph on 'Public Place'. See how the mind map below captures the salient features of Public Places.

Public property is a property that is dedicated to public use and is owned by the government and people of the country jointly. For example, roods, electricity, public parks and grounds, hospitals, libraries, government offices, etc. These properties are all built by the government with public money that we pay in the form of taxes.

The government is responsible for maintaining this property. But it does not mean that people have no role to play in this regard. If the government is responsible for building and maintaining public property, it is the duty of people to help the government in maintaining it. It costs a lot money to build or maintain these properties. If the people of the country do not use public amenities properly or destroy diem, it will not be easy to replace them. It has been seen that people use water and electricity wastefully.

They remove parts of railway tracks and damage electric lights and fans of public places. Most of the people do not realize the value of public property. Public libraries are set up by the government for the benefit of the people. Some people, including our school children are in the habit of tearing off and removing pages from library books. Similarly, people scribble filthy words on public walls. Several students cut the seat covers while travelling in buses. Even National Monuments and heritage sites are defaced.



Activity 2: Read the following paragraph on 'Good Teachers' and develop a mind map to summarize the salient features of the text in your notebook.

Good teachers are indeed a rare commodity, as not all teachers are blessed with good communication skills, have expert knowledge, and can inspire their students. First, good teachers are effective communicators. Being a good communicator means presenting information in ways that students can understand. Second, good teachers are experts in their subject area and have advanced knowledge of the subject they are teaching. Lastly, good teachers enjoy the subject they teach and make learning fun. Their energy and enthusiasm are contagious, and they are a source of inspiration for their students. To summarize, good teachers are not only subject experts and effective communicators, they are also inspirational.

Further practice: Complete the exercise given on page 8 of your textbook.

Worksheet 5

Unit No. 2

Prereading Strategies

SLO 1: Use pre-reading strategies to predict the content of a text from a picture by asking questions and contextual clues.

Activity 1: Look at the picture and answer the questions by looking at the contextual clues.



What two teams can be seen playing cricket? _____

How do you know?_____

What do you think the batsman has done?_____

What is the position of the person standing behind the wickets? _____

Why is he looking up? _____

Activity 2: Look at the picture below and formulate your own questions around the picture:

1. _____?
2. _____?
3. _____?
4. _____?
5. _____?



Further practice: Further practice: Look at the picture given on page 18 of your textbook and formulate five questions around it. One example can be: Where do you think the train is heading?

Worksheet 6

Unit No. 2

Sentence

SLO 2: Generate questions to understand the text.

Activity 1:	Read Text 1 on the history of the Qissa Khawani Bazaar, Peshawar and go over the questions to understand the text. Then read Text 2 and formulate your own questions to show your understanding of the text:

TEXT 1:

Since ancient times, Qissa Khawani Bazaar has been one of the most famous bazaars, located in the old city of Peshawar. In the past, the entrance to this historical Bazaar was from the Kabuli gate (Kabuli drawaza) that welcomed caravans from central Asia through Afghanistan. Qissa Khwani derived from Persian words Qissa Khwan means the story tellers, however, the cafes in past used to welcome the travellers/traders from different parts of the world, so the professional story tellers used to tell the stories in these cafes, inns. In the centre of the street, there were erected 2 monuments in the memory of the massacre of 23rd April 1930, when the British army killed some 400 demonstrators in this street, in the independence movement.

Questions to understand the text.

1. Why is the Qissa Khawani Bazaar famous? _____
2. Where is the famous Bazaar located? _____
3. What does Qissa Khawani mean? _____
4. What has changed over the years? _____
5. What is the significance of the two monuments that are in the centre of the street?

   _____
6. When did the independence movement happen? _____

TEXT 2:

Babur first built a fort here in 1526 after capturing Peshawar. It was a royal residence for the Afghan Durrani dynasty before being captured, trashed, and in 1834, rebuilt in mud by the Sikhs (replaced by brick by the British). The word Bala Hissar is from Dari Persian, meaning, “elevated or high fort”. The name was given by the Afghan Pashtun King Timur Shah Durrani (1773–1793), who used the fort as the winter capital of the Durrani Empire. The fort stands on a high mound in the north-western corner of Peshawar city. Not long ago, the fort used to be conspicuously away from the old city of Peshawar, but now the construction of new buildings has covered space between the old city and the fort. However, the fort’s position on a high mound gives a commanding and panoramic view of the entire Peshawar city.

Questions to understand the text.

1. _____?
2. _____?
3. _____?
4. _____?
5. _____?

Further practice: Complete the exercise in the ‘Listening and Speaking section’ given on page 23 of your textbook.

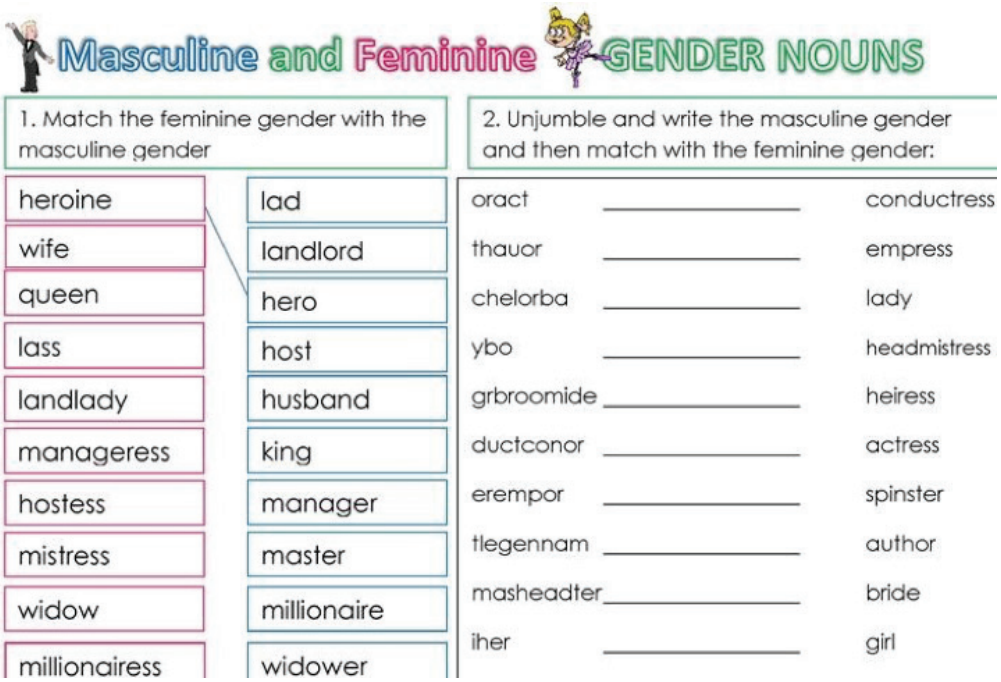
Worksheet 7

Unit No. 2

Gender of Nouns

SLO 3: Change the gender of nouns

Activity 1: Read the instructions carefully and complete both the exercises given below:



Activity 2: Change the gender of the nouns given below and write them in the correct columns:

Father, grandmother, sister, nephew, uncle, lioness, horse, buffalo, prince, queen, lord, boy, hostess, headmaster, grandson

Masculine	Feminine

Further practice: Complete the exercise given on page 24 of your textbook.

Worksheet 8

Unit No. 3

Animate and Inanimate Nouns

SLO 4: Differentiate between and demonstrate the use of possessive forms of animate and inanimate nouns

Activity 1: Make sentences as in the model.

Afridi has got a red car ⟶ Afridi's car is red.

Mariam has a black ruler. ⟶ _____

Ali has a blue school bag. ⟶ _____

The table has broken legs. ⟶ _____

The sofa has soft seats. ⟶ _____

Arham has a nice cricket bat. ⟶ _____

The phone has a weak battery. ⟶ _____

Activity 2: Join the sentences below by using possessive forms. Study the boxes above. An example has been done for you.

Note for students: The -'s possessive is generally used only with nouns referring to animate items (e.g. people and animals) and in time phrases, example: a driver's foot, the cat's nose, a week's holiday, today's newspaper.

The student has a pen. The pen is on the table.	The student's pen is on the table.
The man has a car. The car is in the garage.	
My friend has a puppy. The puppy is cute.	
I have a lamp. The colour of my lamp is blue.	
Pakistan has a population. The population is very large.	
The carpet is handmade. The colour of the carpet is red.	
The television has a screen. The television screen is blurred.	
My brother has a friend. The friend is sick.	

Further practice: Complete the exercises given on pages 25 and 26 of your textbook.

Worksheet 9

Unit No. 4

Writing Main Idea

SLO 1: Read a poem and give orally or in writing main idea.

Activity 1: Read the poem carefully.

It's Spring!

It's spring
And the garden is changing its clothes,
Putting away
Its dark winter suits,
Its dull scarves
And drab brown overcoats
Now, it wraps itself in green shoots,
Slips on blouses
Sleeved with pink and white blossom,
Puts on skirts of daffodil and primrose,
Snowdrop socks and purple crocus shoes,
Then dances in the sunlight.
By John Foster





Activity 2: Put a (✓) against the option that best captures the meaning conveyed in the poem.

Q 1. The garden is changing its clothes means *(change in weather/ change in dress).*

Q 2. Then wraps itself in green shoots means *(covers in green colour/ new leaves sprout).*

Q 3. Then dances in sunlight means *(the plants dance in sunlight/the plants are happy with approaching summer).*

Q 4. Putting away the dark winter suits means: changing clothes/ changing colour.

Q 5.Drab brown overcoats mean: winter is dull/plants are wearing brown overcoats

Activity 3: Identify and circle the option that best captures the main idea of the poem.

A. When spring comes everyone puts away their winter clothes.

B. In spring the nature becomes lively and colourful and plants flowers and trees dance in the sun.

C. The changing colours of nature from its dark clothing to much brighter garments announces the arrival of summer.

Further practice: Complete the exercises given on pages 29 & 30 of the textbook.

Worksheet 10

Unit No. 4

Personification-Giving Human Qualities to Things and Ideas

SLO 2: Recognize literary personification

Activity 1: Read the poem 'Hope' by Emily Dickinson and see the different ways in which the poet has personified hope.

HOPE

Hope is the thing with feathers-
That perches in the soul-
And sings the tune without the words-
And never stops at all-
And sweetest -in the Gale-is heard-
And sore must be the storm-
That could bash the little bird
That kept so many warm
I've heard in the chilliest land –
And on the strangest sea-
Yet-never in Extremity,
It asked a crumb - of me



Activity 2: Read the poem "The Trees' by Joyce Kilmer. Identify the ways in which the trees have been given humans qualities and fill the columns below, with words/phrases from the poem and how they have been personified. An example has been done for you.

The Trees

I think that I shall never see
A poem lovely as a tree.

A tree whose hungry mouth is prest
Against the earth's sweet flowing chest;

A tree that looks at God all day,
And lifts her leafy arms to pray;

A tree that may in Summer wear
A nest of robins in her hair;

Upon whose heart snow has lain;
Who intimately lives with rain.

Poems are made by fools like me,
But only God can make a tree.

Words/phrases from the poem 'The Trees'	Personification
Example: A poem lovely as a tree	The word lovely is a human quality
Example: A tree whose hungry mouth is prest	The word hungry is human quality

Further practice: Complete the exercise given on page 32 of your textbook.

Worksheet 11

Unit No. 4

Indefinite Pronouns

SLO 3: Use few indefinite pronouns

Indefinite pronouns replace nouns when too many nouns would become repetitive. As indefinite words, they don't point to someone or something specific. Examples of singular indefinite pronouns include "someone," "no one," and "everyone." Plural indefinite pronouns include words like "several," "many," and "others."

Activity 1: **Underline the indefinite pronoun (or pronouns) in the following sentences. There are a total of 10 indefinite pronouns across these 9 sentences.**

1. Everybody enjoys a good game of Ludo.
2. Does anybody have the time?
3. One prayed while the other played a Hamd on the radio.
4. Nobody knows the trouble I've seen.
5. The secret was known by few.
6. No, the secret was known by many.
7. Calculus is too hard for some.
8. Surely you recognize somebody.
9. Is there anything I can do?

Activity 2: **Underline the indefinite pronouns in the following paragraph. There are 8 in all.**

I went on a trip last week. Few have visited the park I saw because everyone visits the Mushkpuri Top. I saw something moving in the woods but could not see it clearly. Then there was more movement, and everybody saw it. It could have been a bear or maybe just the wind. Nobody could figure it out, but we had many guesses. The scenery there was gorgeous; one could see for miles. Anybody would love that one view of the valley because nothing on Earth is more beautiful.

Activity 3: **Write a short story of no more than 50 words using at least 4 to 6 indefinite pronouns about an experience of visiting a beautiful place.**

Your Story:

Further practice: Complete the exercise given on page 36 of your textbook.

Worksheet 12

Unit No. 4

Conversation

SLO 4: demonstrate use of pronoun -antecedent agreement recognizing their relationship.

Pronouns in a sentence should agree with its antecedent, or the noun that the pronoun refers to. It needs to agree in number (plural or singular), gender (male, female or undefined) and person (first person, second person or third person). In many sentences a pronoun relates to another word earlier in the sentence. This other word is called an antecedent. It is usually a noun or a pronoun. Example: Sameer dropped his textbook on the floor.
The pronoun in the example is his. The antecedent is Sameer.

Activity 1: **In each sentence below underline the pronoun and circle the antecedent.**

1. The shoppers couldn't find their car in the parking lot.
2. The horse ate its hay in the barn.
3. Shahmeer liked the game, but he liked the popcorn more.
4. In the morning Laila opened her window to look at the clouds.
5. As the fox chased the rabbits, the mice ran into their holes.
6. Mrs. Taj dashed home, and she called Mrs. Malik.
7. Jehanara and Ameer wanted chicken for their picnic.
8. When the bad news arrived, it came with some good news.
9. The box lay on the floor with its lid wide open.
10. Although Kiran often went to the library, today she stayed home.

Activity 2: **Spot the error: Circle the errors in each sentence. Write your corrections on the line underneath the sentence. An example has been done for you.**

1. Everyone loved (their) lunch.

his/her

2. When students get to class, you should be ready to turn in the assignment.

---

3. I have two dogs, and it likes to run.

---

4. Mrs. Ghazi called my mother, and he asked for the recipe.

---

5. If a horse runs too long, they will overheat.

---

6. Her brother was running and broke its toe.

Further practice: Complete the exercise given on page 37 of your textbook.

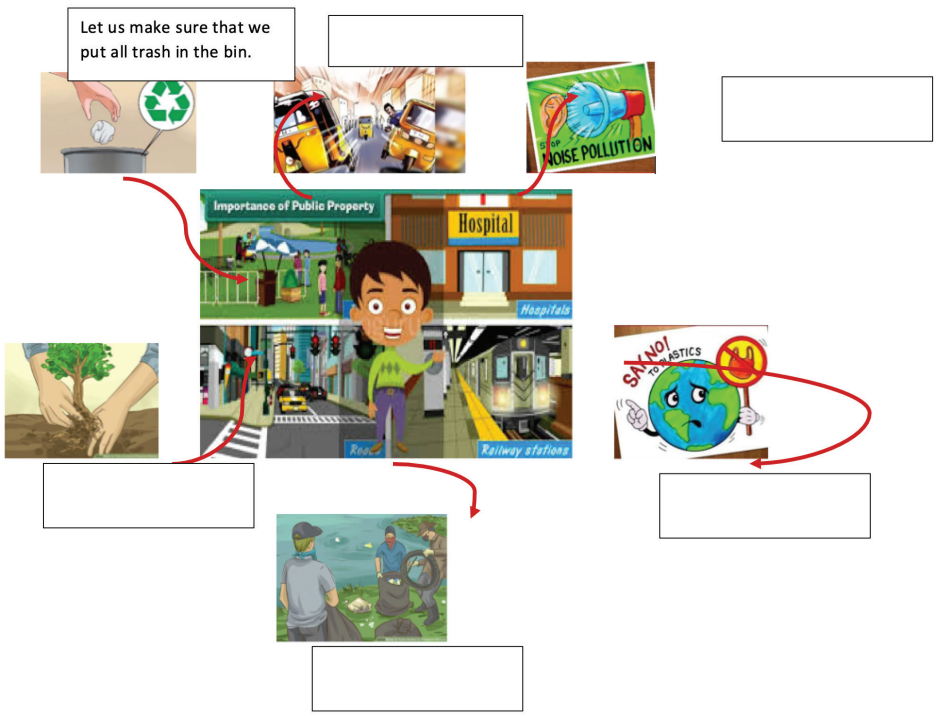
Worksheet 13

Unit No. 5

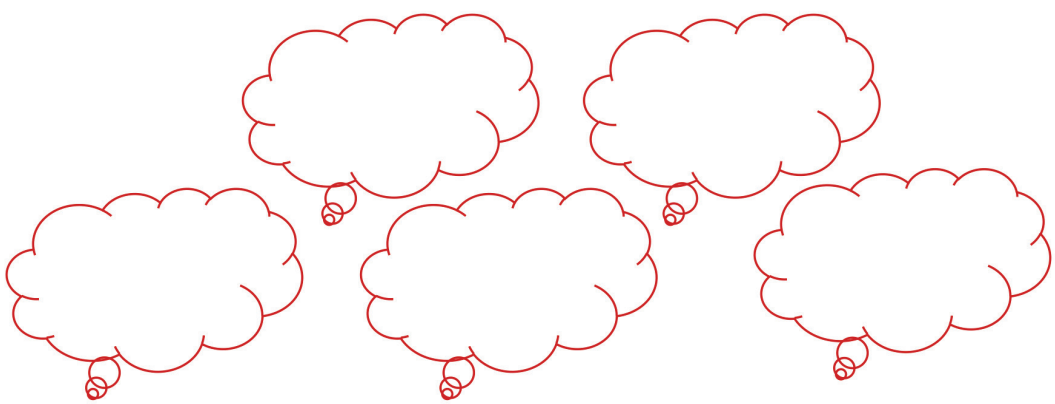
Expression

SLO 2: Write short texts in speech bubbles using vocabulary, tone, style of expression appropriate to the communicative purpose and context.

Activity 1:	Help the boy to fill up the speech bubbles about taking actions to help save the environment from getting polluted. One speech bubble has been done for you.



Activity 2:	Now in the speech bubbles below write five actions you will personally take to make sure your surroundings are clean, safe and secure.



Further practice: Complete the exercise given on page 44 of your textbook.

Worksheet 14

Unit No. 5

Use Critical Thinking

SLO 4: Use critical thinking to respond to the text (while-reading)
- **Scan to answer short questions**
- **Deduce meaning of difficult words from context.**
- **Distinguish between what is clearly stated and what is implied**

Activity 1:	Read the text and answer the short questions. Also, deduce meaning of difficult words from context and distinguish between what is clearly stated and what is implied.

POLLUTION

There are lots of environmental problems nowadays, mainly because of pollution. It is the contamination of air, water and soil by different materials that interfere with human health and quality of life.

The emissions form industries and engines, including cars, are big causes of air pollution and simple things that we do at home, like using aerosols, have bad effects on the ozone layer, which protects life on Earth from ultraviolet radiation.

Water is also suffering from pollution by domestic, municipal and also industrial waste.

It is up to us to stop damaging the environment. We all should be environment friendly!



★ Answer the following questions.

1. What is the biggest enemy of the environment?
2. What are the causes of air pollution?
3. What's wrong with aerosols?
4. What is the function of the Ozone Layer?
5. Why is water suffering from pollution?
6. Why do you think we should all be environment friendly?



★ Complete the sentences with Should/Shouldn't do to save the Earth.

SHOULD SHOULDN'T

1. We _____ burn trees.
2. We _____ walk or ride a bike to school.
3. We _____ leave the tap running when we're brushing the teeth.
4. We _____ turn off the lights and the computer when we leave the room.
5. We _____ recycle waste paper, bottles and cans.
6. We _____ use aerosols.
7. We _____ use low energy light bulbs.
8. We _____ drop litter in the streets.

Word	Contextual Clues	Meaning
Contamination		
Emissions		
Ozone layer		
Damage		
Environment		

Read the comprehesnion passage on pages 41& 42 and complete the exercise given on page 43 on your textbook.

Worksheet 15

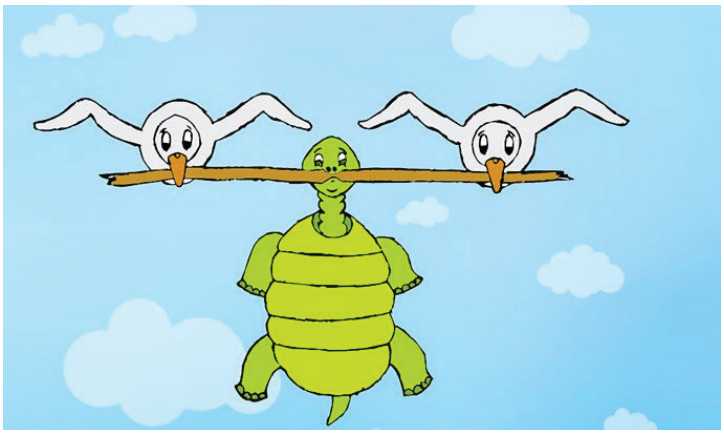
Unit No. 6

Reading Comprehension

SLO 1: Apply critical thinking to read silently and with comprehension and extract the main idea and supporting detail.

Activity 1: Read the story titled, 'The Talkative Tortoise'. Answer the questions and write the main idea in one sentence.

The Talkative Tortoise



A tortoise and two storks were good friends. Storks often told stories about different places to the tortoise. The tortoise felt sad that he could not travel along with them. One day the tortoise had on idea. He told the storks, "I cannot travel because I do not have wings. Both of you hold each end of a long stick with your beaks. I will hold the middle part of the stick with my mouth".

One stork thought it to be a good idea. However, the other stork said, "Not a bad idea. But you are very talkative. If you talk you will fall down and die." The storks and the tortoise started their journey. As they flew, the children clapped hands and ran after them. One boy started teasing. The tortoise could not resist and opened his mouth to reply. As soon as he opened his mouth, he lost his grip on the stick. He fell down, and died.

1. Who was friend of tortoise?

---

2. Storks stories were about?

---

3. Why tortoise cannot travel speedily?

---

4. Why tortoise fell down?

---

5. Write main idea of story in one sentence.

Further practice: Complete the exercise on page 51 of your textbook.

Worksheet 16

Unit No. 6

Linking Verbs

SLO 2: Demonstrate and recognize use of linking verbs.

Linking verbs do not show action but instead they rename or describe a subject.
Example: We _____ going to go to the market but it got too late. Answer: were

Activity 1: For each given sentence, you must fill in the blank with a linking verb. Sample linking verbs include is, was, were, are, am.

1. We _____ going to the game tonight.
2. You _____ going to buy me an Eid gift.
3. They _____ a good group of students to take on a field trip.
4. He _____ a good student in my class.
5. You _____ talking too much in the class.
6. They _____ going to the cricket match after school.
7. She _____ the one who organized the funfair.
8. I _____ going to take out the trash after dinner.

Activity 2: For each linking verb listed below, write a sentence.

Present Tense

1. I am _____
2. You are_____
3. It is _____
4. He is _____
5. She is _____

Past Tense

6. I was _____
7. You were _____
8. It was _____
9. She was _____

Further practice: Complete the exercise given on page 54 of your textbook.

Worksheet 17

Unit No. 6

Modal Verbs

SLO 3: Recognize and demonstrate function of would, need, dare, in affirmative, negative and interrogative sentences.

A modal verb is a type of auxiliary verb that is used to indicate modality- that is likelihood, ability, permission, and obligation. Modal verbs include can / could, may / might, must, will / would, and shall / should.

Activity 1: Circle the modal verb in each sentence given below.

Example: I (could) find out my test score next week.

Answer: could

1. He can speak Chinese.
2. They might not come to school tomorrow.
3. I can cook really delicious Namkeen gosht.
4. You should stop eating unhealthy food because it is bad for you.
5. May I sit down now?
6. I can play basketball very well.
7. I must go now.
8. Can you help me lift the couch?

Activity 2: Write a sentence with each modal verb given below.

1. would- _____
2. must- _____
3. may- _____
4. should- _____

Activity 3: Write in complete sentences two things you need to do and two things you dare not do.

Need (affirmative)	Dare not (Negative)
Example: I need to finish my homework.	Example: I dare not forget about the homework.

Further practice: Complete the exercise given on page 55 of your textbook.

Worksheet 18

Unit No. 6

Context to Infer Missing Words

SLO 4: Use context to infer missing words.

Context Clues are words in the sentence that help you figure out the meaning of a difficult word that you do not know.

Activity 1: Read the words in the box below. Write each word where it belongs.

potatoes	account	pronounce	author	bicycle	obesity
dangerous	frighten	newspaper	regime	new	

1. My friends said the book would _____ me.
2. Do you ride a _____ to school?
3. The _____ of the book was famous.
4. Don't do anything _____.
5. The _____ grew in the yard.
6. How do you _____ your name?
7. Can you give an _____ of what happened?
8. I love to read the _____ in the morning.
9. Eating too much fat and sugar will lead to _____.
10. Keeping a fitness _____ helps people to live longer healthier lives.

Activity 2: Complete the story below by filling the blanks with words from the following box using contextual clues.

school	fear	cloth	end	shelter	chance	run	morning	soaking

When I started for school in the _____, I realized that there were heavy clouds above and there was a strong _____ of rain. Since I was getting late for _____,

I decided to _____, so that I could reach my school before the rain started. However, I was wrong and as I picked up pace, raindrops fell on me _____me wet. I was not worried about getting wet, but I did _____that my books and all my hard work will be lost, as my school bag was made of _____. I decided to take _____ under a shady tree and waited for the rain to _____.

Further practice: Complete the exercise given on page 52 of your textbook.

Mathematics

Unit 1

SETS

Subject	**Maths**
Grade	**VII**
Unit	**1**
Topic	**SETS**
Page Reference of the textbook	**2-16**

Worksheet 1 Unit 1

Methods of Expressing a Set

SLO: Express a set in descriptive form, set builder form, tabular form.

a. Descriptive form.

Sample Question
If A = {6, 12, 18, 24} write in descriptive form.
Ans: A is a set of first four multiples of 6

Task: Write in descriptive form
1. B = {2, 3, 5, 7, 11}
Ans:

2. C = {1, 3, 5, 7}
Ans:

b. Tabular form

Sample Question:
Q1. Write the set of Natural numbers between 10 and 20 in the tabular form
Ans. {11, 12, 13, 14, 15, 16, 17, 18, 19}

Task:
1. Write the set of odd numbers between 50 and 70 in tabular form.
Ans.

2. Write the set of first ten prime numbers in tabular form.
Ans.

3. C = Set of vowels
Ans.

c. Set Builder form

Sample Question.
Write A = {5, 6, 7, …} in set builder form.

Ans. $A = \{x \mid x \in N, x > 4\}$

Task:

Q1. Write in Set Builder form

4. $B = \{1, 3, 5, 7, 9, 11, 13, 15, 17, 19\}$

Ans.

5. $D = \{6, 12, 18, 24, \ldots\}$

Ans.

Q2. Write the name of the form (tabular, descriptive, set builder) of set in the following.

1	The set of first 5 multiple of 5.	
2	$C = \{2, 4, 6, 8, 10\}$	
3	The set of the names of the days in a week.	
4	$A = \{x \mid x \in N, x > 2\}$	
5	$B = \{a, e, i, o, u\}$	
6	$X = \{ x \mid x$ is odd number & is less than $20\}$	
7	$T = \{$Set of prime numbers less than $20\}$	

Worksheet 2 Unit 1

Operation on Sets

SLO:

- Define union, intersection and difference of two sets.
- Find
  - i) union of two or more sets
  - ii) intersection of two or more sets
  - iii) difference of two sets.

Sample Question.

$A = \{a, b, c, d, e, f\}$

$B = \{e, f, g, h\}$

Find i. $A \cup B$ ii. $A \cap B$ iii. $A \setminus B$

i. $A \cup B = \{a, b, c, d, e, f\} \cup \{e, f, g, h\}$
$= \{a, b, c, d, e, f, g, h\}$

ii. $A \cap B = \{a, b, c, d, e, f\} \cap \{e, f, g, h\}$
$= \{e, f\}$

iii. $A \setminus B = \{a, b, c, d, e, f\} - \{e, f, g, h\}$
$= \{a, b, c, d\}$

/

Task:

1. If $X = \{t, u, v, x, y, z\}$
   $Y = \{t, x\}$

   Find i. $A \cup B$ ii. $A \cap B$ iii. $A \setminus B$

Solution:

i. $A \cup B =$
ii. $A \cap B =$
iii. $A \setminus B =$

2. A = set of first ten natural numbers
   B = set of first three even numbers

   Find i. $A \cup B$ ii. $A \cap B$ iii. $A \setminus B$

Sol:

i. $A \cup B=$
ii. $A \cap B=$
iii. $A \setminus B=$

Worksheet 3 — Unit 1 — Disjoint and Overlapping Sets

SLO: Define and identify disjoint and overlapping sets.

Task:

Find whether the following sets are over lapping sets or disjoint sets.

i. $P = \{20, 30, 40\}$, $Q = \{15, 25, 35\}$ disjoint

ii. $S = \{x, y, z\}$, $T = \{x, s, t, u\}$ _____

iii. $A = \{a, b, c, d, e, f\}$, $B = \{e, f, g, h\}$ _____

iv. $U = \{1, 2, 3, 4, 5, 6\}$, $V = \{7, 8, 9\}$ _____

Disjoint sets: Two sets A and B are disjoint sets, if they do not have any common element i.e. $A \cap B = \varphi$

Overlapping sets: Two sets A and B are called overlapping sets if none of them is a subset of the other and there is at least one element which is common to both the sets.
For example, If $A = \{1,2,3,4,5\}$ and $B = \{4,6,8,10\}$ then set A and set B are overlapping sets because 4 is a common element of both the sets A and B, also $A \not\subseteq B$ and $B \not\subseteq A$.

Worksheet 4 — Unit 1 — Universal Set and Complement of a Set

SLO: Define universal set and complement of a set.

Sample Question.

$U = \{red, blue, green, yellow, pink\}$
$X = \{red, pink, blue\}$
$Y = \{yellow\}$

Find X′ and Y′

Solution:

$X' = U \setminus X$
$= \{red, blue, green, yellow, pink\} - \{red, pink, blue\}$
$= \{green, yellow\}$

And $Y' = U \setminus Y$

Universal set: A set which consists of all the elements under consideration in a as particular problem is called universal set and is denoted by U. For example, if the set of positive integers is under consideration, then the set of all integers will be universal set i.e.
$U = \{10, \pm1, \pm2, \pm3, ...\}$
$W = \{0, 1, 2, 3, ...\}$

Complement of a set: If U is a universal set and A is only subset of U, then the complement of set A is the set of all elements of U which are not in set A, and it is denoted by A′ or A.
In set builder form,
$A' = U \setminus A = \{x | x \in U \text{ and } x \notin A\}$

= {red, blue, green, yellow, pink} – {yellow}
= {red, blue, green, pink}

Task:

1. U = {-1, -2, -3, -4, -5, -6, -7}
   A = {-1, -2, -3}
   B = {-5, -6}
   Then find A′ and B′

Solution:

Worksheet 5 (Unit 1) — Different Properties Involving Union, Intersection, Difference and Complement of Sets

SLO: Verify different properties involving union of sets, intersection of sets, difference of sets and complement of a set, e.g., $A \cap A' = \phi$

Sample question:

Q1. If U = {a, b, c, d, e, f}
A = {a, b, c}
B = {e}

Show i) $A \cup A' = U$
ii) $U' = U \setminus U = \phi$

Solution:

i)

$A' = U \setminus A$

$A' = \{a, b, c, d, e, f\} - \{a, b, c\}$

$A' = \{d, e, f\}$

Now

$A \cup A' = \{a, b, c\} \cup \{d, e, f\}$

$A \cup A' = \{a, b, c, d, e, f\} = U$

ii)

$U' = U \setminus U$

$U' = \{a, b, c, d, e, f\} - \{a, b, c, d, e, f\}$ U'

$= \{\ \}$ or ϕ

Task:

If U = {1, 2, 3, 4, 5, 6, … , 20)
X = {1, 3, 5, 7, … , 19}
Y = {2, 4, 6, 8, … , 20}

1. Find X′

Ans.

2. Find Y′
Ans.

3. Show X ∪ X′ = U
Ans.

Q4. Find Y ∪ Y′
Ans:

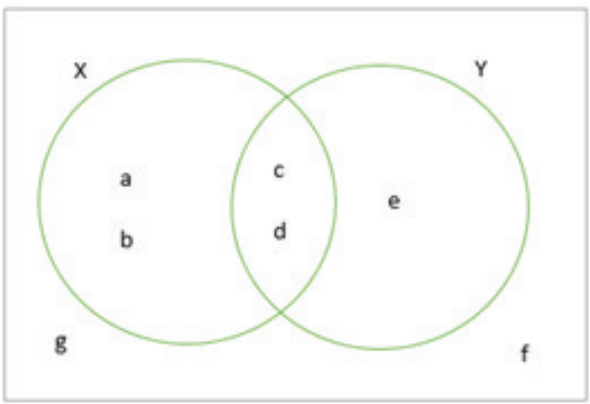
Q5. (X′)′ = X
Ans:

Worksheet 6
Unit 1

Venn Diagrams of Union, Intersection, Difference and Complements of Two Sets

SLO: Represents sets through Venn diagram.

Sample Question
Draw a Venn diagram for
U = {a, b, c, d, e, f, g}
X = {a, b, c, d}
Y = {c, d, e)



Draw a Venn Diagram for
U = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10}
A = {2, 4, 6, 8}
B = {1, 3, 5}
Ans.

Unit 2

RATIONAL NUMBERS

Subject	**Mathematics**
Grade	**VII**
Unit	**2**
Topic	**Rational Numbers**
Page Reference of the textbook	**(20-43)**

Worksheet 7 Unit 2

Definition of Rational Numbers

SLO:

- Define a rational number as a number that can be expressed in the form p/q, where p and q are integers and q > 0
- Representation of rational numbers on a number line.

Task:
Set of integers
Z = {… -3, -2, -1, 0, 1, 2, 3…}
Set of rational numbers
Q = $\{\frac{P}{q} \mid q \neq 0\}$

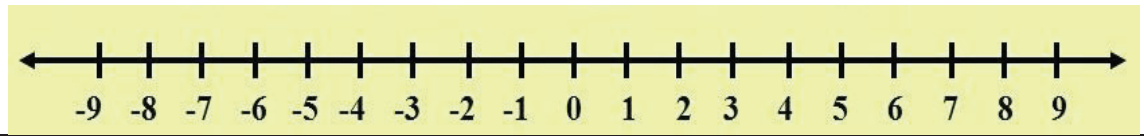
Definition of Rational Numbers:

The set of all numbers of the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$, is called the set of rational numbers.

For example, $9, 0, \frac{-3}{7}, \frac{-6}{4}, 2\frac{1}{5}$ are rational numbers.

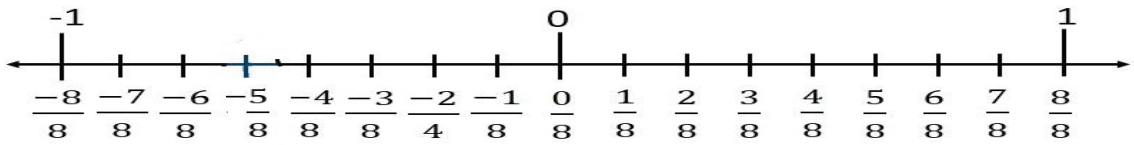
You have two number lines

1



Negative Integers Positive Integers

2



Negative Rational Numbers Positive Rational Numbers

i. Compare the set of rational numbers represented on the number line with set of integers represented on the number line and write the integers which are in the set of rational numbers.

Ans: ( )

ii. Write the integers which are not included in the set of rational numbers represented by the number line.

Ans: ( ).

iii. What did you conclude?

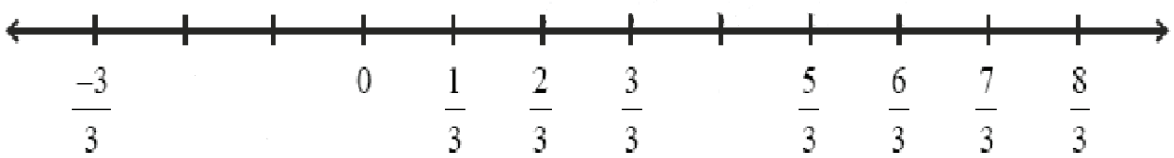
Ans.

Worksheet 8 Unit 2

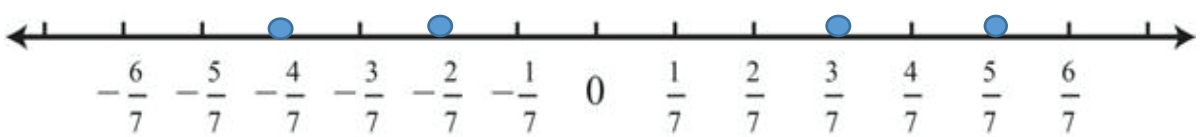
Representation of Rational Numbers on Number Line

SLO: Representation of rational numbers on number line.

1. Graph $\{-\frac{2}{3}, -\frac{1}{3}, \frac{4}{3}\}$ on the number line with coloured pencil.

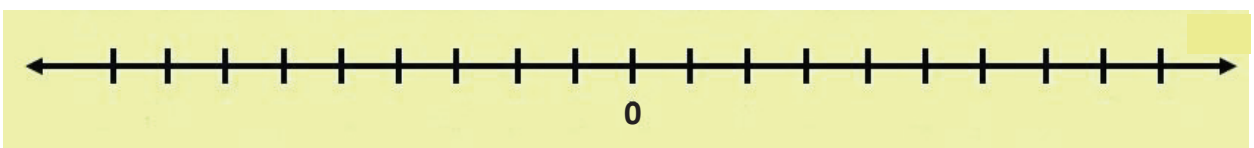


2. Name the coordinates of the point graphed on the number line.

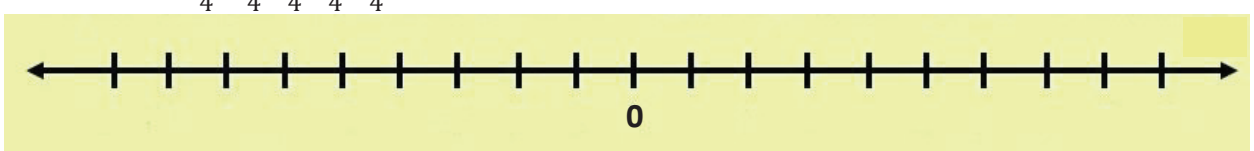


Ans: { _____, _____, _____, _____ }.

3. Show integers less than -7 or greater than or equal to 5.



4. Show $\{-\frac{7}{4}, -\frac{5}{4}, \frac{1}{4}, \frac{3}{4}, \frac{7}{4}\}$



Worksheet 9
Unit 2

Operation on Rational Number

1	$\frac{3}{5}+\frac{7}{5}=$	$\frac{10}{5}$
2	$\frac{1}{10}+(-\frac{7}{10})=$	
3	$-11+(-2)=$	
4	$-\frac{7}{2}+(-\frac{4}{2})=$	
5	$-\frac{2}{12}+\frac{11}{12}=$	

6	$21+(-7)=$	
7	$2\frac{5}{2}+(-2\frac{7}{2})$	
8	$-9+(-11)=$	
9	$\frac{7}{16}+(-\frac{3}{16})=$	
10	$-\frac{8}{12}+\frac{13}{12}=$	

Sample question:

Find sum of $\frac{7}{16}+[-\frac{3}{8}]$

Step 1:

(We replace $-\frac{3}{8}$ by $-\frac{6}{16}$ by multiplying and dividing $-\frac{3}{8}$ with 2 to make the denominators equal.)

Step 2:

$=+[|\frac{7}{16}|+|-\frac{6}{16}|]$

Subtract the absolute value

Step 3:

$=+[\frac{7}{16}-\frac{6}{16}]$

Since the number with the greater absolute value is $\frac{7}{16}$ the sum is positive.

$=\frac{1}{16}$

Task:

Solve

1. $\frac{5}{8}+\frac{1}{4}$

Solution:

2. $2\frac{1}{4}+2$

Solution:

Worksheet 10
Unit 2

Subtraction of Two Rational Numbers

SLO: Subtract a rational number from another

Sample question:
Evaluate
$a - b$ if $a = 2\frac{1}{4}$ and $b = 1\frac{1}{2}$

Replace a with $2\frac{1}{4}$ and b with $1\frac{1}{2}$

$a - b = 2\frac{1}{4} - 1\frac{1}{2}$

$= \frac{9}{4} - \frac{3}{2}$ Write the mixed numbers as improper fraction

$= \frac{9}{4} - \frac{6}{4}$ Express $\frac{3}{2}$ as $\frac{6}{4}$ by multiplying and dividing $\frac{3}{2}$ with 2

$= \frac{3}{4}$ Subtract the numerators

Task:
Solve:

1. $\frac{20}{12} - \frac{8}{12}$

Solution:

2. $1\frac{3}{8} - 1\frac{5}{8}$

Solution:

Worksheet 11 Unit 2

Additive Inverse Property

SLO: Find additive inverse of a rational number

Write additive inverse of the following

i.	-5	
ii.	$\frac{7}{2}$	
iii.	$3\frac{3}{7}$	
iv.	$1\frac{1}{5}$	

Word problems:

1. From a rope of 11m long, two pieces of lengths $\frac{13}{5}$ m and $\frac{33}{10}$ m are cut off. What is the length of the remaining rope?

Sol:

2. The sum of two rational numbers is – 2. If one number is $-\frac{14}{5}$, find the other

Sol:

3. The sum of two rational number is $-\frac{1}{2}$. If one of the numbers is $\frac{5}{6}$ find the other.

Sol:

4. What number should be added to $-\frac{5}{8}$ so as to get $-\frac{3}{2}$?

Sol:

5. Solve $\frac{7}{8}-\frac{3}{2}=$

Sol:

Is the difference of the two numbers above a rational number? Justify your answer.

Ans:

6. What is the negative of a rational number?

Ans:

Worksheet 12
Unit 2

Multiplication of Two or More Than Two Rational Numbers

SLO: Multiply two or more rational numbers.

Sample question:
Find $\frac{6}{7} \times \frac{1}{8}$.
Write the product in simplest form.

Sol:

$\frac{6}{7} \times \frac{1}{8} = \frac{6}{7} \times \frac{1}{8}$ Divide 6 and 8 by 2 (HCF of 6 and 8)

$= \frac{3 \times 1}{7 \times 4}$ Multiply the numerators and denominators

$= \frac{3}{28}$ Simplified

Task:
Multiply

1. $(\frac{3}{5})\,(-\frac{7}{5})$

2. $(-\frac{9}{4})(\frac{7}{6})$

Worksheet 13 Unit 2

Division of a Rational Number by Non-Zero Rational Number

SLO: Divide a rational number by non-zero rational number.

Sample question:
Find $\left[-\frac{1}{2}\right] \div \frac{3}{16}$.

Write the quotient in simplest form.

Solution: $\left[-\frac{1}{2}\right] \div \frac{3}{16} = -\frac{1}{2} \times \frac{16}{3}$ Multiply by the multiplicative inverse of $\frac{3}{16}$ which is $\frac{16}{3}$

$= -\frac{1}{2} \times \frac{16}{3}$ Divide 2 and 16 by HCF i.e 2

$= -\frac{8}{3}$ Simplified

Task:
Solve the following:

1. $\left(-\frac{2}{5}\right) \div \left(-\frac{1}{8}\right)$

Solution:

2. $-\frac{4}{3} \div \left(-\frac{4}{3}\right)$

Solution:

3. $\left(-\frac{1}{6}\right) \div \frac{3}{18}$

Solution:

4. $(-9) \div \left(\frac{18}{3}\right)$

Solution:

Worksheet 14 Unit 2 — Reciprocal of a Rational Number

SLO: Find reciprocal of a rational number.

Task:
Write the reciprocal of the following.

1. $\frac{5}{3}$ is $\boxed{\frac{3}{5}}$
2. $\frac{7}{11}$ is $\boxed{}$
3. $-\frac{9}{13}$ is $\boxed{}$
4. $\frac{8}{16}$ is $\boxed{}$

Worksheet 15 Unit 2 — Multiplicative Inverse of a Rational Number

SLO: Find multiplicative inverse of a rational number

Task: Write multiplicative inverse of the following

1. -5 is $\boxed{-\frac{1}{5}}$
2. $\frac{7}{6}$ is $\boxed{}$
3. $\frac{105}{200}$ is $\boxed{}$
4. $-5\frac{1}{10}$ is $\boxed{}$
5. $2\frac{1}{2}$ is $\boxed{}$

Worksheet 16
Unit 2

Verification of Commutative Property of Rational Numbers

SLO: Verify commutative property of rational numbers with respect to addition and multiplication.
Sample question:

$\frac{5}{8}+\frac{1}{4}=\frac{1}{4}+\frac{5}{8}$

L.H.S

$\frac{5}{8}+\frac{1}{4}$ (We express $\frac{1}{4}$ as $\frac{2}{8}$ by multiplying and dividing $\frac{1}{4}$ with 2 to make the denominators equal.)

$=\frac{5}{8}+\frac{2}{8}$

$=\frac{7}{8}$

R.H.S

$\frac{1}{4}+\frac{5}{8}$ (We express $\frac{1}{4}$ as $\frac{2}{8}$ by multiplying and dividing $\frac{1}{4}$ with 2 to make the denominators equal.)

$=\frac{2}{8}+\frac{5}{8}$

$=\frac{7}{8}$

Therefore $\frac{5}{8}+\frac{1}{4}=\frac{1}{4}+\frac{5}{8}$

Task:
Verify:

1. $\frac{3}{5}+\frac{7}{10}=\frac{7}{10}+\frac{3}{5}$

Solution:

2. $\frac{6}{8}+\frac{8}{5}=\frac{8}{5}+\frac{6}{8}$

Solution:

3. $\frac{2}{5}\times-\frac{3}{4}=-\frac{3}{4}\times\frac{2}{5}$

Solution:

4. $-\frac{7}{8}\times\frac{9}{2}=\frac{9}{2}\times-\frac{7}{8}$

Solution:

Worksheet 17
Unit 2

Verification of Associative Property of Rational Numbers

SLO: Verify associative property of rational numbers with respect to addition and multiplication.

Task:
Verify:

1. $\frac{3}{4}+\left[\frac{1}{3}+\frac{4}{5}\right]=\left[\frac{3}{4}+\frac{1}{3}\right]+\frac{4}{5}$

Solution:

2. $-\frac{2}{5}+\left[\frac{8}{4}+\frac{1}{5}\right]=\left[-\frac{2}{5}+\frac{8}{4}\right]+\frac{1}{5}$

Solution:

3. $\frac{1}{2}\times\left[\frac{4}{5}\times\frac{2}{7}\right]=\left[\frac{1}{2}\times\frac{4}{5}\right]\times\frac{2}{7}$

Solution:

4. $\frac{1}{5} \times \left[\frac{2}{3} \times \frac{5}{6}\right] = \left[\frac{1}{5} \times \frac{2}{3}\right] \times \frac{5}{6}$

Solution:

Worksheet 18
Unit 2

Verification of Distributive Property of Rational Numbers

Task:
Verify:

1. $\frac{2}{3} \times \left[\frac{6}{9} + \frac{1}{18}\right] = \frac{2}{3} \times \frac{6}{9} + \frac{2}{3} \times \frac{1}{18}$

Solution:

2. $\frac{1}{2} \times \left[\frac{1}{8} - \frac{1}{4}\right] = \frac{1}{2} \times \frac{1}{8} - \frac{1}{2} \times \frac{1}{4}$

Solution:

3. **Match the following**.

$\frac{1}{4}+5=5+\frac{1}{4}$	Commutative property with respect to multiplication.
$\frac{3}{6}\times\frac{4}{7}=\frac{4}{7}\times\frac{3}{6}$	Distributive property
$-\frac{2}{5}+\left[\frac{3}{4}+\frac{1}{5}\right]=\left[-\frac{2}{5}+\frac{3}{4}\right]+\frac{1}{5}$	Associative property
$\frac{3}{8}\times\left[\frac{1}{2}+\frac{3}{5}\right]=\frac{3}{8}\times\frac{1}{2}+\frac{3}{8}\times\frac{3}{5}$	Commutative property with respect to addition

Worksheet 19
Unit 2

Comparison of Two Rational Numbers

SLO: Compare two rational numbers
Sample question:
Compare the following.
$\frac{8}{5}$ and $\frac{5}{6}$.

Solution:

Since LCM of 5 and 6 is 30, therefore we can write

$\frac{8}{5}$ and $\frac{5}{6}$ as $\frac{8\times6}{5\times6}$ and $\frac{5\times5}{6\times5}$

$\frac{48}{30}$ and $\frac{25}{30}$

Since $48 > 25$

$\frac{48}{30} > \frac{25}{30}$

Or $\frac{8}{5} > \frac{5}{6}$

Task: Fill in the blanks with $>$ or $<$

i	$\frac{3}{5}$ ☐ $\frac{5}{6}$	v	$-\frac{5}{2}$ ☐ $\frac{5}{3}$
ii	$-\frac{4}{9}$ ☐ $-\frac{5}{6}$	vi	$\frac{7}{3}$ ☐ $\frac{21}{5}$
iii	$\frac{5}{6}$ ☐ $-\frac{10}{12}$	vii	$\frac{7}{6}$ ☐ $\frac{15}{8}$
iv	$\frac{11}{7}$ ☐ $-\frac{5}{3}$	viii	$\frac{8}{15}$ ☐ $\frac{2}{5}$

Worksheet 20
Unit 2

Arrangement of Rational Numbers in Ascending or Descending Order

SLO: Arrange rational numbers in ascending or descending order.

Sample question:

Arrange the following rational numbers in ascending order.

$\frac{3}{5}, \frac{2}{15}, -3\frac{1}{2}, -2\frac{2}{7}, 7$

Solution:

$\frac{3}{5}, \frac{2}{15}, -3\frac{1}{2}, -2\frac{7}{10}, 7$

$= \frac{3}{5}, \frac{2}{15}, -\frac{7}{2}, -\frac{27}{10}, 7$

$LCM\ of\ 5, 15, 2\ and\ 10\ is\ 30$

$\frac{3\times6}{5\times6}, \frac{2\times2}{15\times2}, -\frac{7\times15}{2\times15}, -\frac{27\times3}{10\times3}, \frac{7\times30}{1\times30}$

$= \frac{18}{30}, \frac{4}{30}, -\frac{105}{30}, -\frac{81}{30}, \frac{210}{30}$

Now the denominators are the same so we look at the numerators
-105 < -81 < 4 < 18 < 210

Writing the rational numbers in ascending order

$= -\frac{105}{30}, -\frac{81}{30}, \frac{4}{30}, \frac{18}{30}, \frac{210}{30}, 7$

Therefore

$= -\frac{7}{2}, -\frac{27}{10}, \frac{2}{15}, \frac{3}{5}, 7$ is in ascending order.

Task:

1. Arrange $3\frac{1}{8}, 3\frac{1}{24}, -5\frac{1}{3}, -5\frac{7}{12}$ in ascending order.

Solution:

2. Arrange $1\frac{1}{3}, \frac{3}{5}, -5\frac{7}{6}, 4\frac{2}{5}$ in descending order

Solution: _____

Unit 3

DECIMAL

Subject:	**Mathematics**
Grade:	**VII**
Unit.	**3**
Topic:	**Decimal**
Page Reference of the textbook:	**(44-56)**

Worksheet 21 Unit 3 — Expressing any Rational Number as Decimal

SLO: • Express a given rational number as a decimal and indicate wheter it is terminating or recurring.
• Covert decimal and rational numbers

Complete the charts:

Fraction	No. of zeros in denominator	Decimals
$\frac{2}{10}$	1	0.2
$\frac{13}{10}$		
$\frac{715}{100}$		
$\frac{473}{1000}$		

Decimal	Rational Numbers
0.5	
0.7	
0.9	
0.11	

Worksheet 22 Unit 3 — Terminating and Non-Terminating Decimals

SLO: Define terminating decimals as decimals having a finite numbers of digits after the decimal point

Sample Question.
Write $\frac{3}{4}$ in decimals
Solution:

Definition: Terminating decimals are decimals having a finite number of digits after the,. decimals. e.g. 7.5, the last digit is 5. Otherwise the decimals are called non-terminating. Any fraction where b±0, can be written as a decimal by dividing the numerator by the denominator. The division ends, or terminates, when the remainder is zero, the decimal is a terminating decimal.

```
      0.7 5
  4 ) 3.0 0        (We can add zeros to the end of a decimal)
    - 2 8
        2 0
      - 2 0
        00  ──────→ Division ends when the remainder is '0'
```

0.75 is a terminating decimal.

1. Write $\frac{1}{3}$ in decimals.

$$
\begin{array}{r|l}
3 & 0.3\,3\,3 \\
\hline
 & 1.0\,0\,0 \\
 & -\ 9 \\
 & \hline
 & 1\,0 \\
 & -\ 9 \\
 & \hline
 & 1\,0 \\
 & -\ 9 \\
 & \hline
 & 1
\end{array}
$$

(We can add zeros to the end of a decimal)

As the division goes on without getting zero as remainder, 0.333… is a non-terminating decimal.

Task:
Fill in the blanks with terminating, non-terminating decimals.

1	0.375	Terminating decimal
2	2.285	
3	0.7142…	
4	0.13333…	
5	0.25	
6	0.151515…	
7	2.285…	Non-terminating
8	6.85555…	
9	0.75	
10	19.17247…	

Worksheet 23 Unit 3

Recurring Decimals

SLO:

i. Define recurring decimals as non-terminating decimals in which a single digit or a block of digits repeats itself infinite number of times after the decimal point (e.g. $\frac{2}{7} = 0.285714285714285714\ldots$)

ii. Express a given rational number as a decimal and indicate whether it is terminating or recurring.

Sample questions:

Convert the following rational numbers into decimals and separate recurring and non-recurring decimals.

1. $\frac{69}{17}$

Solution:

$$
\begin{array}{r|l}
 & 4.058\ldots \\
\hline
17 & 69.00 \\
 & -68 \\
 & \quad 1.00 \\
 & \quad -85 \\
 & \quad\ 150 \\
 & \quad -136 \\
 & \quad\ \ 14
\end{array}
$$

So $\frac{69}{17} = 4.058\ldots\ldots$

If we continue to divide then we get $4.\overline{0588235294117647}$ and we notice that a block of digits repeats itself.

Therefore, this is a non-terminating recurring decimal.

Similarly $\frac{5}{3}$

$$
\begin{array}{r|l}
 & 1.666 \\
\hline
3 & 5.000 \\
 & -3 \\
 & \quad 20 \\
 & \quad -18 \\
 & \quad\ 20 \\
 & \quad -18 \\
 & \quad\ 20 \\
 & \quad\ 18 \\
 & \quad\ 2
\end{array}
$$

→ (the number 6 repeats)

The remainder after each step is 2

So $\frac{5}{3} = 1.6666\ldots$

This decimal is a repeating or recurring decimal.

Note: we can use bar notation to indicate that 6 repeats forever.

Thus $1.6666\ldots = 1.\bar{6}$

Task:

Convert the following rational numbers into decimals and indicate whether they recurring or non-recurring decimals.

1. $\frac{21}{6}$
Solution:

2. $\frac{25}{10}$
Solution:

3. $\frac{6}{20}$
Solution:

4. Complete the chart

The number of digits in the repeating cycle is called the Period

Decimal	Bar Notation	Period
0.131313…	$0.\overline{13}$	2
2.6666…		
5.444…		
5.72727…		
2.3333…		

Worksheet 24
Unit 3

Find Terminating and Non-Terminating Decimals Without a Long Division

SLO: Use the following rule to find whether a given number is terminating or not.
Rule: If the denominator of a rational number in the standard form has no prime factor other then 2, 5 or 2 and 5, then and only then the rational number is a terminating decimal.

Sample question:

1. Solve $\frac{45}{25}$ without long division.

Solution:
$\frac{45}{25} = \frac{9\times5}{5\times5} = \frac{9}{5}$

Hint: After simplification if only 2, 5 or 2 and 5 are left in denominator the decimal will be terminating.

As in the denominator we have only 5 (after cancellation), therefore it is a terminating decimal.

2. Solve $\frac{8}{26}$ without long division

$\frac{8}{26} = \frac{4\times2}{13\times2} = \frac{4}{13}$

As in the denominator we have 13. The only prime factor of 13 is 13.
Therefore it is a non-terminating decimal.

Task:
Which of the following are terminating and non-terminating decimal (without using division method)

$\frac{27}{18}$	$\frac{16}{28}$	$\frac{8}{20}$

$\frac{48}{54}$	$\frac{7}{35}$

Worksheet 25
Unit 3

Conversion of Decimal to Rational Number

Match the column:

Column A	Column B
0.48	$\frac{72}{100}$
0.88…	$\frac{5}{3}$
0.33…	$\frac{12}{25}$
0.72	$\frac{8}{9}$
1.66…	$\frac{9}{27}$

Worksheet 26
Unit 3

Rounding Off

SLO: Get an approximate value of a number, called rounding off, to a desired number of decimal places.

Sample question:
Round off 72.86 to nearest tenth.

i. Locate and underline the digit of decimal place which needs to be rounded off i.e 72.<u>8</u>6.
ii. Consider the digit to the right of the under lined digit.
iii. If this is 5 or more than 5 i.e. 6, 7, 8, or 9 then increase the underlined digit by '1' i.e. 72.86 can be rounded up to 72.9
iv. If this digit is less than 5 i.e. 4, 3, 2, 1 or 0. Then keep the underlined digit unchanged.

Task:
Complete the table

Q. No	Decimal No	Rounded to the Nearest Tenth	Rounded to the Nearest Hundred	Rounded to the Nearest Thousand
1	8.6347	8.6	8.63	8.635
2	0.2727			
3	0.3000			
4	6.7932			
5	19.9912			
6	4.62			
7	81.723			
8	51.103			
9	3.1979			
10	7.0385			

Unit 4

EXPONENTS

Grade	**VII**
Unit	**4**
Topic	**Exponents**
Page Reference of the textbook	**57-76**

Worksheet 27 (Unit 4) Exponents/Indices

SLO: Identify Base, Exponent and Value
Use rational numbers to deduce laws of exponents

Task:

1. Write the following in Exponent form.

i. $2 \times 2 \times 2 \times 2 \times 2 = 2^5$

ii. $-5 \times -5 \times -7 \times -5 \times -7 =$ _____

iii. $a \times b \times c \times a \times b \times c \times a \times b =$ _____

iv. $x \times x \times x \times y \times y \times z \times z =$ _____

v. $(-9) \times (-2) \times (-9) \times (-2) =$ _____

2. Write exponent and base in the following.

1	$(-x)^3$	Exponent = 3	Base = –x
2	$(-4)^8$	Exponent =	Base =
3	$(a)^m$	Exponent =	Base =
4	$(2/7)^6$	Exponent =	Base =
5	$(t)^{-4}$	Exponent =	Base =

Task

- **Product Law:**
  when bases are same but exponents are different:
  $a^m \times a^n = a^{m+n}$,
  when bases are different but exponents are same:

$$a^n \times b^n = ab^{(n)}$$

- **Quotient Law:**
  when bases are same but exponents are different:
  $a^m \div a^n = a^{m-n}$
  when bases are different but exponent are same:

$$a^n \div b^n = (\frac{a}{b})^n$$

- **Power Law:** $(a^m)^n = a^{mn}$
- For zero exponent $a^0 = 1$
- For exponent as negative integers $a^{-m} = \frac{1}{a^m}$

Sample Questions:

1. $y^7 \times y^3 \times y^2$

Ans: $y^7 \times y^3 \times y^2 = y^{7+3+2} = y^{12}$

2. $\frac{(\frac{3}{7})^5}{(\frac{3}{7})2} = (\frac{3}{7})^{5-2} = (\frac{3}{7})^3 = 3^3/7^3 = \frac{3\times3\times3}{7\times7\times7} = \frac{27}{343}$

3. $(6)^{-3}$

Ans: $(6)^{-3} = \frac{1}{6^3} = \frac{1}{6\times6\times6} = \frac{1}{216}$

4. $((-3)^2)^2$

Ans: $= (-3)^{2x2}$
$= (-3)^4$
$= -3 \times -3 \times -3 \times -3 = 81$

Task:

1. Match the column

Column 1	Column 2
$(xy)^{-m}$	1
$a^m \times a^n$	$1/x^m y^n$
$(10)^0$	a^{m-n}
$(xy)^m$	a^{m+n}
a^m/a^n	$x^m y^m$

2. Fill in the given boxes with the correct answers for the following:

i. $xy \times xy \times xy =$ x^3y^3

ii. $\frac{a7}{a^3} \times \frac{a^2}{a} =$ ☐

iii. $\left(-\frac{4}{3}\right)^0 =$ ☐

iv. $\frac{b^m}{b^n} \times \frac{b^{-2m}}{b^{-2n}} =$ ☐

3. Write the law of exponent (power of power rule, power of quotient rule, power of product, negative exponent) in the blanks.

i. $((2^2)^3)^2 = (2^6)^2$ Power of Power rule

ii. $a^m \times a^n = a^{m+n}$ _____

iii. $\frac{5^3}{5^2} = 5^{3-2} = 5$ _____

iv. $3^{-2} = \frac{1}{3^2}$ _____

v. $x^0 = 1$ _____

4. Evaluate using the laws of exponent|

i. $(-\frac{8}{3})^4$

ii. $(-7)^2 \times (-7)^3 \times (-7)^{-1}$

iii. $\frac{x^{-3}y^{-2}}{x^2y^{-3}}$

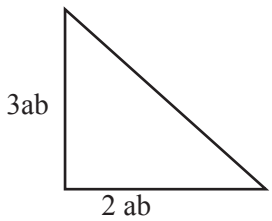
iv. $((\frac{3}{5})^2)^3$

v. $(-3)^5 \div \frac{1}{-3}$

Worksheet 28
Unit 4

Word Problems with Exponents/Indices

Sample Word problem:
In the given right angle triangle the base & height are given. Find the area of the triangle.



Solution:
Here in above figure
Base = 2ab
Height = 3ab
Area of right angled triangle = $\frac{1}{2}$ (base × height)
$=\frac{1}{2} \times 2ab \times 3ab$
$=3\ a^2b^2$

Task:
1. Find the area of right angled triangle when base is 2ab and height is 4ab.

Solution:

2. Find base of a right angled triangle when area is $10a^2b^2$ and height is 5ab.

Solution:

3. Find height of right angled triangle when its area is $20x^2y^2$ and base is 4xy.

Solution:

قومی ترانہ

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کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
رہبر ترقی و کمال
ترجمان ماضی شان حال
جان استقبال!
سایۂ خدائے ذوالجلال

KHYBER PAKHTUNKHWA ELEMENTARY AND SECONDARY EDUCATION DEPARTMENT



KPESED
معیاری تعلیم... سب کیلئے!
Khyber Pakhtunkhwa Elementary & Secondary Education Department

WORKSHEETS

GRADE 8

Khyber Pakhtunkhwa Elementary &
Secondary Education Department

پیش لفظ

محکمہ ابتدائی و ثانوی تعلیم خیبر پختونخوا نے موجودہ حالات کو مد نظر رکھتے ہوئے نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کو عملی کتاب (ورک بک) مرتب کرنے کا کام تفویض کیا ہے ۔ یہ عملی کتاب نصاب کے حاصلاتِ تعلم اور درسی کتب کی روشنی میں طلبہ کے ہوم ورک کی ضرورت کو مد نظر رکھ کر مرتب کی گئی ہے ۔ اس عملی کتاب میں ایسی سرگرمیاں شامل کی گئی ہیں جن سے طلبہ نہ صرف بامعنی مصروف ہوں گے بلکہ اپنی سابقہ معلومات اور خود تشخیصی علم کے ذریعے مواد و تصوّرات کو سیکھنے کے ساتھ ساتھ درسی کتاب میں دیے گئے سوالات کے جواب دینے کے قابل بھی ہوں گے۔

عالمی وبا COVID-19 کی وجہ سے طلبہ کا تعلیمی سلسلہ متاثر ہورہاہے ۔موجودہ حالات میں طلبہ کا قیمتی وقت بچانےاور دورانِ تعطیلات ان کا تعلیمی سلسلہ جاری رکھنے کے لیے یہ عملی کتاب ترتیب دی گئی ہے۔ یہ عملی کتاب نہ صرف طلبہ کی تعلیمی سرگرمیوں میں رہنمائی کرے گی بلکہ ان کی خود تشخیصی اور تخلیقی صلاحیتوں کو بھی اجاگر کرے گی۔

میں محکمہ ابتدائی وثانوی تعلیم اور نظامتِ نصاب و تعلیمِ اساتذہ خیبر پختونخوا کے ماہرینِ تعلیم کو خراج تحسین پیش کرنے کے ساتھ ساتھ خیبر پختونخوا ایجوکیشن سیکٹر پروگرام اور یونیسیف کا خصوصی طور پر شکر گزار ہوں جن کے تعاون سے اس عملی کتاب کو عملی جامہ پہنایا گیا ۔

گوہر علی خان
ڈائریکٹر نصاب و تعلیمِ اساتذہ خیبر پختونخوا،
ایبٹ آباد

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ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور تعلیمی سرگرمیوں کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کے توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو مکمل کرنے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دیے گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد، استاد یا پھرنیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہنمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اوراسکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1.	انگلش	انعام اللہ خٹک	0333-9746976
2.	ریاضی	عباس خان	0345-9419923
3.	جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4.	اُردو	تاج ولی خان	0313-9848959

General Science

Worksheet 1

Unit No. 1

Human Organ System - Nervous System

SLO: Describe the structure of the nervous system

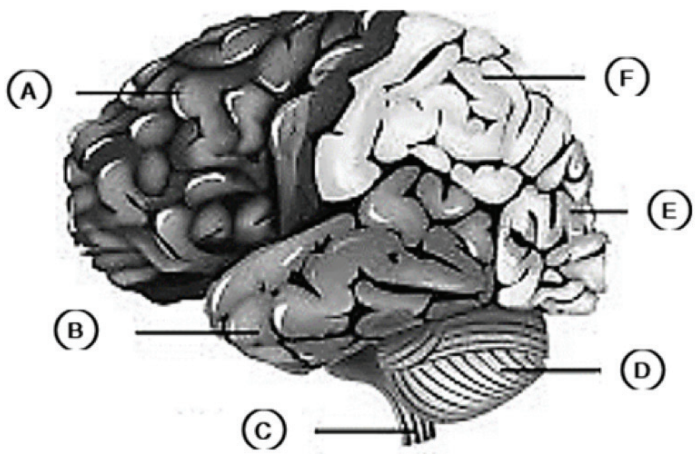
Activity 1:	Read page 3 of the G.Sc. textbook and fill in the blanks

The Central Nervous system consists of _____ and _____.

The Central Nervous system acts as a _____ _____ for the whole nervous system.

The brain can be divided into _____main parts.

Activity 2:	Observe the fig 1.4 page 4 of the G.Sc. textbook and label the diagram of human brain given below.



A._____

B._____

C._____

D._____

E._____

F._____

Reference G. Science Textbook Grade 8 Page. 2-5

Worksheet 2

Unit No. 1

Nervous System

SLO: Describe the structure and functions of the nervous system

Activity 1: Read the topic "Human Nervous system" from page 2-5 in the G.Sc. textbook then give suitable answers of following questions.

a. Define human Nervous system?

---

b. Write the functions of following organs in the Nervous System.

S. No	Organ	Functions
1.	Cerebrum	
2.	Thalamus	
3.	Hypothalamus	
4.	Mid brain	
5.	Cerebellum	
6.	Pons	
7.	Medulla oblongata	
8.	Spinal cords	

Reference G. Science Textbook Grade 8 Page. 2-3

Worksheet 3

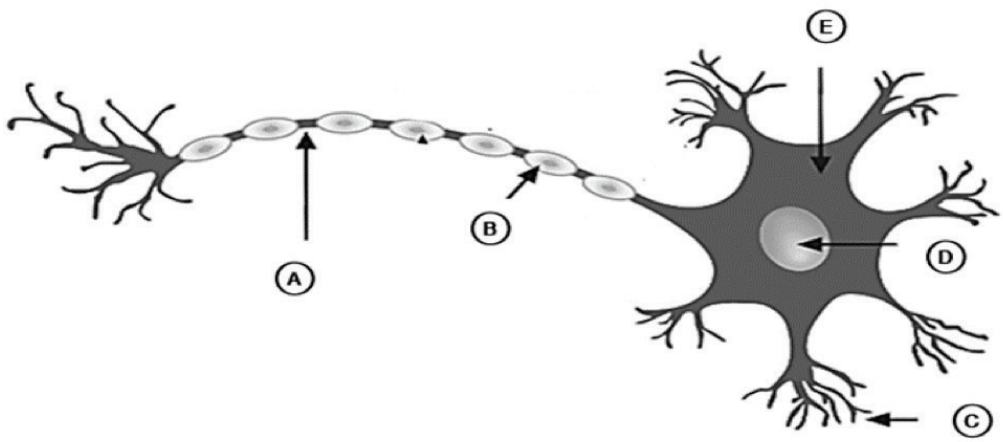
Unit No. 1

Nervous System -Neuron

SLO: Describe the structure and functions of a Neuron

Activity 1: Observe the fig 1.5 on page 7 of the G.Sc. textbook and label the diagram given below with the given words.

Nucleus, cell body, dendrites, Axon, Myelin sheath



Activity 2: Read the description of Neuron structure on page 7 of the G.Sc. textbook and fill in the blanks.

A neuron consists of _____parts _____ _____ and _____.

The cell body contains a _____ and _____.

The thread like projects on the cell body are called _____.

The _____ is a long projection and it _____ _____ away from the cell body.

Neuron _____, messages in the form of _____ _____ called nerve impulses.

A single nerve is a _____ of many _____.

According to the function of neurons they are of three types, name them

1. _____ 2._____ 3. _____

Reference G. Science Textbook Grade 8 Page. 07

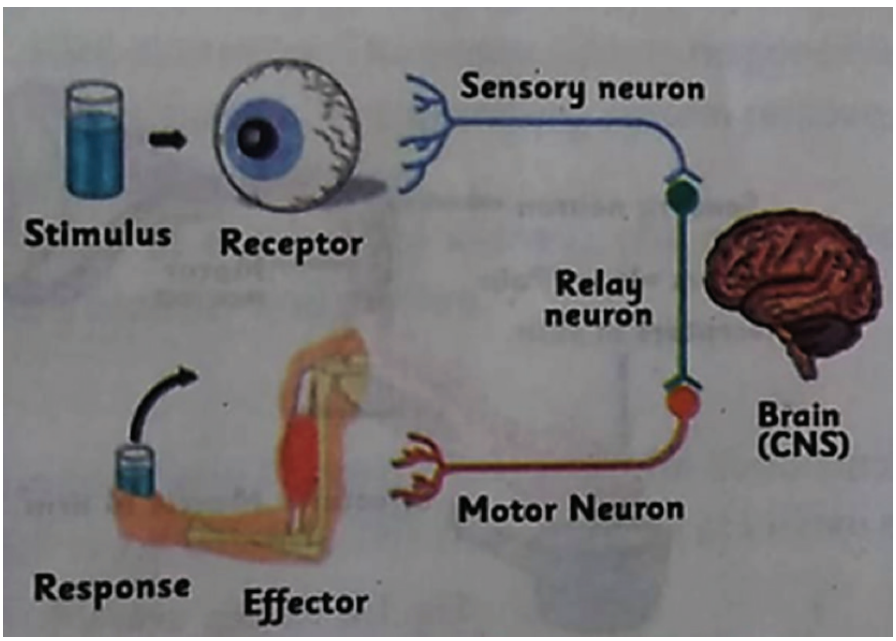
Worksheet 4

Unit No. 1

Working of Nervous System

SLO: Explain the working of the nervous system

Activity 1: Read the working of the Nervous system page 8-9 of the G.Sc. textbook and write the steps of working of nervous systems with the help of the given diagram.



1. _____
2. _____
3. _____
4. _____

Activity 2: Read page 8 of the G.Sc. textbook and fill in the blanks

Nervous system coordinates all _____ _____. It detects changes in the environment and produces _____ to the _____.

Reference G. Science Textbook Grade 8 Page. 5-9

Worksheet 5

Unit No. 1

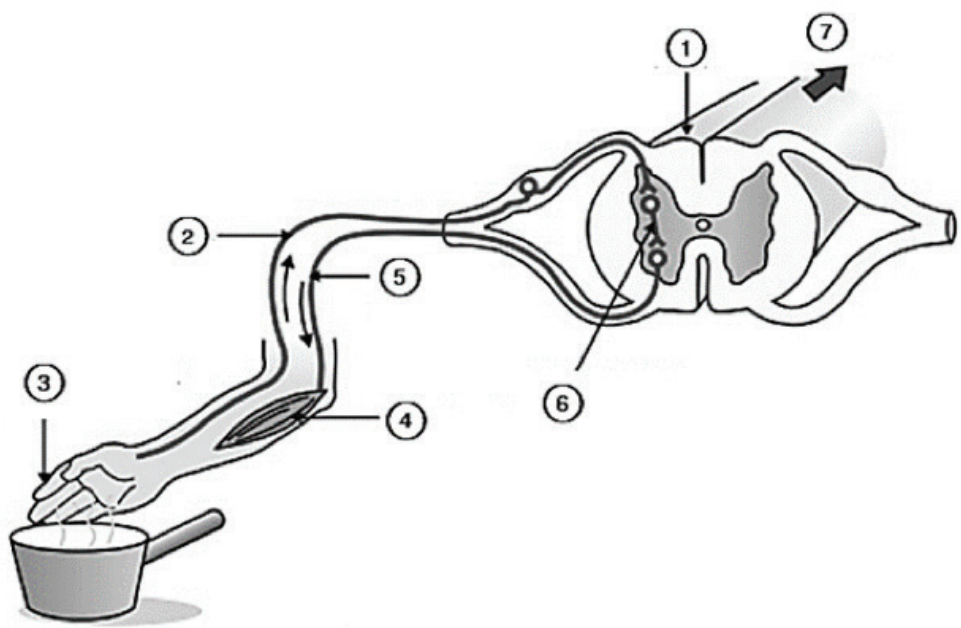
Reflex Action

SLO: Explain reflex action with an example.

Activity 1:	Define reflex action and give One Example of reflex action

---

Activity 2:	Observe fig 1.8 on page 9 of the G.Sc. textbook and label the given diagram.



1. _____ 5. _____

2. _____ 6. _____

3. _____ 7. _____

4. _____

Reference G. Science Textbook Grade 8 Page. 9

Worksheet 6

Unit No. 1

Reflex Action

SLO: Differentiate between voluntary and involuntary actions experienced by you

Activity 1: Define voluntary actions with examples?

b. Define involuntary or autonomic actions with examples?

c. Write the difference between voluntary and involuntary actions with examples

Voluntary action	Involuntary action
Examples	Examples

Reference G. Science Textbook Grade 8 Page. 9 -10

Worksheet 7

Unit No. 1

Human Excretory System

SLO: Define excretion. Draw and label human excretory system.

Activity 1: What is meant by excretion?

_____

_____

_____

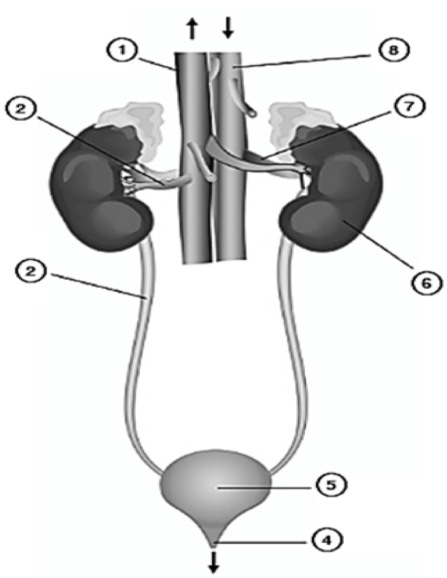
b. Define human execratory system?

_____

_____

_____

Activity 2: Observe fig 1.9 page 11 of the G.Sc. textbook and label the diagram of human excretory system.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Reference: G. Science Textbook Grade 8 Page. 9-10

Worksheet 8

Unit No. 1

Human Kidney

SLO: Describe the role of kidney in excretion of waste.

Activity 1: a. What is the shape of the kidney?

b. Where are Kidneys located in our body?

c. Write 4 roles of Kidney in our body

1 :

2:

3:

4:

Reference G. Science Textbook Grade 8 Page 10 – 13.

Worksheet 9

Unit No. 1

Treatment of Malfunctioned Kidney

SLO: Investigate the possible causes of the malfunctioning of kidneys

Activity 1: Read page 14 – 15 of the G.Sc. textbook and answer the following questions.

a. Write the treatment method for removal of stone from kidney

b. Define dialysis and their functions?

c. How the human kidney is transplanted.

Reference G. Science Textbook Grade 8 Page. 14-15

Worksheet 10

Unit No. 2

Heredity in Organism - Cell Division

SLO: Differentiate between mitosis and meiosis

Activity 1: Read page 20 of the G.Sc. textbook and fill in the blanks

Living organisms consists of _____ and these _____ have the ability to reproduce and multiply through _____ division. It is a process through which parent cell divides in to _____ _____.

There are two methods of cell division _____ and _____

Activity 2: Read (page 20 of the G.Sc. textbook) the following statements carefully and identify it as True or False.

S. No	Statement	T	F
1.	In a process of cell division a parent cell is divided into daughter cells.		
2.	In Mitosis a parent cell is divided into two daughter cells.		
3.	In Mitosis the number of chromosomes in the daughter cells is half as in parent cell.		
4.	In Meiosis the gametes produced are different from one another and from parent cell.		
5.	In Mitosis there involve a single division.		

Reference G. Science Textbook Grade 8 Page. 20

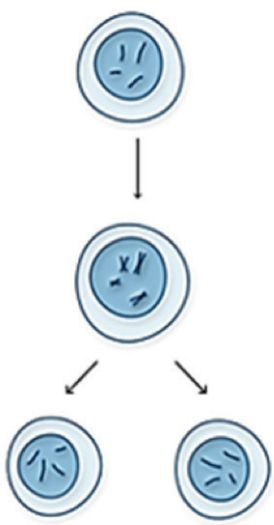
Worksheet 11

Unit No. 2

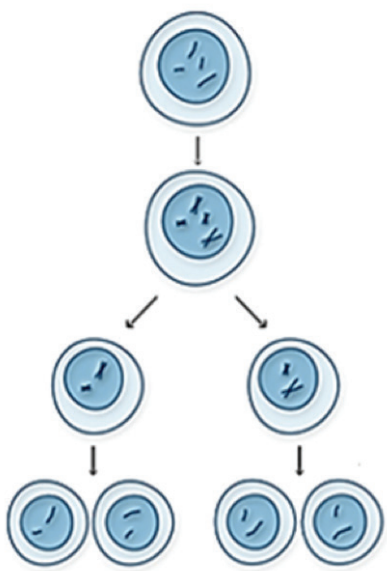
Heredity in Organism - Cell Division

SLO: Differentiate between mitosis and meiosis

Activity 1: Observe the fig 3.4 page 31 of the G.Sc. textbook and label the following diagram of cell division and identify the types of cell division.



Types of cell division: _____



Types of cell division: _____

Difference

Reference G. Science Textbook Grade 8 Page. 21

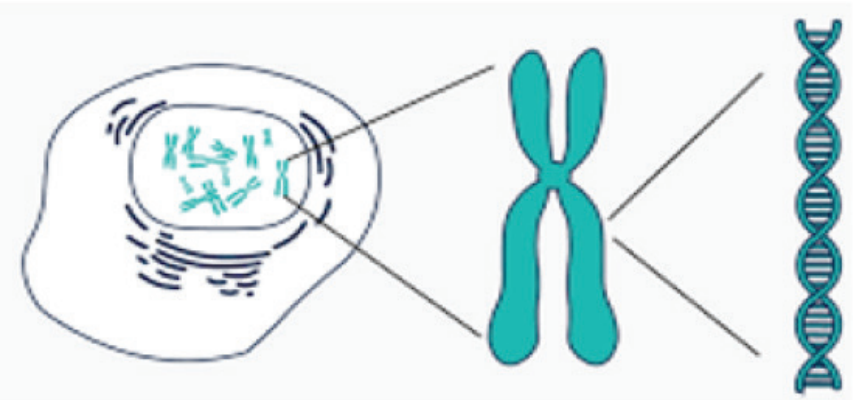
Worksheet 12

Unit No. 2

Heredity in Organism - Chromosomes, Genes and DNA

SLO: Identify DNA and chromosomes in the cell diagram

Activity 1: a. Observe fig 3.2 page 29 of the G.Sc. textbook and identify chromosomes, gene and DNA in the following diagram of a cell.



a. _____ b. _____ c. _____

b. Match column A with column B.

Column-A	Column-B
Basic structure and functional unit of Heredity	Deoxyribonucleic acid (DNA)
Transfer of characters from parent to offspring	Nucleotides
Thread like structure present in the nucleus of a cell	Genes
Coiled many times around proteins providing support to chromosomes	Heredity
Units of DNA (Deoxy ribonucleic acid)are called	Chromosomes
	Inheritable characters

Reference G. Science Textbook Grade 8 Page. 21-22

Worksheet 13

Unit No. 2

Heredity in Organism - Chromosomes, Genes and DNA

SLO: a) Define heredity and recognize its importance in transferring of characteristics from parents to off springs. b) Identify the characteristics that can be transferred from parents to off springs.

Activity 1: Define Heredity

_____

_____

Activity 2: Read page 22-23 of the G.Sc. textbook and fill in the blanks given below.

a. _____, _____, _____ form the basis for heredity.

b. _____ carries the characteristics of parents to the offspring.

c. _____, _____, _____, are examples of Heredity characteristics.

d. Characters which can transfer from parents to offspring's are called _____

_____., examples are _____, _____ ,

e. characters which are not transferred from parents to the offspring's are called _____

_____, examples are _____.

f. Color of the eye in humans is controlled by _____.

Activity 3: Observe and answer the given questions.

Which factors are common in you and your sisters and brothers? Name them.

_____

_____

Are they present in your parents or grandparents?

_____

_____

Reference G. Science Textbook Grade 8 Page. 22-23

Worksheet 14

Unit No. 3

Bio Technology- Biotechnological Product in Daily Life

SLO: Define biotechnology. List some biotechnological products used in daily life.

Activity 1: Define Biotechnology

a. Define Biotechnology.

_____

_____

_____

_____

_____

_____

Activity 2: Write down the names of at least five Biotechnologies different products which are used in daily life.

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

Reference G. Science Textbook Grade 8 Pages 27 and 32

Worksheet 15

Unit No. 3

Biotechnology - Application of Biotechnology

SLO: a) Explain that genetic modification in different foods can increase the amounts of essential nutrients. b) Explain how biotechnology allows meeting the nutritional needs of growing populations

Activity 1:	Write four or more examples in which Biotechnology has helped in improving nutrition and quality of food.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Activity 2	Name four major areas in which Biotechnology techniques are applied.

1. _____

2. _____

3. _____

4. _____

5. _____

Reference G. Science Textbook Grade 8 Page. 33 & 35

Worksheet 16

Unit No. 3

Biotechnology

SLO: List general applications of biotechnology in various fields.

Activity 1: Match the words of column A with suitable words of column B.

Column-A	Column-B
GMOs	Vector
Plasmid	Modified gene
Growth hormones	Insulin
Double helix	Stimulating growth
Diabetes	DNA

Activity 2: Read page 36 carefully and fill in the blanks

- _____ is an important technique of Biotechnology.
- It helps in giving more production in_____ and _____.
- _____ and _____ are used to eliminate weeds and _____ and thus protect crops.

Reference G. Science Textbook Grade 8 Page. 37

Worksheet 17

Unit No. 3

Biotechnology-Genetic Modification in Organisms

SLO: Explain that genetic modification in different foods can increase the amounts of essential nutrients.

Activity 1:	Write the usefulness of genetically modified organism (GMOs).

1. Micro Organism:

2. Improved nutrition and quality of food:

Reference G. Science Textbook Grade 8 Page. 32

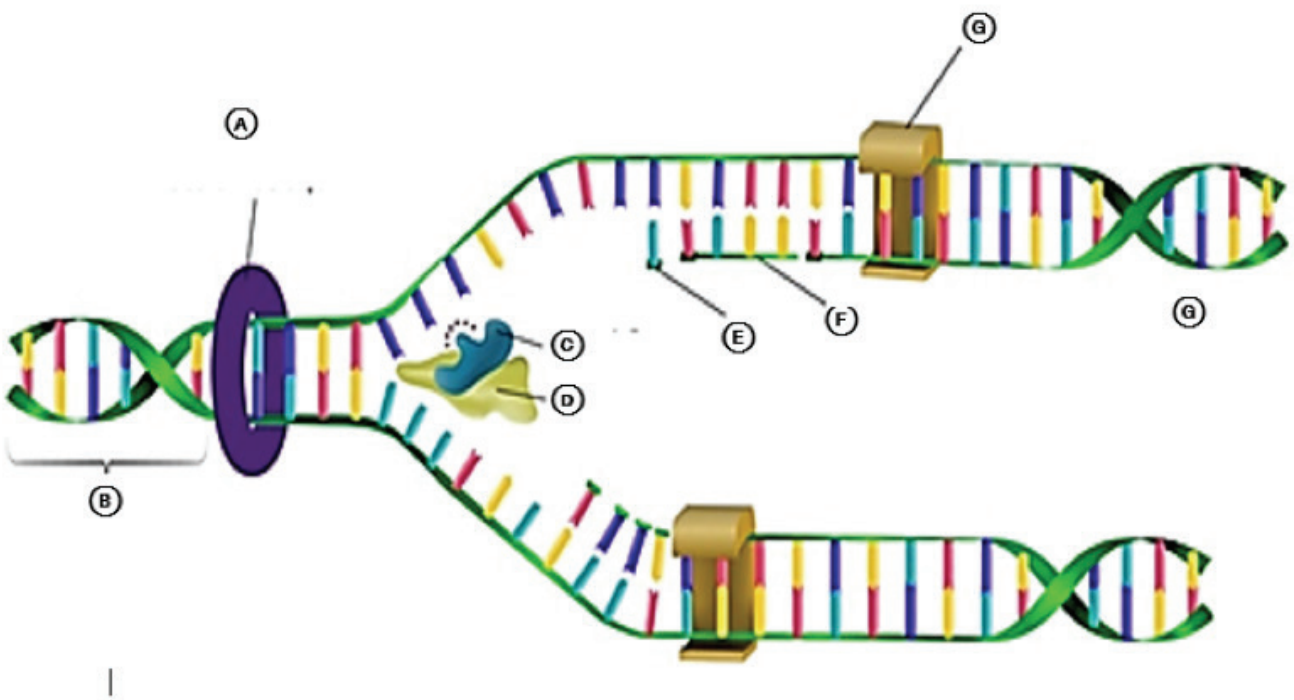
Worksheet 18

Unit No. 3

Biotechnology - DNA Replication

SLO: Explain how genes are introduced into a bacterium.

Activity 1: Observe fig 3.1 on page 29 of the G.Sc. textbook and label the diagram during the process of the DNA Replication



A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

Reference G. Science Textbook Grade 8 Page. 29

Worksheet 19

Unit No. 4

Pollution and Their Effects on the Environment

SLO: Explain the sources, properties and harmful effects of air pollution

Activity 1: Answer the following questions.

a. Define air pollution.

_____

_____

b. Write 4 sources of air pollution.

1. _____

2. _____

3. _____

4. _____

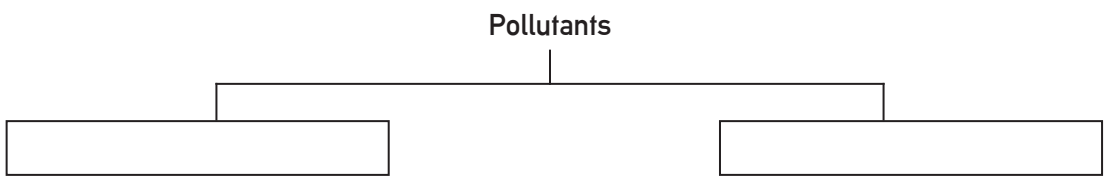
c. Write 3 harmful effects of air pollution

1. _____

2. _____

3. _____

Activity 2: Observe the diagram on page 41 of the G.Sc. textbook and fill in the blanks with types of Pollutants and their examples.



1. _____ 1. _____

2. _____ 2. _____

3. _____ 3. _____

Reference G. Science Textbook Grade 8 Page. 40

Worksheet 20

Unit No. 4

Depletion of Ozone Layer and Deforestation

SLO: Describe the causes and effects of ozone depletion.

Activity 1: Read page 47 of the G.Sc. textbook and describe how ozone is formed in your own words.

_____

_____

_____

_____

_____

_____

_____

a. Complete the following sentences

1. One Chlorine molecule from CFCs can destroy up to _____Ozone molecules.
2. In Pakistan only _____of the total area is covered by forest.
3. Ozone is a gas made up of three _____atoms.
4. The upper part of atmosphere has a fairly high concentration of Ozone molecules, known as the _____.
5. Deforestation brings _____changes in the environment and atmosphere
6. Human being hunt and kill_____ animals for pleasure.

b. Identify 3 human activities that have adverse effects on the environment.

1. _____

2. _____

3. _____

Reference G. Science Textbook Grade 8 Pages. 47-49

Worksheet 21

Unit No. 4

Green House Effect

SLO: a) List problems in human being caused by air pollutants. Explain greenhouse effect. b) Identify acid rain consequences on living and nonliving.

Activity 1: Read page 43- 44 of the G.Sc. textbook and answer the question given below.

a. Write one effect of each of the following pollutants on human organ system.

Pollutants	Effect on human organ system
Sulphur dioxide	
Oxides of Nitrogen	
Carbon monoxide	
Chlorofluorocarbons (CFCs)	

b. Read page 44-45 of the G.Sc. textbook and explain the Green House Effect and how does it affect the earth?

_____

_____

_____

c. Read page 46 of the G.Sc. textbook and identify FOUR harmful effect of Acid Rain on living and Non-living things.

1. _____

2. _____

3. _____

4. _____

Reference G. Science Textbook Grade 8 Pages. 44-45

Worksheet 22

Unit No. 4

Global Warming

SLO: Carry out research to explain global warming and its likely effects on life on earth.

Activity 1: a. Explain Global Warming

b. Write FIVE effects of global warming on life on earth.

1. _____

2. _____

3. _____

4. _____

5. _____

c. Can global warming be controlled if so how?

Reference G. Science Textbook Grade 8 Page. 45

Worksheet 23

Unit No. 4

Deforestation

SLO: a) Define Deforestation. b) State the effects/problems of deforestation on the environment. c) Identify human activities that have long-term adverse consequences on the environment.

Activity 1: Define Deforestation

_____

_____

_____

_____

a. Write SEVEN problems caused by deforestation on environment.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

b. Write FOUR effects of human activities on wild life.

1. _____

2. _____

3. _____

4. _____

Reference G. Science Textbook Grade 8 Pages. 48-49

Worksheet 24

Unit No. 4

Saving the Earth

SLO: Suggest ways in which individual, organizations and government can help to make earth a better place to live.

Activity 1: Suggest NINE specific measures to make the Earth a better place to live.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

5. _____

_____

6. _____

_____

7. _____

_____

8. _____

_____

9. _____

_____

Reference G. Science Textbook Grade 8 Page. 51

اردو

ورک شیٹ

یونٹ نمبر: ۱

ورک شیٹ

۱

حمد

حاصلِ تعلّم: استحسان اور تنقید کی سطح کی تیاری کے لیے کسی تحریر (نظم و نثر) کا خلاصہ لکھ سکیں، تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: کامل۔مکمل،ازل۔ شروع /ابتدا،ابد۔ہمیشہ،عارفوں۔ خدا شناس،سکتہ۔ خاموشی، حیرت۔حیران ہونا ،رعب۔شان و شوکت

کامل ہے جو ازل سے وہ ہے کمال تیرا — باقی ہے جو ابد تک وہ ہے جلال تیرا
ہے عارفوں کو حیرت اور مُنکروں کو سکتہ — ہر دِل پہ چھا رہا ہے رعبِ جمال تیرا

سوال: دیے گئے اشعار کا مفہوم لکھیں۔

جواب: _____

_____

_____

_____

_____

_____

_____

سوال: کمال، جلال اور جمال اللہ تعالیٰ کے صفاتی نام ہیں۔ ان کے علاوہ اللہ تعالیٰ کے کوئی سے چار صفاتی نام اور ان کے معانی بھی لکھیں۔

_____ _____

_____ _____

مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے مختصر جوابات اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۱

ورک شیٹ
۲

الفاظ معنی اور جملے



حاصلِ تعلّم: معانی سے الفاظ کی طرف ذہنی سفر کر سکیں۔ الفاظ کا جملوں میں استعمال کر سکیں۔

ہدایات: درج ذیل الفاظ کے معانی صفحہ نمبر ۱۷۰ پر دی گئی فرہنگ یا اُردُو لغت سے تلاش کر کے لکھیں اور ان کو جملوں میں استعمال کریں۔

الفاظ	معانی	جملے
عزیز	قابل عزت	نبی کریم ﷺ اللہ کو سب سے عزیز ہیں۔
جلال		
قوی		
جچنا		
اندمال		
شوکت		
خیال		
رعب		
قال		
مُنکر		



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳ پر دیے گئے سوال نمبر ۲ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۱

ورک شیٹ ۳

فعل معروف جملوں کی فعل مجہول جملوں میں تبدیلی



حاصلِ تعلّم: معروف کو مجہول جملوں میں بدل سکیں۔

ہدایات: کتاب کے صفحہ نمبر ۴ سے فعل معروف اور فعل مجہول کی تعریف سمجھ کر پڑھیں اور درج ذیل فعلِ معروف کے جملوں کو فعلِ مجہول میں تبدیل کرکے لکھیں۔

فعل معروف	فعل مجہول
میرے استاد کمرۂ جماعت میں دلچسپی سے سبق پڑھاتے ہیں۔	کمرۂ جماعت میں دلچسپی سے سبق پڑھایا جاتا ہے۔
احمد نے اپنے دوست کو کرونا وائرس سے بچنے کے لیے خط لکھا۔	
مالی باغ میں رنگ رنگ کے پودے لگا رہا ہے۔	
بچے نے ایک دلچسپ کتاب پڑھی۔	
میری امی مزے دار پکوان پکا چکی ہیں۔	
میں ٹی وی پر اپنی پسند کا ڈرامہ دیکھوں گا۔	
کسان دن رات کھیتوں میں محنت کرکے فصل اُگاتا ہے۔	
میری دوست فرصت کے اوقات میں سائنسی ایجادات سے متعلق کتابیں پڑھتی ہے۔	



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۲

ورک شیٹ
۴

نعت

حاصلِ تعلّم: کسی تحریر کی تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

اب بھی ظلمات فروشوں کو گلہ ہے تجھ سے
رات باقی تھی کہ سورج نکل آیا تیرا
ایک بار اور بھی یثرب سے فلسطین میں آ
راستہ دیکھتی ہے مسجد اقصیٰ تیرا

یثرب مدینہ کا پرانا نام تھا۔ جب حضرت محمد ﷺ نے مکہ سے یثرب کو ہجرت کی تو اس کا نام مدینۃ النبی پڑ گیا جو اب مختصر ہو کر مدینہ کہلاتا ہے۔

"یثرب" سے مراد کون سی جگہ ہے؟

جواب: _____

"رات باقی تھی کہ سورج نکل آیا تیرا" اس مصرعے میں "رات" اور "سورج" سے شاعر کی کیا مراد ہے؟

رات: _____

سورج: _____

"راستہ دیکھتی ہے مسجدِ اقصیٰ تیرا" اس مصرعے کی نثر بنائیں اور وضاحت کریں۔

نثر: _____

وضاحت: _____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۸ پر دیے گئے سوال نمبر ۸ کے جز نمبر ۱، ۲، ۳ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۲

ورک شیٹ

۵

خلاصہ نظم

حاصلِ تعلّم: کسی تحریر (نظم) کا خلاصہ لکھ سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کی روشنی میں نظم کا خلاصہ لکھیں۔

سوالات:

- بُلبُل کا دن کس کام میں گزرا اور اب وہ کیوں پریشان تھا؟
- جگنو نے بُلبُل کی مدد کیسے کی؟
- کیا ہمیں بھی دوسروں کی مدد کرنی چاہیے؟

ٹہنی پہ کسی شجر کی تنہا — بُلبل تھا کوئی اُداس بیٹھا
کہتا تھا کہ رات سر پہ آئی — اُڑنے چُگنے میں دن گزارا
پہنچوں کِس طرح آشیاں تک — ہر چیز پہ چھا گیا اندھیرا
سُن کر بُلبل کی آہ و زاری — جُگنو کوئی پاس ہی سے بولا
حاضر ہُوں مدد کو جان و دل سے — کیڑا ہوں اگرچہ مَیں ذرا سا
کیا غم ہے جو رات ہے اندھیری — مَیں راہ میں روشنی کروں گا
اللہ نے دی ہے مجھ کو مشعل — چمکا کے مجھے دِیا بنایا
ہیں لوگ وہی جہاں میں اچھّے — آتے ہیں جو کام دوسرں کے

خلاصہ:

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر 8 پر دیے گئے سوال نمبر ۱ کے جز نمبر ۴ اور ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ
۶

معلمِ اخلاق صلی اللہ علیہ وآلہ وسلم



حاصلِ تعلّم: مقرر یا مصنف کے نقطۂ نظر کو اپنے تجزیے کے ساتھ پیش کر سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

حضور صلی اللہ علیہ وآلہ وسلم کی مہمان نوازی کا یہ عالم تھا کہ خود بھوکے رہ کر مہمانوں کو کھانا کھلاتے تھے۔ اور مہمانوں کی ہر طرح سے خدمت کرتے۔ آپ ﷺ غریب ،آقاوغلام اور مسلم و غیر مسلم ہر ایک کے کام آتے تھے۔ ایک دفعہ ایک غلام آٹا پیس رہا تھا اور ساتھ کراہ بھی رہا تھا۔ آپ ﷺ نے اس سے کراہنے کی وجہ پوچھی۔ تو اس نے بتایا کہ وہ بیمار ہے لیکن اُس کا آقا اسے آرام کرنے نہیں دیتا۔ آپ ﷺ نے اُسے آرام سے لِٹا دیا اور سارا آٹا خود پیس کردیا۔ ساتھ ہی یہ بھی فرمایا کہ جب بھی آٹا پیسنا ہو تو مجھے بلوا لیا کرو۔ آپ ﷺ بیماروں کی بیمار پرسی فرماتے اور اسکی تلقین بھی فرماتے۔ کسی کی بیماری کا سنتے تو فوراً عیادت کے لیے چلے جاتے۔ تسلی دیتے اور صحت یابی کے لیے دعا فرماتے۔

سوال: درج بالا عبارت میں حضور ﷺ کی کون سی تین اہم صفات بیان ہوئی ہیں؟

1. _____

2. _____

3. _____

سوال: درج بالا عبارت سے ہمیں کیا اخلاقی سبق مِلتا ہے؟

_____

_____

_____



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۱۰ تا ۱۲ پر دیے گئے سبق کو پڑھ کر مصنف کا نقطۂ نظر اپنے الفاظ میں کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ

۷

محاورات اور ضرب الامثال



حاصلِ تعلّم: محاورات اور ضرب الامثال کا استعمال سیکھ سکیں۔

کالم "الف" میں محاورات درج ہیں اور کالم "ب" میں ان کے معانی بےترتیب دیے گئے ہیں۔ درست معانی تلاش کرکے کالم "ج" میں لکھیں۔

کالم "الف" (محاورات)	کالم "ب" (بےترتیب معانی)	کالم "ج" (درست معانی)
آسمان ٹوٹنا	غصّے سے دیکھنا	بہت بڑی مصیبت آنا
آن کی آن میں	دھوکا کھانا	
آنکھیں دکھانا	اچانک، فوراً	
باتوں میں آنا	شرمندہ ہونا	
پانی پانی ہونا	بہت بڑی مصیبت آنا	
منہ میں پانی آنا	لالچ آنا	

دیے گئے محاورات کو جملوں میں استعمال کریں۔

آسمان ٹوٹنا	
آن کی آن میں	
آنکھیں دکھانا	
پانی پانی ہونا	
منہ میں پانی آنا	
باتوں میں آنا	



مشق: کتاب کے صفحہ نمبر ۱۵ پر دیے گئے سوال نمبر ۴ کا جواب کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ

۸

انشاپردازی (صفائی نصف ایمان ہے)



حاصلِ تعلّم: کسی بھی فطری، اخلاقی یا قومی موضوع پر اپنے علم اور مشاہدے کی روشنی میں کاغذ پر لکھیں۔

ہدایات: صفائی نصف ایمان ہے کے موضوع پر دیے گئے سوالات کی روشنی میں جملے لکھیں۔

سوالات:

- صفائی سے کیا مراد ہے؟
- جسمانی صفائی کیوں ضروری ہے؟
- صفائی ہمیں کن بیماریوں سے بچاتی ہے ؟
- ارد گرد کے ماحول کو کیسے صاف رکھ سکتے ہیں ؟
- گھر، گلی، محلے، علاقے اور شہر کی صفائی میں حکومتی ادارے کیا کردار ادا کر سکتے ہیں ؟

صفائی نصف ایمان ہے



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۱۵ پر دی گئی سرگرمی کے مطابق چارٹ تیار کر کے اپنے پاس محفوظ کریں۔

یونٹ نمبر: ۴

ورک شیٹ
۹

مضمون نویسی (کروناوائرس)

حاصلِ تعلّم: تین سو سے زائد الفاظ کی ضخامت کا مضمون تیار کرکے پیش کر سکیں۔

ہدایات: درج ذیل اشارات کی مدد سے "کرونا وائرس" کے موضوع پر مضمون لکھیں۔

اشارات

کرونا وائرس ایک خطرناک وائرس----،اس کا آغاز چین کے شہر----- ، کرونا وائرس کی علامات-----، کرونا وائرس کے متاثرین ----- کرونا وائرس سے متاثر ہونے والے ممالک کے نام-------، کرونا وائرس کا علاج-----، کرونا وائرس سے بچاؤ کی تدابیر------ ، سماجی فاصلہ رکھیں------، لاک ڈاؤن-----، پاکستان حکومت کی ہدایات اور امداد------، پاکستان کے متاثرہ شہر -------، شہریوں کا رویہ------، ڈاکٹروں کی خدمات اور اپیل-------۔ حکومت کا ساتھ -------، کرونا سے محفوظ-------

کرونا وائرس

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۱ پر دی گئی سرگرمی برائے طلبہ کا جواب کاپی میں لکھیں۔

یونٹ نمبر: ۵

ورک شیٹ

۱۰

تفہیمِ عبارت



حاصلِ تعلّم: عبارت کو اس کے عناصر، نتائج، علت و معلول کے تعلق اور رفتار مطالعہ (خاموش اور بلند آواز) بنیادی خیال اور بیان کے حوالے کو ذہن میں محفوظ رکھ کر پڑھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات تحریر کریں۔

تعلیم کا مقصد صرف سکول جاکر کتابیں پڑھ لینا نہیں ہے بلکہ تعلیم کا اصل مقصداپنا کام خود کرنے کے قابل ہونا، دوسروں کی مدد کرنا اور ملک و قوم کی خاطر مثبت کام کرنےکا جذبہ رکھنا ہے۔ بہترین طالب علم وہ ہوتا ہے جو وقت کی پابندی کرتاہے۔ اپنے والدین اور اساتذہ کا کہنامانتا ہےاور ہاتھ سے کام کرنے کو عار نہیں سمجھتا۔ ایک مثالی طالب علم کے اوصاف میں یہ باتیں بھی شامل ہیں کہ وہ صبح سویرے بیدار ہو کر سیر کے لیے جاتا ہے۔ ورزش کرتا ہے۔ نماز کی پابندی کرتا ہے۔ دل لگا کر پڑھتا ہے۔اپنے اساتذہ کی باتیں توجہ سے سنتا اور ان پر عمل کرتا ہے۔ بڑوں کا احترام اور چھوٹوں سے پیار کرتا ہے۔ اپنےدوستوں کی مدد کرتا ہے۔ ایک مثالی طالب علم دن رات محنت کرکے نہ صرف پڑھائی میں اعلیٰ نمبر لے کرکامیابی حاصل کرتا ہے بلکہ وہ اپنے حسنِ اخلاق، حسنِ کردار، حسنِ نیت اور حسنِ عمل سے یہ ثابت کردیتا ہے کہ اس کی زندگی کا مقصد دوسروں کے کام آناہے ۔

تعلیم کے کوئی سے تین اہم مقاصد لکھیں۔

1. _____ 2. _____ 3. _____

دی گئی عبارت کے مطابق ایک مثالی طالب علم کی کوئی سی چار خوبیاں تحریر کریں۔

1. _____

2. _____

3. _____

4. _____

ایک مثالی طالب علم بننے کے لیے آپ کس بات پر عمل کریں گے؟

_____



مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲۵ پر دیے گئے سوال نمبر ۱ کے جز نمبر ۷ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۵

ورک شیٹ

۱۱

روزمرہ اور محاورہ کے لحاظ سے غلط جملوں کی تصحیح



حاصلِ تعلّم: روزمرہ اور محاورہ کے لحاظ سے غلط جملوں کی تصحیح کر سکیں۔

ہدایات: درج ذیل جملوں کو روزمرہ اور محاورہ کے مطابق درست کرکے دوبارہ لکھیں۔

غلط جملے	درست جملے
پاکستان دن بدن ترقی کررہا ہے۔	پاکستان روز بروز ترقی کر رہا ہے۔
میں فارسی کو جانتا ہوں۔	
وہ وہاں سے نو دو بارہ ہو گیا۔	
جھوٹ مارنا بہت بری بات ہے۔	
کیا آپ نے اخبار پڑھی ہے؟	
سردی کی وجہ سے میرے کان بجنے لگے۔	
مری میں تیز برف باری ہوئی۔	
روزانہ صفائی کا عادت اپنائیں۔	
صابن سے بار بار ہاتھ دھوئے۔	
مجھے تو دال میں کچھ سفید نظر آتا ہے۔	



مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲۵ پر دیے گئے سوال نمبر ۲ اور صفحہ نمبر ۲۶ پر دیے گئے سوال نمبر ۴ کو مکمل کریں۔

یونٹ نمبر: ۶

ورک شیٹ
۱۲

تفہیمی سوالات

حاصلِ تعلّم: کسی بھی عام متن پر سوالات کے جوابات تحریر کر سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

اللہ تعالی نے پاکستان کو بے شمار نعمتوں سے نوازا ہے۔ اُسے ہر طرح کے موسم عطا کیے ہیں۔ بلند و بالا پہاڑ، وسیع زرخیز میدان، معدنیات سے بھرپور خطے، سرسبز وادیاں، تاحدِ نگاہ صحرا اور حسین ساحلِ سمندر اس کے حسن کو دوبالا کر دیتے ہیں۔ پاکستان کے شمال میں بلند پہاڑی سلسلے ہیں۔ بعض فلک بوس پہاڑوں کی چوٹیاں سارا سال برف سے ڈھکی رہتی ہیں۔ سردیوں میں درجۂ حرارت اس قدر گر جاتا ہے کہ منفی ۲۰ ڈگری سینٹی گریڈ سے بھی نیچے چلا جاتا ہے۔ ان پہاڑی سلسلوں میں کوہِ ہمالیہ، کوہِ قراقرم اور کوہِ ہندوکش زیادہ اہم ہیں۔ گنگناتی ندیاں، بہتی آبشاریں ور پُرسکون جھیلیں اپنی مثال آپ ہیں۔ وادیٔ ناران میں جھیل سیف الملوک سیاحوں کی توجہ کا مرکز بنی رہتی ہیں۔ پاکستان کے شمالی علاقے خوش ذائقہ پھلوں سے لدے باغات سے بھرے پڑے ہیں۔ جو اپنے ذائقے اور لذت کے اعتبار سے دنیا بھر میں مقبول ہیں۔ کوہ ہمالیہ کی سب سے بلند چوٹی کا نام نانگاپربت ہے۔ جو سطح سمندر سے تقریبا ۸۱۲۶ میٹر بلند ہے۔ کوہ قراقرم کے پہاڑوں کی چوٹیوں کی اوسط اونچائی تقریبا ۷۰۰ میٹر ہے۔ دنیا کی دوسری بلند ترین چوٹی کے ٹو، جس کی اونچائی تقریباً ۸۶۱۱ میٹر ہے۔ اسی پہاڑی سلسلے میں واقع ہے۔

پاکستان کے شمال میں واقع دو پہاڑی سلسلوں کے نام اور ان سے متعلق دی گئی معلومات بھی لکھیں؟

1. _____

2. _____

پاکستان کو اللہ تعالیٰ نے کن کن نعمتوں سے نوازا ہے؟

_____

_____

_____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳۷ پر دیے گئے سوال نمبر ۳ کے تمام اجزا کے مختصر جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۳

یہ وطن تمہارا ہے (ملی نغمہ)

حاصلِ تعلّم: استحسان اور تنقید کی سطح کی تیاری کے لیے کس تحریر (نظم و نثر) کا خلاصہ لکھ سکیں، تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور آخر میں دیے گئے سوالات کے جوابات لکھیں۔

میرِ کارواں ہم تھے، روحِ کارواں تُم ہو
ہم تو صرف عنواں تھے، اصل داستاں تُم ہو
نفرتوں کے دروازے، خود پہ بند ہی رکھنا
اِس وطن کے پرچم کو، سربلند ہی رکھنا
یہ وطن تمہارا ہے، تم ہو پاسباں اس کے
یہ چمن تمہارا ہے، تُم ہو نغمہ خواں اس کے

"روحِ کارواں" اور "اصل داستاں" سے شاعر کی کیا اور کون مراد ہے؟

روحِ کارواں _____

اصل داستاں _____

اس شعر میں شاعر اہلِ وطن کو کیا تعلیم دینا چاہتا ہے؟

نفرتوں کے دروازے، خود پہ بند ہی رکھنا اِس وطن کے پرچم کو، سربلند ہی رکھنا

_____

سوال: دیے گئے اشعار کا مرکزی خیال تحریر کریں؟

_____

_____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴۲ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۸

ورک شیٹ
۱۴

تفہیمِ عبارت

حاصلِ تعلّم: مصنف کی تکنیک، مقصود اور طرز بیان کو پڑھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

گرلز گائیڈنگ لڑکیوں کی بہتر نشوونما کے لیے بہترین تحریک ہے۔ اس تحریک میں شامل ہونے کے لیے انہیں عملی زندگی کی مہارتوں کا پتہ چلتا ہے۔ انہیں قیادت کے مواقع میسر آتے ہیں۔ ذمہ داریاں سنبھالنے کا احساس پیدا ہوتا ہے۔ اسی طرح کسی کے ماتحت کام کرنے یا دوسروں کی قیادت کرنے کا عملی موقع ملتا ہے۔ جو لڑکیاں زمانۂ طالب علمی میں گائیڈ رہ چکی ہوتی ہیں وہ عملی زندگی میں زیادہ کامیاب، زیادہ خود اعتماد اور زیادہ ذمہ دار ثابت ہوتی ہیں۔ گائیڈنگ کا مقصد ہی لڑکیوں اور خواتین کے کردار کی تشکیل کر کے انہیں اچھا، ذمہ دار اور مفید شہری بننے میں مدد فراہم کرنا ہے تاکہ وہ ملک اور قوم کا نام روشن کریں۔ پاکستان میں گرلز گائیڈنگ کا آغاز ۱۹۴۷ء میں ہوگیا تھا کیونکہ سکاوٹنگ اور گائیڈنگ متحدہ ہندوستان میں پہلے سے ہی فعال تھے۔ اس کا مرکزی دفتر ایچ نائن اسلام آباد میں واقع ہے۔ جہاں گائیڈز کی مختلف سرگرمیوں کے لیے ایک بڑا ہال بھی تعمیر کیا گیا ہے۔ مرکزی دفتر میں ہاسٹل کی سہولت بھی موجود ہے۔گاہے بگاہے گرل گائیڈز کے پروگرام اسلام آباد کے مرکزی دفتر میں انعقاد پذیر ہوتے رہتے ہیں۔ عمر کے لحاظ سے گائیڈ کو تین حصوں میں تقسیم کیا گیا ہے۔ ا. چھے سے گیارہ سال کی لڑکیاں بلیوبرڈ کہلاتی ہیں۔ ۲. گیارہ سے سولہ سال تک کی لڑکیاں گائیڈ کہلاتی ہیں۔ ۳. سولہ سے اکیس سال تک کی لڑکیاں سینئر گائیڈ کہلاتی ہیں۔

سوال: گرلز گائیڈ تحریک کے کوئی سے تین فوائد لکھیں۔

1. _____ 2. _____ 3. _____

سوال : گرلز گائیڈنگ کے قیام کا بنیادی مقصد تحریر کریں۔

_____

سوال : ہمارے ملک میں گرلز گائیڈز کے آغاز کی وجہ کیا تھی؟

_____

_____

مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۴۹ پر دیے گئے سوال نمبر ا کے تمام اجزا کے جواب کاپی میں لکھیں۔

یونٹ نمبر: ۸

ورک شیٹ
۱۵

سابقے اور لاحقے



حاصلِ تعلّم: سابقہ اور لاحقہ کی مدد سے لفظ سازی کر سکیں۔

ہدایات: درج ذیل الفاظ کے تین تین سابقے بنائیں۔

الفاظ	سابقے		
بَد	بدمزاج	بدکردار	بدنصیب
پاک			
خوش			
سَر			
غیر			
ہم			
خیابان			

ہدایات: درج ذیل الفاظ کے تین تین لاحقے بنائیں۔

الفاظ	لاحقے		
انگیز	حیرت انگیز	اثرانگیز	فرحت انگیز
آور			
خواہ			
دار			
ستان			
کار			



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۵۰ پر دیے گئے سوال نمبر ۳ اور ۴ مکمل کریں۔

یونٹ نمبر: ۹

ورک شیٹ
۱۶

درخواست نویسی



حاصلِ تعلّم: درخواست وغیرہ کو سمجھ کر لکھ سکیں۔

ہدایات: دیے گئے خاکے کی مدد سے سکول کے ہیڈ ماسٹر/ہیڈ مسٹریس کے نام ضروری کام کی درخواست لکھیں۔

بخدمت جناب ہیڈ ماسٹر صاحب/ہیڈ مسٹریس صاحبہ۔۔۔۔۔۔۔۔۔۔۔۔۔۔

جناب عالی!

مؤدبانہ گزارش ہے کہ _____

_____

_____

_____

_____

_____ رخصت دی جائے۔ عین نوازش ہو گی۔

العارض

آپ کا/کی تابع شاگرد/شاگردہ

جماعت _____

رول نمبر _____

تاریخ _____



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۵۸ پر سرگرمی برائے طلبہ میں دی گئی درخواست کاپی میں لکھیں۔

English

Worksheet 1

Unit No. 1

Topic Sentences

SLO 1: Recognize that text comprises a group of paragraphs that develop a single theme or idea.

Activity 1: For each of the following sets of topic sentences, specify the topic that is being discussed. Note that each topic sentence presents a different facet of (or opinion about) the topic

- "Most scientists agree that temperatures now are warmer than they were 20 years ago."
- "It is hard to draw any definite conclusions from the hundreds of studies that have considered whether climate change is occurring or not."
- "People who claim that the Earth is now hotter miss the point that the Earth has been getting warmer over the last several thousand years, not just the last 50 years."

Topic: _____

- The nation provides us with a sense of identity. It is our moral duty to respect our country and support it as citizens.
- Our national heroes like Raja Aziz Bhatti Shaheed, Rashid Minhas, and Sarwar shaheed are a few among the many who sacrificed their lives for the love of Pakistan.
- Equality correlates to patriotism. Every person is equal in the eyes of the nation, irrespective of their religion, caste, gender etc. A true patriot recognizes and treats fellow citizens equally.
- Everyday our soldiers stand bravely at the borders and ensure that Pakistan is safe day and night.
- As we come together, we can improve the systems, the infrastructure the economic development and eradicate social evils.

Topic: _____

Activity 2: Identify the topic sentences in the following paragraphs and write it in the space provided:

Paragraph 1: Family is the first school in a person's life, family values and traditions are the first and most valued assets. In the eastern culture, majority of families enjoy a joint family status and are close knit unlike the west, where the concept of nuclear families is more common. Disciplining and developing values and habits in the eastern families is considered the responsibility of the entire family- not just the parents. A child grows up learning about social norms, respect for the elders and consideration for the young in a family setup that nurtures good habits and fosters values such as, listening, patience, collaboration and compassion.

Paragraph 2: Just like there is no alternative to work, there is no shame in working. Whatever a person needs, he/she must acquire through hard work. However, if anyone wishes to achieve anything without the burden of labour, they must indulge in illegal activities which earn no dignity at all. Everyone must work according to their ability and appreciate and encourage hard working people and value dignity of labour. Labour gives us life and livelihood. That is why it is above all other things in life.

Topic sentence paragraph 1: _____

Topic sentence paragraph 2: _____

Further practice: Read the story on Hatim Tai on pages 2-4 of your textbook and see how the paragraphs have been divided to explain a single theme or idea.

Worksheet 2

Unit No. 1

Scan Text to Answer Short Questions

SLO 2: Scan to answer short questions.

Activity 1: Read the story about Mullah Nasiruddin's experience and scan the text to answer the questions that follow.

It is a golden saying "When wealth is lost, nothing is lost; when health is lost, something is lost and when character is lost, everything is lost." Here health is given preference over the wealth or money. So, maintaining health is essential to perform all sorts of duties in our daily life. Keeping good health, is necessary to protect ourselves from germs which are our hidden enemies.

Many diseases are caused by little things, called germs. The germs enter our body through dirty food and water. In the same way, the germs of many diseases are carried by flies. When flies walk on the dirty things, germs stick to their legs. Again, flies sit on uncovered stuffs, the germs stick to them.

When we eat such food stuffs, the germs get into our body and cause illness. So, we should always remember not to eat food if flies are sitting or walking on it. Malaria, typhoid, cholera, and many other diseases are caused by these germs. Dust, standing water, dirty and rotten things are the breeding places for germs. For example, malaria is carried by one of the mosquitoes. If a person has malaria and a mosquito bites him, it carries away some of the germs of that disease. When this mosquito bites a healthy person, the germs may get into the blood and may cause malaria. Mosquitoes lay their eggs in standing water and cause cholera. The most important element for our health and life is to keep ourselves and our foodstuffs clean. If we keep ourselves, our house, and surroundings clean, there are least chances of our being infected by the germs. Cleanliness can protect us from our enemies' i.e. germs. Cleanliness can play a major role to save us from germs and many diseases.

Questions:

1. Why health is important than wealth? _____
2. How one can protect him/herself from germs? _____
3. What are the various methods to protect our food and water? _____
4. Which are the breeding places of germs? _____
5. How can we save ourselves from different diseases? _____
6. Write main idea of the text in 2 sentences. _____

Further practice: Read the questions given on page 5 your textbook and answer.

Worksheet 3

Unit No. 1

Inference and Implication

SLO 3: Distinguish between what is clearly stated and what is implied.

Inference
Use the CLUES in the text to discover what is NOT directly stated
Text: After ensuring that the sheep were busy grazing in the fields, Aftab sat under a tree to complete his homework.
Inference: Aftab is a shepherd and a student.

Activity 1: Read the story and answer the questions.



The little grey mouse that lived in my wall prospered for many days on nibbles of my lunch. I'd pack a meal before bed and, while I slept, it would take small bites of my lunch, which I left on the counter. It'd take a cracker crumble here, and a breadcrumb there, but it wouldn't take too much and it'd always clean up after itself. Things were going quite well for the mouse and I didn't even know it existed, until it got sloppy.



One night while I slept, it ate all of my chips and left behind a big mess. When I awoke to this sight, I knew what had happened to my chips.

So the next night when it returned for another snack, it found a nice, delicious piece of cheese… lightly balanced on a mousetrap. Now I don't have to share my chips anymore.



1. What was the mouse doing in the story?

_____

2. What is implied in the story about what happened to the mouse?

_____

Activity 2: Read each statement below and encircle the correct option after making an inference:

1. An egg is laid. A caterpillar hatches from the egg and constantly eats flowers and leaves. It turns into a pupa and rests inside of a cocoon.

You can infer that .

a. a butterfly will come out of the cocoon

b. a bird will come by and disturb it

c. the caterpillar will come out when it gets hungry

2. Mr. Shahzad was talking to my father about a large tree that was dying. After they were finished, Mr. Shahzad tied a rope to the tree. Then he took out his axe.

You can infer that Mr. Shahzad is a .

a. Teacher

b. Sports teacher

c. Woodcutter

3. My younger sister hid behind the sofa as a storm roared outside. There was lightning and thunder. My sister sobbed each time she heard the thunder. Father tried to persuade my baby sister to come out, but he wasn't successful in convincing her to leave her hiding place.

You can infer that .

a. Father was afraid of storms

b. My sister was playing hide and seek

c. Storms made my baby sister afraid

Further practice: Answer the questions given on page 6 in the 'extending' section.

Worksheet 4

Unit No. 1

Recognize the Author's Purpose

SLO 4: Recognize the author's purpose.

Activity 1: Read the story carefully and identify the author's purpose and give reasons for your answer.





Asma was obsessed with details. She felt that everything that she submitted to her teacher had to be perfect. For the final project in reading class, students were given one week to use their art skills to bring a scene from a novel to life. Asma decided that she would build a shoebox diorama. She spent the first two nights creating an intricately detailed scene far superior to anything that her classmates would produce, but she ended up throwing it away because she didn't like how tape was visible at the bottom of the diorama (a project made in a shoe box).

The next two nights she worked on a similar diorama, but this time she used glue. Again, Asma produced a beautiful product, but she was troubled by how the glue looked when it dried, so she discarded her work again. Over the weekend and into the next week, Asma recreated the project a third time. This time she used a special adhesive putty to construct the diorama and was completely satisfied with the appearance. Unfortunately, her project was now several days late and her grade on the assignment was lowered to a C.

1. What is the author's purpose in this story?

_____

_____

_____

_____

_____

2. What happens in the story that leads you to believe this?

_____

_____

_____

_____

Further practice: Complete the exercise given on page 8 of your textbook.

Worksheet 5

Unit No. 2

Reading Strategies

SLO 1: Apply critical thinking to interact with text and use intensive reading strategies

Activity 1: Read the given paragraph carefully and write short answers to the questions given at the end of the paragraph.



I had inherited considerable wealth from my parents but being young and foolish, I wasted it carelessly. Finding that riches speedily take to its wings if managed badly, I began to think of how I could make the best of what still remained with me. I sold all my household goods by public auction and joined a company of merchants who traded by sea. I obtained goods that were suitable for the places where I intended to visit, and embarked on a sturdy ship with other merchants. We went from island to island, often making excellent bargains, until one day we landed at a spot which, though covered with fruit trees and springs of excellent water, appeared to possess neither houses nor people. While my companions wandered here and there gathering flowers and fruit, I sat under a shady tree, and having heartily enjoyed the provisions I had bought with me, I fell asleep.



i. How did the narrator of the story spend his wealth?

Ans:_____

ii. Why did the narrator (Sindbad) sell all his household goods?

Ans:_____

_____

iii. How did Sindbad and the other merchants reach the island?

Ans:_____

iv. Why did Sindbad's friends wander on the island?

Ans:_____

_____

v. Identify and write five pronouns from the above paragraph.

Ans:_____

Further practice: answer the questions given on page 23 of your textbook.

Worksheet 6

Unit No. 2

Looking for Contextual Clues

SLO 2: Deduce meaning of difficult words from context

Activity 1: Read the excerpt from Alice in the Wonderland and tick the option closest to the meaning.



Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had **peeped** into the book her sister was reading, but it had no pictures or conversations in it, `and what is the use of a book,' thought Alice `without pictures or conversation?'

So she was **considering** in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.



There was nothing so VERY **remarkable** in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, `Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it **occurred** to her that she ought to have **wondered** at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT- POCKET, and looked at it, and then **hurried** on, Alice started to her feet, for it **flashed** across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and **burning with curiosity**, she ran across the field after it, and fortunately was just in time to see it **pop** down a large rabbit-hole under the hedge.

Peeped:	1. Glanced	2. Jumped	3. Wondered
Considering:	1. Thinking	2. Making	3. Stopping
Remarkable:	1. Amazing	2. Trustworthy	3. Surprising
Occurred:	1. Happened	2. Hit her	3. Leaked
Wondered:	1. Pondered	2. Considered	3. Studied
Hurried:	1. Ran	2. Worried	3. Walked
Flashed:	1. Zoomed	2. Happened	3. Pictured
Burning with curiosity:	1.Boiling with interest	2. Flaming with fire	3. Ablaze with heat
Pop:	1. Go	2. Burst	3. Explode

Further practice: read and understand the difficult words given on page 13 in 'the new vocabulary section' of your textbook.

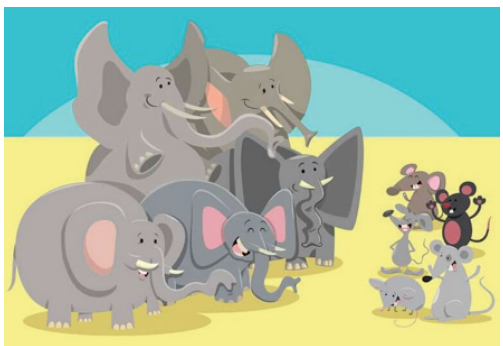
Worksheet 7

Unit No. 2

Sequencing & Summarizing

SLO 3: Read a story to retell it sequentially and summarize.

Activity 1: Read the story carefully and complete the activity given below.



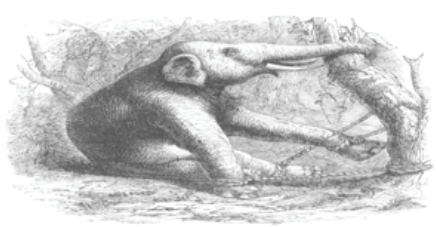
There was a village that was abandoned by its people after it shattered, post an earthquake. However, the mice living in the village decided to stay and make it their home. On the outskirts of this village, there was a lake, where a herd of elephants visited regularly to bathe and drink water. Since the village was on the way to this lake, the elephants trampled the mice while walking there. So, the king of mice decided to meet the elephants. He told them, " O elephants, as you travel through the village, many mice are trampled. We will be very grateful if you could please consider changing your route. We will remember and return the favour when you are in need."

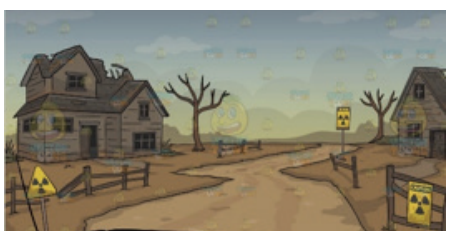
The elephant king laughed, "We are giant elephants. What favour can you mice return? Nevertheless, we will honour your request and change our route."

After a few days, the elephants got trapped and entangled in nets that were set up by hunters. They struggled hard to escape, but in vain. The elephant king remembered the promise made by the king of mice. So, he sent a fellow elephant who got lucky and was not trapped, to ask the mice king to come and help them.

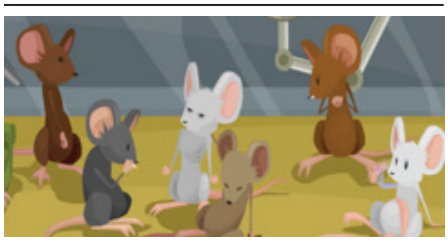
Soon, all the mice came and started nibbling the nets, and freed the elephants. The king of the elephants couldn't thank the mice enough!

Activity 2: Number the pictures according to the story sequence. Summarize each segment in the space provided.













Further practice: Complete the writing segment given on page 14 of your textbooks.

Worksheet 8

Unit No. 2

Characterization

SLO 4: Present a character sketch orally giving reasons to support the response

Activity 1: Activity a: Read the passage below and identify the characteristics of Long John Silver taking help from the description given in the box below:

Height
tall, tallish, short, shortest, medium height

Build
frail, stocky, slim, thin, plump, fat, skinny, well-built

Age
young, elderly, middle-aged, teenager, in 20s, 30s, 40s

Eyes
big round blue eyes

Face
round, oval, square, with scars, wrinkles, freckles, clean and pleasant-tempered, plain and pale, small, bright, narrow

Hair
bald, straight, curly, spiky, wavy

Clothes
casual, scruffy, shabby, smart, tidy, messy



As I was waiting, a man came out of a side room, and at a glance I was sure he must be Long John. His left leg was cut off close by the hip, and under the left shoulder he carried a crutch, which he managed with wonderful dexterity, hopping about upon it like a bird. He was **very tall and strong,** with a face as big as an ox—**plain and pale,** but intelligent and smiling. Indeed, he seemed in the most cheerful spirits, whistling as he moved about among the tables, with a merry word or a slap on the shoulder for the more favoured of his guests.



Now, to tell you the truth, from the very first mention of **Long John** in Squire Trelawney's letter I had taken a fear in my mind that he might prove to be the very **one-legged** sailor whom I had watched for so long at the old Benbow. But one look at the man before me was enough. I had seen the captain, and Black Dog, and the blind man, Pew, and I thought I knew what a pirate was like—a very different creature, according to me, from **this clean and pleasant-tempered landlord**.

I plucked up courage at once, crossed the threshold, and walked right up to the man where he stood, propped on his crutch, talking to a customer.

Activity 2: The above passage is from the novel 'Treasure Island,' by Robert Louis Stevenson. Long John Silver is a complex cunning and a colourful character. Fill in the columns below with one example each for 'Physical Traits,' and 'Characteristics' to demonstrate your understanding of his personality. An example has been done for you.

Character	Physical Traits	Inference	Characteristics	Inference
Long John Silver	He was **very tall and strong**, with a face as big as an ox—**plain and pale**, but intelligent and smiling.	He was not a typical pirate.	Indeed, he seemed in the most cheerful spirits, whistling as he moved about among the tables, with a merry word or a slap on the shoulder for the more favoured of his guests.	In contrast to the views of people, Long John Silver was a pleasant and cheerful person.

Activity 3: Activity b: Read the character description of Agatha and Washington. Fill the columns given below with appropriate details and infer the kind of personalities they are from the description given.

Agatha had a **narrow, oblong face** with **angular cheekbones** and a **pointed chin**. Her **slit-like eyes** were a clouded hazel, and her thinly plucked eyebrows were shaped into a deceivingly perfect arch that followed the slight curve of her eye. A **long nose hooked over continually pursed lips,** which were painted a bright red in an unsuccessful effort to mask their natural thinness. Bleached blonde hair, made thin from too many years of hair dye, hung straight down into an **angular cut at her jaw.** The sharp features of Agatha's face were merely a reflection of her entire body structure, and **everything**—from her skeletal arms to her paper-thin waste—**screamed of unnatural skinniness.** She walked in long strides, her shoulders back and face held forward, wearing tall heels and a bold leopard-print dress.

Washington had a **rectangular face** with a defined, slightly **pointed chin** and a **sturdy jaw line**. His **dark eyes were small** and spaced evenly apart, sitting below trim eyebrows that seemed to curve as a natural extension of his broad, rounded nose. He kept his mouth closed in a thin, straight line, and his hair—**naturally light brown in color** but powdered to a bright white—was neatly tied and worn back to reveal a **wide forehead**. The jacket he wore over his broad shoulders had neatly polished buttons, and the scarf around his neck was tied so that the ruffles perfectly filled the space left open by his coat. He walked straight, his face held forward in a steady gaze, and had an air of authority that was visible.

Activity 4: Identify and list down the character sketch of Washington in the space below. An example of Agatha has been done for you.

Characters	Physical traits	Inference	Characteristics	Inference
Agatha	a narrow, oblong face with angular cheekbones and a pointed chin	A strong and obstinate person, who seems to be habitual of getting what she wants.	bright red lips that mask their natural thinness	She is an artificial and surface person who wishes to hide what she actually looks like
Washington				

Further practice: From the details given about Gulliver's personality on pages 10 to 12 of your textbook, write a character sketch of Gulliver.

Worksheet 9

Unit No. 3

Understanding Poetry

SLO 1: Read a poem and give orally or in writing the main idea, theme, summary, personal response and paraphrase.

Activity 1: a) read the important definitions given below. b) read the poem about the honeybees and respond to the questions in the space provided below:

Honeybees



A bright sunny yellow the colour of honey

Is the bee that makes sounds that are really funny

They're busy all day filling up their hives

With pollen and nectar, that are food for their lives

They don't like anyone near their homes

But if you go close you are sure to be stung by the drones

The honey is guarded and protected by these busy bees

In which Allah has kept the cure for all disease

Important Definitions

1. Paraphrase it!
- Put the text in your own words
- Avoid copying the text
- Rearrange similar text
- Ask yourself if you have included all the details

Example: Working out and physical fitness is a positive activity that builds the immune system.
Paraphrase: Exercising strengthens the immune system
2. Theme: is the message or the moral of a story.
Example: in the story of the 'Hare and the Tortoise', the theme is 'slow and steady wins the race.'
3. Main Idea: tells the reader what the story is about. Main idea is specific to a story and cannot be generalised.
Example: the tortoise and the hare are in a race.
4. Summary: is a condensed version of the original text.
Example: Even the slowest tortoise can defeat the quickest hare, and even the proudest hare can learn a timeless lesson from the most humble tortoise: Slow and steady wins the race is a superb story of an arrogant hare and a humble and persistent tortoise, who set out to compete in a race

What is the theme of the poem? _____

What is the main idea of the poem? _____

_____

_____

Paraphrase the poem:_____

Write the summary of the poem: _____

_____

_____

Write your personal response for this poem: _____

_____

Further practice: read and understand the section on 'understanding the poem' given on page 21 of your textbook.

Worksheet 10

Unit No. 3

Summary Skills

SLO 2: Apply summary skills to poems to write a summary. Restate the message in simple prose.

Activity 1: Read the poem 'Try Again' by William Hickson and then read the sample summary of the first 11 lines.

This a lesson you should heed **Line 1**
Try again;

If at first you don't succeed,
Try again.

Then your courage should appear;
For if you will persevere,
You will conquer, never fear,
Try again.

Once or twice though you should fail,
If you would at last prevail,
Try again. **Line 11**

If we strive, 'tis no disgrace
Though we did not win the race–
What should you do in that case?
Try again.

If you find your task is hard.
Try again;

Time will bring you your reward,
Try again;

All that other folk can do,
Why with patience should not you?
Only keep this rule in view,
Try again

Summary: Line 1-11

Following is the summary of the first eleven lines.
In this poem the poet stresses on trying again and again till you are successful. according to him, if one does not give up, one is bound to succeed. So, one should not fear to struggle and keep on trying even after a few failures.

Summary: _____

_____

_____

_____

_____

_____

The Message from the Poem

Further practice: Read and complete the exercises given on page 22 of your textbook.

Worksheet 11

Unit No. 3

Comma Use in Introductory Phrases Containing Verbs

SLO 3: Recognize and use comma to separate an introductory phrase containing a verb from the main sentence.

Examples:

- Having finished the test, he left the room.
- To get a seat, you'd better come early.
- After the test but before lunch, I went jogging.
- The sun radiating intense heat, we sought shelter in the cafe.

Activity 1: Put a comma to separate an introductory phrase containing a verb from the main sentence:

1. Considering he was not well he decide to skip school.

_____

2. Despite his dislike for fish he ate the fried fish.

_____

3. Though she had found her lost notes she did not disclose this to her friends.

_____

4. Having survived the earthquake he had no fear of dying.

_____

5. Being the first one to spot the crescent he rushed to his granddad to break the news.

_____

6. Regardless of all the opposition the party won with a huge mandate.

_____

7. Looking at the situation around Corona virus everyone stayed inside their homes.

_____

8. Studying from dawn till dusk finally paid off and he secured first position.

_____

Activity 2: Formulate your own sentences using the following phrases. Do not forget to insert the comma in the right place.

1. While I…..
2. Even though she….
3. Watching television……
4. Reaching home late….
5. Even with all the…..

Further practice: Complete the exercise given on page 23 of your textbook.

Worksheet 12

Unit No. 3

Use of Tenses

SLO 4: Illustrate the use of tenses learnt earlier

Activity 1: Complete the following sentences using an appropriate simple present or simple past tense form.

1. He _____ he is above playing with us. (think)
2. She _____ two thousand rupee an hour. (earn)
3. The plants _____ in the absence of water. (die)
4. He _____ English with a Pakistani accent. (speak)
5. The cold weather _____ my health. (affect)
6. They _____; they always agree. (not quarrel)
7. Fatty foods _____ with me. (not agree)
8. The teacher _____ them an hour for their painting. (allow)
9. Smoking is _____ (not allow)
10. The twins _____ alike. (look)
11. You alone _____ my secrets. (know)
12. He _____ his fortune amongst his three children. (divide)

Activity 2: Read the sentences and fill in the blanks with the correct tense from the three options given below.

1.	When I opened my eyes, I _____a strange sight.	a. see	b. saw	c. sees
2.	Every morning she ____up early and gets ready for work.	a. woke	b. wake	c. wakes
3.	I haven't ____anything from her in a long time.	a. hear	b. heard	c.hears
4.	The headmaster ____to talk to you now.	a. wanted	b.want	c.wants
5.	Jane ____with her parents even now.	a. live	b.lives	c.lived
6.	We are _____Greece next month.	a. visiting	b.visit	c. visited
7.	The moon _____around the earth.	a. revolves	b. revolved	c. revolve
8.	She ___a novel last year.	a. wrote	b. writes	c. write
9.	All students _____in their work, as soon as the lesson ends.	a. handed	b. hands	c. hand

Further practice: Read the poem on page 20 of your textbook and select any 5 verbs. Use these verbs in sentences of your own identifying the form of the verb. One has been done for you.

Example: I look around and see only people who I love. (Present tense).

Worksheet 13

Unit No. 4

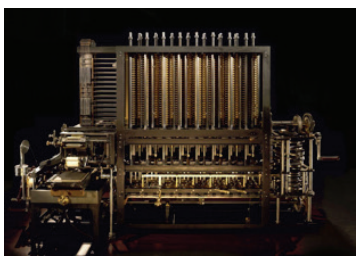
Reading for Meaning

SLO 1: Use critical thinking to respond to the text (while-reading)
- **Scan to answer short questions**
- **Deduce meaning of difficult words from context.**
- **Distinguish between what is clearly stated and what is implied.**

Activity 1: Read the given paragraph carefully and write the answers in spaces provided.



Computer is one of the most brilliant gifts of modern science. It is an electronic machine used to solve various problems. This is done by the instructions given to it using various programs called software. The ability of computers to follow generalized set of operations, called programs, enables them to perform an extremely wide range of tasks. The first mechanical computer was designed by Charles Babbage, the British mathematician in the year 1849. The prototype of computers was totally different from modern computers, but its basic structure was quite similar. Babbage attempted to make the first automatic computing engine, but he failed to complete it. Parts of his incomplete machine are on display in the science museum of London.



i. How are various problems solved through a computer?

_____

_____

ii. What did you learn about the function of programs in computer?

_____

_____

iii. What is similar between the first computer made by Charles Babbage and the one in use these days?

_____

_____

iv. The first mechanical computer was designed by the _____ mathematician?
1. American. 2. French 3. British 4. German

v. A prototype means _____
1. Model 2. Type of computer 3. Positive 4. Machine

Further practice: Complete the exercise given on page 32 of your textbook.

Worksheet 14

Unit No. 4

New Vocabulary

SLO 2: Build and use appropriate vocabulary and correct spelling for effective communication

Activity 1: Choose the most appropriate option. First one is done for you.

1. Computer is a/an:
i. mailing machine
ii. electronic machine
iii. supply machine
iv. simple machine
Ans: (ii) electronic machine

2. The first computer was designed by:
i. Charles Babbage
ii. Charles Edison
iii. Newton
iv. Charles lamb
Ans: _____

3. The antonym (opposite meaning) of 'automatic' is:
i. manual
ii. sharp
iii. self
iv. difficult
Ans: _____

4. Which one of the following is an abstract noun:
i. mouse
ii. monitor
iii. printer
iv. software
Ans: _____

5. The word 'enormous' means:
i. severe
ii. extremely large
iii. perfect
iv. minor
Ans: _____.

Further practice: Complete the exercise given on page 32 under the section of 'New Vocabulary,' of your textbook.

Worksheet 15

Unit No. 4

Procedural Writing

SLO 3: Use appropriate vocabulary and tense to write a simple paragraph by explaining a process or procedure.

A procedure is an established way of doing something. Whenever you read how-to guides or follow step-by-step instructions, you're using procedural writing. Using procedural writing helps you accomplish a goal; it gives instructions for completing both common and complex goals.

Activity 1: Read the procedure of using the simple -yet -powerful photo manipulation tool called Paint, which is a part of your computer's operating systems. Notice the words in Bold font which indicate the sequence of a procedure.

First, you need to know where is 'Paint?' But how to use Paint on MS Word. Windows 7 users – Click on the start button and in the search bar type in paint, then select the Paint icon. Alternatively, you can click on Start > All Programs > Accessories > Paint. Windows 88.1/ – In the main menu, scroll until you see the Paint icon and click on it.

Next, to open a saved image you wish to edit, click on the menu button (highlighted in red).

Then, you can choose to start a new project, open a saved picture, save an image as a different file type, print an image you have open, or email that image to a contact.

Subsequently, you can use the "Select" option to select a section of the photo. The selection can be rectangular or "free form" – meaning you can freely draw the selection you wish to.

Once selected, you can invert the selection, selecting everything BUT the area you've marked.

Another option is to use *Transparent selection,* which only selects the painted area, without the background. Presently, you can use the crop option to crop the image to the selected area. Moreover, the resize option will let you change the size of the selected area (or the whole picture if nothing was selected) by percentage of the original size, or by selecting a specific size in pixels. **Furthermore,** the Rotate option lets you rotate or flip the image as you please.

Now that you have a sense of the location of Paint in your computer's operating system, and some of the functions of this powerful photo manipulation tool, you can explore this program further.

Activity 2: Read the words in the box below which indicate sequence of a procedure. Fill in the blanks with the suitable word to complete the instruction on 'how to convert a Word Document to a PDF?'

Finally, Then, After this, Occasionally, First step, Next, Remember, Occasionally

1. _____some users find they may need to convert a Word Document into a PDF. Please follow the steps given below:
2. _____ to convert a Word Document to a PDF is to click the Microsoft Office Button, point to the arrow next to Save As, and then click PDF or XPS.
3. _____in the File Name list, type or select a name for the document.
4. _____the Save as type list, click PDF.
5. _____if you want to open the file immediately after saving it, select the Open file after publishing check box.
6. _____this check box is available only if you have a PDF reader installed on your computer.
7. _____, click Publish.

Further practice: Read pages 30 and 31 of your textbook and complete the exercises on page 32.

Worksheet 16

Unit No. 4

Possessive Pronouns

SLO 4: Demonstrate correct use of my – mine, your – yours etc

Activity 1: Read the sentences below and fill in the correct pronoun.

Should I use a possessive pronoun or a possessive adjective?

An adjective needs someone or something to talk about (describe).

A pronoun takes someone or something's place.

Possessive Adjective: It is my car (describes the car).

Pronoun: Its mine (takes the car's place).



Possessive Adjectives

1) Hamid works hard to keep _____ body fit.

2) Kadir and Saamer are farmers, they grow vegetable on _____ land.

3) The car is cool, I really like _____ colour.

4) We do _____ work diligently.

5) I find it very hard to keep my house clean, what do you do to keep _____ so tidy.

Possessive Pronouns

1. Your dog is smart but _____ is smarter. (I)
2. Our zoo has five deer, how many does _____ have? (You)
3. My seat is an aisle seat, _____ is a window seat. (he)
4. His birthday is on Friday, _____ is on Sunday. (I)
5. They took our seats, so we took _____. (They)
6. That's my favourite park, I love _____ swings. (It)
7. My family is poor, _____ is rich. (They)

Correct the possessives in the following sentences:

1. Tahir rode her horse around the farm.
2. May I ride you horse?
3. They lost them gloves; can they borrow yours?
4. I'm not sharing any of my gifts, they are all me.
5. I saw a huge truck in the parking lot of my neighbours, it was them.

Further practice: Complete the exercise given on page 33 of your textbook.

Worksheet 17

Unit No. 5

Read with Comprehension

SLO 1: Read with comprehension

Activity 1: Read the passage on Prophet Muhammad's (PBUH) Leadership.

Messenger Muhammad (PBUH) conveyed Islam, the religion of universal kindness. No other religion in history disseminated so rapidly as Islam. Successful leaders get the love and trust of their people and are pursued by them in amount to their aptitude to solve their problems. These can be personal or public or related to individual's private life or the community's social economic and political affairs. Messenger Muhammad (PBUH) resolved all problems so skilfully and easily that no one confronted him. Although his people were by nature argumentative, ignorant, wild, and rebellious, he delivered a message to them that was so grave that all his followers converted into a harmonious community of peace happiness knowledge and good morals.

The Messenger was enormously a just man. His universal kindness did not avert him from carrying out divine justice and his compassion and tolerance kept him from violating any Islamic rule. For example, during a military operation, Usama Bin Zayd tossed down an enemy soldier to kill him. When he was about to kill him, the man spoke out his faith in Islam. Judging this to be the product of fear of imminent death, Usama killed him. The Prophet reprimanded Usama and asked him if he had cleaved his heart open to see if what he was saying was out of fear or had he actually accepted the faith.

Prophet Muhammd (PBUH) had all the necessary leadership qualities for success in every aspect of life. Allah the Almighty says, "Most certainly you have in the messenger of Allah an excellent pattern of behaviour. "The Prophet (PBUH) is the source from which flowed all later developments related to command, statecraft, religion, spiritual development and so on in the Islamic world.

Activity 2: Answer the following questions

1. What was one of the reasons that made Prophet Muhammad (PBUH) a successful leader?

_____

2. What was the nature of the Prophet's (PBUH) followers?

_____

3. Explain the meanings of the following words with reference to the context.

   a. Confronted _____

   b. Harmonious community _____

   c. Divine _____

   d. Reprimanded_____

   e. Cleaved his heart open _____

4. Why does Prophet Muhammad (PBUH) stand out as someone with superb leadership qualities?

In the table below, fill the columns by giving three examples of his leadership qualities as mentioned in the passage and support these with your own reasons. One example has been for you.

Leadership Qualities of Prophet Muhammad (PBUH)	Example from the text	My reason to believe this is an exceptional quality
Problem solver	Resolved problems skilfully	I think addressing personal issues of people is an art, and our Prophet (PBUH) had a talent to deal with the most difficult issues in the easiest manner.

Further practice: Read the excerpt given on pages 36-38 and complete the exercise given on page 39.

Worksheet 18

Unit No. 5

Know About Verbs

SLO 2: Know about the definition of a verb

Activity 1: Read and understand the definition of verbs and distinguish between action and non-action verbs.

Verbs are the action words in a sentence that describe what the subject is doing. Along with nouns, verbs are the main part of a sentence or phrase, telling a story about what is taking place. In fact, without a verb, full thoughts can't be properly conveyed, and even the simplest sentences, such as Maria cooks, have a verb. Actually, a verb can be a sentence by itself, with the subject, in most case you, implied, such as, ***Cook!*** and ***Drive!***

VERBS	
Action words	**Non-Action verbs**
Verbs are 'doing' words, meaning they signify the part of the sentence which explains the action taking place: He ran away, she eats halwa puri on Sundays, the horses gallop across the fields. Ran, eats and gallop are the 'action' parts of those sentences, thus they are the verbs.	**Hon Not all verbs are easily identifiable as: action I know your name, Ali thought about it, she considered several applications. These are are non-action verbs, i.e. those that describe a state the state of being, emotion, possession, sense or opinion. Other non-action verbs include love like, agree, feel, am, and have.**

1. Kamran eats his dinner quickly.
2. We went to the market.
3. You write neatly in your notebook.
4. They thought about all the prizes in the competition.

Useful tips!

Here are some other ways to recognize verbs in a sentence: If you're not sure if a word is a verb, ask yourself, "Can I do _____?"

Can I think, wonder, walk, yawn? Yes, so these are verbs.

You can also ask, "What is happening?"

In the sentence, 'Kamran eats his dinner quickly', what is happening? **Eating** is happening, so eating is an action **verb**.

In the sentence, 'They thought about all the prizes,' what is happening? **Thought** (thinking) is happening, so thought is a non-action **verb**.

Activity 2: underline the verbs in the sentences given below and write if the verb is action or non-action in the space provided.

Let's run to the corner and back._____

I hear the train coming. _____

Call me when you're finished with class._____

I know the answer. _____

She recognized me from across the room. _____

Do you believe everything people tell you? _____

Further practice: complete the exercise on page 41 of your textbook.

Worksheet 19

Unit No. 5

Functions of a Verb

SLO 3: identify various functions of a verb

Useful Tip:
Some linking verbs can function as action verbs:
If you can substitute the verb with am is or are, you are dealing with a linking verb.
The dog smelled the man's boots.
The dog is the man's boots. (action)
The dog smelled bad.
The dog is bad. (linking)

Linking Verbs- forms of be:

am	be	being	was
are	been	is	were

▪ Other Linking Verbs:

appear	grow	seem	stay
become	look	smell	taste
feel	remain	sound	turn

Activity 1: Read each sentence and circle the verb. Determine whether the verb is acting as a linking or an action verb in the sentence. Write LV or AV on the line beside each sentence.

1. Math is my favourite subject. _____
2. I am eleven years old. _____
3. My uncle sings beautiful Hamd.
4. I looked everywhere for the key to my diary. _____
5. Your kitchen smells awful. _____
6. The students were tired after the P. E. class.
7. The baby seems cranky today. _____
8. My mother was not in her room. _____
9. My father is on a call. _____
10. I cook tasty food for my family. _____

Helping verbs

Am	Is	Are	Was
Were	Being	Been	Be
Has	Have	Had	Did
Shall	Will	Should	Would
May	Might	Must	Can
Could	Does	Do	

Activity 2: Read the paragraph. Circle and write at least four verbs for each category given below:



In our physical education class, we play lots of games. My favourite sport is football. In this game, both teams kick the ball turn by turn and try to take it towards the opposite team's goal and look to chase the target. This game requires a lot of energy and is quite rigorous, and the players make loud sounds to get the attention of their team members. Though most of the time the players seem exhausted due to the challenge of not being able to touch the ball with their hands and to continuously tackle with their feet, head or shoulders, it is a game worth playing. I began learning to play football when I was just a toddler. My father would throw the ball towards me and I was supposed to kick and not touch it with my hands. Now I am so used to this and feel that I can tackle almost anything with my feet, head and shoulders and the entire credit goes to my sporty father.

Action verbs	Linking verbs	Helping verbs

Further practice: Complete the exercise given on page 42 of your textbook.

Worksheet 20

Unit No. 5

Know More About Verbs

SLO 4: Have knowledge of various kinds of verbs

Activity 1:	Read the following paragraph titled 'the Yak's dilemma,' and list down 6 to 8 action verbs in the column below. Use these verbs to write a story of your own on an 'Unpleasant experience."

The Yak's Dilemma

"Look at my hair," the yak said. His hair was a mess. He did not like it this long. The yak could barely see because of his long hair. He needed to find someone that would cut it. He walked through plains looking for someone who could help. He found a monkey, who agreed to help the yak. The yak sat down happy that he would finally shed all the extra hair that had grown on his body. But when there was no movement of hair cutting, the yak turned his head to see what the monkey was doing. He was shocked to see that the monkey and at least ten of its companions were picking lice from its hair and enjoying the fresh protein. The yak kicked the monkeys and walked on ahead in disgust.



Action Verbs

My Story: _____

Mathematics

Unit
1

OPERATIONS ON SETS

Subject	Subject: Maths
Grade	Grade: VIII
Unit	Unit. 1
Topic	Topic: Operations on Sets
Page Reference of the text book:	1-24

Worksheet 1 Unit 1 — **Some Important Sets**

SLO:

Recognize set of:

- Natural numbers (N)
- Whole numbers (W)
- Integers (Z)
- Rational Numbers (Q)
- Even numbers (E)
- Odd numbers (O)
- Prime numbers (P)

Task:

Q1. Write name of given sets in the boxes,

i.	N = {1, 2, 3, 4…}	Set of Natural Numbers
ii.	W = {0, 1, 2, 3, . . .}	
iii.	Z = {0, ±1, ±2, . . .}	
iv.	E = {0, ±2, ±4, ±6, . . .}	
v.	P = {2, 3, 5, 7, 11, . . .}	
vi.	O ={ ±1, ±3, ±5, . . .}	
vii.	Q = $\{x \mid x = \frac{p}{q}$, p, q, $\in$ Z, q $\neq$ 0$\}$	

Worksheet 2 Unit 1 — Power Set

SLO: Find power set P(A) of a set A.

Sample:

If A = {1, 2, 3} then P (A) is the set of all the subsets of A.

P (A) = { φ, {1}, {2}, {3}, {1, 2}, {1, 3}, {2, 3}, {1, 2, 3}

Write power set of the following sets.

i. If B = {x, y} then P (B) = _____

ii. If x = {p, q, r} then P (X) = _____

iii. If Y = {s, t, u} then P (Y) = _____

iv. If R = {i, o, u} then P (R) = _____

v. If Q = {2, 3, 4} then P (Q) = _____

vi. If T = {orange, blue, red} then P (T) = _____

Worksheet 3 Unit 1 — Verify Commutative and Associative Laws w.r.t Union and Intersection

SLO: Verify Commutative and associative laws with respect to Union and Intersection.

Match Column A with Column B

Column A	Column B
Commutative law of union of sets	$A \cap (B \cap C) = (A \cap B) \cap C$
Associative law of intersection of sets	$A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$
Distributive property of union over intersection of sets	$A \cap B = B \cap A$
Commutative law of intersection of sets	$A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$
Associative law of union of sets	$A \cup B = B \cup A$
Distributive property of intersection over union of sets	$A \cup (B \cup C) = (A \cup B) \cup C$

Worksheet 4 Unit 1 — **De-Morgan's Laws**

SLO: State and verify De Morgan's Laws

Sample question

$U = \{a, b, c, d, e, f\}$

$A = \{a, b, c\}$

$B = \{d, e, f\}$

Then verify De-Morgan's law

Solution:

De-Morgan's law states

i. $(A \cup B)' = A' \cap B'$

ii. $(A \cap B)' = A' \cup B'$

i. $(A \cup B)' = A' \cap B'$

First LHS $= (A \cup B)'$

First we find $A \cup B$

$A \cup B = \{a, b, c\} \cup \{d, e, f\}$

$= \{a, b, c, d, e, f\}$

As

LHS $(A \cup B)' = U - (A \cup B)$

$= \{a, b, c, d, e, f\} - \{a, b, c, d, e, f\}$

$= \{\ \} \longrightarrow (1)$

Now RHS $= A' \cap B'$

First we find A' & B'

$A' = U - A$

$= \{a, b, c, d, e, f\} - \{a, b, c\}$

$= \{d, e, f\}$

$B' = U - B$

$= \{a, b, c, d, e, f\} - \{d, e, f\}$

$= \{a, b, c\}$

Now $A' \cap B'$

$A' \cap B' = \{d, e, f\} \cap \{a, b, c\}$

$= \{\ \} \longrightarrow ②$

From ① and ②

$\{\ \} = \{\ \}$

Hence verified that

$(A \cup B)' = A' \cap B'$

ii. $(A \cap B)' = A' \cup B'$

LHS

$(A \cap B)' = U - (A \cap B)$

$= \{a, b, c, d, e, f\} - \{\ \}$

$= \{a, b, c, d, e, f\} \longrightarrow ①$

Now taking RHS $= A' \cup B'$

First we find A' & B'

$A' = U - A$

$= \{a, b, c, d, e, f\} - \{a, b, c\}$

$= \{d, e, f\}$

$B' = U - B$

$= \{a, b, c, d, e, f\} - \{d, e, f\}$

$= \{a, b, c\}$

RHS $A' \cup B' = \{d, e, f\} \cup \{a, b, c\}$

$= \{a, b, c, d, e, f\} \longrightarrow ②$

From 1 & 2

$\{a, b, c, d, e, f\} = \{a, b, c, d, e, f\}$

Hence verified that

$(A \cap B)' = A' \cup B'$

Task:

If $U = \{a, e, i, o, u\}$
$X = \{a, e\}$
$Y = \{o, u\}$

Then verify De-Morgan Law

i. $(X \cup Y)' = X' \cap Y'$

ii. $(X \cap Y)' = X' \cup Y'$

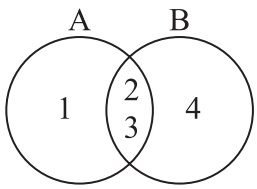
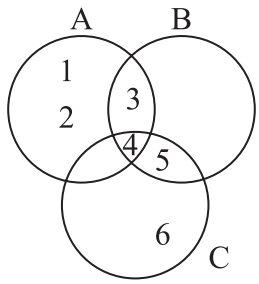
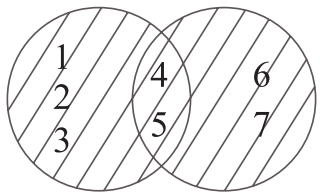
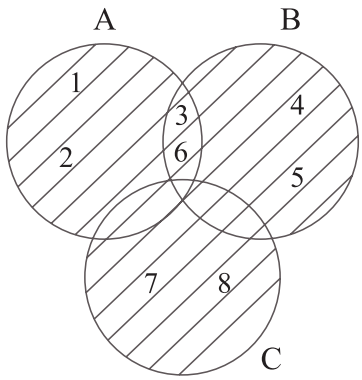
Solution:

Worksheet 5 Unit 1

To Demonstrate Union and Intersection of Three Overlapping Sets Through Venn Diagrams

SLO: Demonstrate union and intersection of three overlapping sets through Venn diagram.

Match the columns

Column A	Column B
If A = {1, 2, 3, 4} B = {3, 4, 5} C = {4, 5, 6} Then (A ∩ B) ∩ C = {4}	
If A = {1, 2, 3} B = {2, 3, 4} Then (A ∩ B)	
If A = {1, 2, 3, 6} B = {3, 4, 5, 6} C = {6, 7, 8} Then (A ∪ B) ∪ C =	
If A = {1, 2, 3, 4, 5} B = {4, 5, 6, 7} Then (A ∪ B) =	

Worksheet 6
Unit 1

Verify Associative and Distributive Laws Through Venn Diagram

SLO: Verify associative and distributive laws through Venn diagram.

Sample question

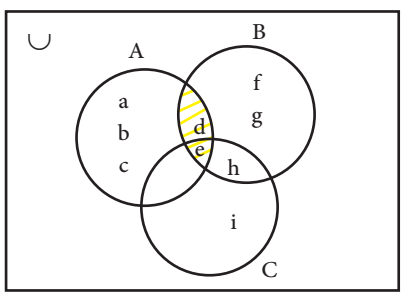
If U = {a, b, c, d, e, f, g, h, i}

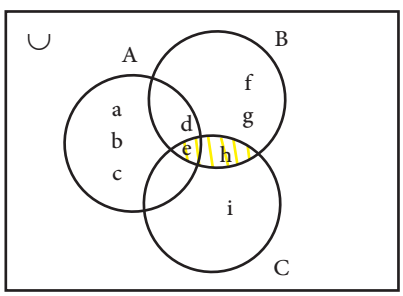
A = {a, b, c, d, e}

B = {d, e, f, g, h}

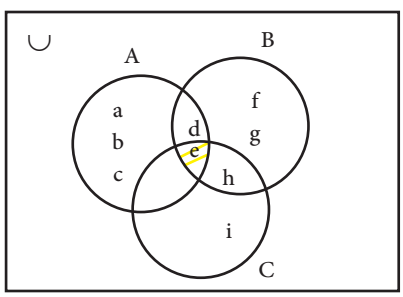
C = {e, h, i}

Verify $(A \cap B) \cap C = A \cap (B \cap C)$ using Venn diagram.

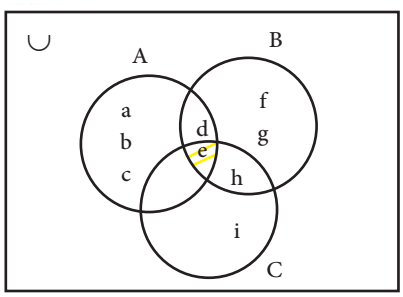




$A \cap B$



$B \cap C$



$(A \cap B) \cap C$ = $A \cap (B \cap C)$

Therefore the associative law $(A \cap B) \cap C = A \cap (B \cap C)$ has been shown above.

Task:

For the sets

$U = \{1, 2, 3, 4, 5, 6, 7, 8\}$
$A = \{1, 2, 3\}$
$B = \{3, 4, 5\}$
$C = \{3, 6, 7, 8\}$

Use Venn diagram to verify

i. $A \cap (B \cap C) = (A \cap B) \cap C$

ii. $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

Solution:

(Use separate sheet for the Venn Diagram)

Unit 2

REAL NUMBERS

Subject	Maths
Grade	Grade: VIII
Unit	2
Topic	Real Numbers
Page Reference of the text book:	25-49

Q1. Convert 0.63 into a fraction.
Solution:

Q2. Without division, using the rule separate the terminating and non-terminating decimals.

i. $\frac{47}{40}$ Terminating Non-terminating

ii. $\frac{84}{105}$ Terminating Non-terminating

Q3. Round off 262.5332 to the nearest thousandth.
Solution:

Worksheet 7 Unit 2 **Irrational Numbers**

SLO:

- Define irrational number.
- Recognize rational and irrational numbers.

Task:

A= $\{\frac{1}{2}, \sqrt{2}, \frac{1}{3}, \sqrt{3}, \frac{1}{4}\}$

i. Select which are rational numbers from the above set.
Q = { }

ii. Select which are not rational numbers from the above set.
Q′ = { }

iii. Does set A contain real numbers? Explain your answer.

Worksheet 8 Unit 2 — **Real Numbers**

SLO: Define real numbers.

Task:

$U = \{1, \frac{1}{2}, \sqrt{2}, \frac{1}{3}, \sqrt{3}, \frac{1}{4}, \frac{1}{5}, \sqrt{25}, \frac{1}{6}, \sqrt{6}\}$

Write the rational number in set Q and irrational numbers in Q'

i. $Q = \{$ $\}$

ii. $Q' = \{$ $\}$

iii. Is the union of Q and Q' the set of rational numbers or irrational number or real numbers? Explain your answer.

Task:

Write rational number or irrational number in front of each number

i	0.01001001	rational number	vi	$5\frac{3}{4}$	
ii	-6		vi	π	
iii	$\sqrt{3}$		viii	2.45	
iv	1.732		ix	$\sqrt{7}$	
v	$\frac{-11}{3}$		x	$\frac{7}{4}$	

Worksheet 9 — Unit 2 — Squares

SLO: Find perfect square of number.

Sample question.

$9 = 3 \times 3$ (product of two equal integers)

$= 3^2$

$= 9$

9 is a perfect square.

Whereas 8 is not a perfect square because we cannot express it as the product of two integers.

Task:
Fill in the table of squares of numbers 11 to 20.

Number	Product	Square	Number	Product	Square
11	$11 \times 11 = 11^2$	121	16		
12			17		
13			18		
14			19		
15			20		

Worksheet 10 — Unit 2 — Pattern for the Squares of Natural Numbers

SLO: Establish patterns for the squares of natural numbers (e.g. $4^2=1+2+3+4+3+2+1$)

Task:
Find the patterns for

i. $2^2 = 4 = 1 + 3$ (sum of first two odd numbers)

ii. $5^2 = 25 =$ _____

iii. $8^2 = 64 = 1+3+5+7+9+11+13+15$ (sum of first eight odd numbers)

iv. $9^2 = 81 =$ _____

Fill in the boxes

i. $2^2 = 1 + \square + 1 = 4$

ii. $3^2 = 1 + \square + \square + 2 + 1 = 9$

iii. $4^2 = 1 + 2 + 3 + \square + 3 + \square + 1 = 16$

iv. $7^2 = \square + \square + \square + \square + 5 + 6 + 7 + \square + \square + 4 + 3 + 2 + 1 = 49$

v. $9^2 = \square + \square + 3 + 4 + \square\ 6 + 7 + \square + 9 + 8 + 7 + 6 + \square + \square +$
$\square + \square + \square = 81$

Worksheet 11 — Unit 2 — Square Roots

SLO: Find square root of

- a natural number (e.g. 16, 625, 1600)
- a common Fraction (e.g. $\frac{9}{16}, \frac{36}{49}, \frac{49}{65}$)
- a decimal (0.01, 1.21, 0.64) given in perfect square form, by prime factorization and division method.

Sample question

Find square root of 16

$16 = 4 \times 4 = 4^2$

$\sqrt{16} = \sqrt{(4)^2}$

$= 4$

Task:

Find the square roots of the following

i. 64 ii. 225

Solution:

Sample question

Find square root of $\sqrt{\frac{100}{44}}$

$\frac{100}{144} = (\frac{10}{12})^2$

$$\Rightarrow \sqrt{\left(\frac{10}{12}\right)^2} = \frac{10}{12}$$

Task:

Find $\pm\sqrt{0.49}$

Solution:

Complete the table

Perfect Squares	1	4	9	16	25	400	625
Square Root		$\sqrt{4} = 2$		$\sqrt{16} = 4$			

Worksheet 12 — Unit 2 — Methods to Find Square Roots

SLO: Find square root of natural numbers using prime factorization and division methods.

a. Square root of Natural numbers

i. Prime factorization method.

Sample question

Q1. $144 = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3$

2	144
2	72
2	36
2	18
3	9
	3

$\sqrt{144} = \sqrt{2^2 \times 2^2 \times 3^2}$

$= 2 \times 2 \times 3$

$= 12$

Task:

Q2. Find square roots of the following by Prime factorization method.

i. 169 ii. 225

Solution:

ii. Division Method

Sample question:

Q3. Find the square root of 625

		25
2	625	
	4	
45	225	
	225	
	0	

i. Make pairs from right to left of the given number.
ii. To divide 6 we will take 2 x 2.
iii. Now we will take 45 x 5
iv. Quotient 25 is the required square root.

Task:

Q4. Find the square root of the following by division method

i. 256 ii. 144

Solution:

b. Square root of a common fraction.

i. Prime factorization Method

Sample question:

Q5. Find the square root of $\frac{121}{64}$

$121 = 11 \times 11 = 11^2 = 121$

$\Rightarrow \sqrt{121} = \sqrt{11^2} = 11$

$64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 = 2^2 \times 2^2 \times 2^2$

$\sqrt{64} = \sqrt{2^2 \times 2^2 \times 2^2} = 2 \times 2 \times 2 = 8$

Now

$$\frac{\sqrt{121}}{\sqrt{64}} = \frac{11}{8}$$

ii. Division Method

$$\frac{\sqrt{121}}{\sqrt{64}}$$

$$\begin{array}{r|l} & 11 \\ \hline 1 & 121 \\ & 1 \\ \hline 21 & 21 \\ & 21 \\ \hline & 0 \end{array}$$

Quotient 11 is the required square root of 121.

$$\begin{array}{r|l} & 8 \\ \hline 8 & 64 \\ & 64 \\ \hline & 0 \end{array}$$

Quotient 8 is the required square root of 64

Now

$$\frac{\sqrt{121}}{\sqrt{64}} = \frac{11}{8}$$

Task:

Q6. Find square root of following with both methods Prime factorization and Division method

i. $\frac{625}{900}$ ii. $\frac{784}{256}$

Solution:

c. Square root of a decimal factor

i. By Division method

Sample question:

Q7. Find the square root of 6.25

$$\begin{array}{r|l} & 2.5 \\ \hline 2 & 6.25 \\ & 4 \\ \hline 45 & 2.25 \\ & 2.25 \\ \hline & 0 \end{array}$$

2.5 is the required square root of 6.25

ii. $\sqrt{6.25} = \sqrt{\frac{625}{100}} = \sqrt{\frac{5\times5\times5\times5}{2\times2\times5\times5}}$

$$= \sqrt{\frac{5^2\times5^2}{2^2\times5^2}}$$

$$= \frac{5 \times 5}{2 \times 5} = \frac{25}{10} = 2.5$$

Task:

Q8. Find the square of given decimal fractions by (a) Division method (b) Prime factorization

i. 27.04 ii. 51.84

Solution:

Worksheet 13 Unit 2 Square Root of a Non-Perfect Square

SLO: Find square root of a number which is not a perfect square (e.g. the numbers 2, 3, 2.5)

Sample question:

Q1. Calculate the square root of 1233

	35
3	1233
	9
65	333
	325
70	008

As the divisor has become greater than the dividend, we will stop process here. The remainder i.e. 8 is the digit which must be subtracted from the given number (1233) to get a perfect square.

Note:

All the non-perfect squares end with 2, 3, 7 or 8. But it is not necessary that all the perfect squares always end with 0, 1, 4, 5, 6 or 9.

Q2. Write perfect square and non-perfect squares in the correct box.

i	144	Perfect Square	**vi**	45857	
ii	458782	Non-Perfect Square	**vii**	400	
iii	169		**viii**	361	
iv	196		**ix**	103	
v	451288		**x**	8888	

Worksheet 14 Unit 2

Number of Digits in the Square Root of Perfect Squares

SLO: Use the following rule to determine the number of digits in the square root of a perfect square.

Rule: Let n be the number of digits in the perfect square then its square roots contains

- $\frac{n}{2}$ digits if n is even
- $\frac{n+1}{2}$ digits if n is odd

Sample Question.

Find the number of digits in the square roots of 169
Solution:

The number digit in 169 is n = 3 which is odd number. Therefore

$x = \frac{n+1}{2}$

$= \frac{3+1}{2}$

$= \frac{4}{2} = 2$

The number of digits in square root of 169 is 2

Verification
$\sqrt{169} = 13$ has 2 digits.

Note: $x = \frac{n}{2}$ if n is even

$x = \frac{n+1}{2}$ if n is odd

Task:

Find the number of digits in the square root of

i. 400

ii. 2704

iii. 5184

Worksheet 15 Unit 2 **Real Life Problems**

SLO: Solve Real life problems involving square roots.

Q1. The area of a square room is $784m^2$. Find the length of its sides?

Solution:

Q2. A square desktop has an area of 324 square inches. What is the length of one side of the desktop?

Solution:

Q3. If the area of a square shaped field of a wheat crop is $7744m^2$. Find the perimeter of the field?

Solution:

Q4. Find the least number which must be subtracted from 3139 to get a perfect square, then verify your answer.

Solution:

Worksheet 16 Unit 2	Cubes, Cube Root and Perfect Cube

SLO:

- Recognize cubes and perfect cubes.
- Find cube roots of a number which are perfect cubes.

Note: we write 3 cube as 3^3

Sample question:

Check whether 343 is a perfect cube or not.

Solution:

Calculating prime factor of 343 we have

$343 = 7 \times 7 \times 7 = 7^3$

In the prime factorization of 343, '7' occur three times, therefore 343 is a perfect cube.

Task:

Complete the chart

S. No	Number	Perfect Cube $e.g. \sqrt[3]{27} = 3$	Not perfect Cube
1	729	☑	
2	79		
3	1000		
4	512		
5	128		☑

Worksheet 17 Unit 2	Properties of Cubes of Number

SLO: Recognize Properties of cubes of numbers.

a. **Cube of a positive number**

Sample question:

Q1. Find cube of 17

Solution: $17^3 = 17 \times 17 \times 17$

$= 4913$ (Note: The cube root of a number x is denoted by $\sqrt[3]{x}$)

b. **Cube of negative number**

Q2. Find cube of – 100

Solution: $(-100)^3 = (-100) \times (-100) \times (-100) = -1000000$

Note for any positive number x

$\sqrt[3]{-x} = -\sqrt[3]{x}$

c. **Cube of a common fraction**.

If a >1, then $a^3 > a$; a is a real number.

Q3. Find cube of $\frac{1}{9}$

Solution: $(\frac{1}{9})^3 = \frac{1}{9} \times \frac{1}{9} \times \frac{1}{9} = \frac{1}{729}$

The cube value of a fractional number is much less than the number being cubed $\frac{1}{729} < \frac{1}{9}$

Task:

Q4. Find the cube root of the following numbers

i. 1728 ii. -9261 iii. 15625

iv. $-\frac{64}{125}$ v. $\frac{27}{8}$

Solution:

Q5. Find the value

i. $\sqrt[3]{19683}$ ii. $\sqrt[3]{-64}$ iii. $\sqrt[3]{-343}$

Solution:

Unit 3

NUMBER SYSTEM

Subject	Maths
Grade	VIII
Unit	3
Topic	Number System
Page Reference of the text book:	50-68

Worksheet 18 (Unit 3) — The Various Number Systems

SLO:

Task:

Q1. What are the digits in the decimal system? Circle the correct answer:

a. (0, 1) b. (0, 1, 2, 3, 4, 5, 6, 7) c. (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

1. How many digits are in the decimal system?

Ans. _____

2. How do you conclude that the number of digits form the base of a number system?

Ans. _____

Worksheet 19 (Unit 3) — Number System with Base 2, 5, 8, 10

SLO:

- Recognize base of a number system.
- Define number system with base 2, 5, 8, and 10.

Q1. Chose the correct option and fill in the blank.

i. If the digits in a number system are 0, 1 then the base will be _____.

a. 2 b. 5 c. 4 d. 5

ii. If the digits in a number system are 0, 1, 2, 3, 4 then base will be _____.

a. 2 b. 5 c. 8 d. 10

iii. If digits are 0, 1, 2, 3, 4, 5, 6, 7 then base will be_____.

a. 3 b. 5 c. 6 d. 8

Q2. Write the correct base. Assume that the largest number for each base has been used.

1	(101101)	Base 2	6	(524)	Base 6
2	(41013)		7	(101)	
3	(1001111)		8	(10111101)	
4	(102341)		9	(102341)	
5	(75)		10	(7536)	

Worksheet 20 Unit 3 **Conversion**

SLO: Convert a number from decimal system to a system with base 2, 5, and 8, and vice versa.

a. Conversion of decimal system to binary system

Sample question:

Q1. Convert 35 in base 10 to equivalent number in binary system (base 2).

Solution:
Let us convert 35 to its equivalent number in the binary system.

2	35	
2	17	1
2	8	1
2	4	0
2	2	0
	1	0

i. This is continous division with base digit 2 until we find less than '2' remainder

ii. All the remainders from bottom to top are written to form the number. In this example the last remainder is 1 and the first is also 1. So we start from the '1' at the bottom and get the number as $(100011)_2$

Therefore $(35)_{10} = (100011)_2$

This number will be read as "one zero zero zero one one base 2"

Task:

Q2. Convert the following into binary system.

i. 77 ii. 115 iii. 305

Solution:

Note: use separate sheet for solution.

b. Conversion of binary system to decimal system.

Sample question

Q3. Convert $(1001011)_2$

Solution:

$$(1001011)_2 = 1 \times 2^6 + 0 \times 2^5 + 0 \times 2^4 + 1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$$

$$= 64 + 0 + 0 + 8 + 0 + 2 + 1 = 75$$

Solving hints:

a. All the digits that are in the ones place, tens place, hundreds place and so on are multiplied by a power of 2 starting from 0, 1, 2, 3 and so on. Then all the terms are added to get the decimal number which is converted from the binary number.

Task:

Q4. Convert the following into decimal number

i. $(10101010)_2$ b. $(10011011011)_2$ c. $(1101101)_2$

Solution:

c. Conversion of decimal system to a system with base 5.

Sample question:

Q5. Convert 470 into a system with base 5

5	470	
5	94	0
5	18	4
	3	3

i. This is continous division with base digit 5 until we find a remainder that is less than 5

ii. All the remainders from bottom to top are then written to form the number. In this example the last remainder is 3 and the first is 0. So we start from 3 and end at 0 and write the number as $(3340)_5$

Therefore $(470)_{10} = (3340)_5$

Task:

Q6. Convert the following decimal numbers into a system with base 5.

i. 375 ii. 499 iii. 5890

Solution:

d. Conversion of a system with base 5 to decimal system.

Sample question

Q7. Convert $(430214)_5$ to decimal system.

Solution:

$$(430214)_5 = 4 \times 5^5 + 3 \times 5^4 + 0 \times 5^3 + 2 \times 5^2 + 1 \times 5^1 + 4 \times 5^0$$

$$= 4 \times 3125 + 3 \times 625 + 0 + 50 + 5 + 4$$

$$= 12500 + 1875 + 0 + 50 + 5 + 4$$

$$= 14434$$

Solving Hints:

a. All the digits that are in the ones place, tens place, hundreds place and so on are multiplied by a power of 5 starting from 0, 1, 2, 3 and so on. Then all the terms are added to get the decimal number which is converted from the number in base 5.

Task:

Q8. Convert the following into decimal system.

i. $(3124)_5$ ii. $(14242)_5$ iii. $(334414)_5$

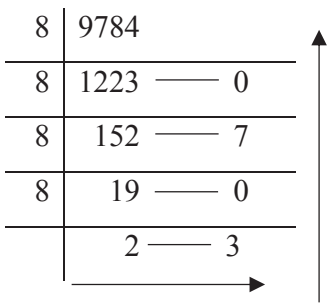
Solution:

e. Conversion of decimal system to octal system.

Sample question.

Q9. Convert 9784 into octal system.

Solution:



i. This is continous division with base digit 8 untill we find a remainder which is less than 8

ii. All the remainders from bottom to top are written to form the number. In this example the last remainder is 2 and the first is 0. So we start from 2 and end at 0 and write the number as $(23070)_8$

$(9784)_{10} = (23070)_8$

Task:

Q10. Convert the following decimal numbers into octal system.

i. $(89172)_{10}$ b. $(789847)_{10}$ iii. $(998784)_{10}$

Solution:

f. Conversion of octal system to decimal system

Sample question.

Q11. Convert $(134)_8$ into decimal system

Solution:

$$(134)_8 = 1 \times 8^2 + 3 \times 8^1 + 4 \times 8^0$$
$$= 1 \times 64 + 3 \times 8 + 4 \times 1$$
$$= 64 + 24 + 4$$
$$= 92$$

Solving hints:

a. The digits from the ones place, tens place, hundreds place and so on are multiplied by a power of 8 starting from 0, 1, 2 and so on. Then all the terms are added to get the decimal number which has been converted from the octal system.

Task:

Q12. Convert the following octal numbers into the decimal system.

i. $(74567)_8$ ii. $(572147)_8$ iii. $(6574724)_8$

Solution:

Subtraction

Sample question.

Q3. Solve $(1110)_2 - (111)_2$

Step1: Align both the numbers from right to left. **Step 2**: Subtract the numbers of right most column first. **Step 3:** As we cannot subtract 1 from 0 we borrow from the digit to the left. In base 2, when we borrow "1" for the right side digit we actually borrow "2"*. **Step 4**: In next column the number will become 0 so previous step will be repeated. **Step 5:** In next column the number will again become 0 so previous step will again be repeated. **Step 6:** In the last column the number will become 0. Therefore, the answer is $(1110)_2 - (111)_2 = (111)_2$	② ② ⓪ ⓪ ② $(1\ 1\ 1\ 0)_2$ - $(1\ 1\ 1)_2$ $(1\ 1\ 1)_2$ **Solving hint:** * In binary system when we borrow "1" for the right side digit, it is actually "2".

Task:

Q4. Find

i. $(11111)_2 - (1010)_2$ ii. $(10010)_2 - (1101)_2$ iii. $(1101)_2 - (101)_2$

Solution:

Multiplication

Q5. Solve: $(1010)_2 \times (111)_2$

Solution:

$$\begin{array}{r} (1010)_2 \\ \times\ (111)_2 \\ \hline {}^{1}(1\ 0\ 1\ 0)_2 \\ {}^{1}(1\ 0\ 1\ 0\ 0)_2 \\ +\ (1\ 0\ 1\ 0\ 0\ 0)_2 \\ \hline (1\ 0\ 0\ 0\ 1\ 1\ 0)_2 \end{array}$$

Therefore $(1010)_2 \times (111)_2 = (1000110)_2$

Task:

Q6. Solve

i. $(111)_2 \times (101)_2$

ii. $(1101)_2 \times (100)_2$

iii. $(11010)_2 \times (111)_2$

Solution:

Steps: 1. Align both the numbers from right to left you wish to add as you would if you were adding decimal numbers. 2. Add the numbers of right-most column first (following the rules of decimal addition). 3. As the answer becomes 2, it should be divided by 2, so the quotient 1 and remainder will be 0, and 1 is carried to next column. 4. In next column, again by addition it becomes 2, so previous step is repeated. 5. In third column, by addition it becomes 3, so it is divided by 2. Now remainder is 1 and quotient will be 1. 6. In answer, 1 will be quotient and will be written on left-most side of the answer (as there is no further column in the question). 7. $(1100)_2$ is the answer.	1 1 1 $(1\ 0\ 1)_2$ $(1\ 1\ 1)_2$ $(1\ 1\ 0\ 0)_2$

b. Number System with base 5.

Addition

Sample question.

Q7. Evaluate $(3124)_5 + (3141)_5$

Step1: Align both the numbers from right to left. **Step 2**: Add the numbers in the right most column first. If the sum is 5 or greater than 5 divide the sum by 5 until the remainder is less than 5. **Step 3:** As the answer becomes 5. It should be divided by 5, write the remainder and carry the quotient to the next digit and so on.	1 1 $(3\ 1\ 2\ 4)_5$ $+\ (3\ 1\ 4\ 1)_5$ $(1\ 1\ 3\ 2\ 0)_5$

Task:

Q8. Find

i. $(43)_5 + (44)_5$

ii. $(143)_5 + (341)_5$

iii. $(1444)_5 + (4411)_5$

Solution:

Subtraction

Sample question.

Q9. Evaluate $(4112)_5 - (3043)_5$

⑤ ⓪ ⓪ ⑤ $(4\ 1\ 1\ 2)_5$ $-\ (3\ 0\ 4\ 3)_5$ $(1\ 0\ 1\ 4)_5$	**Solving Hint:** In base 5, when we borrow "1" for the right side digit, it is actually "5".

Task:

Q10. Simplify

i. $(34)_5 - (14)_5$

ii. $(413)_5 - (314)_5$

iii. $(1322)_5 - (1020)_5$

Solution:

Multiplication

Sample question.

Q11. Solve $(41)_5 \times (40)_5$

$(4\ 1)_5$ $\times\ (4\ 0)_5$ $(0\ 0)_5$ $+\ (3\ 1\ 4\ 0)_5$ $(3\ 1\ 4\ 0)_5$	**Solving Hint:** Step 1: $4\ 1 \times 0 = 0\ 0$ Step 2: $1 \times 4 = 4$ Step 3: $4 \times 4 = 16$ Step 4: Write $(16)_{10}$ in base 5 which is $(31)_5$ Rules for remainder and quotient in addition for base '5' will be followed.

Task:

Q12. Find

i. $(441)_5 \times (22)_5$

ii. $(4132)_5 \times (34)_5$

iii. $(24)_5 \times (44)_5$

Solution:

Note: Use separate sheet for solution.

c. Octal system or number system with base 8

Addition

Sample question:

Q13. Evaluate $(7641)_8 + (3747)_8$

Step1: Align both the numbers from right to left. **Step 2**: Add the numbers of right most column first. If the sum is 8 or greater than divide the sum by 8 until the remainder is less than 8. **Step 3:** Write the remainder and carry the quotient to the next digit and so on.	① ① ① $(7\ 6\ 4\ 1)_8$ $+\ (3\ 7\ 4\ 7)_8$ $(1\ 3\ 6\ 1\ 0)_8$

Task:

Q14. Find

i. $(73)_8 + (33)_8$
ii. $(87)_8 + (202)_8$
iii. $(473)_8 + (776)_8$

Solution:

Note: Use separate sheet for solution.

Subtraction

Sample question

Q15: Evaluate $(616)_8 - (55)_8$

⑤ ⑧ $(6\ 1\ 6)_8$ $-\ (5\ 5)_8$ $(5\ 4\ 1)_8$	**Solving Hint:** In base 8 when we borrow "1" for the right side digit, we actually borrow "8".

Task:

Q16. Simplify

i. $(63)_8 - (40)_8$
ii. $(551)_8 - (66)_8$
iii. $(16315)_8 - (4726)_8$

Solution:

Note: Use separate sheet for solution.

Multiplication

Sample question

Q17: Evaluate $(75)_8 \times (55)_8$

(3) (3) $(7\ 5)_8$ $\times \quad (5\ 5)_8$ $1\ (4\ 6\ 1)_8$ $+\ (4\ 6\ 1\ 0)_8$ $(5\ 2\ 7\ 1)_8$	**Solving Hint:** **Step 1:** $5 \times 5 = 25$ which is 31 in base 8. **Step 2:** $7 \times 5 = 35$ which is 43 in base 8, but we must add the 3 as well and we get 46. **Step 3:** Rules for remiander & quotient in addition for base '8' will be followed.

Task:

Q18. Find

iv. $(46)_8 \times (14)_8$

v. $(311)_8 \times (67)_8$

vi. $(333)_8 \times (444)_8$

Solution:

Note: Use separate sheet for solution.

Worksheet 21 Unit 3 — **Addition, Subtraction and Multiplication of Numbers with Different Bases**

SLO: Add, Subtract and multiply numbers with different bases.

Sample question.

a. Addition

Sample question:

Q1. Evaluate $(41)_2 + (35)_5$

Step 1. Convert the number to the decimal numbers first.

$(41)_2 = 4 \times 2^1 + 1 \times 2^0$

$= 4 \times 2 + 1 \times 1$

$= 8 + 1 = 9$

$(35)_5 = 3 \times 5^1 + 5 \times 5^0$

$= 3 \times 5 + 5 \times 1$

$= 15 + 5$

$= 20$

Step 2. Now add the decimal numbers

$(41)_2 + (35)_5 = (9)_{10} + (20)_{10}$

$(41)_2 + (35)_5 = (29)_{10}$

Task:

Q2. Find

i. $68 + (123)_5 + (1001)_2$

ii. $72 + (111)_5 + (236)_8$

iii. $(123)_2 + (333)_5 + (416)_8$

Solution:

Note: Use separate sheet for solution.

b. Subtraction

Sample question:

Q3. Subtract $(34)_5 - (14)_2$

Solution:

Convert the numbers into decimal numbers

$(34)_5 = 3 \times 5^1 + 4 \times 5^0$

$= 15 + 4 = 19$

$(14)_2 = 1 \times 2^1 + 4 \times 2^0$

$= 2 + 4 = 6$

Now subtract

$(34)_5 - (14)_2 = 19 - 6 = (13)_{10}$

Task:

Q4: Simplify

i. $(168)_5 - (101)_8$

ii. $68 - (100)_5 - (10)_8$

iii. $(43)_8 - (34)_5$

Solution:

Note: Use separate sheet for solution.

c. Multiplication

Sample question:

Q5. Multiply $(12)_2 \times (24)_5 \times (54)_8$

Solution:

First convert all the numbers to decimal numbers

$(12)_2 = 1 \times 2^1 + 2 \times 2^0 = 2 + 2 = 4$

$(24)_5 = 2 \times 5^1 + 4 \times 5^0 = 10 + 4 = 14$

$(54)_8 = 5 \times 8^1 + 4 \times 8^0 = 40 + 4 = 44$

Now multiply all the decimal numbers

$(12)_2 \times (24)_5 \times (54)_8 = 4 \times 14 \times 44 = 2464$

Task:

Q6. Multiply the following

i. $(101010)_2 \times (432)_5 \times (34)_8$

ii. $(1423)_5 \times (172)_8 \times (241)_5$

Solution:

Note: Use separate sheet for solution.

Q7. Simplify and express the answers in decimal number system.

i. $(656)_8 + (21334)_5 - (100100101)_2$

ii. $\{(4341)_5 - (11101)_2\} \times \{(744)_8 - (144)_5\}$

iii. $(1101)_2 \times (44)_5 - (16)_8$

Solution:

Note: Use separate sheet for solution.

قومی ترانہ

پاک سرزمین شاد باد
کشور حسین شاد باد
تو نشان عزم عالی شان
ارض پاکستان!
مرکز یقین شاد باد
پاک سرزمین کا نظام
قوت اخوت عوام
قوم، ملک، سلطنت
پائندہ تابندہ باد
شاد باد منزل مراد
پرچم ستارہ و ہلال
رہبر ترقی و کمال
ترجمان ماضی شان حال
جان استقبال!
سایۂ خدائے ذوالجلال

KHYBER PAKHTUNKHWA ELEMENTARY AND SECONDARY EDUCATION DEPARTMENT

ہدایات برائے طلبہ

عزیز طلبہ!

آپ کے قیمتی وقت کو ضائع ہونے سے بچانے اور تعلیمی سرگرمیوں کو بحال رکھنے کے لیے محکمہ ابتدائی و ثانوی تعلیم حکومتِ خیبر پختونخوا کے توسط سے بنیادی مضامین (اُردو ،انگریزی، ریاضی، جنرل سائنس) پر مشتمل عملی کتب مرتب کی گئی ہیں۔ اِن عملی کتب میں دی گئی سرگرمیوں کو مکمل کرنے کے لیے درج ذیل ہدایات کو غور سے پڑھیں اور اُن پر عمل کریں۔

1. تمام سرگرمیوں/ سوالات کے ابتدامیں دی گئی ہدایات کو غور سےپڑھیں ۔
2. اس عملی کتاب میں دیے گئے سوالات کو متعلقہ مضمون کی درسی کتاب کی مدد سے حل کریں۔
3. درسی درسی کتاب کے متعلقہ مواد کو غورسے پڑھیں اور عملی کتاب میں دی گئی سرگرمیاں اور سوالات خود حل کریں۔
4. کسی بھی مشکل صورت حال میں گھر میں کسی بھی پڑھے لکھے فرد، استاد یا پھرنیچے دیے گئے متعلقہ مضمون کے فوکل پرسن سے بذریعہ ٹیلی فون رہنمائی حاصل کی جا سکتی ہے۔
5. ہر مضمون کی عملی کتاب مختلف سرگرمیوں پر مشتمل ہے جن کے لیے دنوں اور وقت کا تعین کر دیا گیا ہے ۔ ہر مضمون کو روزانہ کی بنیاد پر تیس سے چالیس منٹ کا وقت دیں تا کہ سرگرمی میں دیے گئے تصور کو آسانی سے سمجھ سکیں اورسارا کام ایک ہی دفعہ ختم نہ کریں ۔
6. عملی کتاب مکمل کرنے کے بعد اپنے پاس سنبھال کر رکھیں اوراسکول کھلنےکے بعداپنے متعلقہ استاد کے حوالے کریں۔

نوٹ: اس ورک شیٹ کے باقاعدہ ششماہی امتحان میں نمبر دیے جائیں گے۔

فوکل پرسنز:

1.	انگلش	انعام اللہ خٹک	0333-9746976
2.	ریاضی	عباس خان	0345-9419923
3.	جنرل سائنس	ڈاکٹر امتیاز علی	0336-9687196
4.	اُردو	تاج ولی خان	0313-9848959

General Science

Worksheet 1

Unit No. 1

Human Organ System - Nervous System

SLO: Describe the structure of the nervous system

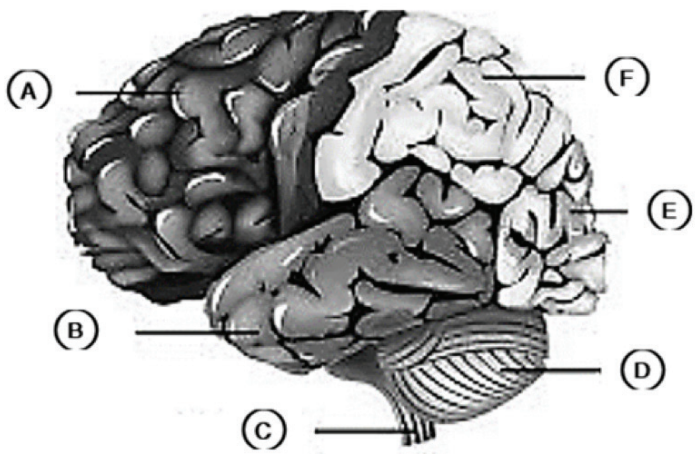
Activity 1:	Read page 3 of the G.Sc. textbook and fill in the blanks

The Central Nervous system consists of _____ and _____.

The Central Nervous system acts as a _____ _____ for the whole nervous system.

The brain can be divided into _____main parts.

Activity 2:	Observe the fig 1.4 page 4 of the G.Sc. textbook and label the diagram of human brain given below.



A._____

B._____

C._____

D._____

E._____

F._____

Reference G. Science Textbook Grade 8 Page. 2-5

Worksheet 2

Unit No. 1

Nervous System

SLO: Describe the structure and functions of the nervous system

Activity 1: Read the topic "Human Nervous system" from page 2-5 in the G.Sc. textbook then give suitable answers of following questions.

a. Define human Nervous system?

---

b. Write the functions of following organs in the Nervous System.

S. No	Organ	Functions
1.	Cerebrum	
2.	Thalamus	
3.	Hypothalamus	
4.	Mid brain	
5.	Cerebellum	
6.	Pons	
7.	Medulla oblongata	
8.	Spinal cords	

Reference G. Science Textbook Grade 8 Page. 2-3

Worksheet 3

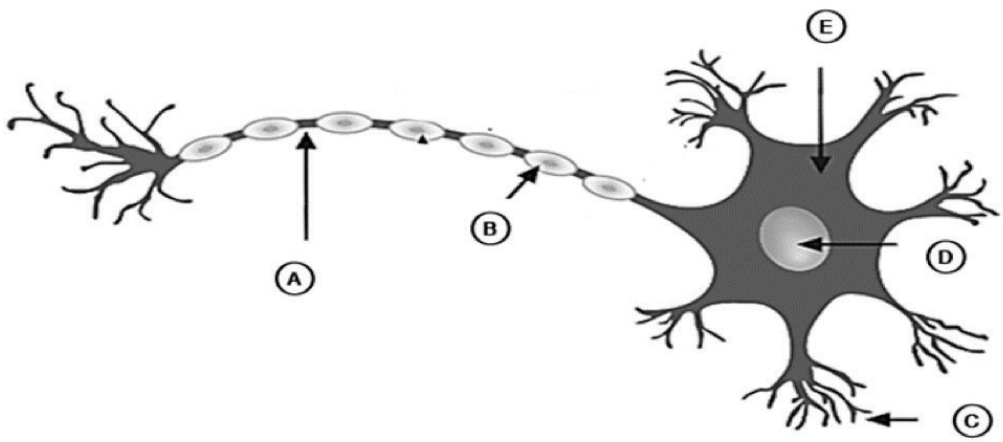
Unit No. 1

Nervous System -Neuron

SLO: Describe the structure and functions of a Neuron

Activity 1: Observe the fig 1.5 on page 7 of the G.Sc. textbook and label the diagram given below with the given words.

Nucleus, cell body, dendrites, Axon, Myelin sheath



Activity 2: Read the description of Neuron structure on page 7 of the G.Sc. textbook and fill in the blanks.

A neuron consists of _____parts _____ _____ and _____.

The cell body contains a _____ and _____.

The thread like projects on the cell body are called _____.

The _____ is a long projection and it _____ _____ away from the cell body.

Neuron _____, messages in the form of _____ _____ called nerve impulses.

A single nerve is a _____ of many _____.

According to the function of neurons they are of three types, name them

1. _____ 2._____ 3. _____

Reference G. Science Textbook Grade 8 Page. 07

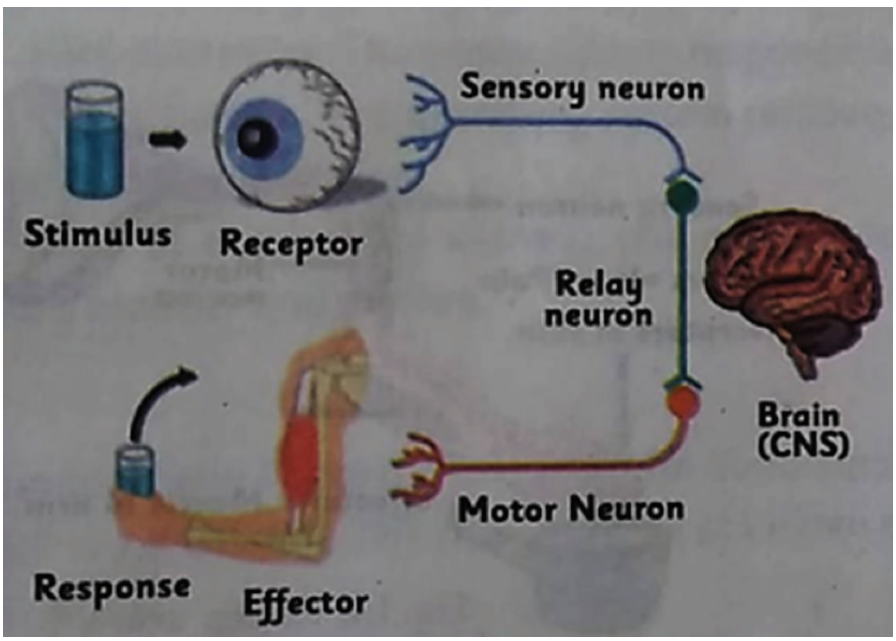
Worksheet 4

Unit No. 1

Working of Nervous System

SLO: Explain the working of the nervous system

Activity 1: Read the working of the Nervous system page 8-9 of the G.Sc. textbook and write the steps of working of nervous systems with the help of the given diagram.



1. _____
2. _____
3. _____
4. _____

Activity 2: Read page 8 of the G.Sc. textbook and fill in the blanks

Nervous system coordinates all _____ _____. It detects changes in the environment and produces _____ to the _____.

Reference G. Science Textbook Grade 8 Page. 5-9

Worksheet 5

Unit No. 1

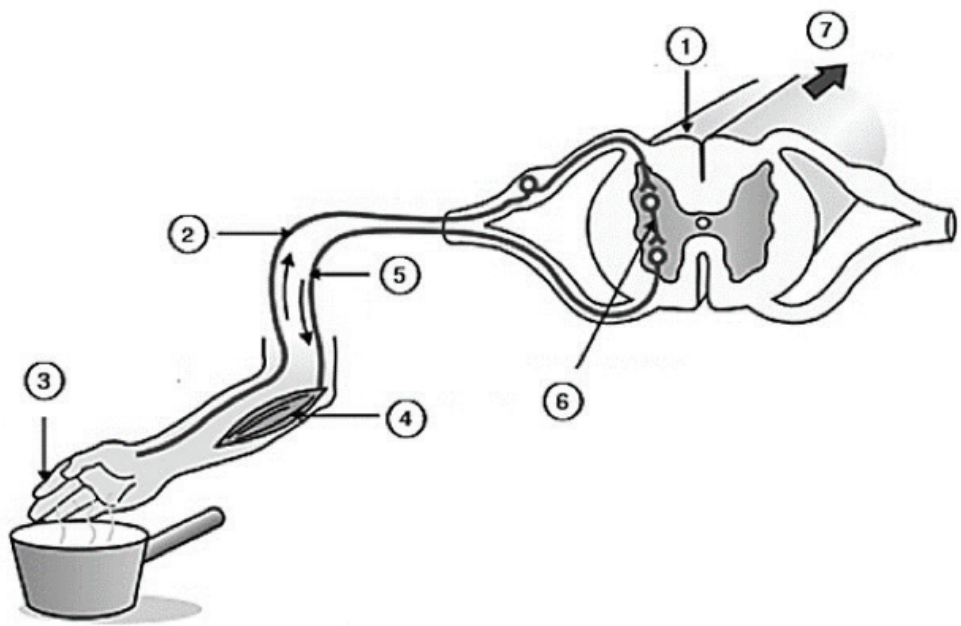
Reflex Action

SLO: Explain reflex action with an example.

Activity 1:	Define reflex action and give One Example of reflex action

---

Activity 2:	Observe fig 1.8 on page 9 of the G.Sc. textbook and label the given diagram.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Reference G. Science Textbook Grade 8 Page. 9

Worksheet 6

Unit No. 1

Reflex Action

SLO: Differentiate between voluntary and involuntary actions experienced by you

Activity 1: Define voluntary actions with examples?

b. Define involuntary or autonomic actions with examples?

c. Write the difference between voluntary and involuntary actions with examples

Voluntary action	Involuntary action
Examples	Examples

Reference G. Science Textbook Grade 8 Page. 9 -10

Worksheet 7

Unit No. 1

Human Excretory System

SLO: Define excretion. Draw and label human excretory system.

Activity 1: What is meant by excretion?

_____

_____

_____

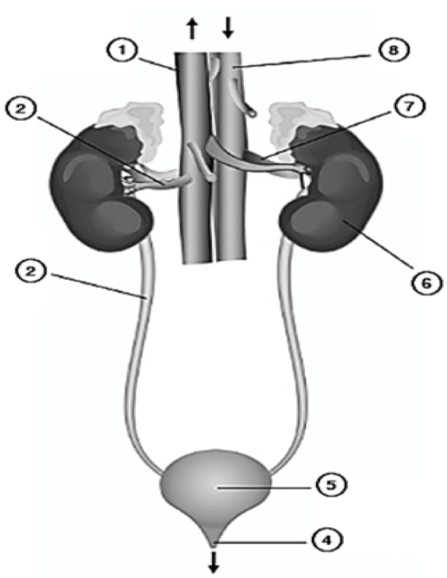
b. Define human execratory system?

_____

_____

_____

Activity 2: Observe fig 1.9 page 11 of the G.Sc. textbook and label the diagram of human excretory system.



1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Reference: G. Science Textbook Grade 8 Page. 9-10

Worksheet 8

Unit No. 1

Human Kidney

SLO: Describe the role of kidney in excretion of waste.

Activity 1: a. What is the shape of the kidney?

b. Where are Kidneys located in our body?

c. Write 4 roles of Kidney in our body

1 :

2:

3:

4:

Reference G. Science Textbook Grade 8 Page 10 – 13.

Worksheet 9

Unit No. 1

Treatment of Malfunctioned Kidney

SLO: Investigate the possible causes of the malfunctioning of kidneys

Activity 1: Read page 14 – 15 of the G.Sc. textbook and answer the following questions.

a. Write the treatment method for removal of stone from kidney

b. Define dialysis and their functions?

c. How the human kidney is transplanted.

Reference G. Science Textbook Grade 8 Page. 14-15

Worksheet 10

Unit No. 2

Heredity in Organism - Cell Division

SLO: Differentiate between mitosis and meiosis

Activity 1: Read page 20 of the G.Sc. textbook and fill in the blanks

Living organisms consists of _____ and these _____ have the ability to reproduce and multiply through _____ division. It is a process through which parent cell divides in to _____ _____.

There are two methods of cell division _____ and _____

Activity 2: Read (page 20 of the G.Sc. textbook) the following statements carefully and identify it as True or False.

S. No	Statement	T	F
1.	In a process of cell division a parent cell is divided into daughter cells.		
2.	In Mitosis a parent cell is divided into two daughter cells.		
3.	In Mitosis the number of chromosomes in the daughter cells is half as in parent cell.		
4.	In Meiosis the gametes produced are different from one another and from parent cell.		
5.	In Mitosis there involve a single division.		

Reference G. Science Textbook Grade 8 Page. 20

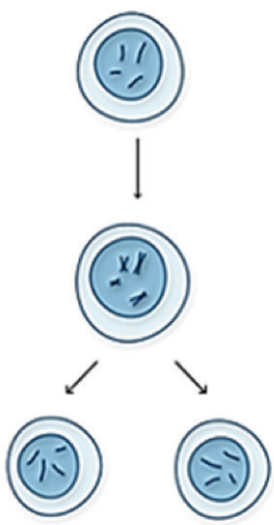
Worksheet 11

Unit No. 2

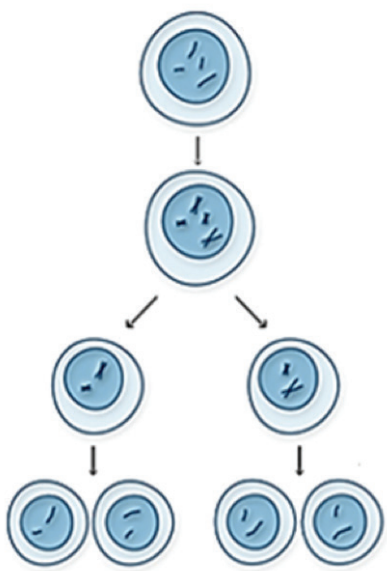
Heredity in Organism - Cell Division

SLO: Differentiate between mitosis and meiosis

Activity 1: Observe the fig 3.4 page 31 of the G.Sc. textbook and label the following diagram of cell division and identify the types of cell division.



Types of cell division: _____



Types of cell division: _____

Difference

Reference G. Science Textbook Grade 8 Page. 21

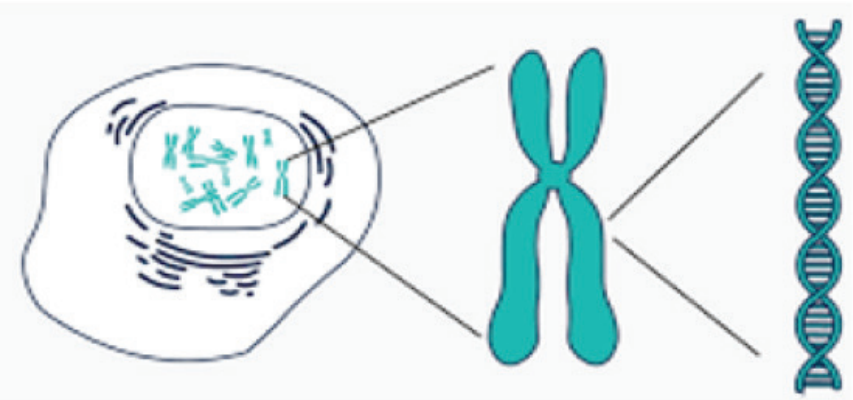
Worksheet 12

Unit No. 2

Heredity in Organism - Chromosomes, Genes and DNA

SLO: Identify DNA and chromosomes in the cell diagram

Activity 1: a. Observe fig 3.2 page 29 of the G.Sc. textbook and identify chromosomes, gene and DNA in the following diagram of a cell.



a. _____ b. _____ c. _____

b. Match column A with column B.

Column-A	Column-B
Basic structure and functional unit of Heredity	Deoxyribonucleic acid (DNA)
Transfer of characters from parent to offspring	Nucleotides
Thread like structure present in the nucleus of a cell	Genes
Coiled many times around proteins providing support to chromosomes	Heredity
Units of DNA (Deoxy ribonucleic acid)are called	Chromosomes
	Inheritable characters

Reference G. Science Textbook Grade 8 Page. 21-22

Worksheet 13

Unit No. 2

Heredity in Organism - Chromosomes, Genes and DNA

SLO: a) Define heredity and recognize its importance in transferring of characteristics from parents to off springs. b) Identify the characteristics that can be transferred from parents to off springs.

Activity 1: Define Heredity

_____

_____

Activity 2: Read page 22-23 of the G.Sc. textbook and fill in the blanks given below.

a. _____, _____, _____ form the basis for heredity.

b. _____ carries the characteristics of parents to the offspring.

c. _____, _____, _____, are examples of Heredity characteristics.

d. Characters which can transfer from parents to offspring's are called _____

_____., examples are _____, _____ ,

e. characters which are not transferred from parents to the offspring's are called _____

_____, examples are _____.

f. Color of the eye in humans is controlled by _____.

Activity 3: Observe and answer the given questions.

Which factors are common in you and your sisters and brothers? Name them.

_____

_____

Are they present in your parents or grandparents?

_____

_____

Reference G. Science Textbook Grade 8 Page. 22-23

Worksheet 14

Unit No. 3

Bio Technology- Biotechnological Product in Daily Life

SLO: Define biotechnology. List some biotechnological products used in daily life.

Activity 1: Define Biotechnology

a. Define Biotechnology.

_____

_____

_____

_____

_____

_____

Activity 2: Write down the names of at least five Biotechnologies different products which are used in daily life.

1. ----------

2. ----------

3. ----------

4. ----------

5. ----------

Reference G. Science Textbook Grade 8 Pages 27 and 32

Worksheet 15

Unit No. 3

Biotechnology - Application of Biotechnology

SLO: a) Explain that genetic modification in different foods can increase the amounts of essential nutrients. b) Explain how biotechnology allows meeting the nutritional needs of growing populations

Activity 1:	Write four or more examples in which Biotechnology has helped in improving nutrition and quality of food.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

Activity 2	Name four major areas in which Biotechnology techniques are applied.

1. _____

2. _____

3. _____

4. _____

5. _____

Reference G. Science Textbook Grade 8 Page. 33 & 35

Worksheet 16

Unit No. 3

Biotechnology

SLO: List general applications of biotechnology in various fields.

Activity 1: Match the words of column A with suitable words of column B.

Column-A	Column-B
GMOs	Vector
Plasmid	Modified gene
Growth hormones	Insulin
Double helix	Stimulating growth
Diabetes	DNA

Activity 2: Read page 36 carefully and fill in the blanks

- _____ is an important technique of Biotechnology.
- It helps in giving more production in_____ and _____.
- _____ and _____ are used to eliminate weeds and _____ and thus protect crops.

Reference G. Science Textbook Grade 8 Page. 37

Worksheet 17

Unit No. 3

Biotechnology-Genetic Modification in Organisms

SLO: Explain that genetic modification in different foods can increase the amounts of essential nutrients.

Activity 1:	Write the usefulness of genetically modified organism (GMOs).

1. Micro Organism:

2. Improved nutrition and quality of food:

Reference G. Science Textbook Grade 8 Page. 32

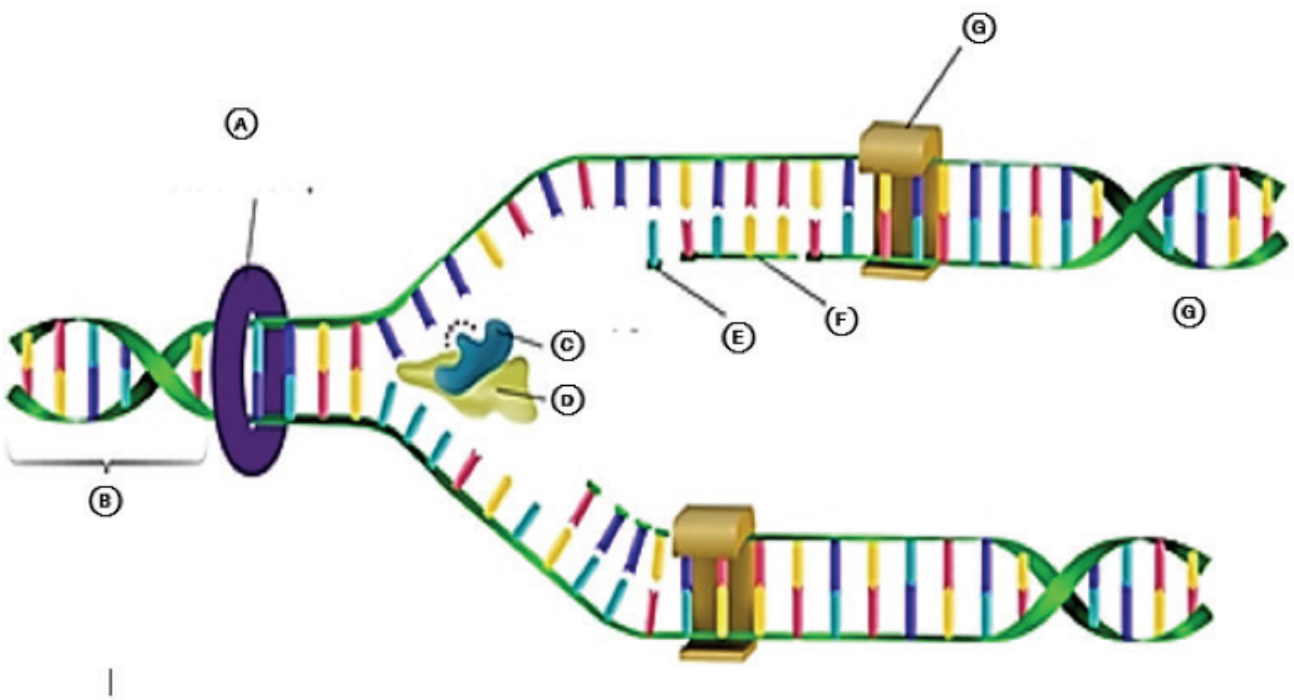
Worksheet 18

Unit No. 3

Biotechnology - DNA Replication

SLO: Explain how genes are introduced into a bacterium.

Activity 1: Observe fig 3.1 on page 29 of the G.Sc. textbook and label the diagram during the process of the DNA Replication



A. _____

B. _____

C. _____

D. _____

E. _____

F. _____

G. _____

Reference G. Science Textbook Grade 8 Page. 29

Worksheet 19

Unit No. 4

Pollution and Their Effects on the Environment

SLO: Explain the sources, properties and harmful effects of air pollution

Activity 1: Answer the following questions.

a. Define air pollution.

_____

_____

b. Write 4 sources of air pollution.

1. _____

2. _____

3. _____

4. _____

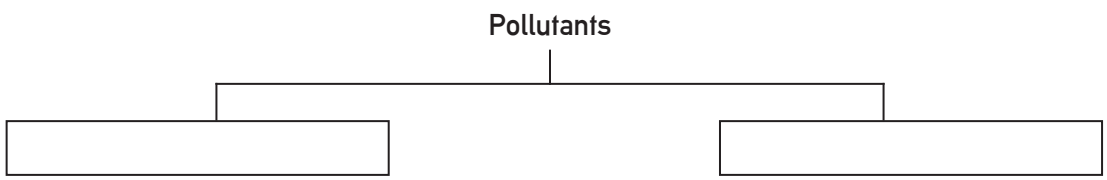
c. Write 3 harmful effects of air pollution

1. _____

2. _____

3. _____

Activity 2: Observe the diagram on page 41 of the G.Sc. textbook and fill in the blanks with types of Pollutants and their examples.



1. _____ 1. _____

2. _____ 2. _____

3. _____ 3. _____

Reference G. Science Textbook Grade 8 Page. 40

Worksheet 20

Unit No. 4

Depletion of Ozone Layer and Deforestation

SLO: Describe the causes and effects of ozone depletion.

Activity 1: Read page 47 of the G.Sc. textbook and describe how ozone is formed in your own words.

_____

_____

_____

_____

_____

_____

_____

a. Complete the following sentences

1. One Chlorine molecule from CFCs can destroy up to _____Ozone molecules.
2. In Pakistan only _____of the total area is covered by forest.
3. Ozone is a gas made up of three _____atoms.
4. The upper part of atmosphere has a fairly high concentration of Ozone molecules, known as the _____.
5. Deforestation brings _____changes in the environment and atmosphere
6. Human being hunt and kill_____ animals for pleasure.

b. Identify 3 human activities that have adverse effects on the environment.

1. _____

2. _____

3. _____

Reference G. Science Textbook Grade 8 Pages. 47-49

Worksheet 21

Unit No. 4

Green House Effect

SLO: a) List problems in human being caused by air pollutants. Explain greenhouse effect. b) Identify acid rain consequences on living and nonliving.

Activity 1: Read page 43- 44 of the G.Sc. textbook and answer the question given below.

a. Write one effect of each of the following pollutants on human organ system.

Pollutants	Effect on human organ system
Sulphur dioxide	
Oxides of Nitrogen	
Carbon monoxide	
Chlorofluorocarbons (CFCs)	

b. Read page 44-45 of the G.Sc. textbook and explain the Green House Effect and how does it affect the earth?

_____

_____

_____

c. Read page 46 of the G.Sc. textbook and identify FOUR harmful effect of Acid Rain on living and Non-living things.

1. _____

2. _____

3. _____

4. _____

Reference G. Science Textbook Grade 8 Pages. 44-45

Worksheet 22

Unit No. 4

Global Warming

SLO: Carry out research to explain global warming and its likely effects on life on earth.

Activity 1: a. Explain Global Warming

_____

_____

_____

_____

b. Write FIVE effects of global warming on life on earth.

1. _____

2. _____

3. _____

4. _____

5. _____

c. Can global warming be controlled if so how?

_____

_____

_____

_____

Reference G. Science Textbook Grade 8 Page. 45

Worksheet 23

Unit No. 4

Deforestation

SLO: a) Define Deforestation. b) State the effects/problems of deforestation on the environment. c) Identify human activities that have long-term adverse consequences on the environment.

Activity 1: Define Deforestation

_____

_____

_____

_____

a. Write SEVEN problems caused by deforestation on environment.

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

b. Write FOUR effects of human activities on wild life.

1. _____

2. _____

3. _____

4. _____

Reference G. Science Textbook Grade 8 Pages. 48-49

Worksheet 24

Unit No. 4

Saving the Earth

SLO: Suggest ways in which individual, organizations and government can help to make earth a better place to live.

Activity 1: Suggest NINE specific measures to make the Earth a better place to live.

1. _____

_____

2. _____

_____

3. _____

_____

4. _____

_____

5. _____

_____

6. _____

_____

7. _____

_____

8. _____

_____

9. _____

_____

Reference G. Science Textbook Grade 8 Page. 51

اردو

ورک شیٹ

یونٹ نمبر: ۱

ورک شیٹ

۱

حمد

حاصلِ تعلّم: استحسان اور تنقید کی سطح کی تیاری کے لیے کسی تحریر (نظم و نثر) کا خلاصہ لکھ سکیں، تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

الفاظ معانی: کامل۔مکمل،ازل۔ شروع /ابتدا،ابد۔ہمیشہ،عارفوں۔ خدا شناس،سکتہ۔ خاموشی، حیرت۔حیران ہونا ،رعب۔شان و شوکت

کامل ہے جو ازل سے وہ ہے کمال تیرا　　باقی ہے جو ابد تک وہ ہے جلال تیرا
ہے عارفوں کو حیرت اور مُنکروں کو سکتہ　　ہر دِل پہ چھا رہا ہے رعبِ جمال تیرا

سوال: دیے گئے اشعار کا مفہوم لکھیں۔

جواب: _____

_____

_____

_____

_____

_____

_____

سوال: کمال، جلال اور جمال اللہ تعالیٰ کے صفاتی نام ہیں۔ ان کے علاوہ اللہ تعالیٰ کے کوئی سے چار صفاتی نام اور ان کے معانی بھی لکھیں۔

_____　　_____

_____　　_____

مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲ پر دیے گئے سوال نمبر ۱ کے تمام اجزا کے مختصر جوابات اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۱

ورک شیٹ
۲

الفاظ معنی اور جملے



حاصلِ تعلّم: معانی سے الفاظ کی طرف ذہنی سفر کر سکیں۔ الفاظ کا جملوں میں استعمال کر سکیں۔

ہدایات: درج ذیل الفاظ کے معانی صفحہ نمبر ۱۷۰ پر دی گئی فرہنگ یا اُردُو لغت سے تلاش کر کے لکھیں اور ان کو جملوں میں استعمال کریں۔

الفاظ	معانی	جملے
عزیز	قابل عزت	نبی کریم ﷺ اللہ کو سب سے عزیز ہیں۔
جلال		
قوی		
جچنا		
اندمال		
شوکت		
خیال		
رعب		
قال		
مُنکر		



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳ پر دیے گئے سوال نمبر ۲ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۱

ورک شیٹ ۳

فعل معروف جملوں کی فعل مجہول جملوں میں تبدیلی



حاصلِ تعلّم: معروف کو مجہول جملوں میں بدل سکیں۔

ہدایات: کتاب کے صفحہ نمبر ۴ سے فعل معروف اور فعل مجہول کی تعریف سمجھ کر پڑھیں اور درج ذیل فعلِ معروف کے جملوں کو فعلِ مجہول میں تبدیل کرکے لکھیں۔

فعل معروف	فعل مجہول
میرے استاد کمرۂ جماعت میں دلچسپی سے سبق پڑھاتے ہیں۔	کمرۂ جماعت میں دلچسپی سے سبق پڑھایا جاتا ہے۔
احمد نے اپنے دوست کو کرونا وائرس سے بچنے کے لیے خط لکھا۔	
مالی باغ میں رنگ رنگ کے پودے لگا رہا ہے۔	
بچے نے ایک دلچسپ کتاب پڑھی۔	
میری امی مزے دار پکوان پکا چکی ہیں۔	
میں ٹی وی پر اپنی پسند کا ڈرامہ دیکھوں گا۔	
کسان دن رات کھیتوں میں محنت کرکے فصل اُگاتا ہے۔	
میری دوست فرصت کے اوقات میں سائنسی ایجادات سے متعلق کتابیں پڑھتی ہے۔	



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۲

ورک شیٹ
۴

نعت

حاصلِ تعلّم: کسی تحریر کی تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

اب بھی ظلمات فروشوں کو گلہ ہے تجھ سے
رات باقی تھی کہ سورج نکل آیا تیرا
ایک بار اور بھی یثرب سے فلسطین میں آ
راستہ دیکھتی ہے مسجد اقصٰی تیرا

یثرب مدینہ کا پرانا نام تھا۔ جب حضرت محمد ﷺ نے مکہ سے یثرب کو ہجرت کی تو اس کا نام مدینۃ النبی پڑ گیا جو اب مختصر ہو کر مدینہ کہلاتا ہے۔

"یثرب" سے مراد کون سی جگہ ہے؟

جواب: _____

"رات باقی تھی کہ سورج نکل آیا تیرا" اس مصرعے میں "رات" اور "سورج" سے شاعر کی کیا مراد ہے؟

رات: _____

سورج: _____

"راستہ دیکھتی ہے مسجدِ اقصٰی تیرا" اس مصرعے کی نثر بنائیں اور وضاحت کریں۔

نثر: _____

وضاحت: _____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۸ پر دیے گئے سوال نمبر ۸ کے جز نمبر ۱، ۲، ۳ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۲

ورک شیٹ

۵

خلاصہ نظم

حاصلِ تعلّم: کسی تحریر (نظم) کا خلاصہ لکھ سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور دیے گئے سوالات کی روشنی میں نظم کا خلاصہ لکھیں۔

سوالات:

- بُلبُل کا دن کس کام میں گزرا اور اب وہ کیوں پریشان تھا؟
- جگنو نے بُلبُل کی مدد کیسے کی؟
- کیا ہمیں بھی دوسروں کی مدد کرنی چاہیے؟

ٹہنی پہ کسی شجر کی تنہا — بُلبل تھا کوئی اُداس بیٹھا
کہتا تھا کہ رات سر پہ آئی — اُڑنے چُگنے میں دن گزارا
پہنچوں کِس طرح آشیاں تک — ہر چیز پہ چھا گیا اندھیرا
سُن کر بُلبل کی آہ و زاری — جُگنو کوئی پاس ہی سے بولا
حاضر ہُوں مدد کو جان و دل سے — کیڑا ہوں اگرچہ مَیں ذرا سا
کیا غم ہے جو رات ہے اندھیری — مَیں راہ میں روشنی کروں گا
اللہ نے دی ہے مجھ کو مشعل — چمکا کے مجھے دِیا بنایا
ہیں لوگ وہی جہاں میں اچھّے — آتے ہیں جو کام دوسرں کے

خلاصہ:

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر 8 پر دیے گئے سوال نمبر ۱ کے جز نمبر ۴ اور ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ

۶

معلمِ اخلاق صلی اللہ علیہ وآلہ وسلم



حاصلِ تعلّم: مقرر یا مصنف کے نقطۂ نظر کو اپنے تجزیے کے ساتھ پیش کر سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

حضور صلی اللہ علیہ وآلہ وسلم کی مہمان نوازی کا یہ عالم تھا کہ خود بھوکے رہ کر مہمانوں کو کھانا کھلاتے تھے۔ اور مہمانوں کی ہر طرح سے خدمت کرتے۔ آپ ﷺ غریب ،آقاوغلام اور مسلم و غیر مسلم ہر ایک کے کام آتے تھے۔ ایک دفعہ ایک غلام آٹا پیس رہا تھا اور ساتھ کراہ بھی رہا تھا۔ آپ ﷺ نے اس سے کراہنے کی وجہ پوچھی۔ تو اس نے بتایا کہ وہ بیمار ہے لیکن اُس کا آقا اسے آرام کرنے نہیں دیتا۔ آپ ﷺ نے اُسے آرام سے لِٹا دیا اور سارا آٹا خود پیس کردیا۔ ساتھ ہی یہ بھی فرمایا کہ جب بھی آٹا پیسنا ہو تو مجھے بلوا لیا کرو۔ آپ ﷺ بیماروں کی بیمار پرسی فرماتے اور اسکی تلقین بھی فرماتے۔ کسی کی بیماری کا سنتے تو فوراً عیادت کے لیے چلے جاتے۔ تسلی دیتے اور صحت یابی کے لیے دعا فرماتے۔

سوال: درج بالا عبارت میں حضور ﷺ کی کون سی تین اہم صفات بیان ہوئی ہیں؟

1. _____

2. _____

3. _____

سوال: درج بالا عبارت سے ہمیں کیا اخلاقی سبق مِلتا ہے؟

_____

_____

_____



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۱۰ تا ۱۲ پر دیے گئے سبق کو پڑھ کر مصنف کا نقطۂ نظر اپنے الفاظ میں کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ

۷

محاورات اور ضرب الامثال



حاصلِ تعلّم: محاورات اور ضرب الامثال کا استعمال سیکھ سکیں۔

کالم "الف" میں محاورات درج ہیں اور کالم "ب" میں ان کے معانی بےترتیب دیے گئے ہیں۔ درست معانی تلاش کرکے کالم "ج" میں لکھیں۔

کالم "الف" (محاورات)	کالم "ب" (بےترتیب معانی)	کالم "ج" (درست معانی)
آسمان ٹوٹنا	غصّے سے دیکھنا	بہت بڑی مصیبت آنا
آن کی آن میں	دھوکا کھانا	
آنکھیں دکھانا	اچانک، فوراً	
باتوں میں آنا	شرمندہ ہونا	
پانی پانی ہونا	بہت بڑی مصیبت آنا	
منہ میں پانی آنا	لالچ آنا	

دیے گئے محاورات کو جملوں میں استعمال کریں۔

آسمان ٹوٹنا	
آن کی آن میں	
آنکھیں دکھانا	
پانی پانی ہونا	
منہ میں پانی آنا	
باتوں میں آنا	



مشق: کتاب کے صفحہ نمبر ۱۵ پر دیے گئے سوال نمبر ۴ کا جواب کاپی میں لکھیں۔

یونٹ نمبر: ۳

ورک شیٹ

۸

انشاپردازی (صفائی نصف ایمان ہے)



حاصلِ تعلّم: کسی بھی فطری، اخلاقی یا قومی موضوع پر اپنے علم اور مشاہدے کی روشنی میں کاغذ پر لکھیں۔

ہدایات: صفائی نصف ایمان ہے کے موضوع پر دیے گئے سوالات کی روشنی میں جملے لکھیں۔

سوالات:

- صفائی سے کیا مراد ہے؟
- جسمانی صفائی کیوں ضروری ہے؟
- صفائی ہمیں کن بیماریوں سے بچاتی ہے ؟
- ارد گرد کے ماحول کو کیسے صاف رکھ سکتے ہیں ؟
- گھر، گلی، محلے، علاقے اور شہر کی صفائی میں حکومتی ادارے کیا کردار ادا کر سکتے ہیں ؟

صفائی نصف ایمان ہے



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۱۵ پر دی گئی سرگرمی کے مطابق چارٹ تیار کر کے اپنے پاس محفوظ کریں۔

یونٹ نمبر: ۴

ورک شیٹ
۹

مضمون نویسی (کروناوائرس)

حاصلِ تعلّم: تین سو سے زائد الفاظ کی ضخامت کا مضمون تیار کرکے پیش کر سکیں۔

ہدایات: درج ذیل اشارات کی مدد سے "کرونا وائرس" کے موضوع پر مضمون لکھیں۔

اشارات

کرونا وائرس ایک خطرناک وائرس----،اس کا آغاز چین کے شہر----- ، کرونا وائرس کی علامات-----، کرونا وائرس کے متاثرین ----- کرونا وائرس سے متاثر ہونے والے ممالک کے نام-------، کرونا وائرس کا علاج-----، کرونا وائرس سے بچاؤ کی تدابیر------ ، سماجی فاصلہ رکھیں------، لاک ڈاؤن-----، پاکستان حکومت کی ہدایات اور امداد------، پاکستان کے متاثرہ شہر -------، شہریوں کا رویہ------، ڈاکٹروں کی خدمات اور اپیل-------۔ حکومت کا ساتھ -------، کرونا سے محفوظ-------

کرونا وائرس

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۲۱ پر دی گئی سرگرمی برائے طلبہ کا جواب کاپی میں لکھیں۔

یونٹ نمبر: ۵

ورک شیٹ

۱۰

تفہیمِ عبارت



حاصلِ تعلّم: عبارت کو اس کے عناصر، نتائج، علت و معلول کے تعلق اور رفتار مطالعہ (خاموش اور بلند آواز) بنیادی خیال اور بیان کے حوالے کو ذہن میں محفوظ رکھ کر پڑھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور نیچے دیے گئے سوالات کے جوابات تحریر کریں۔

تعلیم کا مقصد صرف سکول جاکر کتابیں پڑھ لینا نہیں ہے بلکہ تعلیم کا اصل مقصداپنا کام خود کرنے کے قابل ہونا، دوسروں کی مدد کرنا اور ملک و قوم کی خاطر مثبت کام کرنےکا جذبہ رکھنا ہے۔ بہترین طالب علم وہ ہوتا ہے جو وقت کی پابندی کرتاہے۔ اپنے والدین اور اساتذہ کا کہنامانتا ہےاور ہاتھ سے کام کرنے کو عار نہیں سمجھتا۔ ایک مثالی طالب علم کے اوصاف میں یہ باتیں بھی شامل ہیں کہ وہ صبح سویرے بیدار ہو کر سیر کے لیے جاتا ہے۔ ورزش کرتا ہے۔ نماز کی پابندی کرتا ہے۔ دل لگا کر پڑھتا ہے۔اپنے اساتذہ کی باتیں توجہ سے سنتا اور ان پر عمل کرتا ہے۔ بڑوں کا احترام اور چھوٹوں سے پیار کرتا ہے۔ اپنےدوستوں کی مدد کرتا ہے۔ ایک مثالی طالب علم دن رات محنت کرکے نہ صرف پڑھائی میں اعلیٰ نمبر لے کرکامیابی حاصل کرتا ہے بلکہ وہ اپنے حسنِ اخلاق، حسنِ کردار، حسنِ نیت اور حسنِ عمل سے یہ ثابت کردیتا ہے کہ اس کی زندگی کا مقصد دوسروں کے کام آناہے ۔

تعلیم کے کوئی سے تین اہم مقاصد لکھیں۔

1. _____ 2. _____ 3. _____

دی گئی عبارت کے مطابق ایک مثالی طالب علم کی کوئی سی چار خوبیاں تحریر کریں۔

1. _____

2. _____

3. _____

4. _____

ایک مثالی طالب علم بننے کے لیے آپ کس بات پر عمل کریں گے؟

_____



مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲۵ پر دیے گئے سوال نمبر ۱ کے جز نمبر ۷ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۵

ورک شیٹ

۱۱

روزمرہ اور محاورہ کے لحاظ سے غلط جملوں کی تصحیح



حاصلِ تعلّم: روزمرہ اور محاورہ کے لحاظ سے غلط جملوں کی تصحیح کر سکیں۔

ہدایات: درج ذیل جملوں کو روزمرہ اور محاورہ کے مطابق درست کرکے دوبارہ لکھیں۔

غلط جملے	درست جملے
پاکستان دن بدن ترقی کررہا ہے۔	پاکستان روز بروز ترقی کر رہا ہے۔
میں فارسی کو جانتا ہوں۔	
وہ وہاں سے نو دو بارہ ہو گیا۔	
جھوٹ مارنا بہت بری بات ہے۔	
کیا آپ نے اخبار پڑھی ہے؟	
سردی کی وجہ سے میرے کان بجنے لگے۔	
مری میں تیز برف باری ہوئی۔	
روزانہ صفائی کا عادت اپنائیں۔	
صابن سے بار بار ہاتھ دھوئے۔	
مجھے تو دال میں کچھ سفید نظر آتا ہے۔	



مشق: پیارے بچو!درسی کتاب کے صفحہ نمبر ۲۵ پر دیے گئے سوال نمبر ۲ اور صفحہ نمبر ۲۶ پر دیے گئے سوال نمبر ۴ کو مکمل کریں۔

یونٹ نمبر: ۶

ورک شیٹ
۱۲

تفہیمی سوالات

حاصلِ تعلّم: کسی بھی عام متن پر سوالات کے جوابات تحریر کر سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

اللہ تعالی نے پاکستان کو بے شمار نعمتوں سے نوازا ہے۔ اُسے ہر طرح کے موسم عطا کیے ہیں۔ بلند و بالا پہاڑ، وسیع زرخیز میدان، معدنیات سے بھرپور خطے، سرسبز وادیاں، تاحدِ نگاہ صحرا اور حسین ساحلِ سمندر اس کے حسن کو دوبالا کر دیتے ہیں۔ پاکستان کے شمال میں بلند پہاڑی سلسلے ہیں۔ بعض فلک بوس پہاڑوں کی چوٹیاں سارا سال برف سے ڈھکی رہتی ہیں۔ سردیوں میں درجۂ حرارت اس قدر گر جاتا ہے کہ منفی ۲۰ ڈگری سینٹی گریڈ سے بھی نیچے چلا جاتا ہے۔ ان پہاڑی سلسلوں میں کوہِ ہمالیہ، کوہِ قراقرم اور کوہِ ہندوکش زیادہ اہم ہیں۔ گنگناتی ندیاں، بہتی آبشاریں ور پُرسکون جھیلیں اپنی مثال آپ ہیں۔ وادیٔ ناران میں جھیل سیف الملوک سیاحوں کی توجہ کا مرکز بنی رہتی ہیں۔ پاکستان کے شمالی علاقے خوش ذائقہ پھلوں سے لدے باغات سے بھرے پڑے ہیں۔ جو اپنے ذائقے اور لذت کے اعتبار سے دنیا بھر میں مقبول ہیں۔ کوہ ہمالیہ کی سب سے بلند چوٹی کا نام نانگاپربت ہے۔ جو سطح سمندر سے تقریبا ۸۱۲۶ میٹر بلند ہے۔ کوہ قراقرم کے پہاڑوں کی چوٹیوں کی اوسط اونچائی تقریبا ۷۰۰ میٹر ہے۔ دنیا کی دوسری بلند ترین چوٹی کے ٹو، جس کی اونچائی تقریباً ۸۶۱۱ میٹر ہے۔ اسی پہاڑی سلسلے میں واقع ہے۔

پاکستان کے شمال میں واقع دو پہاڑی سلسلوں کے نام اور ان سے متعلق دی گئی معلومات بھی لکھیں؟

1. _____

2. _____

پاکستان کو اللہ تعالیٰ نے کن کن نعمتوں سے نوازا ہے؟

_____

_____

_____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۳۷ پر دیے گئے سوال نمبر ۳ کے تمام اجزا کے مختصر جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۷

ورک شیٹ
۱۳

یہ وطن تمہارا ہے (ملی نغمہ)

حاصلِ تعلّم: استحسان اور تنقید کی سطح کی تیاری کے لیے کس تحریر (نظم و نثر) کا خلاصہ لکھ سکیں، تشریح کر سکیں اور اہم نکات بیان کر سکیں۔

ہدایات: درج ذیل اشعار کو غور سے پڑھیں اور آخر میں دیے گئے سوالات کے جوابات لکھیں۔

میرِ کارواں ہم تھے، روحِ کارواں تُم ہو
ہم تو صرف عنواں تھے، اصل داستاں تُم ہو
نفرتوں کے دروازے، خود پہ بند ہی رکھنا
اِس وطن کے پرچم کو، سربلند ہی رکھنا
یہ وطن تمہارا ہے، تم ہو پاسباں اس کے
یہ چمن تمہارا ہے، تُم ہو نغمہ خواں اس کے

"روحِ کارواں" اور "اصل داستاں" سے شاعر کی کیا اور کون مراد ہے؟

روحِ کارواں _____

اصل داستاں _____

اس شعر میں شاعر اہلِ وطن کو کیا تعلیم دینا چاہتا ہے؟

نفرتوں کے دروازے، خود پہ بند ہی رکھنا اِس وطن کے پرچم کو، سربلند ہی رکھنا

_____

سوال: دیے گئے اشعار کا مرکزی خیال تحریر کریں؟

_____

_____

_____

مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۴۲ پر دیے گئے سوال نمبر ۵ کا جواب اپنی کاپی میں لکھیں۔

یونٹ نمبر: ۸

ورک شیٹ
۱۴

تفہیمِ عبارت

حاصلِ تعلّم: مصنف کی تکنیک، مقصود اور طرز بیان کو پڑھ سکیں۔

ہدایات: درج ذیل عبارت کو غور سے پڑھیں اور دیے گئے سوالات کے جوابات لکھیں۔

گرلز گائیڈنگ لڑکیوں کی بہتر نشوونما کے لیے بہترین تحریک ہے۔ اس تحریک میں شامل ہونے کے لیے انہیں عملی زندگی کی مہارتوں کا پتہ چلتا ہے۔ انہیں قیادت کے مواقع میسر آتے ہیں۔ ذمہ داریاں سنبھالنے کا احساس پیدا ہوتا ہے۔ اسی طرح کسی کے ماتحت کام کرنے یا دوسروں کی قیادت کرنے کا عملی موقع ملتا ہے۔ جو لڑکیاں زمانۂ طالب علمی میں گائیڈ رہ چکی ہوتی ہیں وہ عملی زندگی میں زیادہ کامیاب، زیادہ خود اعتماد اور زیادہ ذمہ دار ثابت ہوتی ہیں۔ گائیڈنگ کا مقصد ہی لڑکیوں اور خواتین کے کردار کی تشکیل کر کے انہیں اچھا، ذمہ دار اور مفید شہری بننے میں مدد فراہم کرنا ہے تاکہ وہ ملک اور قوم کا نام روشن کریں۔ پاکستان میں گرلز گائیڈنگ کا آغاز ۱۹۴۷ء میں ہوگیا تھا کیونکہ سکاوٹنگ اور گائیڈنگ متحدہ ہندوستان میں پہلے سے ہی فعال تھے۔ اس کا مرکزی دفتر ایچ نائن اسلام آباد میں واقع ہے۔ جہاں گائیڈز کی مختلف سرگرمیوں کے لیے ایک بڑا ہال بھی تعمیر کیا گیا ہے۔ مرکزی دفتر میں ہاسٹل کی سہولت بھی موجود ہے۔گاہے بگاہے گرل گائیڈز کے پروگرام اسلام آباد کے مرکزی دفتر میں انعقاد پذیر ہوتے رہتے ہیں۔ عمر کے لحاظ سے گائیڈ کو تین حصوں میں تقسیم کیا گیا ہے۔ ا. چھے سے گیارہ سال کی لڑکیاں بلیوبرڈ کہلاتی ہیں۔ ۲. گیارہ سے سولہ سال تک کی لڑکیاں گائیڈ کہلاتی ہیں۔ ۳. سولہ سے اکیس سال تک کی لڑکیاں سینئر گائیڈ کہلاتی ہیں۔

سوال: گرلز گائیڈ تحریک کے کوئی سے تین فوائد لکھیں۔

1. _____ 2. _____ 3. _____

سوال : گرلز گائیڈنگ کے قیام کا بنیادی مقصد تحریر کریں۔

_____

سوال : ہمارے ملک میں گرلز گائیڈز کے آغاز کی وجہ کیا تھی؟

_____

_____

مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۴۹ پر دیے گئے سوال نمبر ا کے تمام اجزا کے جواب کاپی میں لکھیں۔

یونٹ نمبر: ۸

ورک شیٹ
۱۵

سابقے اور لاحقے



حاصلِ تعلّم: سابقہ اور لاحقہ کی مدد سے لفظ سازی کر سکیں۔

ہدایات: درج ذیل الفاظ کے تین تین سابقے بنائیں۔

الفاظ	سابقے		
بَد	بدمزاج	بدکردار	بدنصیب
پاک			
خوش			
سَر			
غیر			
ہم			
خیابان			

ہدایات: درج ذیل الفاظ کے تین تین لاحقے بنائیں۔

الفاظ	لاحقے		
انگیز	حیرت انگیز	اثرانگیز	فرحت انگیز
آور			
خواہ			
دار			
ستان			
کار			



مشق:پیارے بچو!درسی کتاب کے صفحہ نمبر ۵۰ پر دیے گئے سوال نمبر ۳ اور ۴ مکمل کریں۔

یونٹ نمبر: ۹

ورک شیٹ
۱۶

درخواست نویسی



حاصلِ تعلّم: درخواست وغیرہ کو سمجھ کر لکھ سکیں۔

ہدایات: دیے گئے خاکے کی مدد سے سکول کے ہیڈ ماسٹر/ہیڈ مسٹریس کے نام ضروری کام کی درخواست لکھیں۔

بخدمت جناب ہیڈ ماسٹر صاحب/ہیڈ مسٹریس صاحبہ۔۔۔۔۔۔۔۔۔۔۔۔۔۔

جناب عالی!

مؤدبانہ گزارش ہے کہ _____

_____

_____

_____

_____

_____ رخصت دی جائے۔ عین نوازش ہو گی۔

العارض

آپ کا/کی تابع شاگرد/شاگردہ

جماعت _____

رول نمبر _____

تاریخ _____



مشق: پیارے بچو! درسی کتاب کے صفحہ نمبر ۵۸ پر سرگرمی برائے طلبہ میں دی گئی درخواست کاپی میں لکھیں۔

English

Worksheet 1

Unit No. 1

Topic Sentences

SLO 1: Recognize that text comprises a group of paragraphs that develop a single theme or idea.

Activity 1: For each of the following sets of topic sentences, specify the topic that is being discussed. Note that each topic sentence presents a different facet of (or opinion about) the topic

- "Most scientists agree that temperatures now are warmer than they were 20 years ago."
- "It is hard to draw any definite conclusions from the hundreds of studies that have considered whether climate change is occurring or not."
- "People who claim that the Earth is now hotter miss the point that the Earth has been getting warmer over the last several thousand years, not just the last 50 years."

Topic: _____

- The nation provides us with a sense of identity. It is our moral duty to respect our country and support it as citizens.
- Our national heroes like Raja Aziz Bhatti Shaheed, Rashid Minhas, and Sarwar shaheed are a few among the many who sacrificed their lives for the love of Pakistan.
- Equality correlates to patriotism. Every person is equal in the eyes of the nation, irrespective of their religion, caste, gender etc. A true patriot recognizes and treats fellow citizens equally.
- Everyday our soldiers stand bravely at the borders and ensure that Pakistan is safe day and night.
- As we come together, we can improve the systems, the infrastructure the economic development and eradicate social evils.

Topic: _____

Activity 2: Identify the topic sentences in the following paragraphs and write it in the space provided:

Paragraph 1: Family is the first school in a person's life, family values and traditions are the first and most valued assets. In the eastern culture, majority of families enjoy a joint family status and are close knit unlike the west, where the concept of nuclear families is more common. Disciplining and developing values and habits in the eastern families is considered the responsibility of the entire family- not just the parents. A child grows up learning about social norms, respect for the elders and consideration for the young in a family setup that nurtures good habits and fosters values such as, listening, patience, collaboration and compassion.

Paragraph 2: Just like there is no alternative to work, there is no shame in working. Whatever a person needs, he/she must acquire through hard work. However, if anyone wishes to achieve anything without the burden of labour, they must indulge in illegal activities which earn no dignity at all. Everyone must work according to their ability and appreciate and encourage hard working people and value dignity of labour. Labour gives us life and livelihood. That is why it is above all other things in life.

Topic sentence paragraph 1: _____

Topic sentence paragraph 2: _____

Further practice: Read the story on Hatim Tai on pages 2-4 of your textbook and see how the paragraphs have been divided to explain a single theme or idea.

Worksheet 2

Unit No. 1

Scan Text to Answer Short Questions

SLO 2: Scan to answer short questions.

Activity 1: Read the story about Mullah Nasiruddin's experience and scan the text to answer the questions that follow.

It is a golden saying "When wealth is lost, nothing is lost; when health is lost, something is lost and when character is lost, everything is lost." Here health is given preference over the wealth or money. So, maintaining health is essential to perform all sorts of duties in our daily life. Keeping good health, is necessary to protect ourselves from germs which are our hidden enemies.

Many diseases are caused by little things, called germs. The germs enter our body through dirty food and water. In the same way, the germs of many diseases are carried by flies. When flies walk on the dirty things, germs stick to their legs. Again, flies sit on uncovered stuffs, the germs stick to them.

When we eat such food stuffs, the germs get into our body and cause illness. So, we should always remember not to eat food if flies are sitting or walking on it. Malaria, typhoid, cholera, and many other diseases are caused by these germs. Dust, standing water, dirty and rotten things are the breeding places for germs. For example, malaria is carried by one of the mosquitoes. If a person has malaria and a mosquito bites him, it carries away some of the germs of that disease. When this mosquito bites a healthy person, the germs may get into the blood and may cause malaria. Mosquitoes lay their eggs in standing water and cause cholera. The most important element for our health and life is to keep ourselves and our foodstuffs clean. If we keep ourselves, our house, and surroundings clean, there are least chances of our being infected by the germs. Cleanliness can protect us from our enemies' i.e. germs. Cleanliness can play a major role to save us from germs and many diseases.

Questions:

1. Why health is important than wealth? _____
2. How one can protect him/herself from germs? _____
3. What are the various methods to protect our food and water? _____
4. Which are the breeding places of germs? _____
5. How can we save ourselves from different diseases? _____
6. Write main idea of the text in 2 sentences. _____

Further practice: Read the questions given on page 5 your textbook and answer.

Worksheet 3

Unit No. 1

Inference and Implication

SLO 3: Distinguish between what is clearly stated and what is implied.

Inference
Use the CLUES in the text to discover what is NOT directly stated
Text: After ensuring that the sheep were busy grazing in the fields, Aftab sat under a tree to complete his homework.
Inference: Aftab is a shepherd and a student.

Activity 1: Read the story and answer the questions.



The little grey mouse that lived in my wall prospered for many days on nibbles of my lunch. I'd pack a meal before bed and, while I slept, it would take small bites of my lunch, which I left on the counter. It'd take a cracker crumble here, and a breadcrumb there, but it wouldn't take too much and it'd always clean up after itself. Things were going quite well for the mouse and I didn't even know it existed, until it got sloppy.



One night while I slept, it ate all of my chips and left behind a big mess. When I awoke to this sight, I knew what had happened to my chips.

So the next night when it returned for another snack, it found a nice, delicious piece of cheese… lightly balanced on a mousetrap. Now I don't have to share my chips anymore.



1. What was the mouse doing in the story?

_____

2. What is implied in the story about what happened to the mouse?

_____

Activity 2: Read each statement below and encircle the correct option after making an inference:

1. An egg is laid. A caterpillar hatches from the egg and constantly eats flowers and leaves. It turns into a pupa and rests inside of a cocoon.

You can infer that .

a. a butterfly will come out of the cocoon

b. a bird will come by and disturb it

c. the caterpillar will come out when it gets hungry

2. Mr. Shahzad was talking to my father about a large tree that was dying. After they were finished, Mr. Shahzad tied a rope to the tree. Then he took out his axe.

You can infer that Mr. Shahzad is a .

a. Teacher

b. Sports teacher

c. Woodcutter

3. My younger sister hid behind the sofa as a storm roared outside. There was lightning and thunder. My sister sobbed each time she heard the thunder. Father tried to persuade my baby sister to come out, but he wasn't successful in convincing her to leave her hiding place.

You can infer that .

a. Father was afraid of storms

b. My sister was playing hide and seek

c. Storms made my baby sister afraid

Further practice: Answer the questions given on page 6 in the 'extending' section.

Worksheet 4

Unit No. 1

Recognize the Author's Purpose

SLO 4: Recognize the author's purpose.

Activity 1: Read the story carefully and identify the author's purpose and give reasons for your answer.

Asma was obsessed with details. She felt that everything that she submitted to her teacher had to be perfect. For the final project in reading class, students were given one week to use their art skills to bring a scene from a novel to life. Asma decided that she would build a shoebox diorama. She spent the first two nights creating an intricately detailed scene far superior to anything that her classmates would produce, but she ended up throwing it away because she didn't like how tape was visible at the bottom of the diorama (a project made in a shoe box).



The next two nights she worked on a similar diorama, but this time she used glue. Again, Asma produced a beautiful product, but she was troubled by how the glue looked when it dried, so she discarded her work again. Over the weekend and into the next week, Asma recreated the project a third time. This time she used a special adhesive putty to construct the diorama and was completely satisfied with the appearance. Unfortunately, her project was now several days late and her grade on the assignment was lowered to a C.



1. What is the author's purpose in this story?

_____

_____

_____

_____

_____

2. What happens in the story that leads you to believe this?

_____

_____

_____

_____

Further practice: Complete the exercise given on page 8 of your textbook.

Worksheet 5

Unit No. 2

Reading Strategies

SLO 1: Apply critical thinking to interact with text and use intensive reading strategies

Activity 1: Read the given paragraph carefully and write short answers to the questions given at the end of the paragraph.



I had inherited considerable wealth from my parents but being young and foolish, I wasted it carelessly. Finding that riches speedily take to its wings if managed badly, I began to think of how I could make the best of what still remained with me. I sold all my household goods by public auction and joined a company of merchants who traded by sea. I obtained goods that were suitable for the places where I intended to visit, and embarked on a sturdy ship with other merchants. We went from island to island, often making excellent bargains, until one day we landed at a spot which, though covered with fruit trees and springs of excellent water, appeared to possess neither houses nor people. While my companions wandered here and there gathering flowers and fruit, I sat under a shady tree, and having heartily enjoyed the provisions I had bought with me, I fell asleep.



i. How did the narrator of the story spend his wealth?

Ans:_____

ii. Why did the narrator (Sindbad) sell all his household goods?

Ans:_____

_____

iii. How did Sindbad and the other merchants reach the island?

Ans:_____

iv. Why did Sindbad's friends wander on the island?

Ans:_____

_____

v. Identify and write five pronouns from the above paragraph.

Ans:_____

Further practice: answer the questions given on page 23 of your textbook.

Worksheet 6

Unit No. 2

Looking for Contextual Clues

SLO 2: Deduce meaning of difficult words from context

Activity 1: Read the excerpt from Alice in the Wonderland and tick the option closest to the meaning.



Alice was beginning to get very tired of sitting by her sister on the bank, and of having nothing to do: once or twice she had **peeped** into the book her sister was reading, but it had no pictures or conversations in it, `and what is the use of a book,' thought Alice `without pictures or conversation?'

So she was **considering** in her own mind (as well as she could, for the hot day made her feel very sleepy and stupid), whether the pleasure of making a daisy-chain would be worth the trouble of getting up and picking the daisies, when suddenly a White Rabbit with pink eyes ran close by her.



There was nothing so VERY **remarkable** in that; nor did Alice think it so VERY much out of the way to hear the Rabbit say to itself, `Oh dear! Oh dear! I shall be late!' (when she thought it over afterwards, it **occurred** to her that she ought to have **wondered** at this, but at the time it all seemed quite natural); but when the Rabbit actually TOOK A WATCH OUT OF ITS WAISTCOAT- POCKET, and looked at it, and then **hurried** on, Alice started to her feet, for it **flashed** across her mind that she had never before seen a rabbit with either a waistcoat-pocket, or a watch to take out of it, and **burning with curiosity**, she ran across the field after it, and fortunately was just in time to see it **pop** down a large rabbit-hole under the hedge.

Peeped:	1. Glanced	2. Jumped	3. Wondered
Considering:	1. Thinking	2. Making	3. Stopping
Remarkable:	1. Amazing	2. Trustworthy	3. Surprising
Occurred:	1. Happened	2. Hit her	3. Leaked
Wondered:	1. Pondered	2. Considered	3. Studied
Hurried:	1. Ran	2. Worried	3. Walked
Flashed:	1. Zoomed	2. Happened	3. Pictured
Burning with curiosity:	1.Boiling with interest	2. Flaming with fire	3. Ablaze with heat
Pop:	1. Go	2. Burst	3. Explode

Further practice: read and understand the difficult words given on page 13 in 'the new vocabulary section' of your textbook.

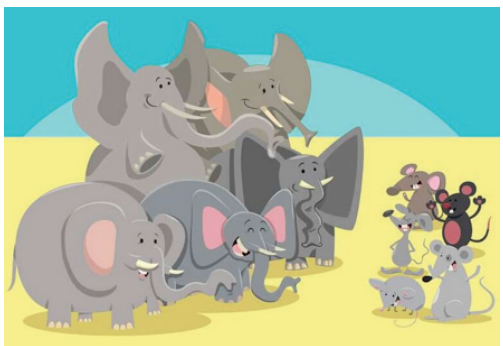
Worksheet 7

Unit No. 2

Sequencing & Summarizing

SLO 3: Read a story to retell it sequentially and summarize.

Activity 1: Read the story carefully and complete the activity given below.



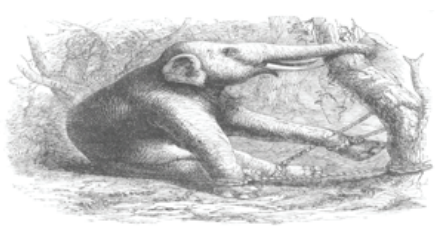
There was a village that was abandoned by its people after it shattered, post an earthquake. However, the mice living in the village decided to stay and make it their home. On the outskirts of this village, there was a lake, where a herd of elephants visited regularly to bathe and drink water. Since the village was on the way to this lake, the elephants trampled the mice while walking there. So, the king of mice decided to meet the elephants. He told them, " O elephants, as you travel through the village, many mice are trampled. We will be very grateful if you could please consider changing your route. We will remember and return the favour when you are in need."

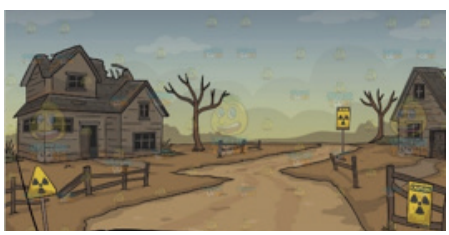
The elephant king laughed, "We are giant elephants. What favour can you mice return? Nevertheless, we will honour your request and change our route."

After a few days, the elephants got trapped and entangled in nets that were set up by hunters. They struggled hard to escape, but in vain. The elephant king remembered the promise made by the king of mice. So, he sent a fellow elephant who got lucky and was not trapped, to ask the mice king to come and help them.

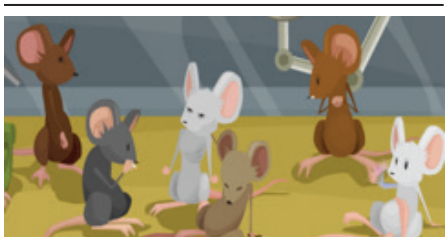
Soon, all the mice came and started nibbling the nets, and freed the elephants. The king of the elephants couldn't thank the mice enough!

Activity 2: Number the pictures according to the story sequence. Summarize each segment in the space provided.













Further practice: Complete the writing segment given on page 14 of your textbooks.

Worksheet 8

Unit No. 2

Characterization

SLO 4: Present a character sketch orally giving reasons to support the response

Activity 1:	Activity a: Read the passage below and identify the characteristics of Long John Silver taking help from the description given in the box below:

Height
tall, tallish, short, shortest, medium height

Build
frail, stocky, slim, thin, plump, fat, skinny, well-built

Age
young, elderly, middle-aged, teenager, in 20s, 30s, 40s

Eyes
big round blue eyes

Face
round, oval, square, with scars, wrinkles, freckles, clean and pleasant-tempered, plain and pale, small, bright, narrow

Hair
bald, straight, curly, spiky, wavy

Clothes
casual, scruffy, shabby, smart, tidy, messy



As I was waiting, a man came out of a side room, and at a glance I was sure he must be Long John. His left leg was cut off close by the hip, and under the left shoulder he carried a crutch, which he managed with wonderful dexterity, hopping about upon it like a bird. He was **very tall and strong,** with a face as big as an ox—**plain and pale,** but intelligent and smiling. Indeed, he seemed in the most cheerful spirits, whistling as he moved about among the tables, with a merry word or a slap on the shoulder for the more favoured of his guests.



Now, to tell you the truth, from the very first mention of **Long John** in Squire Trelawney's letter I had taken a fear in my mind that he might prove to be the very **one-legged** sailor whom I had watched for so long at the old Benbow. But one look at the man before me was enough. I had seen the captain, and Black Dog, and the blind man, Pew, and I thought I knew what a pirate was like—a very different creature, according to me, from **this clean and pleasant-tempered landlord**.

I plucked up courage at once, crossed the threshold, and walked right up to the man where he stood, propped on his crutch, talking to a customer.

Activity 2:	The above passage is from the novel 'Treasure Island,' by Robert Louis Stevenson. Long John Silver is a complex cunning and a colourful character. Fill in the columns below with one example each for 'Physical Traits,' and 'Characteristics' to demonstrate your understanding of his personality. An example has been done for you.

Character	Physical Traits	Inference	Characteristics	Inference
Long John Silver	He was **very tall and strong**, with a face as big as an ox—**plain and pale**, but intelligent and smiling.	He was not a typical pirate.	Indeed, he seemed in the most cheerful spirits, whistling as he moved about among the tables, with a merry word or a slap on the shoulder for the more favoured of his guests.	In contrast to the views of people, Long John Silver was a pleasant and cheerful person.

Activity 3: Activity b: Read the character description of Agatha and Washington. Fill the columns given below with appropriate details and infer the kind of personalities they are from the description given.

Agatha had a **narrow, oblong face** with **angular cheekbones** and a **pointed chin**. Her **slit-like eyes** were a clouded hazel, and her thinly plucked eyebrows were shaped into a deceivingly perfect arch that followed the slight curve of her eye. A **long nose hooked over continually pursed lips,** which were painted a bright red in an unsuccessful effort to mask their natural thinness. Bleached blonde hair, made thin from too many years of hair dye, hung straight down into an **angular cut at her jaw.** The sharp features of Agatha's face were merely a reflection of her entire body structure, and **everything**—from her skeletal arms to her paper-thin waste—**screamed of unnatural skinniness.** She walked in long strides, her shoulders back and face held forward, wearing tall heels and a bold leopard-print dress.

Washington had a **rectangular face** with a defined, slightly **pointed chin** and a **sturdy jaw line**. His **dark eyes were small** and spaced evenly apart, sitting below trim eyebrows that seemed to curve as a natural extension of his broad, rounded nose. He kept his mouth closed in a thin, straight line, and his hair—**naturally light brown in color** but powdered to a bright white—was neatly tied and worn back to reveal a **wide forehead**. The jacket he wore over his broad shoulders had neatly polished buttons, and the scarf around his neck was tied so that the ruffles perfectly filled the space left open by his coat. He walked straight, his face held forward in a steady gaze, and had an air of authority that was visible.

Activity 4: Identify and list down the character sketch of Washington in the space below. An example of Agatha has been done for you.

Characters	Physical traits	Inference	Characteristics	Inference
Agatha	a narrow, oblong face with angular cheekbones and a pointed chin	A strong and obstinate person, who seems to be habitual of getting what she wants.	bright red lips that mask their natural thinness	She is an artificial and surface person who wishes to hide what she actually looks like
Washington				

Further practice: From the details given about Gulliver's personality on pages 10 to 12 of your textbook, write a character sketch of Gulliver.

Worksheet 9

Unit No. 3

Understanding Poetry

SLO 1: Read a poem and give orally or in writing the main idea, theme, summary, personal response and paraphrase.

Activity 1: a) read the important definitions given below. b) read the poem about the honeybees and respond to the questions in the space provided below:

Honeybees



A bright sunny yellow the colour of honey

Is the bee that makes sounds that are really funny

They're busy all day filling up their hives

With pollen and nectar, that are food for their lives

They don't like anyone near their homes

But if you go close you are sure to be stung by the drones

The honey is guarded and protected by these busy bees

In which Allah has kept the cure for all disease

Important Definitions

1. Paraphrase it!
- Put the text in your own words
- Avoid copying the text
- Rearrange similar text
- Ask yourself if you have included all the details

Example: Working out and physical fitness is a positive activity that builds the immune system.
Paraphrase: Exercising strengthens the immune system
2. Theme: is the message or the moral of a story.
Example: in the story of the 'Hare and the Tortoise', the theme is 'slow and steady wins the race.'
3. Main Idea: tells the reader what the story is about. Main idea is specific to a story and cannot be generalised.
Example: the tortoise and the hare are in a race.
4. Summary: is a condensed version of the original text.
Example: Even the slowest tortoise can defeat the quickest hare, and even the proudest hare can learn a timeless lesson from the most humble tortoise: Slow and steady wins the race is a superb story of an arrogant hare and a humble and persistent tortoise, who set out to compete in a race

What is the theme of the poem? _____

What is the main idea of the poem? _____

_____

_____

Paraphrase the poem:_____

Write the summary of the poem: _____

_____

_____

Write your personal response for this poem: _____

_____

Further practice: read and understand the section on 'understanding the poem' given on page 21 of your textbook.

Worksheet 10

Unit No. 3

Summary Skills

SLO 2: Apply summary skills to poems to write a summary. Restate the message in simple prose.

Activity 1: Read the poem 'Try Again' by William Hickson and then read the sample summary of the first 11 lines.

This a lesson you should heed **Line 1**
Try again;

If at first you don't succeed,
Try again.

Then your courage should appear;
For if you will persevere,
You will conquer, never fear,
Try again.

Once or twice though you should fail,
If you would at last prevail,
Try again. **Line 11**

If we strive, 'tis no disgrace
Though we did not win the race–
What should you do in that case?
Try again.

If you find your task is hard.
Try again;

Time will bring you your reward,
Try again;

All that other folk can do,
Why with patience should not you?
Only keep this rule in view,
Try again

Summary: Line 1-11

Following is the summary of the first eleven lines.
In this poem the poet stresses on trying again and again till you are successful. according to him, if one does not give up, one is bound to succeed. So, one should not fear to struggle and keep on trying even after a few failures.

Summary: _____

_____

_____

_____

_____

_____

The Message from the Poem

Further practice: Read and complete the exercises given on page 22 of your textbook.

Worksheet 11

Unit No. 3

Comma Use in Introductory Phrases Containing Verbs

SLO 3: Recognize and use comma to separate an introductory phrase containing a verb from the main sentence.

Examples:

- Having finished the test, he left the room.
- To get a seat, you'd better come early.
- After the test but before lunch, I went jogging.
- The sun radiating intense heat, we sought shelter in the cafe.

Activity 1: Put a comma to separate an introductory phrase containing a verb from the main sentence:

1. Considering he was not well he decide to skip school.

_____

2. Despite his dislike for fish he ate the fried fish.

_____

3. Though she had found her lost notes she did not disclose this to her friends.

_____

4. Having survived the earthquake he had no fear of dying.

_____

5. Being the first one to spot the crescent he rushed to his granddad to break the news.

_____

6. Regardless of all the opposition the party won with a huge mandate.

_____

7. Looking at the situation around Corona virus everyone stayed inside their homes.

_____

8. Studying from dawn till dusk finally paid off and he secured first position.

_____

Activity 2: Formulate your own sentences using the following phrases. Do not forget to insert the comma in the right place.

1. While I…..
2. Even though she….
3. Watching television……
4. Reaching home late….
5. Even with all the…..

Further practice: Complete the exercise given on page 23 of your textbook.

Worksheet 12

Unit No. 3

Use of Tenses

SLO 4: Illustrate the use of tenses learnt earlier

Activity 1: Complete the following sentences using an appropriate simple present or simple past tense form.

1. He _____ he is above playing with us. (think)
2. She _____ two thousand rupee an hour. (earn)
3. The plants _____ in the absence of water. (die)
4. He _____ English with a Pakistani accent. (speak)
5. The cold weather _____ my health. (affect)
6. They _____; they always agree. (not quarrel)
7. Fatty foods _____ with me. (not agree)
8. The teacher _____ them an hour for their painting. (allow)
9. Smoking is _____ (not allow)
10. The twins _____ alike. (look)
11. You alone _____ my secrets. (know)
12. He _____ his fortune amongst his three children. (divide)

Activity 2: Read the sentences and fill in the blanks with the correct tense from the three options given below.

1.	When I opened my eyes, I _____a strange sight.	a. see	b. saw	c. sees
2.	Every morning she ____up early and gets ready for work.	a. woke	b. wake	c. wakes
3.	I haven't ____anything from her in a long time.	a. hear	b. heard	c.hears
4.	The headmaster ____to talk to you now.	a. wanted	b.want	c.wants
5.	Jane ____with her parents even now.	a. live	b.lives	c.lived
6.	We are _____Greece next month.	a. visiting	b.visit	c. visited
7.	The moon _____around the earth.	a. revolves	b. revolved	c. revolve
8.	She ___a novel last year.	a. wrote	b. writes	c. write
9.	All students _____in their work, as soon as the lesson ends.	a. handed	b. hands	c. hand

Further practice: Read the poem on page 20 of your textbook and select any 5 verbs. Use these verbs in sentences of your own identifying the form of the verb. One has been done for you.

Example: I look around and see only people who I love. (Present tense).

Worksheet 13

Unit No. 4

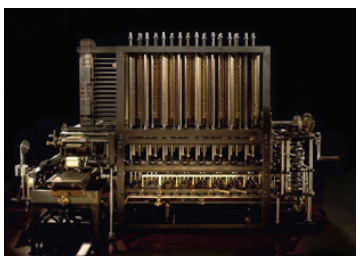
Reading for Meaning

SLO 1: Use critical thinking to respond to the text (while-reading)
- **Scan to answer short questions**
- **Deduce meaning of difficult words from context.**
- **Distinguish between what is clearly stated and what is implied.**

Activity 1: Read the given paragraph carefully and write the answers in spaces provided.



Computer is one of the most brilliant gifts of modern science. It is an electronic machine used to solve various problems. This is done by the instructions given to it using various programs called software. The ability of computers to follow generalized set of operations, called programs, enables them to perform an extremely wide range of tasks. The first mechanical computer was designed by Charles Babbage, the British mathematician in the year 1849. The prototype of computers was totally different from modern computers, but its basic structure was quite similar. Babbage attempted to make the first automatic computing engine, but he failed to complete it. Parts of his incomplete machine are on display in the science museum of London.



i. How are various problems solved through a computer?

_____

_____

ii. What did you learn about the function of programs in computer?

_____

_____

iii. What is similar between the first computer made by Charles Babbage and the one in use these days?

_____

_____

iv. The first mechanical computer was designed by the _____ mathematician?
1. American. 2. French 3. British 4. German

v. A prototype means _____
1. Model 2. Type of computer 3. Positive 4. Machine

Further practice: Complete the exercise given on page 32 of your textbook.

Worksheet 14

Unit No. 4

New Vocabulary

SLO 2: Build and use appropriate vocabulary and correct spelling for effective communication

Activity 1: Choose the most appropriate option. First one is done for you.

1. Computer is a/an:
i. mailing machine
ii. electronic machine
iii. supply machine
iv. simple machine
Ans: (ii) electronic machine

2. The first computer was designed by:
i. Charles Babbage
ii. Charles Edison
iii. Newton
iv. Charles lamb
Ans: _____

3. The antonym (opposite meaning) of 'automatic' is:
i. manual
ii. sharp
iii. self
iv. difficult
Ans: _____

4. Which one of the following is an abstract noun:
i. mouse
ii. monitor
iii. printer
iv. software
Ans: _____

5. The word 'enormous' means:
i. severe
ii. extremely large
iii. perfect
iv. minor
Ans: _____.

Further practice: Complete the exercise given on page 32 under the section of 'New Vocabulary,' of your textbook.

Worksheet 15

Unit No. 4

Procedural Writing

SLO 3: Use appropriate vocabulary and tense to write a simple paragraph by explaining a process or procedure.

A procedure is an established way of doing something. Whenever you read how-to guides or follow step-by-step instructions, you're using procedural writing. Using procedural writing helps you accomplish a goal; it gives instructions for completing both common and complex goals.

Activity 1: Read the procedure of using the simple -yet -powerful photo manipulation tool called Paint, which is a part of your computer's operating systems. Notice the words in Bold font which indicate the sequence of a procedure.

First, you need to know where is 'Paint?' But how to use Paint on MS Word. Windows 7 users – Click on the start button and in the search bar type in paint, then select the Paint icon. Alternatively, you can click on Start > All Programs > Accessories > Paint. Windows 88.1/ – In the main menu, scroll until you see the Paint icon and click on it.

Next, to open a saved image you wish to edit, click on the menu button (highlighted in red).

Then, you can choose to start a new project, open a saved picture, save an image as a different file type, print an image you have open, or email that image to a contact.

Subsequently, you can use the "Select" option to select a section of the photo. The selection can be rectangular or "free form" – meaning you can freely draw the selection you wish to.

Once selected, you can invert the selection, selecting everything BUT the area you've marked.

Another option is to use *Transparent selection,* which only selects the painted area, without the background. Presently, you can use the crop option to crop the image to the selected area. Moreover, the resize option will let you change the size of the selected area (or the whole picture if nothing was selected) by percentage of the original size, or by selecting a specific size in pixels. **Furthermore,** the Rotate option lets you rotate or flip the image as you please.

Now that you have a sense of the location of Paint in your computer's operating system, and some of the functions of this powerful photo manipulation tool, you can explore this program further.

Activity 2: Read the words in the box below which indicate sequence of a procedure. Fill in the blanks with the suitable word to complete the instruction on 'how to convert a Word Document to a PDF?'

Finally, Then, After this, Occasionally, First step, Next, Remember, Occasionally

1. _____some users find they may need to convert a Word Document into a PDF. Please follow the steps given below:
2. _____ to convert a Word Document to a PDF is to click the Microsoft Office Button, point to the arrow next to Save As, and then click PDF or XPS.
3. _____in the File Name list, type or select a name for the document.
4. _____the Save as type list, click PDF.
5. _____if you want to open the file immediately after saving it, select the Open file after publishing check box.
6. _____this check box is available only if you have a PDF reader installed on your computer.
7. _____, click Publish.

Further practice: Read pages 30 and 31 of your textbook and complete the exercises on page 32.

Worksheet 16

Unit No. 4

Possessive Pronouns

SLO 4: Demonstrate correct use of my – mine, your – yours etc

Activity 1: Read the sentences below and fill in the correct pronoun.

Should I use a possessive pronoun or a possessive adjective?

An adjective needs someone or something to talk about (describe).

A pronoun takes someone or something's place.

Possessive Adjective: It is my car (describes the car).

Pronoun: Its mine (takes the car's place).



Possessive Adjectives

1) Hamid works hard to keep _____ body fit.

2) Kadir and Saamer are farmers, they grow vegetable on _____ land.

3) The car is cool, I really like _____ colour.

4) We do _____ work diligently.

5) I find it very hard to keep my house clean, what do you do to keep _____ so tidy.

Possessive Pronouns

1. Your dog is smart but _____ is smarter. (I)
2. Our zoo has five deer, how many does _____ have? (You)
3. My seat is an aisle seat, _____ is a window seat. (he)
4. His birthday is on Friday, _____ is on Sunday. (I)
5. They took our seats, so we took _____. (They)
6. That's my favourite park, I love _____ swings. (It)
7. My family is poor, _____ is rich. (They)

Correct the possessives in the following sentences:

1. Tahir rode her horse around the farm.
2. May I ride you horse?
3. They lost them gloves; can they borrow yours?
4. I'm not sharing any of my gifts, they are all me.
5. I saw a huge truck in the parking lot of my neighbours, it was them.

Further practice: Complete the exercise given on page 33 of your textbook.

Worksheet
17
Unit No. 5

Read with Comprehension

SLO 1: Read with comprehension

Activity 1: Read the passage on Prophet Muhammad's (PBUH) Leadership.

Messenger Muhammad (PBUH) conveyed Islam, the religion of universal kindness. No other religion in history disseminated so rapidly as Islam. Successful leaders get the love and trust of their people and are pursued by them in amount to their aptitude to solve their problems. These can be personal or public or related to individual's private life or the community's social economic and political affairs. Messenger Muhammad (PBUH) resolved all problems so skilfully and easily that no one confronted him. Although his people were by nature argumentative, ignorant, wild, and rebellious, he delivered a message to them that was so grave that all his followers converted into a harmonious community of peace happiness knowledge and good morals.

The Messenger was enormously a just man. His universal kindness did not avert him from carrying out divine justice and his compassion and tolerance kept him from violating any Islamic rule. For example, during a military operation, Usama Bin Zayd tossed down an enemy soldier to kill him. When he was about to kill him, the man spoke out his faith in Islam. Judging this to be the product of fear of imminent death, Usama killed him. The Prophet reprimanded Usama and asked him if he had cleaved his heart open to see if what he was saying was out of fear or had he actually accepted the faith.

Prophet Muhammd (PBUH) had all the necessary leadership qualities for success in every aspect of life. Allah the Almighty says, "Most certainly you have in the messenger of Allah an excellent pattern of behaviour. "The Prophet (PBUH) is the source from which flowed all later developments related to command, statecraft, religion, spiritual development and so on in the Islamic world.

Activity 2: Answer the following questions

1. What was one of the reasons that made Prophet Muhammad (PBUH) a successful leader?

_____

2. What was the nature of the Prophet's (PBUH) followers?

_____

3. Explain the meanings of the following words with reference to the context.

   a. Confronted _____

   b. Harmonious community _____

   c. Divine _____

   d. Reprimanded_____

   e. Cleaved his heart open _____

4. Why does Prophet Muhammad (PBUH) stand out as someone with superb leadership qualities?

In the table below, fill the columns by giving three examples of his leadership qualities as mentioned in the passage and support these with your own reasons. One example has been for you.

Leadership Qualities of Prophet Muhammad (PBUH)	Example from the text	My reason to believe this is an exceptional quality
Problem solver	Resolved problems skilfully	I think addressing personal issues of people is an art, and our Prophet (PBUH) had a talent to deal with the most difficult issues in the easiest manner.



Further practice: Read the excerpt given on pages 36-38 and complete the exercise given on page 39.

Worksheet 18

Unit No. 5

Know About Verbs

SLO 2: Know about the definition of a verb

Activity 1: Read and understand the definition of verbs and distinguish between action and non-action verbs.

Verbs are the action words in a sentence that describe what the subject is doing. Along with nouns, verbs are the main part of a sentence or phrase, telling a story about what is taking place. In fact, without a verb, full thoughts can't be properly conveyed, and even the simplest sentences, such as Maria cooks, have a verb. Actually, a verb can be a sentence by itself, with the subject, in most case you, implied, such as, ***Cook!*** and ***Drive!***

VERBS	
Action words	**Non-Action verbs**
Verbs are 'doing' words, meaning they signify the part of the sentence which explains the action taking place: He ran away, she eats halwa puri on Sundays, the horses gallop across the fields. Ran, eats and gallop are the 'action' parts of those sentences, thus they are the verbs.	**Hon Not all verbs are easily identifiable as: action I know your name, Ali thought about it, she considered several applications. These are are non-action verbs, i.e. those that describe a state the state of being, emotion, possession, sense or opinion. Other non-action verbs include love like, agree, feel, am, and have.**

1. Kamran eats his dinner quickly.
2. We went to the market.
3. You write neatly in your notebook.
4. They thought about all the prizes in the competition.

Useful tips!

Here are some other ways to recognize verbs in a sentence: If you're not sure if a word is a verb, ask yourself, "Can I do _____?"

Can I think, wonder, walk, yawn? Yes, so these are verbs.

You can also ask, "What is happening?"

In the sentence, 'Kamran eats his dinner quickly', what is happening? **Eating** is happening, so eating is an action **verb**.

In the sentence, 'They thought about all the prizes,' what is happening? **Thought** (thinking) is happening, so thought is a non-action **verb**.

Activity 2: underline the verbs in the sentences given below and write if the verb is action or non-action in the space provided.

Let's run to the corner and back._____

I hear the train coming. _____

Call me when you're finished with class._____

I know the answer. _____

She recognized me from across the room. _____

Do you believe everything people tell you? _____

Further practice: complete the exercise on page 41 of your textbook.

Worksheet 19

Unit No. 5

Functions of a Verb

SLO 3: identify various functions of a verb

Useful Tip:
Some linking verbs can function as action verbs:
If you can substitute the verb with am is or are, you are dealing with a linking verb.
The dog smelled the man's boots.
The dog is the man's boots. (action)
The dog smelled bad.
The dog is bad. (linking)

Linking Verbs- forms of be:

am	be	being	was
are	been	is	were

- Other Linking Verbs:

appear	grow	seem	stay
become	look	smell	taste
feel	remain	sound	turn

Activity 1: Read each sentence and circle the verb. Determine whether the verb is acting as a linking or an action verb in the sentence. Write LV or AV on the line beside each sentence.

1. Math is my favourite subject. _____
2. I am eleven years old. _____
3. My uncle sings beautiful Hamd.
4. I looked everywhere for the key to my diary. _____
5. Your kitchen smells awful. _____
6. The students were tired after the P. E. class.
7. The baby seems cranky today. _____
8. My mother was not in her room. _____
9. My father is on a call. _____
10. I cook tasty food for my family. _____

Helping verbs

Am	Is	Are	Was
Were	Being	Been	Be
Has	Have	Had	Did
Shall	Will	Should	Would
May	Might	Must	Can
Could	Does	Do	

Activity 2: Read the paragraph. Circle and write at least four verbs for each category given below:



In our physical education class, we play lots of games. My favourite sport is football. In this game, both teams kick the ball turn by turn and try to take it towards the opposite team's goal and look to chase the target. This game requires a lot of energy and is quite rigorous, and the players make loud sounds to get the attention of their team members. Though most of the time the players seem exhausted due to the challenge of not being able to touch the ball with their hands and to continuously tackle with their feet, head or shoulders, it is a game worth playing. I began learning to play football when I was just a toddler. My father would throw the ball towards me and I was supposed to kick and not touch it with my hands. Now I am so used to this and feel that I can tackle almost anything with my feet, head and shoulders and the entire credit goes to my sporty father.

Action verbs	Linking verbs	Helping verbs

Further practice: Complete the exercise given on page 42 of your textbook.

Worksheet 20

Unit No. 5

Know More About Verbs

SLO 4: Have knowledge of various kinds of verbs

Activity 1:	Read the following paragraph titled 'the Yak's dilemma,' and list down 6 to 8 action verbs in the column below. Use these verbs to write a story of your own on an 'Unpleasant experience."

The Yak's Dilemma

"Look at my hair," the yak said. His hair was a mess. He did not like it this long. The yak could barely see because of his long hair. He needed to find someone that would cut it. He walked through plains looking for someone who could help. He found a monkey, who agreed to help the yak. The yak sat down happy that he would finally shed all the extra hair that had grown on his body. But when there was no movement of hair cutting, the yak turned his head to see what the monkey was doing. He was shocked to see that the monkey and at least ten of its companions were picking lice from its hair and enjoying the fresh protein. The yak kicked the monkeys and walked on ahead in disgust.



Action Verbs

My Story: _____

Mathematics

Unit 1

OPERATIONS ON SETS

Subject	Subject: Maths
Grade	Grade: VIII
Unit	Unit. 1
Topic	Topic: Operations on Sets
Page Reference of the text book:	1-24

Worksheet 1 Unit 1 — **Some Important Sets**

SLO:

Recognize set of:

- Natural numbers (N)
- Whole numbers (W)
- Integers (Z)
- Rational Numbers (Q)
- Even numbers (E)
- Odd numbers (O)
- Prime numbers (P)

Task:

Q1. Write name of given sets in the boxes,

i.	N = {1, 2, 3, 4…}	Set of Natural Numbers
ii.	W = {0, 1, 2, 3, . . .}	
iii.	Z = {0, ±1, ±2, . . .}	
iv.	E = {0, ±2, ±4, ±6, . . .}	
v.	P = {2, 3, 5, 7, 11, . . .}	
vi.	O ={ ±1, ±3, ±5, . . .}	
vii.	Q = $\{x \mid x = \frac{p}{q}$, p, q, $\in$ Z, q $\neq$ 0$\}$	

Worksheet 2 Unit 1 — Power Set

SLO: Find power set P(A) of a set A.

Sample:

If A = {1, 2, 3} then P (A) is the set of all the subsets of A.

P (A) = { φ, {1}, {2}, {3}, {1, 2}, {1, 3}, {2, 3}, {1, 2, 3}

Write power set of the following sets.

i. If B = {x, y} then P (B) = _____

ii. If x = {p, q, r} then P (X) = _____

iii. If Y = {s, t, u} then P (Y) = _____

iv. If R = {i, o, u} then P (R) = _____

v. If Q = {2, 3, 4} then P (Q) = _____

vi. If T = {orange, blue, red} then P (T) = _____

Worksheet 3 Unit 1 — Verify Commutative and Associative Laws w.r.t Union and Intersection

SLO: Verify Commutative and associative laws with respect to Union and Intersection.

Match Column A with Column B

Column A	Column B
Commutative law of union of sets	$A \cap (B \cap C) = (A \cap B) \cap C$
Associative law of intersection of sets	$A \cap (B \cup C) = (A \cap B) \cup (A \cap C)$
Distributive property of union over intersection of sets	$A \cap B = B \cap A$
Commutative law of intersection of sets	$A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$
Associative law of union of sets	$A \cup B = B \cup A$
Distributive property of intersection over union of sets	$A \cup (B \cup C) = (A \cup B) \cup C$

Worksheet 4 Unit 1

De-Morgan's Laws

SLO: State and verify De Morgan's Laws

Sample question

$U = \{a, b, c, d, e, f\}$

$A = \{a, b, c\}$

$B = \{d, e, f\}$

Then verify De-Morgan's law

Solution:

De-Morgan's law states

i. $(A \cup B)' = A' \cap B'$

ii. $(A \cap B)' = A' \cup B'$

i. $(A \cup B)' = A' \cap B'$

First LHS $= (A \cup B)'$

First we find $A \cup B$

$A \cup B = \{a, b, c\} \cup \{d, e, f\}$

$= \{a, b, c, d, e, f\}$

As

LHS $(A \cup B)' = U - (A \cup B)$

$= \{a, b, c, d, e, f\} - \{a, b, c, d, e, f\}$

$= \{\ \} \longrightarrow (1)$

Now RHS $= A' \cap B'$

First we find A' & B'

$A' = U - A$

$= \{a, b, c, d, e, f\} - \{a, b, c\}$

$= \{d, e, f\}$

$B' = U - B$

$= \{a, b, c, d, e, f\} - \{d, e, f\}$

$= \{a, b, c\}$

Now $A' \cap B'$

$A' \cap B' = \{d, e, f\} \cap \{a, b, c\}$

$= \{\ \} \longrightarrow ②$

From ① and ②

$\{\ \} = \{\ \}$

Hence verified that

$(A \cup B)' = A' \cap B'$

ii. $(A \cap B)' = A' \cup B'$

LHS

$(A \cap B)' = U - (A \cap B)$

$= \{a, b, c, d, e, f\} - \{\ \}$

$= \{a, b, c, d, e, f\} \longrightarrow ①$

Now taking RHS $= A' \cup B'$

First we find A' & B'

$A' = U - A$

$= \{a, b, c, d, e, f\} - \{a, b, c\}$

$= \{d, e, f\}$

$B' = U - B$

$= \{a, b, c, d, e, f\} - \{d, e, f\}$

$= \{a, b, c\}$

RHS $A' \cup B' = \{d, e, f\} \cup \{a, b, c\}$

$= \{a, b, c, d, e, f\} \longrightarrow ②$

From 1 & 2

$\{a, b, c, d, e, f\} = \{a, b, c, d, e, f\}$

Hence verified that

$(A \cap B)' = A' \cup B'$

Task:

If $U = \{a, e, i, o, u\}$
$X = \{a, e\}$
$Y = \{o, u\}$

Then verify De-Morgan Law

i. $(X \cup Y)' = X' \cap Y'$

ii. $(X \cap Y)' = X' \cup Y'$

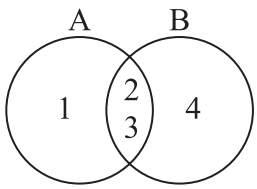
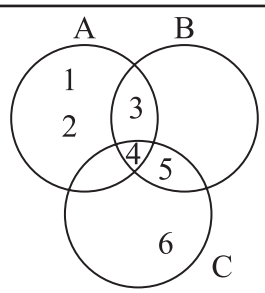
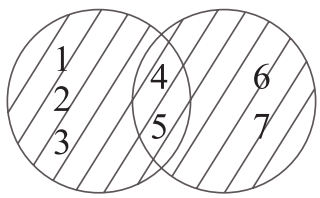
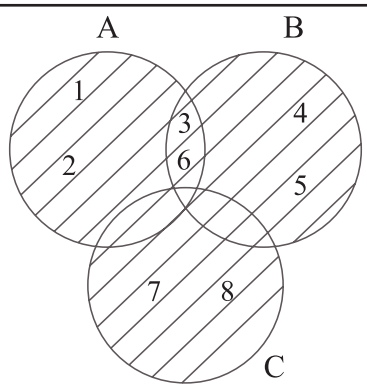
Solution:

Worksheet 5 Unit 1

To Demonstrate Union and Intersection of Three Overlapping Sets Through Venn Diagrams

SLO: Demonstrate union and intersection of three overlapping sets through Venn diagram.

Match the columns

Column A	Column B
If A = {1, 2, 3, 4} B = {3, 4, 5} C = {4, 5, 6} Then (A ∩ B) ∩ C = {4}	
If A = {1, 2, 3} B = {2, 3, 4} Then (A ∩ B)	
If A = {1, 2, 3, 6} B = {3, 4, 5, 6} C = {6, 7, 8} Then (A ∪ B) ∪ C =	
If A = {1, 2, 3, 4, 5} B = {4, 5, 6, 7} Then (A ∪ B) =	

Worksheet 6
Unit 1

Verify Associative and Distributive Laws Through Venn Diagram

SLO: Verify associative and distributive laws through Venn diagram.

Sample question

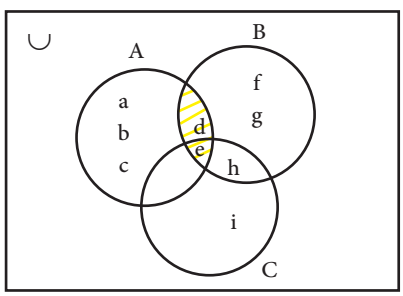
If U = {a, b, c, d, e, f, g, h, i}

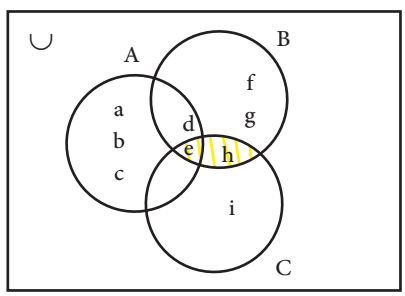
A = {a, b, c, d, e}

B = {d, e, f, g, h}

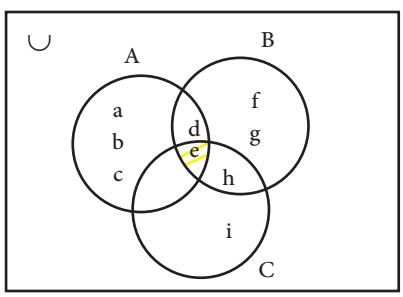
C = {e, h, i}

Verify $(A \cap B) \cap C = A \cap (B \cap C)$ using Venn diagram.

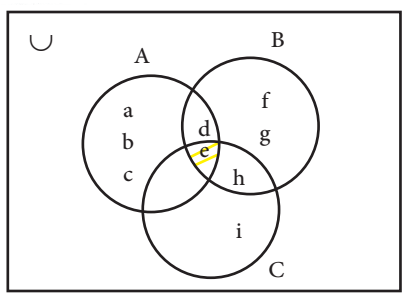




$A \cap B$



$B \cap C$



$(A \cap B) \cap C$ = $A \cap (B \cap C)$

Therefore the associative law $(A \cap B) \cap C = A \cap (B \cap C)$ has been shown above.

Task:

For the sets

$U = \{1, 2, 3, 4, 5, 6, 7, 8\}$
$A = \{1, 2, 3\}$
$B = \{3, 4, 5\}$
$C = \{3, 6, 7, 8\}$

Use Venn diagram to verify

i. $A \cap (B \cap C) = (A \cap B) \cap C$

ii. $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$

Solution:

(Use separate sheet for the Venn Diagram)

Unit 2

REAL NUMBERS

Subject	Maths
Grade	Grade: VIII
Unit	2
Topic	Real Numbers
Page Reference of the text book:	25-49

Q1. Convert 0.63 into a fraction.
Solution:

Q2. Without division, using the rule separate the terminating and non-terminating decimals.

i. $\frac{47}{40}$ Terminating Non-terminating

ii. $\frac{84}{105}$ Terminating Non-terminating

Q3. Round off 262.5332 to the nearest thousandth.
Solution:

Worksheet 7 Unit 2 **Irrational Numbers**

SLO:

- Define irrational number.
- Recognize rational and irrational numbers.

Task:

A= $\{\frac{1}{2}, \sqrt{2}, \frac{1}{3}, \sqrt{3}, \frac{1}{4}\}$

i. Select which are rational numbers from the above set.
Q = { }

ii. Select which are not rational numbers from the above set.
Q′ = { }

iii. Does set A contain real numbers? Explain your answer.

Worksheet 8 Unit 2 — **Real Numbers**

SLO: Define real numbers.

Task:

$U = \{1, \frac{1}{2}, \sqrt{2}, \frac{1}{3}, \sqrt{3}, \frac{1}{4}, \frac{1}{5}, \sqrt{25}, \frac{1}{6}, \sqrt{6}\}$

Write the rational number in set Q and irrational numbers in Q'

i. $Q = \{$ $\}$

ii. $Q' = \{$ $\}$

iii. Is the union of Q and Q' the set of rational numbers or irrational number or real numbers? Explain your answer.

Task:

Write rational number or irrational number in front of each number

i	0.01001001	rational number	vi	$5\frac{3}{4}$	
ii	-6		vi	π	
iii	$\sqrt{3}$		viii	2.45	
iv	1.732		ix	$\sqrt{7}$	
v	$\frac{-11}{3}$		x	$\frac{7}{4}$	

Worksheet 9 — Unit 2 — Squares

SLO: Find perfect square of number.

Sample question.

$9 = 3 \times 3$ (product of two equal integers)

$= 3^2$

$= 9$

9 is a perfect square.

Whereas 8 is not a perfect square because we cannot express it as the product of two integers.

Task:
Fill in the table of squares of numbers 11 to 20.

Number	Product	Square	Number	Product	Square
11	$11 \times 11 = 11^2$	121	16		
12			17		
13			18		
14			19		
15			20		

Worksheet 10 — Unit 2 — Pattern for the Squares of Natural Numbers

SLO: Establish patterns for the squares of natural numbers (e.g. $4^2=1+2+3+4+3+2+1$)

Task:
Find the patterns for

i. $2^2 = 4 = 1 + 3$ (sum of first two odd numbers)

ii. $5^2 = 25 =$ _____

iii. $8^2 = 64 = 1+3+5+7+9+11+13+15$ (sum of first eight odd numbers)

iv. $9^2 = 81 =$ _____

Fill in the boxes

i. $2^2 = 1 + \square + 1 = 4$

ii. $3^2 = 1 + \square + \square + 2 + 1 = 9$

iii. $4^2 = 1 + 2 + 3 + \square + 3 + \square + 1 = 16$

iv. $7^2 = \square + \square + \square + \square + 5 + 6 + 7 + \square + \square + 4 + 3 + 2 + 1 = 49$

v. $9^2 = \square + \square + 3 + 4 + \square\ 6 + 7 + \square + 9 + 8 + 7 + 6 + \square + \square +$
$\square + \square + \square = 81$

Worksheet 11
Unit 2

Square Roots

SLO: Find square root of

- a natural number (e.g. 16, 625, 1600)
- a common Fraction (e.g. $\frac{9}{16}, \frac{36}{49}, \frac{49}{65}$)
- a decimal (0.01, 1.21, 0.64) given in perfect square form, by prime factorization and division method.

Sample question

Find square root of 16

$16 = 4 \times 4 = 4^2$

$\sqrt{16} = \sqrt{(4)^2}$

$= 4$

Task:

Find the square roots of the following

i. 64 ii. 225

Solution:

Sample question

Find square root of $\sqrt{\frac{100}{44}}$

$\frac{100}{144} = (\frac{10}{12})^2$

$$\Rightarrow \sqrt{\left(\frac{10}{12}\right)^2} = \frac{10}{12}$$

Task:

Find $\pm\sqrt{0.49}$

Solution:

Complete the table

Perfect Squares	1	4	9	16	25	400	625
Square Root		$\sqrt{4} = 2$		$\sqrt{16} = 4$			

Worksheet 12 — Unit 2 — Methods to Find Square Roots

SLO: Find square root of natural numbers using prime factorization and division methods.

a. Square root of Natural numbers

i. Prime factorization method.

Sample question

Q1. $144 = 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3$

2	144
2	72
2	36
2	18
3	9
	3

$\sqrt{144} = \sqrt{2^2 \times 2^2 \times 3^2}$

$= 2 \times 2 \times 3$

$= 12$

Task:

Q2. Find square roots of the following by Prime factorization method.

i. 169 ii. 225

Solution:

ii. Division Method

Sample question:

Q3. Find the square root of 625

		25
2	625	
	4	
45	225	
	225	
	0	

i. Make pairs from right to left of the given number.
ii. To divide 6 we will take 2 x 2.
iii. Now we will take 45 x 5
iv. Quotient 25 is the required square root.

Task:

Q4. Find the square root of the following by division method

i. 256 ii. 144

Solution:

b. Square root of a common fraction.

i. Prime factorization Method

Sample question:

Q5. Find the square root of $\frac{121}{64}$

$121 = 11 \times 11 = 11^2 = 121$

$\Rightarrow \sqrt{121} = \sqrt{11^2} = 11$

$64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2 = 2^2 \times 2^2 \times 2^2$

$\sqrt{64} = \sqrt{2^2 \times 2^2 \times 2^2} = 2 \times 2 \times 2 = 8$

Now

$$\frac{\sqrt{121}}{\sqrt{64}} = \frac{11}{8}$$

ii. Division Method

$$\frac{\sqrt{121}}{\sqrt{64}}$$

$$\begin{array}{r|l} & 11 \\ \hline 1 & 121 \\ & 1 \\ \hline 21 & 21 \\ & 21 \\ \hline & 0 \end{array}$$

Quotient 11 is the required square root of 121.

$$\begin{array}{r|l} & 8 \\ \hline 8 & 64 \\ & 64 \\ \hline & 0 \end{array}$$

Quotient 8 is the required square root of 64

Now

$$\frac{\sqrt{121}}{\sqrt{64}} = \frac{11}{8}$$

Task:

Q6. Find square root of following with both methods Prime factorization and Division method

i. $\frac{625}{900}$ ii. $\frac{784}{256}$

Solution:

c. Square root of a decimal factor

i. By Division method

Sample question:

Q7. Find the square root of 6.25

$$\begin{array}{r|l} & 2.5 \\ \hline 2 & 6.25 \\ & 4 \\ \hline 45 & 2.25 \\ & 2.25 \\ \hline & 0 \end{array}$$

2.5 is the required square root of 6.25

ii. $\sqrt{6.25} = \sqrt{\frac{625}{100}} = \sqrt{\frac{5\times5\times5\times5}{2\times2\times5\times5}}$

$$= \sqrt{\frac{5^2\times5^2}{2^2\times5^2}}$$

$$= \frac{5 \times 5}{2 \times 5} = \frac{25}{10} = 2.5$$

Task:

Q8. Find the square of given decimal fractions by (a) Division method (b) Prime factorization

i. 27.04 ii. 51.84

Solution:

Worksheet 13 Unit 2 Square Root of a Non-Perfect Square

SLO: Find square root of a number which is not a perfect square (e.g. the numbers 2, 3, 2.5)

Sample question:

Q1. Calculate the square root of 1233

	35
3	1233
	9
65	333
	325
70	008

As the divisor has become greater than the dividend, we will stop process here. The remainder i.e. 8 is the digit which must be subtracted from the given number (1233) to get a perfect square.

Note:

All the non-perfect squares end with 2, 3, 7 or 8. But it is not necessary that all the perfect squares always end with 0, 1, 4, 5, 6 or 9.

Q2. Write perfect square and non-perfect squares in the correct box.

i	144	Perfect Square	**vi**	45857	
ii	458782	Non-Perfect Square	**vii**	400	
iii	169		**viii**	361	
iv	196		**ix**	103	
v	451288		**x**	8888	

Worksheet 14 Unit 2

Number of Digits in the Square Root of Perfect Squares

SLO: Use the following rule to determine the number of digits in the square root of a perfect square.

Rule: Let n be the number of digits in the perfect square then its square roots contains

- $\frac{n}{2}$ digits if n is even
- $\frac{n+1}{2}$ digits if n is odd

Sample Question.

Find the number of digits in the square roots of 169
Solution:
The number digit in 169 is n = 3 which is odd number. Therefore

$x = \frac{n+1}{2}$

$= \frac{3+1}{2}$

$= \frac{4}{2} = 2$

The number of digits in square root of 169 is 2

Verification
$\sqrt{169} = 13$ has 2 digits.

Note: $x = \frac{n}{2}$ if n is even

$x = \frac{n+1}{2}$ if n is odd

Task:

Find the number of digits in the square root of

i. 400

ii. 2704

iii. 5184

Worksheet 15 Unit 2 **Real Life Problems**

SLO: Solve Real life problems involving square roots.

Q1. The area of a square room is $784m^2$. Find the length of its sides?

Solution:

Q2. A square desktop has an area of 324 square inches. What is the length of one side of the desktop?

Solution:

Q3. If the area of a square shaped field of a wheat crop is $7744m^2$. Find the perimeter of the field?

Solution:

Q4. Find the least number which must be subtracted from 3139 to get a perfect square, then verify your answer.

Solution:

Worksheet 16 Unit 2	Cubes, Cube Root and Perfect Cube

SLO:

- Recognize cubes and perfect cubes.
- Find cube roots of a number which are perfect cubes.

Note: we write 3 cube as 3^3

Sample question:

Check whether 343 is a perfect cube or not.

Solution:

Calculating prime factor of 343 we have

$343 = 7 \times 7 \times 7 = 7^3$

In the prime factorization of 343, '7' occur three times, therefore 343 is a perfect cube.

Task:

Complete the chart

S. No	Number	Perfect Cube $e.g. \sqrt[3]{27} = 3$	Not perfect Cube
1	729	☑	
2	79		
3	1000		
4	512		
5	128		☑

Worksheet 17 Unit 2	Properties of Cubes of Number

SLO: Recognize Properties of cubes of numbers.

a. **Cube of a positive number**

Sample question:

Q1. Find cube of 17

Solution: $17^3 = 17 \times 17 \times 17$

$= 4913$ (Note: The cube root of a number x is denoted by $\sqrt[3]{x}$)

b. **Cube of negative number**

Q2. Find cube of – 100

Solution: $(-100)^3 = (-100) \times (-100) \times (-100) = -1000000$

Note for any positive number x

$\sqrt[3]{-x} = -\sqrt[3]{x}$

c. **Cube of a common fraction**.

If a >1, then $a^3 > a$; a is a real number.

Q3. Find cube of $\frac{1}{9}$

Solution: $(\frac{1}{9})^3 = \frac{1}{9} \times \frac{1}{9} \times \frac{1}{9} = \frac{1}{729}$

The cube value of a fractional number is much less than the number being cubed $\frac{1}{729} < \frac{1}{9}$

Task:

Q4. Find the cube root of the following numbers

i. 1728 ii. -9261 iii. 15625

iv. $-\frac{64}{125}$ v. $\frac{27}{8}$

Solution:

Q5. Find the value

i. $\sqrt[3]{19683}$ ii. $\sqrt[3]{-64}$ iii. $\sqrt[3]{-343}$

Solution:

Unit 3

NUMBER SYSTEM

Subject	Maths
Grade	VIII
Unit	3
Topic	Number System
Page Reference of the text book:	50-68

Worksheet 18 (Unit 3) — The Various Number Systems

SLO:

Task:

Q1. What are the digits in the decimal system? Circle the correct answer:

a. (0, 1) b. (0, 1, 2, 3, 4, 5, 6, 7) c. (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

1. How many digits are in the decimal system?

Ans. _____

2. How do you conclude that the number of digits form the base of a number system?

Ans. _____

Worksheet 19 (Unit 3) — Number System with Base 2, 5, 8, 10

SLO:

- Recognize base of a number system.
- Define number system with base 2, 5, 8, and 10.

Q1. Chose the correct option and fill in the blank.

i. If the digits in a number system are 0, 1 then the base will be _____.

a. 2 b. 5 c. 4 d. 5

ii. If the digits in a number system are 0, 1, 2, 3, 4 then base will be _____.

a. 2 b. 5 c. 8 d. 10

iii. If digits are 0, 1, 2, 3, 4, 5, 6, 7 then base will be_____.

a. 3 b. 5 c. 6 d. 8

Q2. Write the correct base. Assume that the largest number for each base has been used.

1	(101101)	Base 2	6	(524)	Base 6
2	(41013)		7	(101)	
3	(1001111)		8	(10111101)	
4	(102341)		9	(102341)	
5	(75)		10	(7536)	

Worksheet 20 Unit 3 **Conversion**

SLO: Convert a number from decimal system to a system with base 2, 5, and 8, and vice versa.

a. Conversion of decimal system to binary system

Sample question:

Q1. Convert 35 in base 10 to equivalent number in binary system (base 2).

Solution:
Let us convert 35 to its equivalent number in the binary system.

2	35	
2	17	1
2	8	1
2	4	0
2	2	0
	1	0

i. This is continous division with base digit 2 until we find less than '2' remainder

ii. All the remainders from bottom to top are written to form the number. In this example the last remainder is 1 and the first is also 1. So we start from the '1' at the bottom and get the number as $(100011)_2$

Therefore $(35)_{10} = (100011)_2$

This number will be read as "one zero zero zero one one base 2"

Task:

Q2. Convert the following into binary system.

i. 77 ii. 115 iii. 305

Solution:

Note: use separate sheet for solution.

b. Conversion of binary system to decimal system.

Sample question

Q3. Convert $(1001011)_2$

Solution:

$$(1001011)_2 = 1 \times 2^6 + 0 \times 2^5 + 0 \times 2^4 + 1 \times 2^3 + 0 \times 2^2 + 1 \times 2^1 + 1 \times 2^0$$

$$= 64 + 0 + 0 + 8 + 0 + 2 + 1 = 75$$

Solving hints:

a. All the digits that are in the ones place, tens place, hundreds place and so on are multiplied by a power of 2 starting from 0, 1, 2, 3 and so on. Then all the terms are added to get the decimal number which is converted from the binary number.

Task:

Q4. Convert the following into decimal number

i. $(10101010)_2$ b. $(10011011011)_2$ c. $(1101101)_2$

Solution:

c. Conversion of decimal system to a system with base 5.

Sample question:

Q5. Convert 470 into a system with base 5

5	470	
5	94	0
5	18	4
	3	3

i. This is continous division with base digit 5 until we find a remainder that is less than 5

ii. All the remainders from bottom to top are then written to form the number. In this example the last remainder is 3 and the first is 0. So we start from 3 and end at 0 and write the number as $(3340)_5$

Therefore $(470)_{10} = (3340)_5$

Task:

Q6. Convert the following decimal numbers into a system with base 5.

i. 375 ii. 499 iii. 5890

Solution:

d. Conversion of a system with base 5 to decimal system.

Sample question

Q7. Convert $(430214)_5$ to decimal system.

Solution:

$$(430214)_5 = 4 \times 5^5 + 3 \times 5^4 + 0 \times 5^3 + 2 \times 5^2 + 1 \times 5^1 + 4 \times 5^0$$

$$= 4 \times 3125 + 3 \times 625 + 0 + 50 + 5 + 4$$

$$= 12500 + 1875 + 0 + 50 + 5 + 4$$

$$= 14434$$

Solving Hints:

a. All the digits that are in the ones place, tens place, hundreds place and so on are multiplied by a power of 5 starting from 0, 1, 2, 3 and so on. Then all the terms are added to get the decimal number which is converted from the number in base 5.

Task:

Q8. Convert the following into decimal system.

i. $(3124)_5$ ii. $(14242)_5$ iii. $(334414)_5$

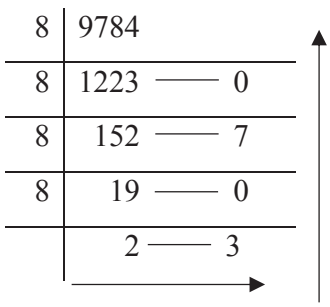
Solution:

e. Conversion of decimal system to octal system.

Sample question.

Q9. Convert 9784 into octal system.

Solution:



i. This is continous division with base digit 8 untill we find a remainder which is less than 8

ii. All the remainders from bottom to top are written to form the number. In this example the last remainder is 2 and the first is 0. So we start from 2 and end at 0 and write the number as $(23070)_8$

$(9784)_{10} = (23070)_8$

Task:

Q10. Convert the following decimal numbers into octal system.

i. $(89172)_{10}$ b. $(789847)_{10}$ iii. $(998784)_{10}$

Solution:

f. Conversion of octal system to decimal system

Sample question.

Q11. Convert $(134)_8$ into decimal system

Solution:

$$(134)_8 = 1 \times 8^2 + 3 \times 8^1 + 4 \times 8^0$$
$$= 1 \times 64 + 3 \times 8 + 4 \times 1$$
$$= 64 + 24 + 4$$
$$= 92$$

Solving hints:

a. The digits from the ones place, tens place, hundreds place and so on are multiplied by a power of 8 starting from 0, 1, 2 and so on. Then all the terms are added to get the decimal number which has been converted from the octal system.

Task:

Q12. Convert the following octal numbers into the decimal system.

i. $(74567)_8$ ii. $(572147)_8$ iii. $(6574724)_8$

Solution:

Subtraction

Sample question.

Q3. Solve $(1110)_2 - (111)_2$

Step1: Align both the numbers from right to left. **Step 2**: Subtract the numbers of right most column first. **Step 3:** As we cannot subtract 1 from 0 we borrow from the digit to the left. In base 2, when we borrow "1" for the right side digit we actually borrow "2"*. **Step 4**: In next column the number will become 0 so previous step will be repeated. **Step 5:** In next column the number will again become 0 so previous step will again be repeated. **Step 6:** In the last column the number will become 0. Therefore, the answer is $(1110)_2 - (111)_2 = (111)_2$	② ② ⓪ ⓪ ② $(1\ 1\ 1\ 0)_2$ - $(1\ 1\ 1)_2$ $(1\ 1\ 1)_2$ **Solving hint:** * In binary system when we borrow "1" for the right side digit, it is actually "2".

Task:

Q4. Find

i. $(11111)_2 - (1010)_2$ ii. $(10010)_2 - (1101)_2$ iii. $(1101)_2 - (101)_2$

Solution:

Multiplication

Q5. Solve: $(1010)_2 \times (111)_2$

Solution:

$$
\begin{array}{r}
(1010)_2 \\
\times\ (111)_2 \\
\hline
{}^{1}(1\ 0\ 1\ 0)_2 \\
{}^{1}(1\ 0\ 1\ 0\ 0)_2 \\
+\quad (1\ 0\ 1\ 0\ 0\ 0)_2 \\
\hline
(1\ 0\ 0\ 0\ 1\ 1\ 0)_2
\end{array}
$$

Therefore $(1010)_2 \times (111)_2 = (1000110)_2$

Task:

Q6. Solve

i. $(111)_2 \times (101)_2$

ii. $(1101)_2 \times (100)_2$

iii. $(11010)_2 \times (111)_2$

Solution:

Steps: 1. Align both the numbers from right to left you wish to add as you would if you were adding decimal numbers. 2. Add the numbers of right-most column first (following the rules of decimal addition). 3. As the answer becomes 2, it should be divided by 2, so the quotient 1 and remainder will be 0, and 1 is carried to next column. 4. In next column, again by addition it becomes 2, so previous step is repeated. 5. In third column, by addition it becomes 3, so it is divided by 2. Now remainder is 1 and quotient will be 1. 6. In answer, 1 will be quotient and will be written on left-most side of the answer (as there is no further column in the question). 7. $(1100)_2$ is the answer.	1 1 1 $(1\,0\,1)_2$ $(1\,1\,1)_2$ $(1\,1\,0\,0)_2$

b. Number System with base 5.

Addition

Sample question.

Q7. Evaluate $(3124)_5 + (3141)_5$

Step1: Align both the numbers from right to left. **Step 2**: Add the numbers in the right most column first. If the sum is 5 or greater than 5 divide the sum by 5 until the remainder is less than 5. **Step 3:** As the answer becomes 5. It should be divided by 5, write the remainder and carry the quotient to the next digit and so on.	1 1 $(3\,1\,2\,4)_5$ $+\ (3\,1\,4\,1)_5$ $(1\,1\,3\,2\,0)_5$

Task:

Q8. Find

i. $(43)_5 + (44)_5$

ii. $(143)_5 + (341)_5$

iii. $(1444)_5 + (4411)_5$

Solution:

Subtraction

Sample question.

Q9. Evaluate $(4112)_5 - (3043)_5$

⑤ ⓪ ⓪ ⑤ $(4\ 1\ 1\ 2)_5$ $-\ (3\ 0\ 4\ 3)_5$ $(1\ 0\ 1\ 4)_5$	**Solving Hint:** In base 5, when we borrow "1" for the right side digit, it is actually "5".

Task:

Q10. Simplify

i. $(34)_5 - (14)_5$

ii. $(413)_5 - (314)_5$

iii. $(1322)_5 - (1020)_5$

Solution:

Multiplication

Sample question.

Q11. Solve $(41)_5 \times (40)_5$

$(4\ 1)_5$ $\times\ (4\ 0)_5$ $(0\ 0)_5$ $+\ (3\ 1\ 4\ 0)_5$ $(3\ 1\ 4\ 0)_5$	**Solving Hint:** Step 1: $4\ 1 \times 0 = 0\ 0$ Step 2: $1 \times 4 = 4$ Step 3: $4 \times 4 = 16$ Step 4: Write $(16)_{10}$ in base 5 which is $(31)_5$ Rules for remainder and quotient in addition for base '5' will be followed.

Task:

Q12. Find

i. $(441)_5 \times (22)_5$

ii. $(4132)_5 \times (34)_5$

iii. $(24)_5 \times (44)_5$

Solution:

Note: Use separate sheet for solution.

c. Octal system or number system with base 8

Addition

Sample question:

Q13. Evaluate $(7641)_8 + (3747)_8$

Step1: Align both the numbers from right to left. **Step 2**: Add the numbers of right most column first. If the sum is 8 or greater than divide the sum by 8 until the remainder is less than 8. **Step 3:** Write the remainder and carry the quotient to the next digit and so on.	① ① ① $(7\ 6\ 4\ 1)_8$ $+\ (3\ 7\ 4\ 7)_8$ $(1\ 3\ 6\ 1\ 0)_8$

Task:

Q14. Find

i. $(73)_8 + (33)_8$
ii. $(87)_8 + (202)_8$
iii. $(473)_8 + (776)_8$

Solution:

Note: Use separate sheet for solution.

Subtraction

Sample question

Q15: Evaluate $(616)_8 - (55)_8$

⑤ ⑧ $(6\ 1\ 6)_8$ $-\ (5\ 5)_8$ $(5\ 4\ 1)_8$	**Solving Hint:** In base 8 when we borrow "1" for the right side digit, we actually borrow "8".

Task:

Q16. Simplify

i. $(63)_8 - (40)_8$
ii. $(551)_8 - (66)_8$
iii. $(16315)_8 - (4726)_8$

Solution:

Note: Use separate sheet for solution.

Multiplication

Sample question

Q17: Evaluate $(75)_8 \times (55)_8$

(3) (3) $(7\ 5)_8$ $\times \quad (5\ 5)_8$ $1\ (4\ 6\ 1)_8$ $+\ (4\ 6\ 1\ 0)_8$ $(5\ 2\ 7\ 1)_8$	**Solving Hint:** **Step 1:** $5 \times 5 = 25$ which is 31 in base 8. **Step 2:** $7 \times 5 = 35$ which is 43 in base 8, but we must add the 3 as well and we get 46. **Step 3:** Rules for remiander & quotient in addition for base '8' will be followed.

Task:

Q18. Find

iv. $(46)_8 \times (14)_8$

v. $(311)_8 \times (67)_8$

vi. $(333)_8 \times (444)_8$

Solution:

Note: Use separate sheet for solution.

Worksheet 21 Unit 3 — **Addition, Subtraction and Multiplication of Numbers with Different Bases**

SLO: Add, Subtract and multiply numbers with different bases.

Sample question.

a. Addition

Sample question:

Q1. Evaluate $(41)_2 + (35)_5$

Step 1. Convert the number to the decimal numbers first.

$(41)_2 = 4 \times 2^1 + 1 \times 2^0$

$= 4 \times 2 + 1 \times 1$

$= 8 + 1 = 9$

$(35)_5 = 3 \times 5^1 + 5 \times 5^0$

$= 3 \times 5 + 5 \times 1$

$= 15 + 5$

$= 20$

Step 2. Now add the decimal numbers

$(41)_2 + (35)_5 = (9)_{10} + (20)_{10}$

$(41)_2 + (35)_5 = (29)_{10}$

Task:

Q2. Find

i. $68 + (123)_5 + (1001)_2$

ii. $72 + (111)_5 + (236)_8$

iii. $(123)_2 + (333)_5 + (416)_8$

Solution:

Note: Use separate sheet for solution.

b. Subtraction

Sample question:

Q3. Subtract $(34)_5 - (14)_2$

Solution:

Convert the numbers into decimal numbers

$(34)_5 = 3 \times 5^1 + 4 \times 5^0$

$= 15 + 4 = 19$

$(14)_2 = 1 \times 2^1 + 4 \times 2^0$

$= 2 + 4 = 6$

Now subtract

$(34)_5 - (14)_2 = 19 - 6 = (13)_{10}$

Task:

Q4: Simplify

i. $(168)_5 - (101)_8$

ii. $68 - (100)_5 - (10)_8$

iii. $(43)_8 - (34)_5$

Solution:

Note: Use separate sheet for solution.

c. Multiplication

Sample question:

Q5. Multiply $(12)_2 \times (24)_5 \times (54)_8$

Solution:

First convert all the numbers to decimal numbers

$(12)_2 = 1 \times 2^1 + 2 \times 2^0 = 2 + 2 = 4$

$(24)_5 = 2 \times 5^1 + 4 \times 5^0 = 10 + 4 = 14$

$(54)_8 = 5 \times 8^1 + 4 \times 8^0 = 40 + 4 = 44$

Now multiply all the decimal numbers

$(12)_2 \times (24)_5 \times (54)_8 = 4 \times 14 \times 44 = 2464$

Task:

Q6. Multiply the following

i. $(101010)_2 \times (432)_5 \times (34)_8$

ii. $(1423)_5 \times (172)_8 \times (241)_5$

Solution:

Note: Use separate sheet for solution.

Q7. Simplify and express the answers in decimal number system.

i. $(656)_8 + (21334)_5 - (100100101)_2$

ii. $\{(4341)_5 - (11101)_2\} \times \{(744)_8 - (144)_5\}$

iii. $(1101)_2 \times (44)_5 - (16)_8$

Solution:

Note: Use separate sheet for solution.

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