

CLASS

II & V

ASSESSMENT (2016) FINDINGS AND TIPS FOR TEACHERS



© PROVINCIAL EDUCATION ASSESSMENT CENTER (PEAC) KHYBER PAKHTUNKHWA

## Table of Content

Preface		3
Introduct	tion	4
About Co	mpendium	6
Mathema	tics	8
Class 2		8
• Co	DNCEPT 1: ADDITION	8
• Co	DNCEPT 2: SUBTRACTION	11
• Co	DNCEPT 3: MULTIPLICATION	14
• Co	DNCEPT 4: DIVISION	15
• Co	DNCEPT 5: FRACTIONS:	16
	DNCEPT 6: GEOMETRY:	17
Class 5		19
• Co	DNCEPT 1: ORDER OF OPERATIONS	19
	DNCEPT 2: WORD PROBLEMS/ UNITARY METHOD	20
	DNCEPT 3: PRIME AND COMPOSITE NUMBERS	21
• Co	DNCEPT 4: HIGHEST COMMON FACTOR (HCF) AND LEAST COMMON MULTIPLE (LCM)	22
• Co	INCEPT 5: EQUIVALENT FRACTIONS AND SIMPLIFICATION OF FRACTIONS	23
	INCEPT 6: TYPES OF FRACTIONS	24
• Co	INCEPT 7: ADDITION AND SUBTRACTION OF FRACTION	25
	DNCEPT 8: MULTIPLICATION AND DIVISION OF FRACTION	26
	DNCEPT 9: DECIMAL FRACTIONS	27
	DNCEPT 11: MULTIPLICATION OF DECIMALS	27
	DNCEPT 12: TYPES OF ANGLES	28
	DNCEPT 13: PERIMETER AND AREA	28
-		
Class 2		31
	DNCEPT 1: LETTER RECOGNITION AND ALPHABETICAL ORDER	31
	DNCEPT 2: SPELLING/PHONICS	32
• Co	INCEPT 3: COMPREHENSION	33
	oncept 4: Pronouns	34
	DNCEPT 5: MASCULINE / FEMININE	35
	INCEPT 6: PREPOSITIONS	36
	oncept 7: Verbs – Present Continuous Tense	37
	DNCEPT 8: PICTURE DESCRIPTION	38
Class 5	······································	41
• Co	DNCEPT 1: TYPES OF NOUNS	41
• Co	DNCEPT 2: SIMPLE TENSES	43
• Co	INCEPT 3: PARTS OF SPEECH	44
• Co	INCEPT 4: PREPOSITIONS	45
• Co	DNCEPT 5: SENTENCE STRUCTURE.	46
	DNCEPT 6: CREATIVE WRITING	47
		49
جماعت دوم	·	49
يب •	تصور 1:حروفِ تېجى كى ترت	49
بيان .	تصور 2: حروف کی پېچ	50

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 2

-

تصور 3: تفبيم	50
تصور 4: ہجے ، اور الفاظ کی بناوٹ •	50 51
تصور ج۔ ہجے ، اور العاصدی بناوت •	51
تصور 6: متعلقہ ذخیرہ الفاظ کا استعمال	52
تصور 7: واحد جمع •	52
تصور 7 : واحد جمع •	52
تصور 8 ہمتھی اور شوائیہ جملے •	53 54
تصور 9: جملے کی باوک • تصور 10: حرف جار	54 54
	_
تصور 1: حروف تہجی کی ترتیب	56
تصور 2:عبارت سازی • تصور 3:الفاظ کی ضد	57 57
تصور د:الفاضحی صد •	57
تصور 4:واحد کی جمع تصور 5:جملوں کی اقسام	
	58
تصور 6:جملے کی بناوٹ • Sead Start Start	59
Social Studies	61
Class 5	61
• CONCEPT 1: LATITUDE AND LONGITUDES	61
• CONCEPT 2: MAP SKILLS AND PAKISTAN'S LOCATION	62
• CONCEPT 3: IMPACT OF HUMAN ACTIVITIES ON CLIMATE	63
• CONCEPT 4: GREENHOUSE GASES AND THEIR EFFECTS	64
• CONCEPT 5: FEDERAL AND PROVINCIAL GOVERNMENT	65
• CONCEPT 6: IMPORT AND EXPORT IN PAKISTAN	66
Science	68
Class 5	
• CONCEPT 1: LIVING THINGS- VERTEBRATES AND INVERTEBRATE	68
<ul> <li>CONCEPT 1: LIVING THINGS- VERTEBRATES AND INVERTEBRATE</li> <li>CONCEPT 2: LIVING THINGS- CLASSIFICATION OF ANIMALS.</li> </ul>	70
<ul> <li>CONCEPT 2: LIVING THINGS- CLASSIFICATION OF ANIMALS.</li> <li>CONCEPT 3: MICRO-ORGANISM</li> </ul>	70
<ul> <li>CONCEPT 5: MICRO-ORGANISM</li> <li>CONCEPT 4: SEED STRUCTURE AND GERMINATION</li> </ul>	73
<ul> <li>CONCEPT 4: SEED STRUCTURE AND GERMINATION</li> <li>CONCEPT 5: ENVIRONMENTAL POLLUTION- CAUSES AND EFFECTS</li> </ul>	73
	79
	79 80
<ul> <li>CONCEPT 7: MATTER AND STATES- CHANGE OF STATES</li> <li>CONCEPT 8: MATTER AND STATES- CONDENSATION AND EVAPORATION IN NATURE</li> </ul>	
<ul> <li>CONCEPT 8: MATTER AND STATES- CONDENSATION AND EVAPORATION IN NATURE</li> <li>CONCEPT 9: FORCES &amp; MACHINES – FRICTION</li> </ul>	. 82 84
<ul> <li>CONCEPT 10: FORCES &amp; MACHINES – BALANCED / UNBALANCED FORCE &amp; INERTIA</li> <li>CONCEPT 11: FORCES &amp; MACHINES – SIMPLE MACHINES</li> </ul>	80 87
<ul> <li>CONCEPT 11: FORCES &amp; MACHINES – SIMPLE MACHINES</li> <li>CONCEPT 12: ELECTRICITY AND MAGNETISM – ELECTRIC CURRENT &amp; CHARGES</li> </ul>	87
<ul> <li>CONCEPT 12: ELECTRICITY AND MAGNETISM – ELECTRIC CORRENT &amp; CHARGES</li> <li>CONCEPT 13: LIGHT PROPERTIES &amp; BEHAVIOR – PROPERTIES OF OBJECTS</li> </ul>	90
<ul> <li>CONCEPT 15: LIGHT PROPERTIES &amp; BEHAVIOR – PROPERTIES OF OBJECTS</li> <li>CONCEPT 14: LIGHT PROPERTIES &amp; BEHAVIOR – LUNAR ECLIPSE</li> </ul>	90 92
<ul> <li>CONCEPT 14: LIGHT PROPERTIES &amp; BEHAVIOR – LUNAR ECLIPSE</li> <li>CONCEPT 15: LIGHT PROPERTIES &amp; BEHAVIOR – VISIBILITY OF STARS AT NIGHT</li> </ul>	92 94
<ul> <li>CONCEPT 15: LIGHT PROPERTIES &amp; DEHAVIOR – VISIBILITY OF STARS AT NIGHT</li> <li>CONCEPT 16: SOLAR SYSTEM- SATELLITE</li> </ul>	94 95
<ul> <li>CONCEPTIO: SOLAR STSTEM- SATELLITE</li> <li>Key Messages for Class 2 teachers</li> </ul>	
Key Messages for Class 5 teachers	109

# PREFACE

Government of KP (GoKP) is in the process of implementing education reforms, aimed at making access to quality education possible for maximum number of school age children in the province. These reforms are impacting all aspects of the system including curriculum, instruction, and assessment. GoKP recognizes that the success of its reform agenda hinges on regular and accurate assessment of the learning achievements of children at various levels of schooling. In this connection, different initiatives have taken place from early grade to higher secondary school level to assess students' learning and suggest remedial activities to improve their learning.

Since Provincial Educational Assessment Centre (PEAC) and Board of Intermediate and Secondary Education (BISE) are responsible for assessment and examination within the province respectively, hence in 2016, both the department were engaged in the following different types of assessments:

- Sample based assessment by PEAC for class 2
- Large scale assessment by BISE for class 5

On behalf of DCTE, I congratulate PEAC team including Mr. Muhammad Mukhtiar – Deputy Director PEAC and his team Ms.Samia Danish, Mr. Muhammad Shafique, Ms.Ishrat Zakir and Ms.ShahidaPerveen who worked day and night with KESP team; Ms.Saima Khalid - Assessment Advisor and Mr. Kamran Iftikhar Lone – Deputy Team Lead Teaching and Learning in designing, orienting, conducting and analyzing class 2 assessments results. I am also thankful to Boards of Intermediate and Secondary Education, KP for providing their technical assistance in the conduct of class 5 assessment and sharing its results with analysis.

PEAC team shared the findings at provincial level with all relevant stakeholders to make them aware about students' achievement and identify ways that can improve teaching learning process and assessment systems. Additionally, this compendium was also developed, which consists of different common errors made by students in assessment and tips for teachers that can be helpful in improving students learning process. The compendium is the result of the collective efforts of the KESP project technical team, DCTE, PEAC and PITE staff who put together their intellectual capacities and carved out time to contribute in writing tips and messages for teachers. We would also like to acknowledge the technical support provided by Adam Smith International through its KESP project officials; namely, Dr. Irfan Muzaffar – Technical Director, Mr. Bilal Ahmad - Team Lead Teaching and Learning, Mr.Kamran Iftikhar Lone – Deputy Team Lead Teaching and Learning and Ms.Saima Khalid – Assessment Advisor. I believe that this compendium will help improve teaching learning processes in the classroom resulting in improved children outcomes, the ultimate goal of E&SED, Khyber Pakhtunkhwa.

Bashir Hussain Shah Director, DCTE Khyber Pakhtunkhwa

# INTRODUCTION

If you are reading this compendium, you are hopefully a primary school teacher teaching in the schools of Khyber Pakhtunkhwa. This compendium is designed

for you. But if you are a subject specialist in the DCTE or PITE, this compendium is also for you, as it will help you identify the areas that require attention and remediation in the professional development activities. The compendium can also be useful for the subject specialists at the Textbook Board and book publishers. Briefly speaking, anyone who is engaged in improving teaching and learning in the classroom will find this compendium useful.

Its purpose is to assist you in teaching better. As you know well, your pupils find some concepts difficult and others easy. You also know from your classroom experience that the only way to find what pupils find difficult is by assessing their learning. In your classroom you assess their learning by asking them questions. When you notice that some pupils have not developed a good understanding of the topic, you make an extra effort with those pupils. You also give your pupils periodic tests (we also call such tests assessments). These tests inform your pupils about their performance and give you information about the areas where they are experiencing difficulties.

The Department of Elementary and Secondary Education (E&SED) has decided to provide you with more information about your pupils' learning by conducting regular assessments. It is expected that this information will help you in responding to the learning needs of your pupils and will ultimately result in improvement in their learning gains. It is currently conducting these assessments at the level of class2 and class 5. All children enrolled in class 5 are expected to appear in this assessment.

The compendium in your hands is a result of this initiative. It will provide you information about the mistakes made by the pupils. It will also give you some tips to help your pupils overcome their learning difficulties. You will also be getting text messages on your mobile devices containing tips for you to use in your classroom in different school subjects. Please note that DCTE will publish an updated version of this compendium every year after the schedule assessments of class 2 and 5.

# ABOUT COMPENDIUM

It is based entirely on the results of class2 and 5 assessments, held in March/April 2016. The analyzed data identified key concepts from the following subjects:

- 1. Mathematics for Class2 and 5
- 2. English for Class2 and 5
- 3. Urdu for Class2 and 5
- 4. Social Studies for Class5
- 5. Science for Class5

Please note that that each item on the assessment corresponds to a *Student Learning Outcome* (SLO) from the national curriculum 2006. The national curriculum framework document assigns a number to each SLO. Since the textbooks are based on national curriculum, each item on the assessment is also linked with a particular page on the textbooks. To help you locate the item in the curriculum framework and in the textbooks, the compendium will provide references to the location of the SLO under consideration in both the curriculum and the textbook.

The assessment findings are given to help youunderstand the type of question asked in the assessment and percentage of pupils responded correctly.

Based on the findings, some tips are suggested for the teachers that can help them in improving pupil learning in the classroom. Teachers can adapt the given tips according to their context, classroom environment and pupils' abilities.

Some of these tips will also be shared through mobile messages, which will give teachers a quick access to these teaching tips. The provided tips will be useful for the teachers to improve their teaching methodology and pupils learning process.

Any feedback is welcomed that can improve this document.

# **Mathematics**

# **Class 2**

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 7

# MATHEMATICS

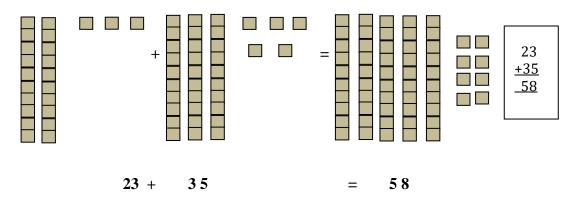
# CLASS 2

Curricular reference	Addition of two-digit and three-digit numbers with carrying (p.14) Solve real life problems, involving addition of: two-digit numbers with carrying, and three-digit numbers with and without carrying (p.14)	
Textbook reference	pp. 41 - 50; 10 – 15	
What does the assessment data tell us?	<ul> <li>Two-digit addition without carrying: 81% answered correctly</li> <li>Two-digit or three-digit addition with carrying: Only 44% on average answered correctly.</li> <li>Performance on addition in the tens and hundreds place, where carrying is required, was poorer (43% answered correctly) than addition in the units place (58% answered correctly)</li> <li>Only 43% used the correct operation and 55% were able to calculate the correct answer in word problems</li> </ul>	

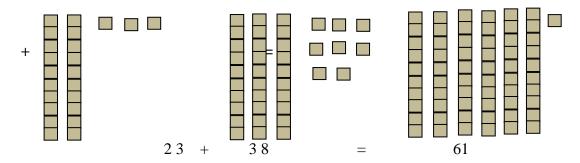
# CONCEPT 1: ADDITION

- 1. Before beginning any new concept, conduct*Mental Math* activity daily (oral questions). Small sums like 2+3, 5+7, 9+8 can be asked to help them add bigger numbers later on.
- 2. Use easily available materials such as money, bottle caps, leaves, pebbles etc. when teaching the concept of addition or subtraction. Note: these should be used more in teaching the concept and not for practice to develop master in addition and subtraction.
- 3. To improve the vocabulary related to addition write add, altogether, many, more, how many on card sheet strips and place around the blackboard to reinforce daily with examples.
- 4. Take a square paper and cut many squares and call them one Unit.
- 5. Now cut strips of 10 squares and call it as 1 ten.

- 6. Now demonstrate the process of addition with the help of these Tens and Units.
- For adding 23+35, take 2 tens and 3 units for 23 and 3 tens and 5 Units for 35. Now ask the students; how many tens and units are there in all. Let the students count and inform 5 tens and 8 units.



8. Now give example of 23 and 38. Explain them that when you add 23 and 38, then you have to regroup the units. You should let students decide how many tens and how many units are there in all. As the units are coming more than 10 i.e.11 so one new Ten will be added to Tens family and one unit will be left.



9. When we manually add Units on finger tips 8+3=11, Here you would tell students then 11 is a two-digit number so cannot come Under Unit place so 1 unit will come at Unit Place and the other, which is 1 ten, will become carry and added with tens. It is written as small 1 will be written on the top of ten's digit.

т и 2 3 <u>+3 8</u> <u>50+</u> <u>11=61</u>	$1 \\ 2 \\ 3 \\ +3 \\ 6 \\ 1$
---	-------------------------------

 $10. \ {\rm Have \ the \ pupils \ repeat \ the \ entire \ process \ with \ different \ examples.}$ 

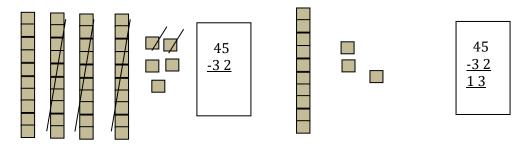
# **CONCEPT 2: SUBTRACTION**

Curricular reference	Subtraction of two-digit and three-digit numbers with borrowing (p.15) Solve real life problems of subtraction involving subtraction of: two-digit numbers with borrowing, and three-digit numbers with and without borrowing (p. 15)
Textbook reference	pp. 52 – 62
What does the assessment data tell us?	<ul> <li>Two-digit subtraction without borrowing: 64% answered correctly</li> <li>Two-digit or three-digit subtraction with borrowing: Only 29% on average answered correctly.</li> <li>Performance on subtraction in the tens and hundreds place, where borrowing is required, was poorer (29% answered correctly) than subtraction in the units place (34% answered correctly)</li> <li>When asked to solve a word problem using subtractions: Only 37% used the correct operation and 44% were able to calculate the correct answer</li> </ul>

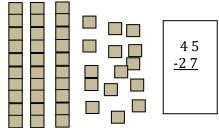
## TIPS FOR THE TEACHERS

## Mental Math question for warm Up Session:

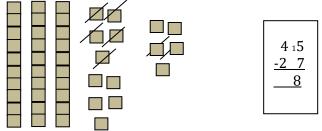
- **1.** Place flash cards of vocabulary for subtraction like subtract, left, less, how many, operation sign etc around the black board.
- 2. Use real objects present in school to teach subtraction. Start with students'belongings, how many pencils are in your pencil box? If you give 2 to your friend, how many pencils will be left with you? How many chairs are missing in the class?
- 3. Use the same Unit squares and tens stick. For subtraction of 45-32, you need four strips of tens and five unit squares.
- 4. First subtract units i.e. take away 2 Units from 5 Units;3 units are left and will be written in unit's place.
- 5. Now from 4 tens; take away 3 tens; and one ten will be left. The answer will be 1 ten and 3 units.



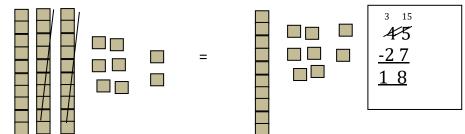
- 6. Do the same example numerically as shown above,
- 7. Now subtract 27 from 45. Take same 4 strips of tens and 5 squares for units. Ask the students how they would subtract 7 units from 5 units.
- 8. Let them think and give you different options. Listen to their responses carefully. Explain them that since we need to subtract 7 units which is more than 5, therefore, we will borrow one ten and convert it into units.



9. Now we have 15 units and 3 tens. Take away 7 units from 15 units; 8 units will be left.



10. Now we will subtract 2 tens from 3 tens;1 ten will be left. Hence the answer is 18.



- 11. To solve 53 17, remember the following steps:
  - a. Subtract units first;
  - Borrow 1 ten from tens and convert it into units. Since 3 is smaller than 7, so borrow 1 ten (10 units) so units will become 13 and tens will become 4.
  - c. Subtract 7 from 13 units and 1 from 4 tens. The difference is 36.

12. Word problems are generally difficult for your pupils. Understanding a word problem is the first step in solving it. Help your pupils understand the word problems in detail.

Practice problem solving daily by simply asking more questions. For example: How many students are enrolled? How many are absent? So how many are present? We had 10 marbles, but now we only have 3. How many did we take away? How many birds in this picture?

# **CONCEPT 3: MULTIPLICATION**

Curricular	Multiply numbers within multiplication table (p. 16)
reference	
Textbook	pp. 63 – 73
reference	
What does the	Multiplication of one-digit numbers 54% on average answered
assessment data	correctly.
tell us?	

- 1. Use repeated addition with real objects to introduce the concept of multiplication, practice. For example,
  - Ask: how many shoes are in there in a pair? (2)
  - Ask: how many shoes are there in five pair of shoes? Then have one of the pupils come up on the board and write 2+2+2+2=10
  - Ask other students: Is this correct? If yes, why?
  - Tell them that this could also be written as 2 times 5 = 10, gradually replace *times* with the sign for multiplication.
  - Repeat similar examples to reinforce the concept of multiplication as repeated addition
- To help pupils solve multiplication problems, make them learn the multiplication tables by heart. Please remember that the multiplication tables should not be committed to memory before clarifying the concepts.

## **CONCEPT 4: DIVISION**

Curricular reference	Divide numbers within multiplication table with remainder zero (p. 16)
Textbook reference	pp. 76 – 78
What does the assessment data tell us?	Division of one-digit numbers 48% on average answered correctly.

## TIPS FOR THE TEACHERS

- 1. For teaching the concept of division, explain the pupils that division means 'sharing equally', practice by sharing pencils/papers/sweets equally among pupils.
- 2. Help pupils understand that division is repeated subtraction i.e. how many times we can subtract a number from another larger number. For example, how many times can you take away4from 20? (see the illustration below)

20 16 12 8 4  

$$-4$$
  $-4$   $-4$   $-4$   $-4$   $-4$   $-4$   
Four was subtracted five times. So, 20 ÷ 4 = 5.

3. To reinforce division, make pupils practice the concept of repeated subtraction and introduce division sign. For example, How many sets of 3 can we subtract from 12 to get 0 or12÷3=4.

# CONCEPT 5: FRACTIONS:

Curricular	Recognize proper fractions and represent in numerical form
reference	(p. 14)
Textbook	pp. 28 – 34
reference	
What does the	Identification of numerical fraction that matches the shape
assessment data	shaded :
tell us?	52%answered correctly.

- 1. To help pupils understand fractions, show them a paper, fold it and cut into halves. Show them the half of it and introduce term half.
  - Show an apple to your students. Tell them you have only one apple; ask them how much of it you should eat today, *half (one of two equal parts)* or *fourth (one of four equal parts)*.
  - Ask them how you should divide it in half (*cut in the middle*).
  - Then ask them how to divide it in four equal parts.
  - Ask them to draw a circle and divide it in half now by drawing a line.
     Ask them to divide it in four equal parts by drawing another line.
  - Reinforce the idea that:
    - $\circ$  Each half is one out of two equal parts. Write it as  $\frac{1}{2}$
    - $\circ$  Each *fourth* is one out of *three equal parts*. Write it as  $\frac{1}{4}$
  - Introduce and practice other simple fractions.
- Colouring fractions: Reinforce the concept of half. Draw circle/square/triangle on board, colour half of each shape and say that this is ½ (half).
- 3. After enough practice with fractions, tell pupils that a simple fraction is written as 2 numbers; Bottom number (or denominator)(*which is total number of equal parts*) and *Top number* (or numerator) (equal parts coloured or taken as the case may be).Both numbers are separated through a line segment. The bottom number (total parts) is written below the line and top number (parts taken) is written above the line.

# CONCEPT 6: GEOMETRY:

Curricular reference	Identify the figures like square, rectangle, triangle, circle, semi-circle and quarter-circle (p. 17)
Textbook reference	pp. 106 – 109
What does the assessment data tell us?	Identification of shape: 57% answered correctly.

#### TIPS FOR THE TEACHERS

1. Recall basic shapes learnt in earlier classes. Provide cut outs of different shapes in groups and ask students to identify shapes on the basis of sides, corners and shape. Ask them to group similar shapes and paste them on a chart paper.

Students will identify the shapes on the basis that

- A triangle has 3 corners and three sides.
- A square and rectangle have four corners and four sides.
- A circle has no corners.
- 2. Always relate Math with the real life situation. Ask pupils to identify things in the classroom or at home which have different shapes like rectangle, triangle and square.

# Mathematics Class 5

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 18

# CLASS 5

# CONCEPT 1: ORDER OF OPERATIONS

Curricular reference	Carryout combined operations using DMAS rule (p.32)
Textbook reference	pp. 18, 53, 73
What does the assessment data tell us?	Solving an equation using order of operations only 29% answered correctly Identify the order of operations: 43% answered correctly

- 1. For simplification, begin with two operations only  $(3 \times 4 + 5)$ .
- 2. Let the students solve the given sum themselves independently. Some may multiply first then add the number whereas some may add first then multiply. In both cases, the answer will be different.
- 3. Introduce the method to solve problems with multiple operations; DMAS i.e. Divide, Multiply, Addition and Subtraction.
- 4. Application of DMAS requires practice. Give your pupils more practice than you are currently giving in application of BODMAS.

# CONCEPT 2: WORD PROBLEMS/ UNITARY METHOD

Curricular reference	Calculate the value of a number of same type of objects when the value of another of the same type is given (unitary method) (p. 35)
Textbook reference	pp. 106 – 109
What does the assessment data tell us?	Calculating the price of a set of items using unitary method: 48% answered correctly

- 1. To introduce the concept of unitary method, help pupils use real life examples to calculate unit cost of different objects verbally like 5 pencils cost 60, what is the cost of 1 pencil?
- In Unitary method finding cost of many always solved by multiplication and cost of one always calculated by division. If question says cost 6 books is 450 what is the cost of 20 books? Here students will first find the cost of one book by division 450/6=75. For cost of 20 books, students will multiply 75×20=1500
- 3. Ask students to create word problem of their own and ask from each other to solve.

# CONCEPT 3: PRIME AND COMPOSITE NUMBERS

Curricular reference	Define and differentiate between prime and composite numbers (p. 25)
Textbook	pp. n/a
reference	
What does the	Characteristics of prime and composite numbers: 27% answered
assessment data	correctly
tell us?	

- 1. Introduce prime numbers to the pupils as the numbers that are divisible by them only and composite numbers as the numbers that can be divided by other numbers also.
- 2. To reinforce the concept of prime and composite numbers, ask pupils to write numbers 1-100 in square line paper; circle the prime numbers and shade the composite numbers. Ask them to justify the prime numbers circled by them.

# CONCEPT 4: HIGHEST COMMON FACTOR (HCF) AND LEAST COMMON MULTIPLE (LCM)

Curricular reference	Find HCF of three numbers, up to 2 digits, using prime factorization and division methods; Find LCM of four numbers, up to 2 digits, using prime factorization and division methods (pp. 32-33)
Textbook reference	pp. 21 – 35
What does the assessment data tell us?	Identification of LCM of given numbers: 56% answered correctly Identification of HCF of given numbers: 29% answered correctly

- 1. Introduce the concept of factor and multiple by explaining that multiple is the product of two numbers and factor is a divisor, hence 6 is the multiple of 2 and 3 whereas 2 and 3 are factors of 6.
- 2. To reinforce the concept of factors and multiples, provide different numbers and ask the pupils to find their factors and multiples.
- 3. Write any two numbers on the board ask pupils to find multiples of both numbers circle common multiples and introduce LCM by identifying Least Common Multiple of both the numbers.
- 4. Write any two numbers on the board, ask pupils to find factors of both numbers, circle common factors and introduce HCF by identifying Highest Common Factor of both the numbers.
- 5. Write vocabulary related to HCF and LCM on flash cards and place them around the blackboard to reinforce the concept such as multiple, least common multiple, factors and highest common factors.

# CONCEPT 5: EQUIVALENT FRACTIONS AND SIMPLIFICATION OF FRACTIONS

Curricular reference	Compare two unlike fractions by converting them to equivalent fractions with the same denominator; Simplify fractions to their lowest form (p. 25-26)
Textbook	pp. n/a
reference	
What does the	• Finding fractions in simplest form: 45% answered correctly
assessment data	<ul> <li>Making equivalent fractions: 34% answered correctly</li> </ul>
tell us?	

TIPS FOR THE TEACHERS

1. Concept of 1 whole is to be given thoroughly. 1 whole is equal to 2 halves, 3 thirds, 4 quarters and so on.

1 whole					
1/2			1/2		
1/3		1/3	3	]	1/3
1/4	1	/4	1/4		1/4

- Students should know that a person eating 4 quarters of a '<u>Naan'</u> and1 '<u>Naan'</u> are eating the same quantity.
- 3. Students can convert simple fraction to equivalent just by multiplying the numerator and denominator with same number. Equivalent fraction of  $\frac{2 \times 4}{3 \times 4} = \frac{8}{12}$ .
- 4. Fraction can be simplified if you divide the numerator and denominator with the same factor.  $\frac{24 \div 12}{36 \div 12} = \frac{2}{3}$  Practice makes students perfect. Encourage them to take the HCF of the given fraction to divide and simplify.
- 5. Vocabulary related to fractions should be placed around the board.

Curricular reference	Identify unit, proper, improper and mixed fractions; Convert improper fraction to mixed fraction and vice-versa (p. 27)
Textbook reference	pp. 37– 38
What does the assessment data tell us?	Recognition of improper fraction: 45% answered correctly Drawing fractions (proper, mixed and improper): 24% answered correctly

# CONCEPT 6: TYPES OF FRACTIONS

- 1. Before teaching the types of fractions, reinforce the concept of fraction by giving different fractional numbers to pupils and ask them to represent them by drawing pictures.
- 2. Explain the three types of fractions; proper fraction (with greater denominator), improper fraction (with greater numerator) and mixed fraction (with whole number and proper fraction).
- 3. Emphasize that the numerator in proper fractions is less than the denominator such as ¼, 3/8,and 4/5. Use papers to make different proper fractions or show pictorially.
- 4. To represent improper fraction graphically in which numerator is greater than a denominator e.g. 5/4, make 2 wholes with 4 quarters each. Take 4 quarters from one whole and 5<sup>th</sup> quarter from other whole.
- 5. To represent mixed fractions graphically (2 ¼), askpupilstodraw2 whole number first and then the given proper fraction ¼. The total parts remain same as given in the denominator of proper fraction.

# CONCEPT 7: ADDITION AND SUBTRACTION OF FRACTION

Add and subtract two and more fractions with different denominators (p.33)
pp. 38 – 42
Addition of fractions: 46% answered correctly Subtraction of fractions: 51% answered correctly

- 1. Always teach addition of fractions with same denominators through material or pictures.
- To add 1/5 and 2/5, make 2 fractions on 2 different papers and place them together, let the pupils count how many fifths are there altogether? (3 fifths)Explain them 1/5 + 2/5 = 3/5
- For teaching addition of mixed fraction, add whole numbers first and then proper fraction. For 2 ¼ + 1 ¼, add whole numbers 2 + 1 = 3; then proper fraction¼ + ¼ = 2/4.Add them together 3 2/4 or 3 ½.
- 4. To teach addition of fraction with different denominators, use equivalent fraction to make denominator same.  $\frac{1}{3} + \frac{3}{4}$  will become  $\frac{1 \times 4}{3 \times 4} + \frac{3 \times 3}{4 \times 3} = \frac{4}{12} + \frac{9}{12} = \frac{4+9}{12} = \frac{13}{12}$
- 5. For mixed fraction with different denominators, add whole numbers and proper fractions separately. For  $2\frac{2}{3} + 3\frac{1}{5}$ , add wholes 2+3=5 then proper fractions using equivalent fraction;  $\frac{2\times5}{3\times5} + \frac{1\times3}{5\times3} = \frac{10+3}{15} = \frac{13}{15}$ . Adding whole numbers  $5\frac{13}{15}$ .
- 6. For adding/subtracting mixed fractions, follow the given steps (a) Convert to improper fraction (b) Take LCM. (c) Make equivalent fractions. (d)Solve numerators. (e) Write as simplified form.
- 7. To add mixed fractions, follow the steps: 1.Add whole numbers 2.Make equivalent fractions of proper fraction. 3. Solve numerators. 4. Make its simplified form 5.Add whole numbers with fractions.

# CONCEPT 8: MULTIPLICATION AND DIVISION OF FRACTION

Curricular reference Textbook reference	Multiply a fraction by another fraction; Divide a fraction by a number; Divide a fraction by another fraction (proper, improper and mixed) (p. 33) pp. 43 – 46; 50 – 51
What does the assessment data tell us?	Multiplication of fractions: 25% answered correctly Division in fractions: 41% answered correctly

- Explain multiplication of fraction by using the term "of". Ask pupils to show you half of half (½ of ½) of a paper. This is one quarter. Replace word "of" with sign of multiplication, ½ x ½ = ¼
- 2. For teaching multiplication of fraction, tell pupils to multiply numerator by numerators and denominators with denominators. The last fraction should always be in simplified form.
- 3. To teach division of fraction, first introduce pictorial representation with the concept of how many. After this introduce conventional method of using reciprocal and multiplication.
- 4. To teach division of fraction, help pupils to understand the concept of how many. Use example of how many halves are there in a whole? (2) How many quarters are there in 2 wholes? (8). So  $1 \div \frac{1}{2} = 2$  and  $2 \div \frac{1}{4} = 8$
- 5. Explain that in conventional method of division in fraction, we use reciprocal of the fraction after the division sign and change division into multiplication. The sum  $2 \div \frac{1}{4}$ , will be solved as  $2 \times \frac{4}{1} = 8$ .
- 6. To simplify a given fraction, fractions, explain that numerators and denominators can be divided by same number both vertically and diagonally. And to multiply, we use either numerators or denominators.

# CONCEPT 9: DECIMAL FRACTIONS

Curricular reference	Convert a given fraction to a decimal (p. 27 – Class 4) Add and subtract decimals (p. 33)	
Textbook reference	pp. 60 - 61	
What does the assessment data tell us?	<ul> <li>Conversion of fraction to decimal: 42% answered correctly</li> <li>Adding decimal fractions: 30% answered correctly</li> <li>Subtracting decimal fractions: 45% answered correctly</li> </ul>	

#### TIPS FOR THE TEACHERS

- 1. For teaching the concept of decimals, introduce decimal place values to the pupils i.e. ones, tenth, hundredths, thousandth.
- To reinforce the concept of place value in decimal, tell pupils place value of a number in a jumbled form and ask them to make a decimal number. Example: 4 units, 0 hundredth, 5 tenth and 1 thousandth is <u>4.501</u>.
- 3. Explain pupils that in addition or subtraction of decimal numbers, alignment of writing numbers under the fixed place value positions is essential.

## CONCEPT 11: MULTIPLICATION OF DECIMALS

Curricular reference	Multiply a decimal by a decimal (p. 34)
Textbook reference	pp. 66 – 67
What does the assessment data tell us?	• Finding product of two numbers with decimals: 29% answered correctly

#### TIP FOR THE TEACHERS

1. While teaching multiplication of decimals, inform pupils that we first multiply the digits, then count the decimal places in the question and place the decimal accordingly.

Curricular	Recall an angle and recognize acute, right, obtuse, straight and
reference	reflex angle; Describe adjacent, complementary and
	supplementary angles (p. 36)
Textbook	pp. 119 – 120; 123 –124
reference	
What does the	Identification of acute and obtuse angles: 33% answered
assessment data	correctly
tell us?	

# CONCEPT 12: TYPES OF ANGLES

#### TIPS FOR THE TEACHERS

- 1. Before teaching types of angles, explain that an angle is formed when two lines share a common point.
- 2. For teaching angles, cut 2 strips of papers, join them at one point with thumb pin to place it on a table. Move one arm to show acute angle, right angle, obtuse angle.
- 3. The vocabulary for 'types of angles' can be retained by placing the important terms around the board.
- 4. To help pupils understand angles, ask them to find angle around the school or home. (For example, angles between the fan's blades, angles in the door frame.
- 5. Explain the concept of angles to the pupils by telling them that angle means "turn". Show students examples of angles in the real life objects, such as the right angles in the corner of the rooms and on the blackboard.

Curricular reference	Differentiate between perimeter and area of a region; Identify the units for measurement of perimeter and area; Solve appropriate problems of perimeter and area (p. 37)
Textbook reference	pp. 148 – 160
What does the assessment data tell us?	<ul> <li>Calculate perimeter: 28% answered correctly</li> <li>Identify units of area and calculate area: 32% answered correctly</li> </ul>

# CONCEPT 13: PERIMETER AND AREA

- 1. Explain the concept of 'Area' as the covered surface and 'Perimeter'as the boundary.
- 2. Draw any shape on the board, divide it into small equal size squares and ask students to count the squares that have covered the surface area. Let the students count and tell you the number of squares.
- 3. Explain that each square is of 1 centimetre in length and we measure area in square centimetre.
- 4. Provide square line papers or use students' square line copies; ask the students to draw any shape on the paper and then count the number of squares in it. They can also trace their hand span and count the area.
- 5. Draw a rectangle with a length of 6 cm and breadth 2 cm. Ask students to estimate its area. Note their responses. Now draw the squares (1 cm each) in the rectangle by using ruler. There will be 12 square centimetre. Appreciate the students with closer estimation.
- 6. Now measure the length and breadth of the rectangle in front of the students, which is 6cm and 2 cm. Explain to the students that area of a rectangle can also be measured by multiplying length and breadth. The unit of area is square centimetre, but it can also be measures in metre, feet or yards.
- 7. Provide them different measurement (length and breadth) to calculate area.
- Teach pupils that for perimeter, we need to add the length of all sides (boundary) of a shape. Take the example of rectangle with length of 6 cm and breadth of 2 cm; add all the lengths i.e. 6 + 2 + 6 + 2 = 16 cm. The unit of perimeter is centimetre.
- 9. This is also equals to 6 + 6 + 2 + 2 or 2 length + 2 breadth or 2 (length + breadth).
- 10. Provide them different measurement (length and breadth) to calculate perimeter.
- 11. To reinforce the concept, encourage pupils to find area and perimeter in their surrounding like perimeter of tables or area covered by the cover page of their math book.

# English Class 2

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 30

# ENGLISH

# CLASS 2

# CONCEPT 1: LETTER RECOGNITION AND ALPHABETICAL ORDER

Curricular reference	Competency 1, benchmark 1, standard IV (p. 25)
Textbook reference	pp. 5 - 6
What does the assessment data tell us?	Recognition of capital and lower case letters: 72% on average answered correctly

- 1. Reinforce letter names and sounds through words beginning those letter and sounds such as A/s/apple, B/b ball. Use flashcards or write the capital and small letters on the black board and point and say e.g. A /a/ apple, B /b/ ball.
- 2. Two letters or more a day can be reinforced depending upon the response of students and pace of curriculum.
- 3. For helping students recognize letters, make them practice writing the letters on the board, floor, wet or dry sand or paper.
- 4. Practice sequencing letters in alphabetical order by drilling the sequence using theletters from Aa-Zz written on the board or through the alphabet song 'ABC'.
- 5. Play letter sequencing games. Make playcards of all 26 letters, ask students to hold one card each and stand in alphabetical order.

Curricular reference	Competency 1, benchmark 1, standard I (p. 22) Competency 4, benchmark 1, standard I (pp. 31 - 32)
Textbook reference	p. 4-10, 21,36
What do pupils know well?	Spelling of three, four, five letter words: 64% on average answered incorrectly

# CONCEPT 2: SPELLING/PHONICS

- 1. Reinforce letter names and sounds through a daily drill using flashcards e.g. say A/a/ arrow, B /b/ bag etc. Two letters or more a day can be reinforced depending upon upon the response of students and pace of curriculum.
- 2. To practice identification of sounds in a word, write a three letter word such as Rat and circle the beginning sound i.e. R. Once students have understood the concept repeat the same for the ending sound i.e. T and then middle sound i.e. A. Students can later be made to practice writing beginning/ending or middle sound in a word.
- 3. Practice breaking words into sounds (syllables). Practice breaking student's names or other words such as Sa -ra for Sara. Instruct students to clap for each syllable e.g. Table: ta-ble (clap twice).
- 4. To help students recognize letters in a word break words into segments showing a finger or a counter for each sound e.g. /b//a//g/ bag or /h//o//m//e/ home
- 5. Practice blending sounds to make words.
- 6. Assign a word for a day to learn the spelling (both for home and school). The word can be called 'Word of the day'. Tell the meaning of the word and use it in a sentence for better understanding. After five words take a spell drill.
- 7. Discover Spelling Patterns Tell the children that thinking about what a word looks like is a useful spelling strategy, so you are going to explore some common spelling patterns together. For example, look for and list words with ea, such as: bead, bread, dead, instead, great, read, treat, break.
- 8. Play spelling games such Sad man Guessing the word by suggesting 10 letters. Each incorrect letter will be marked by the drawing a feature of a Sad man.

# CONCEPT 3: COMPREHENSION

Curricular reference	Competency 1, benchmark 1, standard 2 (p. 23)
Textbook reference	pp. 58, 68, 78, 96
What does the assessment data tell us?	Answering questions from a given paragraph: 57% answered correctly

- 1. To improve reading comprehension, ensure that children have phonemic awareness, letter sound relationship and vocabulary, phonics.
- 2. Motivate students through activities that may increase their interest (book talks, dramatic readings, or displays of art related to the text), making the text relevant to students in some way.
- 3. Stimulate students' background knowledge important to the content of the text by discussing what students will read and what they already know about its topic and about the text organization.
- 4. Introduce new vocabulary related to specific topics by asking students to find out meaning of difficult words and using them in sentences. This will help improve their understanding of the comprehension passage.
- 5. Let the students read the paragraph and make meaning for themselves.
- 6. Ask questions that keep students on track and focus their attention on main ideas and important points in the text.
- 7. Ask students to recall and tell in their own words important parts of the text.
- 8. Check understanding by paraphrasing or restating important and/or difficult sentences and paragraphs.
- 9. Offer students opportunities to respond to the reading in various ways, including through discussion, writing or dramatic play.
- 10. Practice comprehension on weekly basis.

## CONCEPT 4: PRONOUNS

Curricular reference	Competency 4, benchmark 3, standard I (p. 35)
Textbook reference	pp. 28-29
What does the assessment data tell us?	Identify pronouns "he and she": 66% answered correctly

#### TIPS FOR THE TEACHERS

 Explain to the students that 'Pronouns' are the words which are used in place of nouns.
 Explanate intervent backs

E.g. Irum likes to read books.  $\rightarrow$  She has many books. Here, Irum has been replaced by 'She' which is a pronoun.

2. WRITE SENTENCES ON THE BLACKBOARD AND READ THEM OUT.

Irumbrings fruits to eat. $\rightarrow$  She likes apples.Akram is fond of cats. $\rightarrow$ Hehas many cats.

EXPLAIN: IRUM IS REPLACED BY "SHE". AKRAM IS REPLACED BY "HE." HE AND SHE ARE PRONOUNS WE USE THEM IN PLACE OF NOUNS.

Write the sentences on the blackboard and ask students to circle the pronouns.
 <u>Saira</u>reads all the time → She loves reading. Now write the following sentences and ask students to fill in the blanks with the correct pronoun:

 $\underbrace{Omar}_{\text{has a grey cat.}} \rightarrow \underbrace{}_{\text{plays with it every day.}}$ Repeat such examples for a week.

- 4. Explain the pronouns in which the students are facing difficulty such as 'it'. Explain: Pencil is replaced by "it." It is also a pronoun, used in place of things or animals.
  The pencil is very short. → It is blue in colour.
- 5. Make the students practice the use of pronoun'it'. Write sentences on the board and ask students to fill in the preposition 'it' replacing a noun.
  The book is heavy. → \_\_\_\_\_has many pages.
  The dog is hungry. → \_\_\_\_\_needs food.
- 6. Give the students more sentence to fill in using pronouns he, she, it. Have them write the answers in their copies.

# CONCEPT 5: MASCULINE / FEMININE

Curricular reference	Competency 4, benchmark 3, standard I (p. 34)
Textbook reference	pp. 24- 25
What does the assessment data tell us?	Writing feminine word for masculine word: 41% answered correctly

- Explain the term masculine / feminine. Masculine means having characteristics/qualities that are traditionally thought to be typical of or suitable for men, while feminine is having characteristics/qualities that are traditionally thought to be typical of or suitable for a woman Give examples of masculine/ feminine words from the children's family e.g. father - mother, brother – sister, Uncle – Aunt etc.
- 2. To improve students' concept and vocabulary for masculine/ feminine words give examples of masculine / feminine animals such as lion-lioness, as part of gradual learning, examples from different profession can also be given such as policeman-policewoman etc. Pictures at this stage would prove as a good learning source for students of this grade.
- 3. Write masculine/ feminine words on the board and make students practice it.
- 4. Tell students to bring pairs of masculine/ feminine words from home to add those in the word bank. Play vocabulary games such as finding and / or matching masculine/ feminine words from that word bank.
- 5. Prepare a family tree with a list of masculine/ feminine nouns e.g. mother father

# CONCEPT 6: PREPOSITIONS

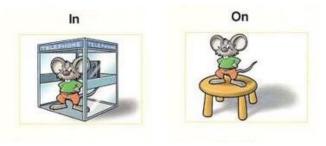
Curricular reference	Competency 4, benchmark 3, standard I (p. 35)
Textbook reference	pp. 90 – 91
What does the assessment data tell us?	For some prepositions only 27% answered correctly

#### TIPS FOR THE TEACHERS

- Check understanding of the prepositions by asking students to describe the positions of objects kept in the classroom such as "Bag on the desk", "Books in the bag." Tell students that 'Prepositions are words that describe the position of an object/ animal or person'.
- 2. Guide students to find objects kept on specific positions or using pictures of objects kept in specific positions. e.g. The bottle is under the table.
- 3. Give instructions using the prepositions and ask students to follow them e.g. Keep the bag on the desk. Write with colour pencil.
- 4. Play games like treasure hunt hiding objects and asking students to follow written instructions with prepositions leading to the treasure .e.g. look for the next clue under the table.
- 5. Lead the students towards practice and ask them to make sentences using pictures like the ones below:

The mouse is \_\_\_\_ the booth.

The mouse is \_\_\_\_ the stool.



# CONCEPT 7: VERBS – PRESENT CONTINUOUS TENSE

Curricular reference	Competency 4, benchmark 3, standard I (p. 35)
Textbook reference	pp. 15 – 21
What does the assessment data tell us?	Identifying correct present continuous verb in the textbook: 68% answered correctly

- 1. Introduce the term verbs as action words by doing some actions and asking the students to name them.
- 2. The concept and definition of verb as action word is a primal and basic definition to learn at first. The progressive/continuous form of verb should then be taught by linking it with the current time of speaking.
- 3. Perform some simple actions (clap, read, speak, and throw) and ask the students: What am I doing? Reinforce that the actions which are happening at time of speaking arepresent continuous tense such as clapping, running etc.
- 4. To check the students understanding by asking them to do different actions and then to describe them using present continuous tense (Do not introduce the name of the tense).
- 5. Show pictures from magazines/ calendars or newspapers and ask the students to describe them using present continuous tense. Give examples such as the girl is sitting, the boy is running etc.
- 6. Paste a picture on the board. Write a sentence describing the action in the picture but leave a blank space for the present continuous tense verb. Ask the students to write the correct verb to fill in the blanks.

# CONCEPT 8: PICTURE DESCRIPTION

Curricular reference	Competency 2, benchmark 1, standard I (p. 27)
Textbook reference	pp. 68, 76, 96, 106
What does the assessment data tell us?	Describing picture: 27% were able to write relevant sentences and 22% used appropriate sentence structure

#### TIPS FOR THE TEACHERS

- 1. Fix 5 minutes for Show and Tell activity in which assign one student each day to bring any object or picture in the class and describe in front of the whole class.
- 2. Example: If a student brings a plate; he may describe as
  - This is a plate.
- 3. Let the students start by using "This is....." sentence. Gradually add more sentences in their description such as:
  - This is a plate.
  - Its colour is green.
  - We keep food in it.
- 4. Do a daily drill of the sentence structures. Add new structures as soon as the previous is understood and learnt.
- 5. Make the students practice arranging jumbled up words to form sentences.

Example	:	is	а	This	ball
		This	is a ba	. <u>ll.</u>	

6. Give guided practice of forming sentence, by choosing words from a table to form sentences e.g.

	writes		pen.
Не	draws	with the	pencil.

- 7. Picture description can be stated as a visual representation of something, such as a person or scene, as shown in a photograph or painting,
- 8. Show a picture to the students and instruct them to name the objects as shown in the picture, hence enhancing students' vocabulary and word bank.
- 9. Make a vocabulary web around objects/ pictures to be described on the board with the help of the students.





10. Provide students with the sentence structures to be used for describing the pictures such as

This is a \_\_\_\_\_. It has \_\_\_\_\_ Its colour is \_\_\_\_\_\_. It gives \_\_\_\_\_.



Students can initially copy, later use the sentence structure to form their own sentences.

# English Class 5

# CLASS 5

# CONCEPT 1: TYPES OF NOUNS

Curricular reference	Competency 4, benchmark 3, standard I (p. 56)
Textbook reference	pp. 6 - 12
What does the assessment data tell us?	Type of noun : only 44% answered correctly

- 1. Point out different objects in the classroom and ask students to name these objects.
- 2. Explain themthat every object, place and animal has a name. These naming words are called nouns.
- 3. On the board write people, place, thing and animal in four sections and ask students to name as many as they can.
- 4. Show pictures such as that of a kitchen, shopping mall etc. and instruct students to name the people, things and animals etc. they see in them.
- 5. Once students have understood the concept of nouns, introduce the concept of common and proper nouns by calling a student by the name and say This is Ahmed. He is a boy.
- 6. Tell students that there are many boys in the class but the special name of this boy is Ahmed. Boy is a common noun, Ahmed is a proper noun.
- 7. Emphasize that common nouns are general names e.g. the name of the place where children study is <u>school.</u>
- 8. Proper nouns are special nouns e.g. the name of <u>this particular school</u> <u>where you study</u> is 'KPK Government Primary School Number 1, Peshawar'.
- 9. Make the students practice common and proper nouns by writing guiding them to write common nouns on the board and then think of their proper nouns. This can be a group activity as other students can help the one writing on the board. and asking students to tell their Proper nouns.

	Common	Proper
Person	Girl, boy, woman,	Iqra, Zaid
	man, teacher,	
Place	School, home,	Peshawar, DI Khan,
	market,	Pakistan
Thing	Book	Little Red Riding Hood

10. Moving further, introduce the students with the concept of countable and uncountable nouns. Countable nouns:

These nouns refer to something which can be counted. They have both singular and plural forms (e.g. cat/cats; woman/women; country/countries).

**Uncountable Nouns:** 

A smaller number of nouns do not typically refer to things that can be counted and so they do not regularly have a plural form: these are known as uncountable nouns (or mass nouns). Examples include: rain, flour, earth, water or wood. Many abstract nouns are typically uncountable, e.g. happiness, truth, darkness, humour.

Examples:

I have a lot of money. (Not 1000 money)

You say I drink a lot of milk. (Not 5 milk)

Tell students that of course you can count money (when it's mentioned as rupees), milk (mentioned in measuring quantity such as Kilos or grams), meat (same as milk); but then you would use the currency, units for measurement such as liter, kilo, glass,...and say that you have got:

5 Rupees... (but not 5 money).

2 liters, glasses... of milk (but not 2 milk)

Would you like some coffee? uncountable because it's referring to the drink in general

He ordered a coffee. countable, because it's referring to a cup of coffee

# CONCEPT 2: SIMPLE TENSES

Curricular reference	Competency 4, benchmark 1, standard III(p. 59)
Textbook reference	pp. 170- 171; 179 - 181, 189 – 191
What does the assessment data tell us?	Identify simple tenses: only 36% & 41% answered correctly.

- 1. Refresh students' memory by referring to verb as action words and how they represent timeframe of the action with its different forms.
- 2. Explain to the students that in a sentence, **verb tense** tells us when an action takes place.
  - a. The **past tense** tells what has already happened
  - b. The simple **present tense** tells about routines, habits, daily activities, and universal truths, and
  - c. The **future tense** tells what will happen next.
- 3. Make the students practice the tenses through the following discussion
  - Past tense: Talk about what students did the day earlier. Ask 'What did you do at home yesterday?' e.g. I ate sandwich, I changed my clothes etc.
  - b. Present tense: Talk about the things students do daily e.g. I come to school. I brush my teeth.
  - c. Future tense: Talk about the things students will do when they will get back home. e.g. I will watch television. I will eat.
- 4. Practice each tense for a week.
- 5. Practice changing the verb in the three tenses e.g. say eat, ate, will eat. Make a list of these verbs on a chart paper, put it in the classroom and reinforce daily.
- 6. Practice the tenses by making children read a unit from the textbook and circle the verb with labels as P for past, Pr for present and F for future.
- 7. Divide the class into three teams i.e. Present, Past and Future. Give them a verb and ask each team to use that in a sentence. Continue this practice unless you are sure that all the students have practiced all the tenses.

# CONCEPT 3: PARTS OF SPEECH

Curricular reference	Competency 4, benchmark 1, standard III(p. 56 – 60)
Textbook reference	pp. 66 – 69, 76 – 79, 118 -121
What does the assessment data tell us?	Identify what part of speech a word is: only 51% answered correctly when it was a verb. Many chose adverb and adjective instead.

- 1. Explain to the students that "Parts of speech" are the basic types of words that English language has. It is important to be able to recognize and identify the different types of words in English, so that you can understand grammar explanations and use the right word form in the right place.
- 2. Explain eight basic part of speech to the students.
  - a. Noun: Words that are used to name persons, things, animals, places, ideas, or events.
  - b. Pronoun: words that are used as replacement for a noun such as I, it, he, she, mine, his, hers, we, they, theirs, and ours.
  - c. Adjective: Words that are used to describe a noun or a pronoun. Adjectives can specify the quality, the size, and the number of nouns or pronouns.
  - d. Verb: Word that shows an action (physical or mental) or state of being of the subject in a sentence.
  - e. Adverb: used to describe words, but the difference is that adverbs describe adjectives, verbs, or another adverb.
  - f. Preposition: Words that specify location or a location in time such as on, in, inside, with, above, below, throughout, outside, before, near, and since.
  - g. Conjunction: Words which joins two words, phrases, or clauses such as and, yet, but, for, nor, or, and so.
  - h. Interjection: Refers to words which express emotions and are usually followed by an exclamation point. Examples are:
    - i. Ouch! That must have hurt.
    - ii. Hurray, we won!
    - iii. Hey! I said enough!
- 3. Make the students practice each part of a speech for a week.
- Practice identifying and circling one part of a speech at a time in a sentence. Extend the practice to identification of two, three and gradually as many as parts of speech as required. Each word when identified and circled can be labeled as N- noun, P- pronoun, V – verb, Adj- Adjective ,Adv- Adverb, Pr- pronoun, Pre- preposition, Con – Conjunction and Int – Interjection.

# CONCEPT 4: PREPOSITIONS

Curricular reference	Competency 4, benchmark 1, standard III(p. 60)
Textbook reference	pp. 106 – 110
What does the assessment data tell us?	Preposition to complete a sentence 27% answered correctly

#### TIPS FOR THE TEACHERS

- 1. Check understanding of the prepositions by asking students to describe the positions of objects kept in the classroom.
- 2. Tell students that prepositions are words that describe the position of an object/ animal or person. *They explain where things are in relation to each other.*
- 3. Give instructions using the prepositions and ask students to follow them e.g. keep the bag on the desk.
- 4. Make the students identify and circle prepositions in a sentence.
- 5. Direct students to make sentences using some pictures provided. Let them share their ideas first and then write a few sentences in their copies.
- Instruct students to draw a picture and write sentences using prepositions.







Between

Under



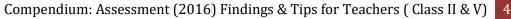
In front of



In

On





45

# CONCEPT 5: SENTENCE STRUCTURE.

Curricular reference	Competency 4, benchmark 3, standard III(p. 62)
Textbook reference	Pp 90, 128, 129, 137, 146, 181
What does the assessment data tell us?	In story writing 16% used appropriate grammar and sentence structure

#### TIPS FOR THE TEACHERS

- 1. Explain the parts of a sentence to the students. a sentence can be divided into two parts: the naming part (subject) and the action part (predicate).
  - a. Subject: of a sentence is the person, place, thing or idea that is doing or being something.
  - b. Predicate: is the part of a sentence that tells something about the <u>subject</u>. The predicate always includes a <u>verb</u>. e.g.

"Asad **is a good boy**." 'Asad' is subject 'is a good boy' is predicate

- 2. Introduce types of sentences and the punctuation marks for that type of sentences.
  - a. Statements (affirmative) sentenceswhich begins with a capital letter and ends with a period or full stop (.) e.g. The elephant is big.
  - b. Questions (interrogative) are asking sentences which ends with a question mark. (?) e.g. Where is the man?
  - c. Exclamatory- are sentences showing sudden and strong feelings. The exclamatory sentence always ends with an exclamation mark. The huge elephant sat on the man!
- 3. Practice each kind of sentence for two to three weeks. Practice the required punctuation as well.
- 4. Practice identifying and labeling the three kinds of sentences with symbols like S for statement, Q for questions and E for exclamatory.
- 5. Make a sentence train on the soft board. Label its carriages as statements, questions and exclamations. Instruct students to write the three types of sentences with correct punctuation on strips of paper and put them in the correct carriage. Practice this exercise daily

# CONCEPT 6: CREATIVE WRITING

Curricular reference	Competency 2, benchmark 2, standard I (p. 46 – 47)
Textbook reference	Pg 64, 75, 96, 136, 161, 162, 188, 192
What does the assessment data tell us?	Story writing: approximately 14% were able to write a beginning, identify a problem and write the ending

- 1. To improve student's creative writing skill, describe the elements of a story to the children i.e. the characters, settings where the story took place, the beginning, the problem or the middle and the solution or the end of the story.
- 2. Tell students that a story usually has a problem and the characters of the story try to solve it.
- 3. To improve identification of the elements of the story (characters, setting, beginning, problem and solution/end), read a story and make the students identify these elements in it.
- 4. Make group of students and ask them to write a story in groups first deciding the title, characters, beginning, problem/middle and solution/ending.
- 5. Provide students with a story writing worksheet or let them make it in their note books.

	E / NAME:
CHARACTERS	SETTING
,	HAT WILL HAPPEN NEXT?
CONCLUSION/END:HC	W WILL THIS STORY END?

أردو جماعت دوم

# أردو

جماعت دوم

تصور 1:حروفِ تہجی کی ترتیب

مہارت: پڑھائی (1) معیار :1، حاصل تعلم: 1 برائے جماعت اول مہارت: زبان شناسی معیار: 1 حاصل تعلم: 5 برائے جماعت دوم	قومی نصاب
جماعت دوم - صفحہ نمبر ۹، ۳۳،۳۸	ٹیکسٹ بک
تقريباً %36 درست جوابات ـ	جانچ کے نتائج

تجاویز جماعت دوم میں بھی بچوں کو حروف تہجی کی مشق بار بار کروائیں ۔ 1: بچوں کو حروف تہجی سکھاتے ہوئے ہر حرف کے خاندان سے واقف کرنا بہت ضروری ہے ۔ جیسے ب کےخاندان میں ب پ ت ٹ ٹ اور ج کے خاندان میں ج چ ح 5 شامل ہیں۔ 2: حروف تہجی کی نظم کی بار بار دہرائی سے بچے حروف کی ترتیب یاد رکھنے کے قابل ہو سکتے ہیں ۔ 3: حروف تہجی کی مشق خالی جگہوں کی صورت میں کروائی جا ئے جیسے ا 4: کمرہ جماعت میں حروف تہجی کی ترتیب سے مختلف تصاویر لگائی جائیں ۔ انگور ۔ 4: کمرہ جماعت میں حروف تہجی کی ترتیب سے مختلف تصاویر لگائی جائیں ۔ انگور ۔ 4: کمرہ جماعت میں حروف تہجی کی ترتیب سے مختلف تصاویر لگائی جائیں ۔ انگور ۔ 4: مختلف ورک شیٹ دی جائیں جن میں ان کی ترتیب نقش ہو جائے گی ۔ 5: مختلف ورک شیٹ دی جائیں جن میں مختلف نام لکھے ہوں ، بچوں ان کو حروف تہجی کی ترتیب سے لکھیں ۔

تصور 2: حروف کی پہچان

مہارت: پڑھائی (1) معیار :1، حاصل تعلم: 1 برائے جماعت اول مہارت: زبان شناسی معیار: 1 حاصل تعلم: 5 برائے جماعت دوم	قومی نصاب
جماعتدوم – صفحہنمبر ۹، ۵۰،۳۰،۰۵۰ ۱۷،۲۱،۲٤،	ٹیکسٹ بک
تقريباً 62فيصد درست جوابات.	جانچ کے نتائج

تجاويز: بچوں کو روزانہ ایک بار حروف تہجی کی آوازوں سے آشنا کیا جائے تاکہ بچے اعادہ کرتے رہیں ۔ 2: مختلف تصاویر دکھا کر پہلا حرف دریافت کیجیے ۔ 3: نئے الفاظ لکھوانے کی سرگرمی کروائیے ، بچے آوازیں پہچان کر لفظ لکھنے کی مشق کریں ۔ 4: املا لیں ۔ 5: حروف کی توڑ جوڑ کی بار بار مشق کر وائیں ۔

تصور 3: تفہیم

قومی نصاب	مہارت: پڑھائی (1) معیار :1، حاصل تعلم: 1
ٹیکسٹ بک	جماعتدوم – صفحہنمبر،۲،۹،۱۰، ۳۰،٤٦،٤۹،٥٨،٦٦
جانچ کے نتائج	تقريباً 60فيصد درست جوابات.

تجاويز:

1: بچوں کو مختلف تصاویر دکھائی جائیں اور ان سے متعلق سوالات کریں جوابات ہمیشہ مکمل جملوں میں لیا کریں اسی طرح عبارت کی پڑ ہائی کے وقت تسلسل سے پڑ ہنے کی عادت ڈلوائیں ۔ 2: بچوں کو آسان عبارت کی پڑ ہائی بار بار کروا نیےتاکہ ان کی پڑ ہنے کی صلاحیت پختہ ہو سکے 3 :بچوں سے پڑ ھائی گئی عبارت کے بارے میں تفصیل سے گفتگو کی جائے اور مختلف سوالات کے ذریعے عبارت کی سمجھ کوجانچا جائے۔ گفتگو کے دوران خیال رکھیں کہ اساتذہ صرف اردو زبان میں بات چیت کریں تاکہ بچےاردو کے درست تلفظ اور انداز ِ بيان سر آگاه ہو سکيں ۔ 4: سوالآت کرتے ہوئے ایسے سوالات ضرور کیے جائیں جس سے ان کی سوچنے کی عادت بھی پختہ ہو سکے ۔ تفہیم کروانے کا مقصد صرف پڑھنا ، سمجھنا ، اور لکھنا نہیں ہے بلکہ سوچنا اور عمل کرنا بھی ہے۔ اس لیے ان کے سوچنے کی صلاحیت کو بچپن ہی سے فروغ دیا جائے تاکہ کسی بھی مواد کو پڑ ھنے کے بعد وہ اسے اپنے عملی زندگی سے بھی منسلک کر سکیں ۔

5: عبارت میں موجود اہم نکات کو خط کشید کروائیے اور لکھوائیے ۔ پہلے یک لفظی جوابات لکھوائیے ۔ پہلے یک لفظی جوابات لکھوائیے ۔ پہلے یک لفظی جوابات لکھوائیے ۔ پہلے یک لفظی 5: تفہیمی سوالات کرواتے وقتبچوں سے پہلے سوالات کے جوابات لیے جائیں ، جوابات لکھنے کا طریقہ کار سمجھایا جائے پھر تحریری کام کروائیں ۔

# تصور 4: ہجے ، اور الفاظ کی بناوٹ

	مہارت: لکھائی (1) معیار :1، حاصل تعلم: 2 اور 5
ٹیکسٹ بک	جماعتدوم – صفحہنمبر ۹، ۵۰،۳۰۰،۵۰ ۱۷،۲۱،۲٤،۵۰
جانچ کے نتائج	تقريباً 42فيصد درست جوابات.

تجاويز:

1: تختہ سیاہ پر جو بھی لفظ یا حرف لکھا جائے اسے لکھتے وقت اس کی بناوٹ بچوں کے سامنے دکھائی جائے کہ کس طرح پینسل کو پکڑ اجائے اور کسی بھی لفظ کولکھتے ہوئے ابتداء کس طرح کی جائے ۔
2: ہجے اور الفاظ کی درست لکھائی کے لیے بچونکو عادت دلوائیے کہ وہ الفاظ کی بار 2: ہجے اور الفاظ کی درست لکھائی کے لیے بچونکو عادت دلوائیے کہ وہ الفاظ کی بار مشق کریں ۔ مثلاً ہر نیا لفظ سکھانے کے بعد اس کی تکرار کروائیے اور لکھوائیے ۔
3: ہمیں مشق کریں ۔ مثلاً ہر نیا لفظ سکھانے کے بعد اس کی تکرار کروائیے اور لکھوائیے ۔
4: تصاویر دکھا کر ان کے نام لکھوانے کی مشق کروائیے تاکہ بچے اس لفظ میں موجود حروف کو پہچان سکیں ۔
4: تصاویر دکھا کر ان کے نام لکھوانے کی مشق کروائیے تاکہ بچے اس لفظ میں موجود کروف کو پہچان سکیں ۔
4: کلیدی الفاظ اور کثیر الاستعمال الفاظ کے فلیش کار ڈزز بنائیے اور ان کے ذہنوں بن میں ہو جوئیں ۔
5: تصاویر دکھا کر ان کے نام لکھوانے کی مشق کروائیے۔
6: تصاویر دکھا کر ان کے نام لکھوانے کی مشق کروائیے۔
7: مساقل اور کثیر الاستعمال الفاظ کے فلیش کار ڈزز بنائیے اور ان کے ذہنوں بن میں ہو جائیں گے ۔
7: میں ہو جائیں گے ۔ ( کا ۔ کی۔ کے۔ ہے۔ میں۔ انھیں۔ تمھیں ۔ یہاں ۔ مجھے ۔
7: میں۔ پر میتقلاً لگا کر رکھیے ۔ اس طرح بچے انھیں روز انہ دیکھیں گے اور ان کے ذہنوں ہو ۔
7: میں۔ ہوں۔ نہاں ۔ مہارے ۔ اس طرح بچے انھیں روز انہ دیکھیں گے اور ان کے ذہنوں ہو۔
7: میں۔ انھیں۔ یہ مہارے ۔ ہمارے ۔ اس طرح بچے انھیں روز انہ دیکھیں ہے اور ان کے ذہنوں ہو۔
7: میں۔ ہو ۔

تصور 5: عبارت کی لکھائی

مہارت: لکھائی (1) معیار :1، حاصل تعلم: 1 اور 5	قومی نصاب
جماعتدومصفحهنمبر ۲۱ ، ۸،۹۶،۳٤	ٹیکسٹ بک

تجاویز: 1: بچوں کو عبارت سازی کی جانب راغب کرنے کے لیے دلچسپ سرگرمیاں کروائی جائیں ، مثلاًکوئی چیز دکھائی جائے اور مختلف سوالات کیے جائیں جیسے پینسل دکھا کر پوچھا جائے کہ یہ کیا ہے ؟ یہ کس چیز سے بنی ہوئی ہے ؟ ہم اس سے کیا کرتے ہیں ؟ اسے کہاں رکھتے ہیں ؟ اسے کہاں سے خریدا جاتا ہے ؟ یہ کہاں بنتی ہے ؟ یہ کتنی شکلوں یا رنگوں میں پائی جاتی ہے ؟ وغیر ہ ، بچوں کے جو ابات کو جملوں کی صورت میں بورڈ پر لکھیں اور ان سے لکھوائیں ۔ اسی طرح مختلف مشقیں کروائی جائیں ۔ 2: بچوں کو مختلف تصاویر دکھائی اور اس سے متعلق جملے لکھوائیں ۔ 3: ممکن ہو تو کوئی ویڈیو دکھائی جا سکتی ہے ، ورنہ اسکول کے میدان میں بچوں کو لایا جائے اور ان کے مشاہدات کو قلم بند کروائیے ۔ 4: اسی طرح ذخیر ہو الفاظ میں اضافے کے لیے روز کا ایک نیا لفظ بورڈ پر لکھیں اور بچوں کو اس کا استعمال سمجھائیے ۔

#### تصور 6 : متعلقم ذخيره الفاظ كا استعمال

قومی نصاب	مهارت: لکھائی (1) معیار :1، حاصل تعلم: 1 اور 5
ٹیکسٹ بک	جماعندوم - صفحہنمبر ۲۰،۵۰،۳۰ ۸۲،۲۲ ۸۲٬۲۲
جانچ کے نتائج	تقريباً 25فيصد درست جوابات.

تجاویز: 1: نخیر ہ الفاظ بڑ ھانے کے لیے پہلا کام یہ کیا جائے کہ بچوں سے اچھی اور شستہ اردو میں گفتگو کی جائے 2: بچوں سے مختلف موضوعات پر بات کی جائے اور استاد ان کی اصلاح کریں اور نئے الفاظ سے آگاہ کریں 3: نئے الفاظ کو لکھوانے کی مشق کروائی جائے اور ان الفاظ کا جملوں میں بار بار استعمال کروایا جائے ۔ 4: مختلف سرگر میاں کروائی جا سکتی ہیں جن کے ذریعے بچوں کی سننے اور بولنے کی 4: مختلف سرگر میاں کروائی جا سکتی ہیں جن کے ذریعے بچوں کی سننے اور بولنے کی ہچانیں ۔ جیسے گھنٹی کی آواز ، کوے کی آواز ، چڑیا کی چیچہاہٹ ، ہل چلانے کی آواز ہوں سے جھوٹے چھوٹے سوالات کیے جائیں اور ان کے مکمل جوابات لیے جائیں ۔ اور لکھوائے جائیں ۔

تصور 7: واحد جمع

برائے	صاب مہارت: زبان شناسی معیار: 1 حاصل تعلم: 5 جماعت اول	قومی ن
Compondium	· Assassment (2016) Findings & Tins for Teachers (Class II & V)	52

Compendium: Assessment (2016) Findings & Tips for Teachers ( Class II & V)

جماعتدوم - صفحہنمبر ۳	ٹیکسٹ ہک
تقريباً 35فيصد درست جوابات.	جانچ کے نتائج

تجاويز:

 ۱: سب سے پہلے تو بچوں کو یہ علم ہونا چاہیے کہ ہم کون سا نیا تصور پڑ ھ رہے ہیں ۔ ہر نئے تصور سے آگاہ کرنے سے پہلے اس تصور کے نام سے طلباء کو ضرور آگاہ کیا جائے ۔ جیسے اسم ، اسمِ ضمیر ، فعل ، واحد جمع ، مذکر مونٹ و غیرہ 2: بچوں کو روز مرہ استعمال آنے والی اشیاء اور مشاہداتی اشیاء جیسے پتھر ، پینسل ، کرسیاں ، ستارے ، روٹیاں ، کی مثالیں دی جائیں اور ہر لفظ کو بورڈ پر لکھا جائے تاکہ بچوں کی بصری صلاحیت میں بھی اضافہ ہو سکے ۔ 3: یہ تصور واضح کیا جائے کہ واحد اور جمع میں کیا فرق ہے ، پہلے تصاویر یا جماعت میں موجود اشیاء کی مثالوں کے ذریعے واحد اور جمع سمجھائیے اور تمام الفاظ بورڈ پر لکھیں ۔ پہلے (ے) والے الفاظ بنوائیں جیسے لڑکا ، لڑکے ۔ اس کے بعد( اں) مشق کروائیے ۔ والے الفاظ جیسے لڑکی ، لڑکیاں ، کاپی ،کاہیاں، اس کے بعد جملوں میں واحد جمع کی مشق کروائیے ۔

# تصور 8 :منفی اور سوالیہ جملے

قومی نصاب	مہارت: زبان شناسی معیار: 1 حاصل تعلم: 7
	جماعتدوم – صفحہنمبر ۔۸٦
جانچ کے نتائج	تقریباً 50سے 53 فیصد درست جوابات۔

تجاویز: 1: منفی اور سوالیہ جملے سکھانے سے پہلے بچوں کو سمجھایا جائے کہ لفظ منفی، مثبت یا سوالیہ کے معنی کیا ہیں بچونکی گفتگو میں ان الفاظ کا استعمال نہایت ضروری ہے ۔ بچوں سے سرگرمی کرواتے ہوئے ان سے بار بار پوچھا جائے کہ وہ کون سے جملے بنا رہے ہیں ۔ 2: جملوں کی مشق بار بار کروانی چاہیے ۔ مثلاً منفی جملے سکھائے جائیں تو جماعت کے ہر بچے سے سے اس کی ایک مثال لی جائے اور لکھواتے وقت ہر بچے سے انفرادی کام کروائیں تاکہ یہ اندازہ ہو سکے کہ کس بچے نے اس تصور کو سیکھنے میں مشکل کا سامنا کیا ۔ 3: دروان مشق مثبت سے منفی ، منفی سے مثبت یا سوالیہ جملے بنوائیے ۔ 4: تینوں اقسام کے جملوں کا فرق لازمی واضح کریں ۔ ( نہیں ، نہ ) کے استعمال کی مشق کروائیے ۔

# تصور 9: جملےکی بناوٹ

مهارت: زبان شناسی معیار: 1 حاصل تعلم: 1	قومی نصاب
جماعتدوم – صفحہنمبر ۳٤،۸۲،٦٦،۱۰۱	ٹیکسٹ بک
تقريباً 50فيصد درست جوابات.	جانچ کے نتائج

تجاویز: 1 بچونسے ہمیشہ اردو زبان میں گفتگو کریں ۔ 2:دور انِ گفتگو کوشش کیجیے کہ بچے مکمل جملوں میں جواب دیں ۔اس دور ان جہاں ضرورت ہو ان کی اصلاح کرتے رہے ۔ 3: بچوں کو جملوں کی ترتیب سکھائیے جس میں فعل ، فاعل اور مفعول کی مدد سے جملہ سازی کی تحریری مشق کروائیے ۔ 4: چھوٹی چھوٹی عبار ات لکھوائیے ، تاکہ جملوں میں ربط رکھنے کی مشق ہو سکے ۔ 5: مختلف ورک شیٹ کے ذریعے بچوں سے جملے مکمل کروائیے جس میں خالی جگہوں ، کہانی اور گڈ مڈ جملوں کی صورت میں عبارت دیجیے جسے بچے پُر کریں گے اور گڈ مڈ جملوں کی ترتیب درست کریں گے۔

تصور 10: حرفِ جار

قومى نصاب	مهارت: زبان شناسی معیار: 1 حاصل تعلم: 1
ٹیکسٹ بک	جماعتدوم – صفحہنمبر ٤ ٥
جانچ کے نتائج	تقريباً 50فیصد درست جوابات۔

تجاويز :

1: کلیدی الفاظ (کا ، کی ، کے ، سے ، پر ، میں ، نے ، کو ) کے فلیش کارڈز سوفٹ بورڈ پر ،گا کر رکھیں تاکہ بچے ان الفاظ سے آشنا ہو جائیں 2: بچوں کو مختلف ورک شیٹ میں خالی جگہیں دی جائیں جنھیں حرفِ جار سے پُر کیا جائے۔ جیسے کتاب میز کے اندر ہے ۔ گلاس میں پانی ہے ۔

ہے ؟ 4: کسی گھر یا جگہ کی تصویر دکھائیں اور بچوں اس کے متعلق سوالات کریں۔

أردو جماعت پنجم

تصور 1: حروفِ تہجی کی ترتیب

مہارت: زبان شناسی معیار: 1 حاصل تعلم: 2 برائے جماعت دوم مہارت: زبان شناسی معیار: 1 حاصل تعلم: 3 برائے جماعت قومى نصاب ينجم

جماعت پنجم– صفحہنمبر ۱۸اور ۱۱	ٹیکسٹ بک
تقريباً 43فيصد درست جوابات.	جانچ کے نتائج

تجاویز : 1: جماعت پنجم کے بچوں کے ذخیرہ الفاظ میں اضافے کے ساتھ ساتھ انھیں حروف تہجی کی ترتیب سے الفاظ لکھنے کی مشق دینا ضروری ہے ۔ 2: بچوں کو قطار میں کھڑا کیا جائے اور حروف تہجی کی ترتیب سے ہر بچہ خود قطار میں شامل ہوں 3: مختلف الفاظ کی فہرست بنائیں اور بچوں سے ان کی ترتیب حروف تہجی کے مطابق کروائیں ۔

تصور 2:عبارت سازى

مہارت : انشا پردازی معیار : 1 حاصل تعلم: 1 برائے جماعت	قومی نصاب
پنجم مہارت : زبان شناسی معیار : 1 حاصل تعلم: 4 برائے جماعت	
مہارت . ریاں ساسی معیار . ۲ کامیں تعلم 4 برائے جماعت ۔ پنجم	
جماعتینجم- اردو (لازمی)- صفحہنمبر ۳۲-۶۱	ئيكىىڭ بك
تقريباً 42فيصد درست جوابات.	

تجاویز: 1۔ طلباء سے گفت و شنید کے دوران مختلف سوالات کیجیے جیسے آپ نے کل کیا کیا تھا ۶ اتوار کو آپ کہاں جائیں گے ؟ آپ کا اچھا دوست کون ہے اور اس کی کون سی عادت آپ کو پسند ہے ؟ و غیرہ ۔ کوشش کیجیے کہ بچے مکمل جملوں کی صورت میں جوابات دیں اور جہاں غلطی کریں وہاں ان کی اصلاح کی جائے۔ 2کسی بھی چیز یا موضوع پر گفتگو کروائیں تاکہ بچے اپنے خیالات کا اظہار کریں خیالات کی تحریری مشق بھی ضروری ہے ۔ طلبہ کے لیے ذخیرہ الفاظ کی فہرست بھی بورڈ پر لگائیں خاص طور پر کثیر الاستعمال الفاظ کے فلیش کارڈز بورڈ پر نمایاں ہوں ۔ 8۔ بچوں سے مختلف موضو عات پر عبار ت لکھوائی جائے ۔ شراکت دار لکھائی کی مدد اور حتمی شکل دینا سکھایا جائے ، انھیں کاٹ چھانٹ کرنا جملوں کو ترتیب دینا 4. لکھتے اور بولتے ہوئے قواعد کی غلطیاں لاز می درست کی جائیں تاکہ بچے اپنی اغلاط کی اصلاح کر کے اسی جملے کو دوبارہ لکھ اور پڑ ھ سکیں ۔ 5: بچوں کو اس بات کی بھی مشق دی جائے کہ ان عبارات میں محاورات کا استعمال کس طرح کیا جاتا ہے ۔

تصور 3: الفاظ کی ضد

مہارت : زبان شناسی معیار : 1 حاصل تعلم: 4 برائے جماعت	قومی نصاب
چېېرې Compendium: Assessment (2016) Findings & Tips for Teachers (	Class II & V) 57

جماعنینجماردو (لازمی)- صفحهنمبرصفحهنمبر ۹، ۳۰ اور ٦٦	ٹیکسٹ ہک
تقريباً 53فيصد درست جوابات۔	جانچ کے نتائج

تجاويز:

بچوں کو الفاظ اور ضد کے معنی واضح طور پر سمجھائے جائیں ۔
 2: روز مرہ کی زندگی سے لیے گئے الفاظ کی ضد بنانا سکھائیں ۔ مثلاً اوپر ، نیچے ،
 اندر ، باہر ، کالا ، سفید، میٹھا ، کڑوا ، دائیں ، بائیں ، بہترین ، بدترین ، موٹا ، پتلا
 3: الفاظ کی ضد بنانے کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 4: الفاظ کی ضد بنانے کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 5: الفاظ کی ضد بنانے کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 6: الفاظ کی ضد بنانے کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 7: الفاظ کی ضد بنانے کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 7: الفاظ کی ضد کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 7: الفاظ کی ضد کے ساتھ ساتھ انھیں جملوں میں بھی استعمال کرنا سکھایا جائے ۔
 8: الفاظ کی ضد کے موٹا لڑکا ہے جبکہ عالی ایک پتلا لڑکا ہے ۔ سورج مشرق سے نکلتا ہے ۔
 9: الفاظ کی ضد کے ساتھ عبارت کی لکھائی بھی بہت اہمیت رکھتی ہے ۔ بچوں کو ایک پیر اگراف دیا جائے اور وہ اس میں موجود الفاظ کی ضد بنا کر عبارت کو دوبارہ لکھے ۔

تصور 4:واحد کی جمع

مہارت : زبان شناسی معیار : 1 حاصل تعلم: 5 برائے جماعت	قومی نصاب
چېارم	
مختلف اسباق میں زیر استعمال	ٹیکسٹ بک
تقريباً 53فيصد درست جوابات.	جانچ کے نتائج

تجاويز :

تصور 5:جملوں کی اقسام

مهارت : زبان شناسی معیار : 1 حاصل تعلم: 1، 2، 5، 6	قومی نصاب
جماعتینجم- اردو (لازمی)- صفحہنمبر ۱۱۵، ۱۲۱، ۱۲۲	ٹیکسٹ ہک
تقريباً 30فيصد درست جوابات.	جانچ کے نتائج

تصور 6:جملے کی بناوٹ

مهارت : زبان شناسی معیار : 1 حاصل تعلم: 4	قومي نصاب
جماعنينجم -اردو (لازمی)- صفحېنمبر ٤٠، ٦٦،٤٣،٩٨،١٣٥	ٹیکسٹ بک
تقريباً 47فيصد درست جوابات.	جانچ کے نتائج

# **Social Studies Class 5**

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 60

# SOCIAL STUDIES

# CLASS 5

Curricular reference	Understand there are 180 imaginary lines of latitude and 360 imaginary lines of longitude; Name the main lines of latitude and longitude; Use longitude and latitude to locate major cities of Pakistan and the world (p. 23)
Textbook reference	pp. 1 – 5
What does the assessment data tell us?	When asked whether latitude and longitude lines are real: 43% answered correctly When asked how Equator divides the Earth: 36% answered Correctly

# CONCEPT 1: LATITUDE AND LONGITUDES

- 1. Before teaching the concept:
  - Make flash cards showing meaning of longitude and latitude. Latitude, means "breadth, width, and size. "Longitude means imaginary lines that divide the globe through the North and South Pole.
  - Place vocabulary, atlas, world map and charts in the classroom boards.
  - If possible, bring globe, atlases and cardinal compass.
- 2. Begin your lesson with vertical and horizontal lines on a balloon and introduce longitude and latitude to the students.
- 3. Now use the map and identify the imaginary lines and its use.
- 4. While teaching 'Latitude and Longitudes', revise all types of angles with the help of protractor by drawing a picture of big protractor on the board.
- 5. Now use a football/ball and draw degrees on the ball with board marker to explain the use of imaginary lines in identifying different places. .
- 6. Practice the concept of 'Latitude and Longitudes', by asking pupils to locate different places on the map with the help of latitude and longitude. Example: Which country is 200 North and 400 East?

# CONCEPT 2: MAP SKILLS AND PAKISTAN'S LOCATION

Curricular reference Textbook reference	Identify the position of things on maps using the terms cardinal and intermediate directions (p.14 – Class 4); Identify the significance of the location of Pakistan (p. 23 – Class 5) pp. 6
What does the assessment data tell us?	Countries located at north or west of Pakistan: 33% answered Correctly

- Create a classroom display of cardinal directions (North, South, East and West) by using resources available in the classroom like using paper plates or by drawing on any paper.
- Ask the students to share where they have seen and used these words before. Take time to discuss these with the class. Explain that we need to know where these directions are in order to be able to use them. Place direction signs in your room, according to where they exist.
- Take students outside the class and ask them simple questions like who is standing in their north, south, west or east.
- For further practice, create a maze of desks in your classroom and have students give directions to a blindfolded classmate. Generally having friends guide each other through the maze has the most successful results.
- Square line pages or graph paper can also be used to start an activity to locate things on the paper according to the cardinal directions given above. Students can stand in the school ground and locate places and its direction which will further help to clear the concept.
- Ask students to draw a map of their house with step by step directions leading to their bedroom. The directions must include cardinal directions.
- Give worksheets of Pakistan's map with drawn cardinal compass to each student.
- Prepare play cards of the neighbouring countries, their locations separately and distribute. Students will roam in the class and find their match of location.

# CONCEPT 3: IMPACT OF HUMAN ACTIVITIES ON CLIMATE

Curricular reference	Explain the various ways in which human activities affect climate; Identify individual and societal actions that can be taken to reduce adverse effects of human activities on climate (p.25)
Textbook reference	pp. 39 – 40
What does the assessment data tell us?	Impact of deforestation, industries, use of fossil fuels on climate: 40% answered correctly

- Display charts and vocabulary related to the topic like industrialization, farming, pollution, deforestation, etc. in the class.
- Create fake visual untidy environment in the school to start class discussion or after break what kind of pollution student's observe in school ground.
- Ask students about the shocking human activities from the surrounding. Help them create a Photo-story board in school by collecting photographs from magazines, newspapers and express how they can reduce pollution.
- Organize Art competition exposing pollution or sketching to bring awareness in other class levels too.
- Introduce the three R's project (Reduce, Reuse and Recycle) like Plastic bottles can be used to make garden pots, flowers, etc. Discuss the advertisement of Pepsi shown on television.

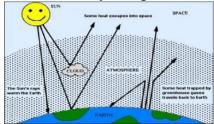
# CONCEPT 4: GREENHOUSE GASES AND THEIR EFFECTS

Curricular reference	Explore how human actives are responsible for the greenhouse effect (p. 25)
Textbook reference	pp. 41 – 42
What does the assessment data tell us?	Greenhouse gases effect climate: 33% answered correctly

# TIPS FOR THE TEACHERS

• Discuss the relationship between the Earth and the Sun. Make a diagram on the board with the help of student's feedback. Talk about importance of Earth's atmosphere and introduce the vocabulary like greenhouse gases and greenhouse effects.

(The gases in the atmosphere stop some of the heat from escaping into space. These gases are called greenhouse gases and the natural process between the sun, the atmosphere and the Earth is called the 'Greenhouse Effect', because it works the same way as a greenhouse)



- Display key words like radiation, heat, trap, gases, carbon dioxide etc. in the classroom.
- Make mini greenhouse in the classroom using plastic bottles, soil and a plant. Tell students why they are making greenhouse. (A greenhouse is a house made of glass. It has glass walls and a glass roof. People grow different plants in them. A greenhouse stays warm inside, even during winter. Sunlight shines in and warms the plants and air inside. But the heat is trapped by the glass and can't escape. So during the daylight hours, it gets warmer and warmer inside a greenhouse, and stays pretty warm at night too.)
- Discuss the importance of various greenhouse gases, such as carbon dioxide, are very important to Earth's atmosphere and climate. Thus, the Earth naturally produces the right balance of gases needed to create the perfect climate to sustain life.
- Ask students to draw what they understand in the end of the lesson and label what's happening in the picture.

# CONCEPT 5: FEDERAL AND PROVINCIAL GOVERNMENT

Curricular reference	Compare the formation of the government and provincial and federal levels; Explain their relationships (p.28)
Textbook reference	pp. 81 – 82
What does the assessment data tell us?	When asked who the head of the country, government, province are: 38% answered correctly

#### TIPS FOR THE TEACHERS

- Display chart and vocabulary in class for discussion and explanation.
- Assign certain duties to the students in groups and explain how the federal and provincial government work. Create a role play in the class.
- Once the students grasp the concept, use coloured chart papers to write responsibilities of each government and display in the class. Assemble them together to understand role of each government.

#### Federal Government

- Defense
- Foreign Policy
- Interprovincial Trade and Communications
- Currency
- Navigation
- Criminal Law
- Citizenship

#### **Provincial Government**

- Municipal Government
- Education
- Health
- Natural Resources
- Property and Civil Rights
- Highways

CONCEPT 6: IMPORT AND	EXPORT IN PAKISTAN
-----------------------	--------------------

Curricular reference Textbook reference	Define the terms public goods, services, imports and exports; Identify the three largest export and three largest imports (pp.31 – 32) pp. 129 – 131
What does the assessment data tell us?	Benefits of exports: 35% answered correctly

- Explain the students; exchange of goods is called trade, using neighbourhood (exchange of daily life goods) and countries (exchange of oil, rice, surgical items) as example. Export means exit of goods and import means entry of good.
- Discuss the meaning of import and export first and then introduce appropriate vocabulary such as importer, import, exporter, export and trade etc. to the students.
- Develop a concept map with student's feedback about the benefits of import and export in Pakistan separately on white board.
- Ask the students to collect items (in small amount), wrappers and empty boxes in groups and prepare a small display for the class.
- Make a list of products or resources you imported into the Pakistan that are most important.
- Next to each import product, tell whether the import is a product (something created by people) or a natural resource (something that is found naturally).
- Develop practical questioning session in the end to make students realize why Pakistan import these products, what might happen if the import stop due to any reason like war.
- Relate this topic with the previous one that provisional governments establish imports and exports for country's benefit and help people.

# SCIENCE Class 5

Compendium: Assessment (2016) Findings & Tips for Teachers (Class II & V) 67

# SCIENCE

# CLASS 5

# CONCEPT 1: LIVING THINGS- VERTEBRATES AND INVERTEBRATE

Curricular reference	Differentiate between vertebrates and invertebrates according to key characteristics; Identify vertebrates and invertebrates from their surroundings (p. 32)
Textbook reference	p. 7; 12-13
What does the assessment data tell us?	Identification of vertebrates: 44% answered correctly

- To teach students about vertebrates and invertebrates, introduce the key concept of backbone to the students. Draw backbone on the board. Point and introduce the terms backbone or spine or vertebral column. Explain them that animals with backbone are called vertebrates like cat, fish, cow. Also explain that Invertebrates are animals that do not have a backbone such as spiders, insects, crabs, etc.
- To reinforce the concept of vertebrates and invertebrates. Instruct students to feel their backbone by running their hand down the back of our neck and between our shoulder blades. Show them the picture of their back bone. Show children pictures of some invertebrates and have them observe that these animals do not have backbone.
- To have student experiment the structure of backbone, provide them thick wires and beads. Instruct them to sting the woodenbeads to form a backbone like figure. Fasten both the ends. Have the students explore how the backbone of a vertebrate animal is made up of both bones which allow it to bend and move.

• Provide further practice to clarify the concept of vertebrates and invertebrates by having children paste pictures of vertebrates and invertebrates in the revenant columns made on board or chart paper.

Vertebrates Invertebrates

- Provide individual practice to reinforce the concept of vertebrates and invertebrates by instructing students to draw animals and insects under the heading of vertebrates and invertebrates. Display their work. Appreciate the correct classification by students and make corrections where necessary.
- To assess students' understanding of the concept of vertebrates and invertebrates arrange a competition. Divide the class into two groups. Ask them to write the names of as many vertebrates and invertebrates as they can. The team with the most correct answers wins.



# CONCEPT 2: LIVING THINGS- CLASSIFICATION OF ANIMALS.

Curricular reference	Classify vertebrates into mammals, reptiles, fish, birds and amphibians on the basis of their characteristics (p. 32)
Textbook reference	p. 7 – 10
What does the assessment data tell us?	Characteristics of mammals: 53% answered correctly Characteristics of reptiles/ amphibians: 38% answered correctly

# TIPS FOR THE TEACHERS

- Before teaching students about classification of vertebrates, revise the concept of vertebrates and invertebrates using pictures of animals.
- Discuss basic characteristics of animals discussed in first lesson to retain core knowledge. Write the characteristics of animal individually on the board and develop a concept map. Assign students home work to draw and write properties of their favorite animal.
- Explain that living things can be sorted into groups in many ways and are classified by similar characteristics. Explain the term classification as :

*Classification or to classify means to put similar things in groups. Scientists use classification* 

Systems for grouping similar types of organisms

• Introduce 5 groups of vertebrates; birds, fishes, amphibians, reptiles and mammals with the help of their pictures, showing vertebral column. Now ask students to give few examples of each group.

#### **Groups of vertebrates**

Warm-blooded: Body temperature stays the same regardless of temperature outside

Cold- blooded: Body temperature depends on the temperature outside

Amphibians: Are born in the water. When they are young they breathe through gills. When they become adults they live on land and breathe through lungs. At this stage, they can only spend some time in the water. Birds: Many birds can fly but not all such as chickens and penguins

• Introduce the characteristics of vertebrates make a <u>table on chart paper</u>. Write the names of the animal classes in table form (see below). Paste one picture or draw an example of each class .Put the chart paper up on the wall and point to the different groups. Say: *To classify we need to think of characteristics, for example what is the animal covered with?* If students cannot respond prompt them: *Mammals are covered in fur or hair, birds have feathers, fish and reptiles have scales and amphibians have moist skin.* 

	Mammals	Birds	Reptiles	Amphibian s	Fish
Covered with?	Hair or fur	Feathers	Scales	Moist skin	Scales
Where does it live?	Mostly land, some water	Land only	Mostly land, some water	Land and partially water	Water only
Breathe with?	Lungs	Lungs	Lungs	Gills and lungs	Gills
Warm- blooded or cold- blooded?	Warm	Warm	Cold	Cold	Cold
Details of its young	Most young born alive. Feed milk to their babies.	Lay hard- shelled eggs	Lay leathery shelled eggs	Lay eggs in the water	Lay eggs without shells
Examples	Humans, bears, dogs, dolphins, bats	Chickens, pigeons, owls	Snakes, turtles, crocodiles	Frogs, salamander s	Fish, sharks, sea horses

• Keep writing what students say, have students assist in writing up. Fill in the gaps where needed. You should end up a chart as such:

71

- Reinforce the information learnt about the classification of vertebrates, have students develop flashcards for each class of animals. On one side they can write the characteristics and on the other side paste or draw pictures animals in the class. Have them use these to learn characteristics in pairs
- Extend students learning about the groups of vertebrates, assign students to draw 1 animal of each group and write key features of that group such as body parts, skin, habitat, food. Display their work and appreciate the correct work. Make corrections where necessary.
- To have students further practice of describing animals characteristics, play Who am I? Instruct students to prepare hints for their friend, describing an animal's characteristics and other students have to guess the animal and its group such as:

An animal has scales, it is cold-blooded and lives in water? Animals with hair and feed milk to their babies. Who are they?

- Clarify the classification of some of the confusing animals, discuss the information and ask questions as given below :
  - Why is a turtle a reptile and not an amphibian?

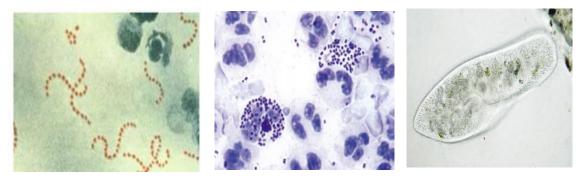
Answer: Turtles have scales on their bodies. They do not transform the way amphibians do. They breathe through lungs throughout their life. They can live in water; whereas amphibians can only live in water for part of their life.

 Why is a dolphin a mammal? Even though it lives in the water It is warm-blooded, it breathes through lungs, feeds milk to its young and even has some hair particularly when it is young

Curricular reference	Define microorganisms; Identify the main groups of microorganisms and give examples for each; Describe the advantages and disadvantages of microorganisms in daily life; Define infection; Identify ways by which microorganisms can enter the human body (p. 32) pp. 22 – 30; 30 – 32
readourrenerence	pp. 22 00,00 02
What does the assessment data tell us?	Characteristics of different microorganisms and infections caused by them: 32% on average answered correctly

## CONCEPT 3: MICRO-ORGANISM

- Help students understand the difference between different microorganisms and their characteristics, clarify the concept by introducing the term microorganism as an extremely small living thing that can only be seen with a microscope
- To give children a firsthand experience of observing a microorganism, show a picture or model or real organism through prepared slides and microscope to the students if possible.



- Show pictures of microorganisms that have harmful effects; called germs and they cause illness and diseases. Inform students that microorganisms rot the cooked and uncooked food.
- Divide children in groups and instruct them to list down ways in which a bacterial disease can enter the body (breathing in, drinking water, eating food, and cuts) and ways to prevent transmission.
- Discuss the beneficial effects of microorganisms such as
  - Bread is made with the help of microorganisms called **yeast** which makes the bread dough rise
  - Bacteria thickens yoghurt and cheese
  - Bacteria helps in decomposition of dead material
  - We eat mushrooms (fungi) because of high nutritional value

- Bacteria in our stomach help process the food and keep us healthy.
- Reinforce the advantages and disadvantages of microorganisms show students a picture as shown below:

Ask them to identify places where microorganisms would be at work (circle).

Then put a star on anything that is helpful and an *x* on anything that is harmful.



Assess students understanding of microorganisms prepare a chart shown below and instruct children to fill the information about the type, advantages and disadvantages in the given columns

Micro- organism	Definition	Advantages	Disadvantages
Virus	•	•	•
Bacteria	•	•	•
Fungi	•	•	•

## CONCEPT 4: SEED STRUCTURE AND GERMINATION

Curricular reference	Compare the structure and function of French bean and Maize seed; List the functions of cotyledons (p. 33)
Textbook reference	pp. 38 – 40
What does the assessment data tell us?	Identify monocotyledonous and dicotyledonous seeds: 32% answered correctly

#### TIPS FOR THE TEACHERS

 Help students understand the difference between monocotyledon and dicotyledonous seed, soak seeds a day earlier and show it to them. Point at the leafy part and say a cotyledon is the leafy part of the seed that will grow into the leaves. Point at the seed with one leaf and say that this is monocotyledon seed as "mono" means one, having one cotyledon. Point at the seed with two leaves and say that this is dicotyledonous seed as di" mean two. Having two cotyledons.Further inform the students that monocot seed cannot be separated into two pieces easily while dicot seeds can be divided into two parts.



• Help the student experiment how monocot and dicot seeds grow , divide the class in groups and provide them with monocot and dicot seeds of different plants like corn, beans, and peanuts etc. instruct children to soak the

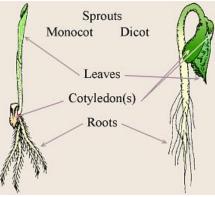
seeds in water.





• Instruct student to remove the upper cover of a seed gently and observe its internal structure. Point at the external structure of seeds and

instruct them to draw what their observation on a paper to show a labeled diagram of monocots and dicots.



• Show the pictures of monocot and dicot plants/ seeds. Instruct students to paste the pictures in the relevant column on the chart as follows:

Seeds/Plants	
Monocot	Dicot

# CONCEPT 5: ENVIRONMENTAL POLLUTION- CAUSES AND EFFECTS

Curricular reference Textbook reference	Explain main causes and effects of water, air and land pollution on environment and suggest ways to reduce them (p. 33) pp. 51 – 53
What does the assessment data tell us?	Causes of pollution: 37% answered correctly Effects of pollution: 34% answered correctly

- Help students understanding the causes and effects of pollution. Display pictures of water, air and land pollution. Let the students identify what is wrong with the pictures displayed and who is causing them.
- Write student's responses underneath each picture. At the end of the activity, discuss the meaning of **pollution** (the presence of harmful or poisonous substances into the environment) and its kind.



- Reinforce that *Air pollution* is the bad air we breathe. Human activities can release substances into the air, some of which can cause problems for humans, plants, and animals. *Land pollution* is the trash and other material that seeps into the Earth's surface. *Water pollution* occurs when a body of water is affected due to the addition of large amounts of materials put into the water.
- To help students understand the causes and effects of pollution infer that people can't survive without clean water, air and land therefore pollution is a responsibility and concern of all people in every community. Ask students about what kind of health problems they face due to air, water and land pollution.

Write student responses on the board as a web. (Skin Rashes, Asthma, Kidney Damage, Liver Damage, Coughing, Bronchitis, Headaches, Heart problems, Dizziness, Throat and Eye Irritation, Cancer).

• To assess student's understanding about the causes and effect of pollution, instruct them to gather related information from the book have students and fill in the chart as shown below.

Туре	Causes	Effects
Air	•	•
Water	•	•
Land	•	•

Land pollution





**Air Pollution** 



Water pollution

## CONCEPT 6: MATTER AND STATES- PROPERTY OF STATES

Curricular reference	Describe the properties of the three states of matter on the basis of arrangement of particles (p. 33)
Textbook reference	pp. 61 – 63
What does the assessment data tell us?	40% on average answered correctly

#### TIPS FOR THE TEACHERS

 Help students understand the properties of three state of matter, introduce the term matter.
 *Matter* is anything that takes up space and has mass.
 <u>Further describe the terms</u>

#### -MASS AS THE MEASURE OF HOW MUCH MATERIAL MAKES UP AN OBJECT; WHAT A SOLID IS MEASURED BY

#### -VOLUME AS THE AMOUNT OF SPACE AN OBJECT TAKES UP; WHAT A LIQUID IS MEASURED BY

- Tell students that matter can be found in three states solid, liquid and gas. Give some examples and then ask children to write some more in the form of web.
- Collect different items (water, juice, book, helium gas balloons and Pepsi) to investigate their observable properties. For example:

Show students a book or pencil and ask: What state is this? Does it have fixed shape?Does it have fixed volume? How close are the molecules?

Explain: Solids are fixed in shape because their molecules are very close together

Show students a bottle of water and ask students what state this is and why?

Have students pour water into a glass and a pot and describe what they see (the water takes on the shape of each)

Explain: *Liquids can flow from one place to another because their molecules are not as close as solid.* 

Have students to make this table on the chart and fill it in to explain the properties of Matter.

Туре	Solid	Liquid	Gas
Shape	Fixed	Not fixed	Not fixed
Volume	Definite	Definite	Indefinite
Space between molecules	Very close together	Enough space to move	Far apart

To help student understand the molecular arrangement of the three states of matter inform students that matter is made up of atoms which when put together form molecules, Show students a diagram of the molecules in solids, liquids and gases. Divide the class into three groups, have students draw diagrams of the molecules in solids, liquids and gases on the chart. Have one person in each group explain the diagram to the class.

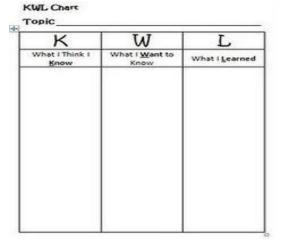
### CONCEPT 7: MATTER AND STATES- CHANGE OF STATES

Curricular reference	Investigate the effect of heat on particle motion during a change in states; Demonstrate and explain the processes that are involved in the change of states (p. 33)
Textbook reference	pp. 64 – 66
What does the assessment data tell us?	Change of states: 39% on average answered correctly

#### TIPS FOR THE TEACHERS

 Elicit the prior knowledge of the students about matter through a KWL chart. Make a table and label the columns as Whatdo you know? What do you want to know? and What have you learnt?.

Fill the first column ' What you know ? by having a discussion on the topic . Ask what they still donot know or want to know in the next column. Fill the list column with after you finish teaching the concept, the day you will end the topic , with students'



responses about the new knowledge gained by them.

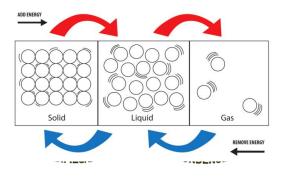
• Introduce the changing state of matter through an experiment if possible, otherwise, explain the entire experiment through pictures. Heat ice infront of children and explain ice which is solid is turning into water which is a liquid. Point at the water is turning into steam which is a gas when heat is continued to be provided. Hold a lid over the steam to collect the water vapours and inform students that the water vapours after cooling are turning into water. Keep the water collected in the freezer and let children observe how it turns into ice.

After the experiment, introduce the terms melting and evaporation with the meanings in the class. Explain if the matter gains heat, its molecules starts vibrating fast which changes the state of matter. Ice (solid) gains heat and become water (liquid). Water gains heat and become steam (gas).

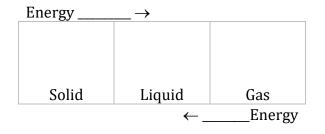
• Explain that if we reverse the process, the movement of molecules slows down and change of state takes place. Introduce the terms condensation

and freezing with meanings and examples like Steam(gas) when loose heat it turns into water(liquid) and when water loose heat further it freeze into ice(solid).

• Draw this diagram on the board. Recap what you said about melting/freezing using diagram.

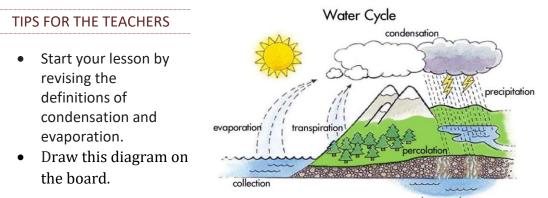


- Pointing the diagram, say: What happens when a liquid converts to a gas? What happens to the energy? And the vibration of molecules? What is the process called?
- Ask students some other examples from daily life like melting of chocolate and candle wax. Dew drops (liquid) are formed on grass in cool mornings when dense fog (water vapours) in the cool air condense.
- Draw the first diagram on the board. Ask the students to fill in the particles. Then have them fill in the blanks about whether the energy is increasing or decreasing. The end result should look somewhat like the second diagram.



## CONCEPT 8: MATTER AND STATES- CONDENSATION AND EVAPORATION IN NATURE.

Curricular reference	Describe the role of evaporation and condensation in the water cycle
Textbook reference	pp. 67 – 70
What does the assessment data tell us?	Defining evaporation and condensation: 12% answered correctly



 Ask the following questions and encourage the students to give their responses

-Where is water found on earth? (Sea, lake, ponds, rivers, puddles)
-What happens when sun comes out? (Evaporation takes place)
-Where the water goes when something is drying? (Earth's atmosphere)
-How does water temporarily stored in Earth's atmosphere? What is this process called?

(By the process of condensation clouds are formed and store water in form of water droplets)

-How does water fall from earth's atmosphere? What is the process called? (When clouds gets heavy they release water droplets that fall on earth. This is called precipitation)

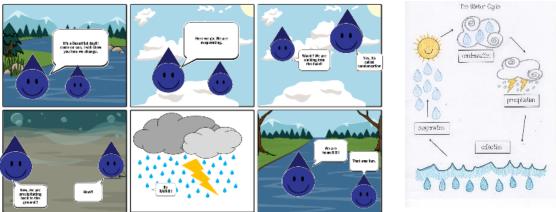
Explain: Water exists on earth in solid, liquid and gas forms, as ice, water and water vapor. It is continuously moving between its different forms or states in the water cycle. The processes involved in the water cycle include evaporation, condensation and precipitation.

• Conduct the experiment to make children observe the water cycle. Place the mug in the bottom of the bowl. Add water around the mug so that it come up to 2/3rd of the mug. Mark at the amount of water to show the water level.



Place a thin plastic sheet to cover the mug and bowl and fasten it with a string. Place the mug and bowl in a sunny area. At the end of the experiment make the students observe the drops of water on the top of the cling film and that the water level has lowered proving that evaporation has taken place. The condensation droplets are the clouds. They will be dripping back into the bowl but you should find that some of the water is now in the cup (your mountains) demonstrating precipitation

• Assign students to draw the water cycle on paper and label it. Display students work in the class.



Create your own at Storyboard That

• Apply knowledge of water cycle by writing a creative story or autobiography of water droplets or make funny posters of water cycle

Curricular reference	Describe friction and its causes; Explain the advantages and disadvantages of friction; Suggest methods to reduce friction; Identify what cyclists; swimmers and parachutists do to reduce friction (p. 34)
Textbook reference	pp. 76 – 80
What does the assessment data tell us?	Friction on different surfaces: 46% answered correctly Ways to reduce friction: 48% answered correctly

# CONCEPT 9: FORCES & MACHINES – FRICTION

#### TIPS FOR THE TEACHERS

• Explain the concept of friction through an experiment;take 2 surfaces i.e. table top and carpet/piece of cloth and 2 marble balls. Draw a starting and ending line on both of the surfaces and place both of the marble balls on each surface starting line. Ask 2 students to push the balls to the ending line at the same time and then observe which ball crosses the end line first. Conclude the experiment, why the ball placed on the carpet reaches the end line late or stops in the middle? Because the surface was rough and friction is found on a rough surface and it opposes motion. However, table top was a smooth surface so there was no friction

Explain: The force of one surface or object rubbing against another is friction. It is the resistance that one surface or object encounters when moving over another.

Remind students: Force is a push or pull that acts on an object. Explain: The amount of friction depends on the texture of the material, surface area, speed, weight, etc.

• Conduct another experiment to show that friction produces heat. Ask the students to observe their palm and back of their palm and their surfaces. (rough and smooth). Then ask the students to rub both of their palm together for 2 minutes and then tell what do they feel.(heat) Now ask the students to rub the back of their palm with the other hand and observe the difference.

Conclude the whole experiment that rubbing the both palms together produces heat, while rubbing one palm with other back of palm produces no heat. Moreover, it was easy to rub the back of the palm with the other hand because it is smooth.

Friction produces heat. Rub your eraser on the desk and you will feel a warm eraser when you touch. Rubbing palms produces heat. Define friction

with reference to this example i.e. surfaces and motion. Friction is found on a rough surface, and when something tries to move on it, it produces heat.

Ask students, what will happen if they apply oil on their hand? Will the rubbing of palm still produces heat? (No) because friction is reduced.

- To extend students understanding of friction conduct this experiment.
  - Collect different objects with different types of surfaces (book, towel, mirror, etc)
  - Make an inclined plane by stacking up several books and putting each of these objects against it.
  - Take a block of wood and let it slide over the different types of objects/surfaces
  - On each surface ask the students to observe how much time it takes for the block to reach the bottom (they can use words like fast, medium, slow if they cannot time it)
  - Conclude the observations with the students, for example: *On rougher surfaces the block moves slower (there is more friction) and smoother surfaces such as glass it moves faster (less friction).*

Modify the experiment

- Have the students make the plane steeper and repeat the steps.
- Conclude the observations with the students, for example: *When we increase the steepness of the plane, the ball moves faster (friction is reduced).*

Modify the experiment once more

- $\circ$   $\;$  Use a ball in place of the block of wood and repeat the steps.
- Conclude the observations with the students, for example: *When we reduce the amount of contact area (or surface area), the ball moves faster (friction is reduced).*

EXPLAIN THE STUDENTS THAT WE NEED TO REDUCE FRICTION TO INCREASE THE PERFORMANCE OF MACHINES, CAR ENGINES SO LUBRICANTS OR OILS ARE USED. OTHERWISE MACHINE PARTS WOULD WEAR AND TEAR BECAUSE OF FRICTION. WE NEED TO HAVE FRICTION WHILE WRITING ON BLACKBOARD WITH CHALK, LIGHTING A MATCH STICK, MARKS ON THE TIRE AND OUR JOGGERS ETC.

Divide students in groups. Instruct them list *some of the means of reducing friction?* Students should be able to recap what they learned.

Provide prompts such as Say: If oil on the floor and you step on it, what will happen? Most likely you will slip, as the friction is reduced. So oil or lubricants are one way to reduce friction. Ask children to think of any other examples? Wheels to reduce friction, the shape of the car, etc.

# CONCEPT 10: FORCES & MACHINES –BALANCED / UNBALANCED FORCE & INERTIA

Curricular reference	Differentiate between and describe effects of balanced and unbalanced forces on the motion of an object; Describe the term inertia (p. 34)
Textbook reference	pp. 76; 81 – 83
What does the assessment data tell us?	Identify situations where force is used: 54% answered correctly; Concept of inertia: 35% answered correctly

#### TIPS FOR THE TEACHERS

• Clarify the term force through the following activity: Put a chair in front of you. First ask one student to push it. Then, ask another to pull it.

Explain that Force (Urdu) is a push or pull that acts on an object.

To make students further understand the concept of force, teach about balanced and unbalanced force. Make 2 teams A (with 5 members) and B (with 3 members),organize a game of tug of war (Rope pulling) between the two teams. They will play "tug of war" (pulling the rope from both sides) and then see who wins. Ask the students, why a group of 5 students won the tug of war. Students would say that 5 students had more "taqat" or "force".

Explain that when force is applied in opposite directions and is equal on both sides it is known as a balanced force (Urdu). When the force is not equal on both sides it is known as an unbalanced force (Urdu).

Explain that Force is Taqat in Urdu and it was not balanced, 5 students applied more force than three on the other side. What could have happened if we have 5 students on both the sides? No one will win because the forces are balanced.

Call two students. Ask one student to grasp other student's hand firmly and place his elbow on a table or other flat surface. On the signal, try to force

other student's hand to the table. The students will conclude why one students wins (who applied more force). Forces are not balanced. Why both arms stands still for some times? (Balanced force)

Explain: Force is a push or pull that acts on an object. Explain: When force is applied in opposite directions and is equal on both sides it is known as a balanced force. When the force is not equal on both sides it is known as an unbalanced force

• **To make the student understand that** the concept of inertia conduct an experiment. Give one student a spoon and put a marble on it. Ask the student to walk through to a specific point and stop there suddenly. The marble will fall down from the spoon. Explain that *this happened because the marble wanted to remain in motion and dropped forward from the spoon* 

Explain INERTIA in relation to the conducted experiment. Inertia is the resistance of any object to any change in its state of motion or rest." To resist the effect of any external force is known as inertia.

To explain the concept of inertia discusses an example with the children from daily life. Ask, how many of the students have travelled in a bus? How many of the students have fallen forward when the driver applied the brake? Why do they fall? It is because when the driver applies the brake, external force acts on us and we resist that force in order to maintain our balance by holding onto a handle with full force. The force we are applying to resist the brake effect is known as inertia.

Ask, who will face more inertia? A fat person or a skinny person? A fat person will face more inertia as he has more mass and inertia is directly proportional to mass. Greater the mass, greater the inertia.

Curricular reference	Demonstrate how wedge and inclined plane are used to move the objects; Compare the three kinds of levers using examples; Describe how lever makes work easier by giving examples of its uses from daily life
Textbook reference	pp. 84 – 88
What does the assessment data tell us?	Identify simple machines: 8% answered correctly

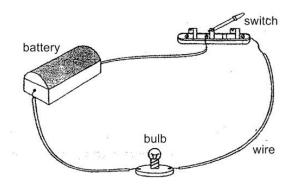
### CONCEPT 11: FORCES & MACHINES -SIMPLE MACHINES

- Before teaching about simple machine, reinforce the concept of force. Explain that 'Force is push or pull' and machines help you do work by changing the amount of force required, the distance or direction of force. Certain machines are complex, i.e. they have many parts such as bicycle. While simple machines are made up of only one or two parts.
- To teach students about the types of machines, show pictures or real machines and explain each.
  - Wheel: the best invention which made the transportation of heavy objects such as rocks and boats easy using log rollers. As the object moved forward, rollers were taken from behind and replaced in front.
  - Lever: The lever consists of a long beam and a fulcrum, or pivot.
     The common lever used are wheelbarrow, seesaw, scissor etc
  - Screw: A screw can also act to hold things together in some cases.
     Some examples of the uses of a screw are in a jar lid,, meat grinder, door lock, machine screw.
  - Pulleys: A pulley is one of the original simple machines. The original primary use for pulleys was to make it easier to lift heavy items. The pulley is a simple machine made with a wheel and a rope, cord, or chain. Examples are elevators, bulldozers, rock climbers, cranes etc.
  - Inclined Planes: It is a plane surface where one end is higher than the other. Common examples are children's slide, a loading ramp, aircraft wings, windmills, and propeller blades.
  - Wedges: " Almost all cutting tools are wedges .e.g. shovel, a knife, an axe, a pick axe, a saw, a needle etc.
- Divide students into groups and have each team write down one example of each type of machine. They should draw a picture of each as well. Have the students come up and explain what they have chosen and why. If there are any mistakes have them correct them and display the finished work on the wall.
- Ask the students to make a model of any simple machine from junk material and bring it to the classroom next day. Provide them opportunity to display and explain their developed machine.

# CONCEPT 12: ELECTRICITY AND MAGNETISM – ELECTRIC CURRENT & CHARGES

Curricular reference -	Describe flow of electric current in an electrical circuit; (p. 35)
Textbook reference	pp. 109 – 112
What does the assessment data tell us?	Concept of electric current, charges and circuits: 33% on average answered correctly

- Ask the students to name some appliances used in their home.Explain that electrical energy is a form of energy from which we power our appliances. *Electric current is the flow of electric charges. Charges come from electrons which are tiny particles we cannot see. When electrons flow through certain substances we get electricity.*
- Demonstrate the workings of an electric circuit. Bring wire, small bulb and battery to the class and make the complete circuit. Explain that 'An electric circuit is an electrical device that provides a path for electrical current to flow'.



- Draw the circuit consisting of a bulb, battery and wire on the board. Label battery of +ve and –ve terminals, and then show the flow of electron through wire till the other terminal. If the circuit wire could be broken, electrons will reach their original position, hence, the bulb will not light. Draw incomplete circuit as well.
- To further explain the working of an electric circuit instruct students to make a circle with you. Tell them that you represent a battery, they represent a wire conductor and the circle represents a circuit. Distribute an object -- like a ball or an eraser -- to each member of the circle,

including yourself. Ideally, everyone should have the same object. Tell students that these objects represent electrons inside a wire conductor.

Remind students that you are playing the part of the battery in this circuit. Explain that all batteries have a positive end, represented by your left hand, and a negative end, represented by your right hand. Pass your "electron" (the object you are holding) to the student on your right. The student receiving your electron should in turn pass the one he or she is holding to the right. Have students continue passing on electrons to the person to their right. Tell students that this represents the flow of electricity in the circuit, the like charges repel each other which keeps them moving.

Tell students that as long as the circle remains intact, the electrons continue to flow and their circuit is closed. Demonstrate this by creating a gap in the circle of students that is too wide across to pass electrons. Tell them in this way the current will stop.

## CONCEPT 13: LIGHT PROPERTIES & BEHAVIOR – PROPERTIES OF OBJECTS

Curricular reference	Differentiate between luminous and non-luminous objects; Identify and differentiate between transparent, opaque and translucent objects in their surroundings (p.34)
Textbook reference	pp. 95 – 97
What does the assessment data tell us?	Identify luminous objects: 33% answered correctly Indicate properties of opaque and transparent objects: 37% answered correctly

- Explain the difference between luminous and non-luminous objects that
- Luminous objects are objects that give out light on their own. Torch, Sun and Stars are luminous object, they have their own light.
- Non-luminous objects are objects that do not give out light on their own. Book and our hand is a non-luminous object because it doesn't have its own

light but can be see through our eyes when light falls on it. We can see our hand in day light but not in the dark.

- Reinforce the concept luminous objects and Non-luminous objects by making two columns on the board and ask students to fill in examples of each. (some examples have been provided)
   Luminous objects sun, stars, candle, torch, light bulb
   Non-luminous objects
   Non-luminous objects
   Non-luminous objects
   Sun, stars, candle, torch, light bulb
- To assess the students understanding of the concept of luminous objects and Non-luminous objects ask questions such as

*Is the moon a luminous object?* Answer: It is not. The moon only shines because its surface reflects the light from the sun.

- Demonstrate the difference between opaque, transparent and translucent objects by showing one of each object: opaque (book), transparent (water glass) and one translucent (a colored plastic bottle or frosted glass) and shine the light from a torch on them. Have the students' note how the light behaves on each and write down their observations.
- Explain the difference between opaque, transparent and translucent objects that:
  - Opaque objects do not allow light to pass through at all.
  - $\circ$   $\;$  Transparent objects allow all light to pass through.
  - Translucent objects allow some light to pass through.
- To assess students understanding of the opaque, transparent and translucent objects. Draw three columns on the board and ask the students to tell the things that can be listed in the opaque, transparent and translucent category.

## CONCEPT 14: LIGHT PROPERTIES & BEHAVIOR – LUNAR ECLIPSE

Curricular reference	Explain the formation of shadows and eclipses (p. 34)
Textbook reference	pp. 100
What does the assessment data tell us?	Position of the earth in a lunar eclipse: only 17% answered correctly

#### TIPS FOR THE TEACHERS

- Draw the picture of earth, moon and sun on the board and clarify movement of planets and moon. Explain that earth rotates on its axis and as well as revolves (or moves) around the sun. And the moon revolves around the earth.
- Perform an activity to demonstrate the movement of earth and moon:

Ask three students to do a role play. Student 1 will play the role of the sun and stand still at the center. Have student 2 to play the role of the earth and revolve around student 1 (the sun). Have student 3 play the moon and revolve around student 2 (the earth).

Inform students that moon get its light from sun and its surface reflects the light from the sun.

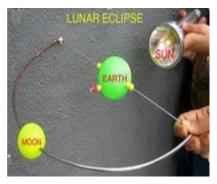
• To demonstrate a lunar eclipse make a diagram such as this on the board or on a chart. Explain: Sometimes, the earth comes directly between the sun and moon. This causes the shadow of earth to fall on the moon. The moon appear darkened as the earth's shadow is cast upon it. This is known as a lunar eclipse.



- Perform an activity to demonstrate the eclipse (see the picture to understand how to set it up):
  - Give students the two balls to hold. The larger ball will represent the earth and the smaller ball will represent the moon. You hole the torch which represents the sun.
  - Stand in front with the torch. Have the student with the large ball stand behind you and the student with the small ball stand in the end.
  - Point the torch towards them. The light of the torch will fall on the large ball only. The large ball will block out the light to the smaller one.
- Ask students to explain what just happened. Conclude: *The earth blocked the light of sun on moon and caused a lunar eclipse.* It is the partial or total blocking of light of one celestial object by another. An ECLIPSE of the Sun or Moon occurs when the Earth, Moon, and Sun are aligned. The solar eclipse occurs when the moon comes in between the sun and the earth and Lunar eclipse occurs when the earth comes between the sun and the moon.
- A shadow is the dark area that is formed when light is blocked by an opaque or a translucent object because light travels in a straight line. Now, place a book in front of a torch and then ask the student, can they see light at the back of the book? No, because book blocks the light forming a darker area behind known as shadow.

• Take a tennis ball, a football and a torch. Place them in a way that face of

the torch, tennis ball and a football are in
straight line. Switch on the light of the torch
and then see that the shadow of the tennis
ball falls on the football, and from the
football side we can only see the outline of
the tennis ball. Hence, tennis ball acts as a
moon and football as an earth, that's why in
solar eclipse we can only see the outline of
the sun from the earth. However, in lunar



eclipse earth comes in the middle of sun and moon, and the huge shadow of the earth falls on the moon, hence we cannot see the moon for some time in lunar eclipse.

## CONCEPT 15: LIGHT PROPERTIES & BEHAVIOR – VISIBILITY OF STARS AT NIGHT

Curricular reference	Differentiate between luminous and non-luminous. (p.34)
Textbook reference	Pg 95
What does the assessment data tell us?	When asked to explain why the stars are visible at night: only 12% answered correctly

- Explain the visibility of stars through an experiment. Bring a torch and a small bulb. Explain to the students that in this experiment the torch represents the sun and the small bulb represents a star.
  - Turn on both the torch and the bulb. Ask whether they can see the light of the bulb. The answer will be no.
  - Turn off the torch, ask where they can see the light of the bulb. The answer will be yes.
- Ask the students why they couldn't see light of the bulb earlier. Listen to their responses carefully. Explain that it's because the light of sun is so strong that the light of bulb will provide diminished light. In the second situation, the same bulb provides ample of light to light up the whole room. This phenomenon happens as the brighter luminous object takes over the light of the less bright luminous object.
- Explain that Stars are the luminous objects in our universe, they have their own light but they are very far from our earth. Sun is also a star but as it is near to our planet earth that's why in the day time we can only see the light of the sun but at night when the sun shifts to the other part of earth, then can we only see the light of the far apart stars in our universe.

Curricular reference	Natural satellites in the solar system (p. 36)
Textbook reference	p. 135
What does the assessment data tell us?	Concept of natural satellites: 34% answered correctly

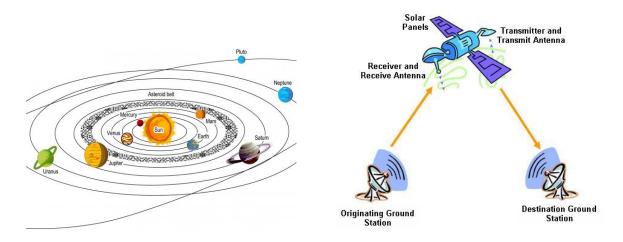
## CONCEPT 16: SOLAR SYSTEM- SATELLITE

#### TIPS FOR THE TEACHERS

- Show the picture of solar system and satellites to the students. To help students understand the difference between natural and artificial satellite, explain the meaning of satellite.
   A satellite is an object that revolves or orbits around another object in space.
- To help students understand the difference between artificial and natural satellite, show pictures and explain the vocabulary with meanings.

- A "natural satellite" is any astronomic body in space that orbits around a larger body e.g. *Moons are known as natural satellites because they orbit planets.* 

-An artificial satellite is made by people and launched into orbit using rockets are called "artificial satellites".



- To improve students understanding about artificial satellite show pictures different kinds of artificial satellite. Explain that there are currently over a thousand active artificial satellites orbiting the Earth and they all provide different information to the earth for example navigation satellite, weather satellite, earth observation satellite, Communication satellite and International space station.
- Ask the students to draw solar system on a paper and label it. Extend the task by instructing students to design their own satellite system and write down its purpose.

# **Key Messages for Class 2 teachers**

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Urdu	حروفِ تہجی کی ترتیب	حروف تہجی کی ترتیب سکھانے سے پہلے مختلف سرگرمیوں کے ذریعے حروف تہجی کی آوازوں کا اعادہ کروائیں۔ حروف کی ابتدائی ، درمیانی اور آخری شکل کی مشق اور ذخیرہ الفاظ کی دہرائی کرائیں ، آدھی اشکال کی بار بار مشق کرائیں ، اور ہر حروف سے مختلف الفاظ بنوائیں ۔	جماعت دوم – صفحہ نمبر ۹، ۳۳،۳۸
	2	Math	Addition and Subtraction	Always use easily countable materials such as money, bottle caps, leaves, pebbles, etc. to teach addition and subtraction.	Textbook p. 36 & 37
1	3	English	Letter Recognition and Alphabetical Order	Use flashcards or write the alphabets on the black board for students' better recognition of alphabetical order. Point towards letters and say that aloud e.g. A/a/ apple, B/b/ ball Reinforce two or more letters a day.	Textbook p.2
	4	English	Letter Recognition and Alphabetical Order	Please use daily objects such as wet or dry sand, floor, black board or paper and make students practice writing the letters on them. This will help them recognize the formation of letters.	Textbook p.3
	1	Urdu	حروفِ تہجی کی ترتیب	نظموں کی مدد سے حروف تہجی کی ترتیب کی مشق کروائیں۔	جماعت دوم – صفحہ نمبر ۹،۳۳
2	2	Math	Word problems	To help students understand and solve the word problems, make sure they spend enough time in understanding the statements. Read, translate, and explain the statements. Ask questions assess their understanding of word problems. Encourage students to come up with their own word problems.	Textbook p. 54 & 55
	3	English	Letter Recognition and Alphabetical Order	Young learners enjoy fun way of teaching. To teach alphabetical order make students practice alphabets in sequence from Aa-Zz or through the ABC song.	Textbook p.3

# KEY MESSAGES FOR CLASS 2 TEACHERS

Days	S.No	Subject	Торіс	Message	Text Book Reference
	4	English	Letter Recognition and Alphabetical Order	Use activity based teaching methods to teach alphabetical order. Give each student a letter card and then ask all of them to stand in alphabetical order.	Textbook p.3
	1	Urdu	حروف کی پېچان	حروف تہجی کی پہچان کے لیے روز انہ حروف تہجی کی آوازوں کا اعادہ لازمی کروایا جائے نیز مختلف الفاظ کے ذریعے حروف کی اشکال کی مشق کروائیے ۔املا اور الفاظ کی جوڑ بھی حروف کی شناخت میں مدد گار ثابت ہوگی ۔	جماعت دوم – صفحہ نمبر ۹، ۱۷،۲۱،۲٤،۵ ۰،۳۰،۵۵
3	2	Math	Addition	When teaching two-digit addition with carrying, always use place- value system. Ask your pupils to add the units first. In the sum, keep the ones at ones place and carry tens to tens place.	Textbook p.6
	3	English	Spelling	Reinforce letter names and sounds through a daily drill by using alphabet flashcards. Use this activity once a day to help students learn spellings.	Textbook p.4
	4	English	Spelling	You have problem teaching spellings to students? Help students identify and write the beginning sound in a 3 letter word. Use the same method for middle and ending sounds in due course	Textbook p.4
	1	Urdu	تفېيم	تفہیم کی صلاحیت کی پختگی کے لیے سب سے پہلے طلبہ کو تصویری تفہیم کی مشق کروائیے، اس کے بعد یک لفظی جواب کی تفہیم ، کثیر الانتخابی جوابات کی مشق ، پھر پورے جملے کی صورت میں جواب پوچھیے اورلکھوائیے ۔ ہر تفہیم میں سوچ کر جواب دینے والے سوالات ضرور شامل کریں۔	جماعت دوم – صفحہ نمبر ۲،۹،۱۵، ۳۰،٤٦،٤٩،٥ ۸،٦٦
4	2	Math	Addition	For practicing addition, do a daily Mental Math activity. Ask children one digit addition and subtraction problems such as 2+3, 5+7, 9-8. Smaller numbers first, bigger later.	Textbook p.6&7
	3	English	Spelling	Teach breaking words in syllables (parts in which a word can be broken). Practice breaking words in syllables by Clapping for each	Textbook p.143, 148, 149

Days	S.No	Subject	Торіс	Message	Text Book Reference
				syllable. eg: Sara: Sa (clap) –ra (clap); Mango: man(clap) - go (clap)	
	4	English	Spelling	To help students learn spellings, teach them breaking words into segments by showing a finger or a counter for each sound e.g. /b/ /a/ /g/ bag	Textbook p.143, 148, 149
	1	Urdu	ہجے ، اور الفاظ کی بناوٹ	ہجے ، اور الفاظ کی بناوٹ کے لیے کلیدی الفاظ اور کثیر الاستعمال الفاظ کے فلیش کارٹز مستقل بورڈ پر لگا کر رکھیے، املا کی مشق ہر دوسرے دن ضروری ہے ، بلند خوانی کے دوران بھی طلبہ سے الفاظ کی جوڑ توڑ دریافت کیجیے اور بورڈ پر مختلف الفاظ لکھوانے کی مشق سے طلبہ کی دیکھنے ، پڑ ھنے اور یاد رکھنے کی صلاحیت میں بہتری آئے گی ۔	جماعت دوم – صفحہ نمبر ۹، ۱۷،۲۱،۲٤،۵ ۰،۳۰،۵۵
5	2	Math	Addition	To improve students' addition skills, write on cards such words as add, altogether, many, more, how many. Place these cards around the blackboard use them frequently.	Textbook p.6
	3	English	Spelling	Want to learn how to teach spellings to young kids! Blend letters together to make words from them e.g. break flag into fla-g, bag into ba-g and so on	Textbook p.36
	4	English	Spelling	Tell students a word and its meanings every day. Make them learn the meanings and spellings through a spelling drill. Teach them how to use it in a sentence. After five words take a spell drill.	Textbook p.4
6	1	Urdu	عبارت کی لکھائی	عبارت سازی سے پہلے طلبہ سے موزوں الفاظ کا استعمال کرتے ہوئے اردو میں گفتگو کی جائے طلبہ کو پہلے تصاویر پر چند الفاظ لکھوائے جائیں ، اس کے بعد جملوں کی صورت میں تصویر کی وضاحت کر ائیں ۔ پانج سےدس جملوں کی باقاعدہ مشق کروائی جائے۔	جماعت دوم صفحہ نمبر ۵۸،۹٦،۳٤

Days	S.No	Subject	Торіс	Message	Text Book Reference
	2	Math	Subtraction	Use place-value system to teach two-digit subtraction with borrowing. Tell students to subtract ones first. Tell them what you borrow from tens place is not "one" but "one ten, broken down in ten ones". Subtract ones and then tens from remaining tens value.	Textbook p.7
	3	English	Spelling	Help your students improve their spellings through games such as 'Sad man that is guessing the word by asking 10 questions. Mark each incorrect letter by drawing a feature of a Sad man on the board.	Textbook p.21
	4	English	Comprehensio n	Want to help students improve their passage comprehension? Try this! Pre teach new vocabulary to the students and ask them to use those words in their own sentences and then teach passage.	Textbook p.58
	1	Urdu	عبارت کی لکھائی	passage. عبارت سازی کے لیے کسی بھی عنوان سے متعلق پہلے اہم الفاظ لکھوائیں ، پھر ان الفاظ سے جملے بنوا ئیں اور پھر پیراگراف کی صورت میں لکھوائیں ۔	جماعت دوم صفحہ نمبر ۲۱
	2	Math	Subtraction	To improve students' subtraction skills, place flash cards of vocabulary for subtraction like subtract, left, less, how many, and operation sign around the black board and use them frequently.	Textbook p.7
7	3	English	Comprehensio n	To improve understanding of the comprehension passage, read and explain the comprehension passage and the questions. Now read the paragraph again and instruct students to underline the lines where the answers to the questions are mentioned.	Textbook p.96
	4	English	Pronoun	Explain the term 'Pronoun' as words used in place of nouns. E.g. Irum likes to read books. "She" likes to finish one book every week Here 'she' is pronoun. Practice with more examples like he, they, it, their.	Textbook p.28,29

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Urdu	متعلقہ ذخیرہ الفاظ کا استعمال	ذخیر ہ الفاظ میں اضافہ کے لیےطلبہ سے اردو میں گفتگو کریں ،سننے اور بولنے کی سرگرمیوں میں اضافہ کریں ، کسی بھی عنوان پر طلبہ سے ان کی رائے لیں اور لکھوائیں ۔	جماعت دوم - صفحہ نمبر ۸۲،٦۲
	2	Math	Multiplicatio n	Introduce multiplication as repeated addition. Practice repeated addition like 5 pairs of shoes will be 2+2+2+2= 10. Come up with similar examples yourself	Textbook p.9&10
8	8 3 English Pronoun	Write sentences on the blackboard starting with nouns for example 'Irum likes to play in the park' and ask students to replace nouns with pronouns such as ' She likes to play in the park'. Use this drill every day till you are sure that students have well understood the concept.	Textbook p.28,29		
	4	English	Pronoun	Use different activities to teach reinforce pronouns such as fill in the blanks; circle the correct option etc to reinforce pronouns.	Textbook p.28,29
	1	Urdu	متعلقہ ذخیرہ الفاظ کا استعمال		جماعت دوم صفحہ نمبر ۱٦،۲۱،٥٠٣٠
9	2	Math	Multiplicatio n	Practice multiplication as repeated addition using easily available materials. Gradually introduce the symbol of multiplication. Tell your students 2+2+2+2= 10 is the same as 5 times 2, which is the same as 5 X 2. Give more similar examples.	Textbook p.9&10
	3	English	Pronoun	After students have understood the concept of pronoun, introduce the pronoun 'it', explain that it is used in place of things or animals. E.g. 'Pencil' which is a thing is replaced by "it".	Textbook p.28,29
	4	English	Masculine/F eminine	To teach masculine / feminine to the students explain the term masculine- male gender / feminine - female gender. Give examples from	Textbook p.24

Days	S.No	Subject	Торіс	Message	Text Book Reference
				the children's family e.g. father - mother, brother – sister.	
	1	Urdu	جملےکی بناوٹ	جملوں کی صحیح بناوٹ سکھانے کے لیے بچوں سے اردو میں بات چیت کیجیے بچوں کو کہانی سنائیے اور اسی کہانی کو دوبارہ بچوں سے سنیے جماعت میں سرگرمی کروائیے اور کہانی مکمل کروائیے ۔چھوٹی چھوٹی کہانیاں لکھوائیں ۔ابتداء تصویری کہانی سے کروائیں ۔	جماعت دوم – صفحہ نمبر ۳٤،۸۲،٦٦،۱ ۰۱
10	2	Math	Multiplicatio n	Make your students memorize the multiplication tables from 1 to 10. Make them practice through daily drill.	Textbook p. 9,10 & 11
	3	English	Masculine/Fe minine	To improve children's vocabulary for masculine/ feminine words, give examples of masculine / feminine animals such as lion- lioness, professionals such as actor-actress. Refer to pictures page x in the textbook for more examples.	Textbook p.25
	4	English	Masculine/Fe minine	Make a list of masculine/ feminine words from around the students' environment and reinforce daily.	Textbook p.25
	1	Urdu	حرفِ جار	کلیدی الفاظ (کا، کی، کے، سے، پر، میں ، نے، کو) کے فلیش کارڈز سوفٹ بورڈ پر ؛گاکر رکھیں بچوں کو مختلف ورک شیٹ میں خالی جگہیں دی جائیں جنھیں حرفِ جار سے پُر کیا جائے۔ جیسے کتاب میز کے اندر ہے گلاس میں پانی ہے۔	جماعت دوم – صفحہ نمبر ۔ ٤٥
11	2	Math	Multiplicatio n	Make students check the answers to multiplication problems by using repeated addition. This will strengthen their understanding of multiplication.	Textbook p. 9,10 & 11
	3	English	Masculine/F eminine	Use activity based teaching methodologies to help students improve the vocabulary of masculine/ feminine words. , Use activities such as; i) Finding pairs of masculine/ feminine words ii) Preparing a family tree with a list of masculine/ feminine nouns	Textbook p.24

Days	S.No	Subject	Торіс	Message	Text Book Reference
	4	English	Prepositions	Ask students to describe the positions of objects in the such as 'the book is on the table'. Ask them what tells them the position of the book? Guide them to the answer and give more examples. Now define that Prepositions are words that describe the position of anyone/ anything	Textbook p.90
12	1	Urdu	واحد جمع	لٹرکا ، لڑکے ۔ اس کے بعد( اں) والے الفاظ لڑکا ، لڑکے ۔ اس کے بعد( اں) والے الفاظ جیسے لڑکی ، لڑکیاں ، کاپی ،کاپیاں، اس کے بعد جملوں میں واحد جمع کی مشق کروائیے ۔	جماعت سوم- صفحہ نمبر ۳۵ ، ۱۳، ۸ ۵۹،٤
	2	Math	Division	Explain division to your students as 'equal sharing'. Make sets of available materials, such as pencils, papers, candies etc. and share them equally between smaller groups of students.	Textbook p. 12 & 13
	3	English	Prepositions	Reinforce prepositions, by instructing students to find objects kept on specific positions in the e.g. 'The bottle is under the table', 'the book is in the bag'.	Textbook p.90
	4	English	Prepositions	You can reinforce prepositions by giving instructions to students e.g. 'put the bag on the desk'. Throw the waste in the dustbin. Ask them to tell the propositions used in the sentences.	Textbook p.90
13	1	Urdu	منفی اور سوالیہ جملے	جماعت میں منفی اور مثبت جملوں کی زبانی مشق کروائیں اور بھی بورڈ پر لکھوائیں ۔ پہلے بچوں سے جی ہاں اور جی نہیں والے سوالات کیجیے پھر ان سے پورے جملوں میں جواب لیں ۔	جماعت دوم – صفحہ نمبر ۔ ۸٦
	2	Math	Division	Explain to your students that that division is also repeated subtraction i.e. Ask how many times we can subtract 2 from 6 to get zero? (3 times). Give them more examples.	Textbook p. 12 &13 .

Days	S.No	Subject	Торіс	Message	Text Book Reference
	3	English	Prepositions	Engage students in different activities, they like that and learn more. You can play games like treasure hunt where you can hide objects and ask students to follow written instructions with prepositions .e.g. Look for the next clue under the table. Find an object in the drawer.	Textbook p.91
	4	English	Prepositions	To reinforce prepositions, have the students make sentences using pictures showing an object's position. E.g. The mouse in the box. The ball on the table.	Textbook p.90
14	1	Urdu	منفی اور سوالیہ جملے	جماعت میں منفی اور مثبت جملوں کی لکھوانے کی مشق بھی کروائیں۔ منفی اور مثبت جملوں کا فرق واضح کیا جائے اور ہر جملے پر بچوں سے پوچھیں کہ یہ کون سا جملہ ہے تاکہ وہ ان کے ناموں سے آگاہ ہو جائیں ۔	جماعت دوم – صفحہ نمبر ۔ ۸٦
	2	Math	Division	After giving enough practice to your students with the concept of division as repeated subtraction, introduce division sign. Ask how many sets of 3 can we subtract from 12 to get 0. This can also be written as 12÷3=4.	Textbook p. 12 & 13
	3	English	Verb: Present Continuous Tense	To teach present continuous tense, reinforce the term 'verbs' as action words by doing some actions and asking the students to name them.	Textbook p.15
	4	English	Verb: Present Continuous Tense	Perform simple actions (clap, read, throw) in the and ask students: What am I doing? Explain that the actions which are happening at time of speaking are present continuous tense.	Textbook p.19
15	1	Urdu	جملےکی بناوٹ	جملوں کی صحیح بناوٹ سکھانے کے لیے بچوں سے اردو میں بات چیت کیجیے بچوں کو کہانی سنائیے اور اسی کہانی کو دوبارہ بچوں سے سنیے جماعت میں سرگرمی کروائیے اور کہانی مکمل کروائیے چھوٹی چھوٹی کہانیاں لکھوائیں ۔ابنداء تصویری کہانی سے کروائیں ۔	جماعت دوم – صفحہ نمبر ۳٤،۸۲،٦٦،۱ ۰۱

Days	S.No	Subject	Торіс	Message	Text Book Reference
	2	Math	Division	Use multiplication tables to solve division problems. Explain to your students that they can directly read the table to find a factor to divide a number. Hence 12÷3 =4 (As 3×4=12).	Textbook p. 11, 12 & 13
	3	English	Verb: Present Continuous Tense	Ask the students to do different actions and then describe them using present continuous tense. e.g. jump and say, 'I am jumping', run and say, 'I am running'.	Textbook p.19
	4	English	Picture Description	Show students pictures from magazines/ newspapers and ask them to describe the pictures using present continuous tense. e.g. the girl is sitting, the boy is running and reinforce present continuous.	Textbook p.18
16	1	Math	Fractions	Introduce the concept of fractions by first, explaining the concepts of 1 whole with examples like an apple, a colour box of 12 pencils, one round "roti" is 1 whole etc.	Textbook p. 37, 38
	2	Math	Fractions	To introduce one half, show them a paper, fold it and cut into halves. Show them the half of it and introduce term half. Draw circle/square/triangle on board, colour half of each shape and say that this is ½ (half).	Textbook p. 37, 38
	3	English	Picture Description	Picture description can help students improve their vocabulary; draw a vocabulary web around the picture guide students describe pictures using the vocabulary.	Textbook p.19
	4	English	Picture Description	Bring pictures from magazines and newspapers in the and explain them in very simple words and structures. Repeat this activity at least three times with different pictures in two weeks	Textbook p.68
17	1	Math	Fractions	Reinforce the concept of fractions by making more parts of a whole. Introduce different fractional numbers by shading parts of a whole and by writing the	Textbook p. 37, 38

Days	S.No	Subject	Торіс	Message	Text Book Reference
				corresponding fraction on the blackboard.	
	2	Math	Fractions	Inform the students that a fraction is written with 2 numbers; denominator (total parts) and numerator (parts taken). Both numbers are separated by a line segment. Write examples on the board.	Textbook p. 37, 38
	3	English	Picture Description	To teach picture description, show the students a picture and ask them to write 2 - 3 simple sentences about it.	Textbook p.68
	4	English	Picture Description	Substitute the noun and verb according to the picture shown to students e.g. Teacher: There is a girl in the picture, she is painting. Students repeat the same.	Textbook p.68
18	1	Math	Fractions	Use fractions in daily life examples. For example, half glass of water, one fourth of a roti, three fourths of the distance from home to school.	Textbook p. 37, 38
	2	Math	Geometry	Introduce different shapes by using flash cards in the room in which shape is drawn with its name. Identify shapes in the environment.	Textbook p. 119 & 120
	3	English	Picture Description	Use picture description to teach correct sentence structure, give guided practice to form sentences by choosing words from a table. For example He writes with the pen, draws pencil	Textbook p.106
	4	English	Picture Description	To practice picture description, provide students with word cards to structure new sentences on their own, later to be corrected by the teacher.	Textbook p.106

# **Key Messages for Class 5 teachers**

#### KEY MESSAGES FOR CLASS 5 TEACHERS

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Living things- Vertebrates and Invertebrat e	Before teaching the concept of vertebrates, draw backbone on the board and introduce the term backbone or spine or vertebral column. Explain them that animals with back bone are called vertebrates like cat, fish, cow.	KP TBB, P# 7&12
	2	Social Studies	Latitude and Longitudes	Introduce latitude and longitude by drawing horizontal lines (Latitude) and vertical lines (longitude) on the board, explain that these imaginary lines help locate places on earth easily.	KP TBB, P# 2 & 3
1	3	Urdu	حروفِ تہجی کی ترتیب	جماعت پنجم کے بچوں کے نخیرہ الفاظ میں اضافے کے ساتھ ساتھ انھیں حروف تہجی کی ترتیب سے الفاظ لکھنے کی مشق دینا ضروری ہے ۔ مختلف الفاظ کی فہرست بنائیں اور بچوں سے ان کی ترتیب حروف تہجی کے مطابق کروائیں ۔	جماعت پنجم- اردو (لازمی)- صفحہ نمبر ۱۷اور ۱۱
	4	Math	Order of operations	Your students need practice in using BODMAS rule for order of operations. Begin with two operations only. Make them use MAS (Multiply Add Subtract) and then DMAS (Divide Multiply Add Subtract) and finally BODMAS (Brackets Off Divide Multiply Add Subtract).	Textbook p. 15, 16 & 17
	5	English	Types of Nouns	To teach the students about nouns, show them objects/pictures relevant to their life such as kitchen, park, market etc. and ask them to name them.Explain them that naming words are called Nouns.	Textbook p.12
2	1	Science	Living things- Vertebrates and Invertebrat e	To reinforce the concept of vertebrates, ask students to feel their back bone and notice where it starts and ends, explain them animals without backbone are called invertebrate like ant, butterfly, snail.	KP TBB, P# 7&12

Days	S.No	Subject	Торіс	Message	Text Book Reference
	2	Social Studies	Latitude and Longitudes	Explain the terms 'Latitudes and Longitudes'. Latitude is the distance north or south of the equator. Longitude is distance east or west of the prime meridian.	KP TBB, P# 2 & 3
	3	Urdu	عبارتسازى	ذخیر بالفاظمیناضافہاور جملے سے مطابقتر کھن ےکے تصور کو و اضحکر نے کے لیے طلباءس ےگفتو شنیدکے دور انمختلفسو الاتکیجیے جیس مآپنے کلکیاکیاتھا؟اتو ار کو آپکہانجائینگے؟آپ کالچھادو ستکو نہے اور اسکیکو نسیعادتآپکو پسند دہے ؟و غیر ہ ۔ کو ششکیجیے کہبچے مکملجملو نکیصور تمینج و اباتدیناور جہانغلطیکرینو ہانانکیاصلاحکیجائ	جماعتینجم- اردو (لازمی)- صفحېنمبر ۳۱- ٤١
	4	Math	Word Problems/ Unitary Method	Help your students with word problems by introducing the following steps: Read carefully, underline the keywords, identify operation, solve the question and lastly check correctness. Practice each step.	Textbook p. 107 & 108
	5	English	Types of Nouns	Use everyday life objects to explain the concept of countable (that students can count) and uncountable nouns (that cannot be counted) such as books, pencils as countable noun and sand, water as uncountable objects.	Textbook p.10
	1	Science	Living things- Vertebrates and Invertebrat e	To differentiate between vertebrate and invertebrate, list names of different animals and ask students to make 2 columns (vertebrate and invertebrate) in their copies and write names of animals in their respective columns.	KP TBB, P# 7&12
3	2	Social Studies	Latitude and Longitudes	To retain the knowledge of latitude and longitude, use material like balloons or simple paper balls to draw lines of latitude and longitude by using markers or pencils	KP TBB, P# 2 & 3
	3	Urdu	عبارتسازی	بچوں سے مختلف موضو عات پر عبار ت لکھوائی جائے ۔ شراکت دار لکھائی کی مدد سے عبارت لکھوانے کی ابتداء کی جائے ،	جماعتینجم۔ اردو (لازمی)۔ صفحہنمبر ۳۲۔

Days	S.No	Subject	Торіс	Message	Text Book Reference
				انھیں کاٹ چھانٹ کرنا سکھائیں اور فائنل ڈرافٹ سمجھایا جائے ۔	٤١
	4	Mathe matics	Word Problems/ Unitary Method	Ask students to create word problems on their own and solve it.	Textbook p. 107, 108 & 109
	5	English	Simple Tenses	Explain to the students that a verb in the tense tells us when and what action takes place. In the sentence, he eats an apple, eats is a present tense verb.	Textbook p.170
	1	Science	Living things- Vertebrates and Invertebrat e	Ask students to draw animals and insects under the heading of vertebrates and invertebrates. Display student's work. Appreciate the correct classification by students and make corrections where necessary.	KP TBB, P# 7&12
	2	Social Studies	Latitude and Longitudes	Use resources such as globe, atlases and cardinal compass to help students understand about 'Latitude and Longitudes'.	KP TBB, P# 2 & 3
4	3	Urdu	جملونكيدرست بناوٹ	Latitude and Longitudes . مختلفموضو عاتپر بچونسے انکیر ائےلیجیے ۔ ار دو بولنے پر حوصلہ افز ائیکیجیے ۔ جملہساز یکیبار بار مشقکر وائیں قواعدکیدر ستکےلیے خالیجگہو نکیمختلفور ک شیٹکر وائیں ۔	جماعتینجماردو (لازمی)- صفحېنمبر ٤٠، ٦٦،٧٣،٩٨،١ ٣٥
	4	Math	Word Problems/ Unitary Method	To introduce the concept of unitary method, help students use real life examples to calculate unit cost of different objects, such as if 5 pencils cost 60, what is the cost of 1 pencil?	Textbook p. 107, 108 & 109
	5	English	Simple Tenses	To help students understand past tense, explain that it describes already completed actions e.g. 'I wrote on the board'. She drank water.	Textbook p.179
5	1	Science	Living things- Vertebrates and Invertebrat e	Plan a short quiz or a game where students can ask questions from each other about vertebrates and invertebrates.	KP TBB, P# 7&12

Days	S.No	Subject	Торіс	Message	Text Book Reference
		Social	Latitude	Introduce the terms equator (an	KP TBB, P# 2
		Studies	and	imaginary circle between the	& 3
	n		Longitudes	North and South Pole) and prime	
	Z			meridian (an imaginary circle that	
				divides the earth into east and	
				west).	
		Urdu	الفاظكيضد	بچونكو الفاظاور ضدكےمعنيو اضحطور پر سم	جماعتپنجم-
				جھائےجائیں ۔	اردو (لازمى)-
	3			بچونگوالفاطاور صدیحےمعلیواصحطور پر سم جھائےجائیں ۔ روز مرہ کیزندگیسےلیےگئےالفاظ کیضدبناناس کھائِیں ۔	صفحېنمبر ٩،
	C C			کھائیں ۔	۳۰ اور ۲۹
				مثلاً او پر ، نیچے ، اندر ، باہر ، کالا ، سفید ، میٹھا، کڑ	
		D.A I.		وا،دائيں،بائيں،بہترين،بدترين،موٹا،پتلا	
		Math	Highest	Introduce the concept of factor	Textbook p.
			Common	and multiple by explaining that	22 & 23
			Factor	Factors and multiples are both to	
	4		(HCF)	do with multiplication: Factors are	
				what we can multiply to get the	
				number. Multiples are what we	
				get after multiplying the number	
			Circula	by an integer (not fraction).	Tauthaal
		English	Simple	Explain students that simple	Textbook
	-		Tenses	present tense describes actions	p.170
	5			which are about routines, habits,	
				daily activities, general truths e.g. 'I write on the board everyday'.	
		Science	Living	Introduce 5 groups of vertebrates;	KP TBB, P#
		Science	things-	birds, fishes, amphibians, reptiles	7- 10
	1		Classificatio	and mammals with the help of	/ 10
	-		n of	their pictures, showing vertebral	
			Animals.	column.	
		Social	Latitude	Write key words and place them	KP TBB, P# 2
		Studies	and	on the classroom board to	& 3
	2		Longitudes	reinforce the concept of 'Latitude	G 3
6			Longitudes	and Longitudes'.	
		Urdu	عدار ت	بچوں کی اردوں لکھتے اور ہو آتے ہوئے	جماعت پنجم-
	-		سازي	قواعد کی غلطیاں لازمی درست کی جائیں	اردو (لازْمیٰ)۔
	3			تاکہ بچے اپنی اغلاط کی اصلاح کر کے	صفحہ نمبر
				اسی جملے کو دوبارہ لکھ اور پڑ ہ سکیں ۔	٤١_٣٦
		Math	Highest	To reinforce the concept of factors	Textbook p.
	Д		Common	and multiples, provide different	22 & 23
	7		Factor	numbers and ask the students to	
	2 3 4 5 1 2 3 4		(HCF)	find their factors and multiples.	

Days	S.No	Subject	Торіс	Message	Text Book Reference
	5	English	Simple Tenses	Help students understand future tense by explaining that this tense states what will happen in the future such as 'I will go to school tomorrow'. Emphasize on the use of will.	Textbook p.190
	1	Science	Living things- Classificatio n of Animals.	Assign students to draw 1 animal of each group and write key features of that group such as body parts, skin, habitat, food. Display their work and appreciate the correct work. Make corrections where necessary.	KP TBB, P# 7- 10
	2	Social Studies	Latitude and Longitudes	While teaching 'Latitude and Longitudes', revise all types of angles with the help of protractor by drawing a picture of big protractor on the board.	KP TBB, P# 2 & 3
7	3	Urdu	جملےکیبناو ٹ	جملوں میں ترتیب رکھنے کے لیے گڈ مڈ جملے دئیے جائیں اور طلباء سے اس کی ترتیب درست کرنے کے لیے کہا جائے ۔ یہ عبارت کوئی کہانی کی صورت میں ہو تو بچے زیادہ دلچسپی لیں گے ۔	جماعتینجماردو (لازمی)- صفحہنمبر ٤٠، ٦٦،٧٣،٩٨،١ ٣٥
	4	Math	Least Common Multiple (LCM)	Write any two numbers on the board, ask students to find multiples of both numbers, circle common multiples and introduce LCM by identifying Least Common Multiple of both the numbers.	Textbook p. 28 & 29
	5	English	Simple Tenses	Multiple of both the numbers.oleUse daily activities from students'	Textbook p.179
8	1	Science	Micro- organism	Introduce microorganism as an extremely small living thing that can only be seen with a microscope.	KP TBB, P# 23
0	2	Social Studies	Latitude and Longitudes	Practice the concept of 'Latitude and Longitudes', by asking students to locate different places on the map with the help of	KP TBB, P# 2 & 3

Days	S.No	Subject	Торіс	Message	Text Book Reference
				latitude and longitude. Example: Which country is 20o North and 40o East?	
	3	Urdu	الفاظ کی ضد	بچوں کو الفاظ اور ضد کے معنی واضح طور پر سمجھائے جائیں ۔ روز مرہ کی زندگی سے لیے گئے الفاظ کی ضد بنانا سکھائیں ۔ مثلاً اوپر ، نیچے ، اندر ، باہر ، کالا ، سفید، میٹھا ، کڑوا ، دائیں ، بائیں ، بہترین ،بدترین ، موٹا ، پتلا	جماعتینجماردو (لازمی)- صفحہنمبر ۹، ۳۰ اور ٦٦
	4	Math	Highest Common Factor (HCF)	Write any two numbers on the board, ask students to find factors of both numbers, circle common factors and introduce HCF by identifying Highest Common Factor of both the numbers.	Textbook p. 22 & 23
	5	English	Simple Tenses	Talk about the things students do daily to reinforce Present tense. e.g. You come to school. You brush your teeth. Practice Present tense for a week.	Textbook p.171
	1	Science	Micro- organism	Show a picture or model or real organism through prepared slides and microscope to the students if possible.	KP TBB, P# 23
	2	Social Studies	Map skills and Pakistan's location	Introduce cardinal directions, East, West, North and South with the help of compass needle or direction of sun rise and sun set to teach map skills to the students.	KP TBB, P# 8&9
9	3	Urdu	واحدكيجمع	طلبہ کایہ تصور و اضحکرینکہ و احداو رجمعمین کیافر قہے ، پہلے تصاویر یاجماعتمینمو جو داشیا ءکیمثالو نکے ذریعے و احداو رجمعسمجھائیے ا و رتمامالفاظبور ڈپر لکھیں ۔ پہلے (ے) و الے الفاظبنو ائینجیسے لڑکا،لڑکے ۔ اسکے بعد ( اں) و الے الفاظجیسے لڑکی،لڑکیاں،کاپی،کاپیاں۔	مختلفاسباقمينز ير استعمال
	4	Math	LCM and HCF	Write vocabulary related to HCF and LCM on flash cards and place them around the blackboard to reinforce the concept such as multiple, least common multiples, factors and highest common factors.	Textbook p. 22, 23 & 24

Days	S.No	Subject	Торіс	Message	Text Book Reference
	5	English	Simple Tenses	Talk about the things students will do when they will get back home to reinforce Future tense. e.g. You will watch television. You will eat lunch. Practice Past tense for a week.	Textbook p.190
	1	Science	Micro- organism	Assign students to draw pictures of microorganism and discuss their characteristics. Display information on the chart paper to retain knowledge.	KP TBB, P# 23
	2	Social Studies	Map skills and Pakistan's location	Play maze game/ treasure hunt to locate hidden objects with the help of cardinal directions such as take 2 steps to east, move 5 steps towards south etc.	KP TBB, P# 8&9
	3	Urdu	الفاظ کی ضد	بچوں کو ایک پیر اگر اف دیا جائے اور وہ اس میں موجود الفاظ کی ضد بنا کر عبارت کو دوبارہ لکھے ۔	اردو (لازمیٰ)۔
10	4	Math	Equivalent and simplificatio n of fractions	Tell your students that equivalent fractions are fractions that look different but show exactly the same amount. You can make equivalent fractions by multiplying or dividing the numerator and denominator by the same number.	Textbook p. 43,44 & 45
	5	English	Simple Tenses	To identify different forms of verbs in the three tenses, put a list of these verbs written on a chart paper in the classroom e.g. eat, ate, will eat and reinforce daily.	Textbook p. 170- 171; 179 - 181, 189 – 191
11	1	Science	Seed structure and Germinatio n	To teach children about structure of seed, introduce the terms Monocotyledon seed (seed carrying one cotyledon leaf) and Dicotyledonous seed (seed carrying two cotyledon leaves).	KP TBB, P# 37
	2	Social Studies	Map skills and Pakistan's	Give square line papers to students to draw school map on paper and write locations of	KP TBB, P# 8&9

Days	S.No	Subject	Торіс	Message	Text Book Reference
			location	principal office, your class room or	
				main gate, etc.	
	3	Urdu	جملونكياقسام	طلباكو جملو نكياقسامسمجھانےكےليے جماعة مينمنفياور مثبت، حكميہ، سو اليہ، التجائيہ جملو نكيز بانيمشقكر وائيناور بھيبور ڈپر لكھو ائيں۔ پہلے بچو نسے جيہاناور جينہينو الے سو الاتكيجيے ےپھر انسے پور ے جملو نمينجو ابليں۔	جماعتینجم- اردو (لازمی)- صفحہنمبر ۱۲۱، ۱۲۱، ۱۲۲
	4	Math	Types of Fractions	Tell your students that Fractions whose numerators are less than the denominators are called proper fractions.(Numerator < denominator) For example 2/3, ¾, 4/5, 5/6 etc. Ask students to come up with more examples.	Textbook p. 37 & 38
	5	English	Simple Tenses	To reinforce the simple tenses, make children read any unit given in the book and circle the verb with labels as P for past, Pr for present and F for future.	Textbook p. 170- 171; 179 - 181, 189 – 191
	1	Science	Seed structure and Germinatio n	Prepare flash cards of words like, monocots, dicots, cotyledon, leaf, germination etc., display in the class and drill daily to reinforce the core vocabulary related to Germination.	KP TBB, P# 37
12	2	Social Studies	Map skills and Pakistan's location	To improve map skills teach children to locate the neighboring countries of Pakistan on Pakistan's map with the help of cardinal directions.	KP TBB, P# 8&9
	3	Urdu	واحد کی جمع		مختلفاسباقمینز پر استعمال
	4	Math	Types of Fractions	Tell your students that improper fractions are the opposite of proper fractions. For example, 3/2, 4/3, 5/4, 6/5 are improper fractions. Ask students to come up with more examples.	Textbook p. 37 & 38

Days	S.No	Subject	Торіс	Message	Text Book Reference
	5	English	Simple Tenses	Want to help students learn tenses well! Try this: Divide the class into three teams i.e. Present, Past and Future. Give them a verb and ask each team to use that in a sentence. Continue this practice unless you are sure that all the students have practiced all the tenses.	Textbook p. 170- 171; 179 - 181, 189 – 191
	1	Science	Seed structure and Germinatio n	Provide soaked seeds (chick peas or peas) and rice or corn seeds to the students to observe the difference of dicot and monocot. Ask them to draw the structure on paper and highlight the differences. Tell them that peas are dicots and rice and corn are monocots	KP TBB, P# 37
	2	Social Studies	Impact of Human activities on climate	Help students understand that every local action has a global affect. E.g. If you plant a tree or cut a tree, both will affect the environment/climate.	KP TBB, P# 39&40
13	3	Urdu	جملوں كى اقسام	طلبا کو جملوں کی اقسام سمجھانے کے لیے جماعت میں منفی اور مثبت ، حکمیہ، سوالیہ ،التجائیہ جملوں کی زبانی مشق کروائیں اور بھی بورڈ پر لکھوائیں ۔ پہلے بچوں سے جی ہاں اور جی نہیں والے سوالات کیجیے پھر ان سے پورے جملوں میں جواب لیں۔	جماعت پنجم- اردو (لازمی)- صفحہ نمبر ۱۲۱، ۱۲۱، ۱۲۲
	4	Math	Types of Fractions	Tell your students that a mixed fraction is a combination of a whole number and a proper fraction. For example (2 ¼), Ask students to come up with more examples.	Textbook p. 38 & 39
	5	English	Parts of Speech	Explain to the students that "Parts of speech" are the basic types of words that English has.It is important to be able to recognize and identify the different types of words in English, so that you can understand grammar explanations and use the right word form in the right place.	Textbook p.1, 76-79, 118 – 121

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Environmen tal pollution- Causes and effects	Explain the meanings of vocabulary like pollution, illness, toxic material, acid rain and litter to the students before teaching the concept of environmental pollution.	KP TBB, P# 49 – 52
	2	Social Studies	Impact of Human activities on climate	Assign students to draw and present different types of pollution they see around them like smoke from factories, cars and trucks, deforestation, throwing waste on land or in water bodies.	KP TBB, P# 39&40
14	3	Urdu	جملوں کی اقسام	جملوں کا انتخاب کرتے ہوئے خیال رہے کہ کوئی ایسا جملہ نہ استعمال کیا جائے جو اخلاقیات کے خلاف جاتا ہو ۔ اسی طرح لکھوانے کی مشق بھی کروائیں ، ہر جملے پر بچوں سے پوچھیں کہ یہ کون سا جملہ ہے تاکہ وہ ان کے ناموں سے آگاہ ہو جائیں	جماعت پنجم - صفحہ نمبر ۱۲۱ ، ۱۲۱، ۱۲۲
	4	Math	Addition and subtraction of fraction	Begin to teach addition of fractions by only using fractions with same denominator.	Textbook p. 38 & 39
	5	5of fraction5EnglishParts of SpeechExplain eight basic part of speech to the students. Nouns are namin words. Verbs are action words. Adjective describes the quantity and quality of a noun. Adverb describes a verb. Add examples to elaborate each part of speech	Adjective describes the quantity and quality of a noun. Adverb describes a verb. Add examples to	Textbook p.1, 76-79, 118 – 121	
15	1	Science	Environmen tal pollution- Causes and effects	Integrate the information learnt about environmental pollution, relate Science topic of environmental pollution to the Social Studies topic of "Human activities and climate".	KP TBB, P# 49 – 52
15	2	Social Studies	Impact of Human activities on climate	Organize plantation and cleanliness day in the school to create awareness about environment and reinforce the impact of human activities on the climate.	KP TBB, P# 39&40

Days	S.No	Subject	Торіс	Message	Text Book Reference
	3	Urdu	جملوں کی در ست بناوٹ	درست بناوٹ والے جملوں کی مشق کے لیے طلبہ سے موزوں الفاظ کا استعمال کرتے ہوئے اردو میں گفتگو کی جائے ۔ قواعد کی درستی اسی صورت ہو سکتی ہے جب طلبہ اردو میں گفتگو کریں ۔	جماعت پنجم - اردو (لازمی)- صفحہ نمبر ٤٠، ٦٦،٧٣،٩٨،١ ٣٥
	4	Math	Addition and subtraction of fraction	To add 1/5 and 2/5, make 2 fractions on 2 different papers and place them together, let the students count how many fifths are there altogether? (3 fifths) Explain them 1/5 + 2/5 = 3/5. Give more examples.	Textbook p. 37 & 38
	5	English	Parts of Speech	To practice identifying parts of speech, make the students circle one part of a speech at a time in a sentence. Later 2, 3 or more parts of speech can be identified.	Textbook p.1, 76-79, 118 – 121.
	1	Science	Matter and States- Property of States	Introduce the vocabulary about matter and display it on the board like matter, volume, mass, space, solid, liquid, gas.	KP TBB, P# 61 & 63
	2	Social Studies	Impact of Human activities on climate	Organize a walk around school location to sensitize local community about effects of pollution and deforestation.	KP TBB, P# 39&40
	3	Urdu	حملوں کی		جماعتینجم - اردو (لازمی)- صفحہنمبر ۲۰، ۲۱،۷۳،۹۸،۱
16	4	Math	Addition and subtraction of fraction	For teaching addition of mixed fraction, add whole numbers first and then proper fraction. For 2 $\frac{1}{4}$ + 1 $\frac{1}{4}$ , add whole numbers 2 + 1 = 3; then proper fraction $\frac{1}{4}$ + $\frac{1}{4}$ = 2/4 which is 1/2 when simplify. Add whole number, 3+1/2 = 3 1/2	Textbook p. 38 & 39
	5	English	Parts of Speech	Write a paragraph on the board and ask students to identify parts of speech, make them circle and label Nouns as N, Pronouns as P, Verbs as V, Adjectives as Adj, Adverbs as Adv, Pronouns as Pr, and Prepositions as Pre. Practice this activity for a week.	Textbook p.1, 76-79, 118 – 121.

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Matter and States- Property of States	Assign students to collect different items that are easily available around them like pencils, water, and water bottle and discuss their properties according to different types of matter.	KP TBB, P# 61 & 63
	2	Social Studies	Impact of Human activities on climate	For raising awareness about healthy environment, involve prominent personalities of the local community in taking steps for decreasing pollution and increasing plantation.	KP TBB, P# 39&40
17	3	Urdu	جملوں کی در ست بناوٹ	بچونكوجملونكيترتيبسكھائيےجسمينفعل،فاع لاور مفعولكيمددسےجملېسازيكيتحريريمشقك روائيے -	اردو (لازمی)-
	4	Math	Addition and subtraction of fraction	For mixed fraction with different denominators, add whole numbers and proper fractions separately. Then add their answers together.	Textbook p. 38 & 39
	5	English	Preposition	Explain the term 'Preposition' to the students by telling them that these are words that describe the position of an object/ animal or person. For example, the book is in the bag and the bag is on the desk.	Textbook p.107, 109
	1	Science	Matter and States- Property of States	Reinforce the three states of matter i.e. solid, liquid and gas, assign homework to list five examples of solids, liquids and gases each.	KP TBB, P# 61 & 63
18	2	S.St	Greenhouse Gases and their effects	Before teaching about greenhouse gases, first discuss the relationship of the Sun and the Earth and how important is Earth's atmosphere.	KP TBB, P# 40•41&42
	3	S.St	Greenhouse Gases and their effects	Display key words like radiation, heat, trap, gases, carbon dioxide, methane, nitrous oxide and water vapors on prominent places in the classroom to help students retain the concept of greenhouse gases.	KP TBB, P# 40•41&42

Days	S.No	Subject	Торіс	Message	Text Book Reference
	4	Math	Addition and subtraction of fraction	To add mixed fractions, follow the steps: 1.Add whole numbers 2.Make equivalent fractions of proper fraction. 3. Solve numerators. 4. Make its simplified form 5.Add whole numbers with fractions.	Textbook p. 38 & 39
	5	English	Preposition	To practice prepositions, provide students a paragraph and ask them to identify and circle prepositions in the paragraph.	Textbook p.109
	1	Science	Matter and States- Change of States	Before teaching the changes in the state of matter, use example of water and explain students that when water is heated, it becomes vapours and when it is frozen, it becomes ice. Heat changes the arrangement of molecules.	KP TBB, P# 64 & 65
	2	Science	Matter and States- Change of States	Explain students that evaporation is the change of state from liquid to gas and condensation is the change of state from gas to liquid.	KP TBB, P# 64 & 65
19	3	Social Studies	Greenhouse Gases and their effects	Help students to understand how greenhouse works by placing a half cut plastic bottle (atmospheric layer) over a small potted plant and let the students observe the formation of water vapors in the bottle.	KP TBB, P# 40•41&42
	4	Math	Multiplicati on and division of fraction	Explain multiplication of fraction by using the term "of". Ask students to show you half of half ( ½ of ½)of a paper. This is one quarter. Replace word "of" with sign of multiplication, ½ x ½ = ¼	Textbook p. 43 & 44
	5	English	Sentence Structure	To teach correct sentence structure, explain that every complete sentence contains two parts: a subject and a predicate. The subject is what (or whom) the sentence is about, while the predicate tells something about the subject.	Textbook p.90

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Matter and States- Change of States	Explain to the students that melting is the change of state from solid to liquid while freezing is the change of state from liquid to solid.	KP TBB, P# 64 & 65
	2	Science	Matter and States- Change of States	Use the scientific terms evaporation, condensation, freezing and melting repeatedly to familiarize students with the terms.	KP TBB, P# 64 & 65
20	3	Social Studies	Federal and Provincial Governmen t	To help students understand roles and responsibilities of Government, list the basic necessities of life and identify resources provided by Government.	KP TBB, P# 81&82
	4	Math	Multiplicati on and division of fraction	For teaching multiplication of fraction, tell students to multiply numerator by numerators and denominators with denominators. The last fraction should always be in simplified form.	Textbook p. 43, 44 & 45
	5	English	Sentence Structure	While teaching sentence structure, introduce types of sentences and the punctuation marks for each type i.e. statement, questions and exclamatory.	Textbook p.146
	1	Science	Matter and States- Condensati on and Evaporation in nature.	Help students to understand the concept of evaporation and condensation from the examples of daily life like drying of clothes / puddles and condensation of water vapours on cold glass etc.	KP TBB, P# 64 & 68
21	2	Social Studies	Federal and Provincial Governmen t	Use the example of hierarchal system of the school (difference between role of class teacher and head teacher), explain the difference between Federal and Provincial Government.	KP TBB, P# 81&82
	3	Social Studies	Federal and Provincial Governmen t	Organize an election in the school and assign roles and responsibilities to the students to help them understand the function of 'Federal and Provincial	KP TBB, P# 81&82

Days	S.No	Subject	Торіс	Message	Text Book Reference
				Government'.	
	4	Math	Multiplicati on and division of fraction	To teach division of fraction, help students to understand the concept of how many. Use example of how many halves are there in a whole? (2) How many quarters are there in 2 wholes? (8). So $1 \div \frac{1}{2} = 2$ and $2 \div \frac{1}{4} = 8$	Textbook p. 50 & 51
	5	English	Sentence Structure	While teaching sentence structure, introduce Statements - 'Telling' sentences; begin with a capital letter; ends with a period or full stop (.) e.g. The elephant is big.	Textbook p.146).
	1	Science	Matter and States- Condensati on and Evaporation in nature.	To help students understand different processes involve in water cycle, ask students to draw water cycle and label it properly.	KP TBB, P# 64 & 68
	2	Social Studies	Import and Export in Pakistan	Before teaching the concept of import and export, explain to the students that exchange of goods is called trade.	KP TBB, P# 129&130
22	3	Math	Multiplicati on and division of fraction	Explain that in conventional method of division in fraction, we use reciprocal of the fraction after the division sign and change division into multiplication. The sum $2 \div \frac{1}{4}$ , will be solved as $2 \times \frac{4}{1} = 8$ .	Textbook p. 50 & 51
	4	English	Sentence Structure	Questions are 'Asking' sentences; they end with a question mark.(?) e.g. Where is the your book Ahmad?	Textbook p.146
	5	English	Sentence Structure	While teaching sentence structure, introduce Exclamatory sentences; showing sudden/strong feelings and end with an exclamation mark (!). The huge elephant sat on the man!	Textbook p.146

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Matter and States- Condensati on and Evaporation in nature.	Elaborate the concept of evaporation and condensation in nature; explain the process of water cycle through a small role play about journey of a water drop in water cycle.	KP TBB, P# 64 & 68
	2	Science	Matter and States- Condensati on and Evaporation in nature.	Display the key words in the classroom like sun, water, heat, evaporate, cloud, cool, precipitation, rain, collect, rivers, lakes, streams and sea to reinforce the concept of water cycle.	KP TBB, P# 64 & 68
23	3	Social Studies	Import and Export in Pakistan	Explain the terms import and export as export is exit of goods and import is entry of goods in the country.	KP TBB, P# 129&130
	4	Math	Decimal Fractions	For teaching the concept of decimals, introduce decimal place values to the students i.e. ones, tenth, hundredths, thousandth.	Textbook p. 58 & 59
	5	English	Sentence Structure	While teaching sentence structures, introduce 'Questions' - asking sentences; ends with a question mark (?). Example - Where is the cat?	Textbook p.138
	1	Science	Forces & Machines – Friction	To teach children about Friction, explain the term and say that it is the resistance that one surface or object encounters when moving over another.	KP TBB, P# 75 & 79
24	2	Science	Forces & Machines – Friction	Explain the concept of friction by rolling a ball on two different surfaces i.e. (rough) carpet and (smooth) table top. Let the students observe that the ball moves slower on rough surface.	KP TBB, P# 75 & 79
	3	Social Studies	Import and Export in Pakistan	To reinforce the concept of import and export, make 4 groups of students, provide 1 type of good to each group (chart, color pencils, erasers and pencils). Assign each group a task to draw pictures by exchanging goods with other.	KP TBB, P# 129&130

Days	S.No	Subject	Торіс	Message	Text Book Reference
	4	Math	Decimal Fractions	To reinforce the concept of place value in decimal, tell students place value of a number in a jumbled form and ask them to make a decimal number. Example: 4 units, 0 hundredth, 5 tenth and 1 thousandth is 4.501.	Textbook p. 59 & 60
	5	English	Punctuation and Sentence type	To teach sentence structure, after explaining types of sentences, also explain that in statements - affirmative sentences, 'helping verbs' follow the subject while in questions - interrogative sentences, 'helping verbs' come in the beginning.	Textbook p.146.
	1	Science	Forces & Machines – Friction	<ul> <li>Explain the advantages of friction;</li> <li>a. Air resistance (type of friction)</li> <li>helps slow down the parachutists</li> <li>b. Prevents slipping or sliding</li> <li>c. Helps us in moving</li> <li>d. Keeps things at their places.</li> </ul>	KP TBB, P# 75 & 79
	2	Mathem atics	Decimal Fractions	Explain students that in addition or subtraction of decimal numbers, alignment of writing numbers under the fixed place value positions is essential.	Textbook p. 60 & 61
25	3	Math	Multiplicati on of decimals	While teaching multiplication of decimals, inform students that we first multiply the digits, then count the decimal places in the question and place the decimal accordingly.	Textbook p. 61 & 62
	4	English	Punctuation and Sentence type	To reinforce three types of sentences, prepare a sentence train with 3 labeled carriages. Instruct students to write and keep the statements, questions and exclamations in the respective carriage.	Textbook p.146
26	1	Science	Forces & Machines – Friction	<ul> <li>Explain the disadvantages of friction;</li> <li>It produces heat which decreases the efficiency of machines.</li> <li>The tires of the cars or soles</li> </ul>	KP TBB, P# 75 & 79

Days	S.No	Subject	Торіс	Message	Text Book Reference
				of the shoe worn out. · Slows down objects and people.	
	2	Science	Forces & Machines – Balanced / Unbalanced Force & inertia	Organize a game of tug of war between the two teams, first with unequal and then with equal members. Discuss the students' experience and concept of balanced and unbalanced force with the students.	KP TBB, P# 81 & 83
	3	Math	Types of angles	An angle is formed when two lines share a common point. Show examples of angles to your students in the classroom, such as the corner of their desks, angles in the blackboard, roof, etc.	Textbook p. 119, 120 & 121
	4	Math	Types of angles	Cutting 2 strips of papers. join them at one point with thumb pin to place it on a table. Move one arm to show acute angle, right angle, obtuse angle. Place the names of different types of angles on the walls of your classroom.	Textbook p. 119, 120 & 121
	5	English	Punctuation and Sentence type	To reinforce types of sentences, practice identifying and labeling the three kinds of sentences with S (Statement), Q (Question) and E (Exclamation).	Textbook p.146
27	1	Science	Forces & Machines – Balanced / Unbalanced Force & inertia	Introduce the concept of Inertia as resistance to oppose the external force. Ask students to relate to the experience of applying sudden brakes in a bus while traveling and how their body jerks; this is inertia.	
27	2	Science	Forces & Machines – Simple machines	Use real object like cutting tools, shovel, knife, axe and saw to introduce basic six machines which are wheel, lever, screw, pulley, inclined plane and wedges. Explain them that simple machines help to make our work easy.	

Days	S.No	Subject	Торіс	Message	Text Book Reference
	3	Science	Forces & Machines – Simple machines	Assign students to make models of simple machines that are used in daily life and present to entire class/school.	
	4	Math	Types of angles	Help students understand angles, ask them to find angle around the school or home. (For example, angles between the fan's blades, angles in the door frame.	Textbook p. 119, 120 & 121
	5	English	Creative writing	To improve students' story writing skills, describe the elements of a story i.e. characters, settings – where the story took place, the beginning, problem and solution/end of the story. It is useful to explain each part in the light of the story.	Textbook p.75
	1	Science	Electricity and magnetism – Electric Current & Charges	Ask the students to list some electric appliances they use in their home. Explain them that electrical energy is a form of energy which we supply to work our appliances.	KP TBB, P# 108 & 110
	2	Science	Electricity and magnetism – Electric Current & Charges	For teaching electric current, make a circuit using wire, bulb, switch and battery. The bulb lights up or switches off as the switch closes or opens respectively. Help students to make their own circuit too.	KP TBB, P# 108 & 110
28	3	Math	Perimeter and area	Explain the concept of 'Area' of an object as the covered surface and 'Perimeter' as length of the boundary of that object.	Textbook p. 149 &150
	4	English	Creative writing	To teach students good story writing skills tell them that a story usually has a problem and the characters of the story try to solve it.	Textbook p.108.
	5	English	Creative writing	To improve identification of the elements of the story (characters, setting, beginning, problem and solution/end), read a story and make the students identify these elements in it.	Textbook p.108

Days	S.No	Subject	Торіс	Message	Text Book Reference
	1	Science	Light properties &Behavior – Properties of Objects	Bring different objects in the class such as glass, plastic glass, wooden piece, cloth piece, frosted glass and a torch. Throw the light on each object and see if the light passes through them or not. Classify the objects as transparent, opaque and translucent objects.	KP TBB, P# 94 - 96
29	2	Science	Light properties &Behavior – Properties of Objects	Explain that torch, Sun and Stars are luminous object, they have their own light whereas non- luminous objects do not have their own light but can be seen when light falls on them such as hands or tables.	KP TBB, P# 94 - 96
	3	Math	Perimeter and area	Reinforce the concept of 'area and perimeter' by using classroom objects like blackboard in which black colour shows area and its outline shows perimeter.	Textbook p. 149 &150
	4	English	Creative writing	To practice story writing skills, instruct students to write a story in groups first deciding the title, characters, beginning, problem/middle and solution/ending.	Textbook p.108
	1	Science	Light properties &Behavior – Lunar Eclipse	Before starting the topic of Lunar Eclipse, have a brainstorming session on the topic in the class to assess student's prior knowledge.	KP TBB, P# 100
30	2	Science	Light properties &Behavior – Lunar Eclipse	Define the term eclipse as the partial or total blocking of light. Explain the reasons for eclipse.	KP TBB, P# 100
	3	Science	Light properties &Behavior – Lunar Eclipse	Use pictures and explain that the solar eclipse occurs when the moon comes in between the sun and the earth and Lunar eclipse occurs when the earth comes between the sun and the moon.	KP TBB, P# 100
	4	Science	Light properties	Place the vocabulary flashcards related to eclipse around the	KP TBB, P# 100

Days	S.No	Subject	Торіс	Message	Text Book Reference
			&Behavior	board to help students retain	
			– Lunar	knowledge.	
			Eclipse		
		Math	Perimeter	Tell students to find out area of an	
			and area	object, multiply its length by	150 & 151
	_			breadth and to calculate	
	5			perimeter, add length of all sides.	
				Ask them to find the area of the	
				classroom, the surface of their	
		Science	light	desk and other objects.	
		Science	Light properties	Explain students that stars are the luminous objects in our universe,	-
			&Behavior	they have their own light but they	155
	1		– Visibility	are very far from our earth.	
			of stars at		
			night		
		Science	Light	To explain the visibility of stars	KP TBB. P#
			properties	explain that as Sun (a star) is	133
	2		&Behavior	nearer to our planet Earth that's	Textbook p. 150 & 151 KP TBB, P# 133 KP TBB, P#
	2		– Visibility	why in the day time we can only	
			of stars at	see it's light but at night with no	
31			night	sun, we see the light of the stars.	
		Science	Solar	For solar system, introduce the	KP TBB, P# 2
			System-	terms Natural satellite - a natural	& 3
	3		Satellite	body that revolves around a larger	
	5			body (moon around earth) and	
				artificial satellite (bodies launched	
				by humans in satellite).	
		Science	Solar	Assign students to draw solar	
	_		System-	system or make a model of solar	& 3
	4		Satellite	system with the help of play	
				dough or small balls. Display their	
				work.	