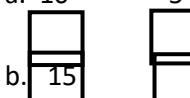


WEEK	TOPIC	PERFORMANCE OBJECTIVES	CONTENT	TEACHER'S ACTIVITIES	LEARNERS' ACTIVITIES	TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
THEME: NUMBER AND NUMERATION							
1	Whole numbers.	1. Count in ones up to 100, in hundreds up to 900, in hundreds, tens and units up to 1000. 2. Write numerals up to 1000 in: a. short form and b. expanded form. 3. count in twos, threes, fives and tens up to 60. 4. Write the place value of a digit in any number up to 999. 5. Order whole numbers using symbols. 6. Solve problems on	1. Counting in ones up to 10, in tens up to 100, in hundreds of tens, and units up to 1000. 2. Writing numerals up to 1000 in: a. short form and b. expanded from. 3. Counting in twos, threes, fives and tens up to 60. 4. Writing the place value of a digit in any number up to 99,999. 5. Ordering of whole numbers using symbols.	1. Guides learners to count by using bundles of sticks, seeds etc in counting in tens and hundreds. 2. Guides learners to build place value abacus and asks them to label columns. 3. Assists leaners in making overlay and writing number as shown below: 50000 3000 600 70 4. Demonstrate the use of overlay cards. 5. Guides the Learners in activities to build numerals up tp 99,999 with abacus. 6. Guide learners to form and write 5-digit numbers using overlay cards. 7. Guide learners to solve problems in quantitative aptitude.	1. Count using their counter e.g. sticks and march sticks in tens and hundreds. 2. Label columns of place value abacus. 3. make overlay cards. 4. observe and demonstrate the use of overlay cards. 5. count numbers with abacus. 6. make use of overlay cards to write 5-digit numbers. 7. Solve problems on quantitative aptitude.	Counters, match sticks, seeds, bottle tops etc. 2. Flash cards 3. Sum cards.	Count numbers up to 99,999. 2. Solve problems on counting numbers up to one hundred thousand. 3. Solve problems in quantitative reasoning involving whole numbers.

		qualitative reasoning.	6. Quantitative reasoning.	aptitude e.g. complete the following diagram for an overlay card for the numbers. 8. Design series of activities to lead learners to count meaningfully up to one hundred thousand.			
2	Whole numbers up to 1000,000.	Learners should be able to: e. expand the place value concept to 100,000 and then to 1000,000. 2. Count in thousands up to One Million. 3. Solve quantitative aptitude with numbers up to 1 000,000	Counting up to One Million in ones, tens, hundreds and thousands. 2. Writing numerals and stating the place values of numbers up to 100, 000. 3. Extending place values by moving figures one more place to the left. 4. Quantitative aptitude.	1. Count up to 100,000 (in tens of thousands). 2. Write numerals up to 99 999. 3. Count up to 1 000 000. 4. Write the place value of any numeral in a 6-digit number. 5. Write the place value of any numeral in a 7-digit number. 6. Lead learners in making overlay cards thus: 70000 4000 500 60 _____ 74 560 7. Demonstrate the use of overlay cards. 8. Guide learners to form and write 6 and 7-digit	1. Read numerals written in ascending order on the chalkboard e.g. a. 4 b. 43 c. 435 d. 4357 e. 43576 f. 435762 g. 4357625 2. Give the place value of 4, 3, 5, 6, 7, 2 and 5 above i.e. i. 4 in a – g ii. 3 in b – g iii. 5 in c – g iv. 7 in d – g v. 6 in e – g	1. Seeds, sticks. 2. Abacus, overlay cards, examples, charts.	1. Give the place value of the following: a. 46 624; b. 99, 999 c. 1999867; 2. State the place value of 4 in the number 435762 in column e. 3. Explain that the 6-digit numerals is divided into two groups of thousand and one i.e. HTH, TTH, TH H, T, U. 4. Write numerals up to 100,000 and then up to 1000 000. 5. Solve exercise on

				<p>numbers using overlay cards.</p> <p>9. Guide learners in activities to build numerals up to 999,999 with abacus.</p> <p>10. Guide learners to solve problems on quantitative aptitude e.g. complete the following:</p> <p>8675: 8000 <input type="text"/>000 70 <input type="text"/></p>	<p>vi. 2 in f – g. 3. Label column of place value abacus. 4. Demonstrate the use of overlay cards. 5. Solve quantitative aptitude exercises.</p>		quantitative aptitude.
3	Whole numbers. (Place value)	Learners should be able to: 1. apply knowledge of counting to local counting in groups of: a. five's (yam, oranges, onions etc.). b. group of 7s (weeks and days). c. groups of 60s (hours, minutes, and seconds). 2. State or relate the idea	1. Counting in 5s, 7s and 60s. 2. Quantitative, aptitude. 3. Place values thousands, hundreds, tens, and units. Th, H, T, U. 4. Learners should be able to: use abacus to state the place value.	<p>1. Bring counters, clock faces and a calendar for use in class.</p> <p>2. Show learners to count in 5s, 7s and 60s.</p> <p>3. Lead learners to count in 5s using counters.</p> <p>4. Guide learners to count in 7s using days of the week.</p> <p>5. Make use of a clock face to show learners how to count in 60s.</p> <p>6. organizes activities to make learners change days to weeks, seconds to minutes. Also minutes to hours vice versa.</p>	<p>1. Group counters in 5s, 7s and 60s. 2. Count in 5s e.g. 5, 10, 15, 20, 25 ... 3. Count in 7s e.g. 7, 14, 21, 28, 35 .. 4. Count in 60s e.g. 60, 120, 180, 240 etc. 5. Change days to weeks e.g. 7 days = 1 week.</p>	Counters, available objects in the locality, clocks face and calendar etc. 2. Abacus, beads etc.	<p>Learners to:</p> <p>1. solve problems in groups of five, seven, and sixty, 2. Write the place value of each digit in given 4-digit number.</p> <p>a. using: -spike abacus; -thread abacus; -pocket abacus; -thread beads.</p> <p>b. without the use of abacus</p>

		<p>of counting in fives as in the case of market days.</p> <p>3. using of abacus to state the place value.</p> <p>4. Writing the place value of each digit in the number 6435 as</p> <p>5 Units 3 Tens 4 Hundreds 6 Thousands</p> <p>5. Solve the quantitative reasoning on place value.</p>	<p>5. Write the place value of each digit number as:</p> <p>6345 6 – 6000 4 - 400 3 - 30 5 - 5</p>	<p>7. Guide learners to various them that called for counting in 5s, 7s, 60s e.g market days.</p> <p>8. Lead learners to solve exercises on quantitative aptitude e.g.</p> <p>Complete the following:</p> <p>a. 10 5 </p> <p>b. 15 5 </p>	<p>21 days = 3 weeks; 28days – 4 weeks.</p> <p>6. Change minute to hours e.g. 60 mins – 1 hour 260 mins – 4hours 20 mins.</p> <p>7. Change seconds to minutes e.g. 180 seconds = 3 minutes.</p> <p>8. Solve some problems on quantitative aptitude involving whole numbers.</p> <p>9. Write the place value of the digits in a four-digit numbers.</p>		
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4	Whole numbers of Roman Numerals.	Leaners should be able to: 1. Count Roman Numerals up to 100 (I to C). 2. Solve problems on quantitative reasoning involving use of roman numeral:	1. Roman numerals (I to C) I for One V for five X for ten L for fifty C for One hundred IX for nine XX for Twenty XXX for thirty XL for forty LX for sixty LXX for Seventy LXXX for Eighty 2. Quantitative reasoning.	<p>Guide leaners to use fingers to represent numbers in Roman numerals I – X (1 – 10).</p> <p>2. Guide learners to form Roman numerals: -I (one finger) -v (five fingers) -x (Ten fingers)</p> <p>3. Give the values of L=50 and C=100.</p> <p>4. Use the properties referred above to describe XI, IX, etc.</p> <p>5. Build a chart explaining Roman numerals and use it as an illustration e.g.</p> <table border="0" style="width: 100%; text-align: center;"> <tr><td>I</td><td>1</td></tr> <tr><td>II</td><td>2</td></tr> <tr><td>III</td><td>3</td></tr> <tr><td>IV</td><td>4</td></tr> <tr><td>V</td><td>5</td></tr> <tr><td>VI</td><td>6</td></tr> <tr><td>VII</td><td>7</td></tr> <tr><td>VIII</td><td>8</td></tr> <tr><td>IX</td><td>9</td></tr> <tr><td>X</td><td>10</td></tr> </table> <p>b. Lead learners to solve quantitative aptitude examples e.g.</p> <table border="0" style="width: 100%; text-align: center;"> <tr><td>C</td><td>100</td></tr> </table>	I	1	II	2	III	3	IV	4	V	5	VI	6	VII	7	VIII	8	IX	9	X	10	C	100	<p>1. Use fingers to form Roman numerals I – X (1 – 10 fingers).</p> <p>2. Study the charts/flash card on Roman numerals.</p> <p>3. Practise reading Roman numerals.</p> <p>4. Practise writing Roman numerals.</p> <p>5. Solve exercise involving numbers 2 and 3 above.</p> <p>6. Solve exercises involving quantitative aptitude on Roman numerals.</p>	<p>-Roman numerical charts. -Flash cards; -Roman Numeral charts -Number Charts -Flash Cards.</p>	<p>Learners to: 1. Read given Roman numerals and state the corresponding values in the Hindu/Arabic form. 2. Write the value of the Roman numeral I – C in the Hindu/Arabic form.</p>
I	1																												
II	2																												
III	3																												
IV	4																												
V	5																												
VI	6																												
VII	7																												
VIII	8																												
IX	9																												
X	10																												
C	100																												

				L 50 XC 90			
5	Ordering of whole numbers up to 1000 by using the symbol < and >.	Learners should be able to: 1. order whole numbers to 1 – 1000 using the symbol < and >. 2. Solve problems on quantitative reasoning involving ordering of whole numbers.	1. Ordering of whole numbers up to 1 – 1000. 2. Quantitative aptitude.	Guide learners in ordering of numbers 1 – 500 on numeral chart. 2. Leads learner to order two numbers e.g. 546 and 174 as 546 > 174 or 174 < 546. 3. Lead learners to recall the meaning of the symbol. (< and >). 4. Give more exercises on ordering of whole numbers. 5. Guide learners to solve quantitative aptitude problems involving ordering of whole numbers e.g. $176 > 123$ $350 < 872$ $409 \square 134$ $201 \square 1004$.	1. Revise order of numbers 1 – 500 using number chart. 2. Recall the meaning of the symbols (< or >). 3. Order any two given numbers. 4. Solve problems on ordering whole numbers. 5. Solve problems on quantitative aptitude involving ordering of whole numbers.	Roman numerical charts. Flash card, Number charts.	1. Order whole number up to 1000. 2. Solve quantitative aptitude exercises.
6	Lowest Common Multiple (LCM).	Learners should be able to: 1. Find the L.C.M. of	1. L.C.M. of numbers up to 9.	1. Guide learners in the process of obtaining the L.C.M. e.g. L.C.M of 3 and 4 is obtained by finding the multiples of 3 and 4.	1. Practice finding multiples of the given numbers by	Cardboard showing sets of multiples of given numbers.	1. Obtain the L.C.M of numbers by identifying the lowest of the

		<p>numbers up to 9.</p> <p>2. Use common factors in working out things from various groups.</p> <p>3. List the use of L.C.M. in everyday life.</p>	<p>2. L.C.M. of two numbers up to 9.</p>	<p>$3 = 3, 6, 9, 12, 15, 18$ $4 = 4, 8, 12, 16, 20$</p> <p>A selection of the lowest common multiple is made thus: 12.</p> <p>Therefore, the L.C.M of 3 and 4 is 12.</p> <p>2. Also explain how to find the L.C.M by the use of factor method. For example, to find the L.C.M of 3 and 4:</p> $3 = 3 \times 1$ $4 = 2 \times 2$ $\text{L.C.M} = 2 \times 2 \times 3 = 12.$ <p>3. Lead the learners to list the use of common factors in working out things for various groups.</p>	<p>picking the lowest of the common multiples e.g. the L.C.M of 3 and 4.</p> <p>2. Practice finding L.C.M using factor method.</p> <p>3. List uses of common factor in working out things for various groups.</p>		<p>common multiples.</p> <p>2. List the use of L.C.M in everyday life.</p>
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MID-TERM TEST							
7	Highest Common Factors (HCF)	Learners should be able to find the H.C.F. of 2-digit numbers.	H.C.F. of 2-digit numbers.	<p>1. Bring flannel board, flash card and number cards to the class.</p> <p>2. Guide learners to use flannel board and flash cards to identify common numbers.</p> <p>3. Guide learners to use the flannel board and flash cards to identify factors of given numbers which are then recorded</p>	<p>1. Use the flannel board and flash cards (number cards) to identify factors of given numbers.</p> <p>2. Select factors of common to</p>	Flannel board, Flash cards and number cards.	<p>1. Find the factors of given numbers.</p> <p>2. Find the common of factors of given numbers hence, determine the H.C.F..</p> <p>3. Find H.C.F. using prime factor method.</p>

				<p>on the chalkboard e.g. factors of 12 and 18 i.e. $12 = 1,2,3,4,6$ and 12. $18 = 1,2,3,6, 9$ and 18.</p> <p>4. Identify the Highest common factors in 1,2,3,4, 6 and 12, and 1,2,3,6,9 and 18.</p> <p>5. Guide learners to pick the Highest Common Factor i.e. 6.</p> <p>6. Guide learners to find H.C.F. using prime factors method thus:</p> $6 = 2 \times 3 \times 1$ $8 = 2 \times 2 \times 2 \times 1$ $\text{H.C.F.} = 2.$	<p>the given numbers and identify the Highest Common Factors.</p> <p>3. Practice obtaining the H.C.F. with several examples.</p>		
9	Faction.	<p>Learner should be able to:</p> <p>1. differentiate between proper and improper fractions.</p> <p>2. change improper fraction to mixed numbers and vice versa.</p> <p>3. apply fractions in sharing commodities in</p>	<p>1. Proper and improper fraction and mixed numbers.</p> <p>2. Mixed number.</p> <p>3. Quantitative reasoning.</p> <p>4. Decimal fractions up to tenth and hundredths.</p> <p>5. Equivalent fraction.</p>	<p>Guide learners to divide an object e.g. an orange into two equal parts to show a proper fraction.</p> <p>2. Guide learners to identify what is proper and improper fraction as well a mixed member.</p> <p>3. Guide learners to convert from improper fraction to mixed numbers and vice versa.</p> <p>4. Guide learners to apply fractions in sharing commodities in homes, market, schools etc.</p>	<p>1. Explain the meaning of proper and improper fraction and mixed numbers.</p> <p>2. Cut objects e.g. orange into equal part to show a proper fraction.</p> <p>3. convert improper fraction to</p>	<p>Orange, paper cutting of different shapes, Fraction, charts, oranges, squares. Cardboards, Flow chart of quantitative reasoning. Flash cards.</p>	<p>Learners to:</p> <p>i. classify a given set of fractions into proper and improper fraction.</p> <p>ii. Convert improper fraction to mixed number and vice versa.</p> <p>3. Solve more conversion problems on fractions.</p>

		<p>home, market, school etc.</p> <p>4. Solve quantitative reasoning problems involving fractions.</p> <p>5. Solve quantitative reasoning problem in decimal fraction.</p> <p>6. obtain equivalent fractions of a given fraction.</p> <p>7. ordering pair of fractions.</p> <p>8. Solve quantitative reasoning on equivalent fractions.</p>	<p>6. Ordering fractions.</p> <p>7. Quantitative reasoning.</p>	<p>5. Guide learners to identify decimal numbers in decimal fractions: tenths, hundredths as fractions with 10 and 100 as denominators respectively.</p> <p>6. Solve problem in quantitative reasoning.</p> <p>7. Guide learners to state three or four equivalent fractions of a given fraction.</p> <p>8. Guide learners to notice that when fractions have the same denominator, the fraction with smaller numerator is less e.g.</p> <p>$\frac{6}{10}$ and $\frac{9}{10}$ implies that hence</p> $\frac{6}{10} < \frac{9}{10}$ <p>9. Guide learners to solve quantitative aptitude problems on equivalent fractions.</p>	<p>mixed numbers and vice versa.</p> <p>4. Apply fraction to share commodities in home, market, schools etc.</p> <p>5. Explain decimals in 10 and 100 as fraction with 10 and 100 as denominators.</p> <p>6. solve problems in quantitative reasoning.</p> <p>7. Give equivalent fractions of given fractions.</p> <p>8. order a pair of fraction by comparing their new numerators.</p> <p>9. Solve some quantitative aptitude</p>		<p>4. Write decimal fraction with denominators tens and hundred.</p> <p>5. Solve problems in quantitative reasoning.</p> <p>6. Find the equivalence of given fraction.</p> <p>7. Order given pair of fractions using < or >.</p> <p>8. Solve problems on quantitative aptitude reasoning involving equivalent fractions.</p>
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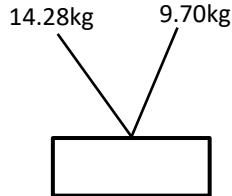
					problems involving equivalent fractions.		
THEME: BASIC OPERATIONS							
10	Addition and Subtraction of whole numbers	Learners should be able to: 1. add whole numbers in TH, H, T, U with remaining. 2. Add whole numbers without remaining. 3. Subtract whole numbers in TH, H, T, U with remaining. 4. Subtract whole numbers in TH, H, T, U without remaining.	1. Addition of whole numbers in TH, H, T, U with remaining. 2. Addition of whole numbers in Th, H, T, U without remaining. 3. Subtraction of whole numbers in Th, H, T, U without remaining. 4. Subtraction of whole numbers in Th, H, T, U with remaining.	1. Guide learners to use abacus TH, H, T, U for addition and subtraction of three 4-digit number with or without remaining. 2. Guide the learners to note the importance of place value in performing correct addition and subtraction in everyday activities. 3. Guide learners to carry out the correct addition and subtraction. 4. Guide learners through addition and subtraction of three 4-digit numbers taking two at a time e.g. $1816 + 2672 + 4297$. 5. Guide learners to solve quantitative aptitude problems involving addition and subtraction of three 4-digit numbers e.g. $4600 \begin{array}{l} \diagdown \\ \diagup \end{array} 920$ $\begin{array}{l} \diagup \\ \diagdown \end{array} 13800$	1. Use abacus to subtract three 4-digits numbers. 2. Apply place value in addition and subtraction and need for correct addition and subtraction. 3. Solve problems that requires addition and subtraction in at least four digit numbers. 4. Add and subtract three 4-digit numbers taking two at a time. e.g. $1816 + 2672 - 4297$.	Abacus and charts.	Learners should be able to: 1. add and subtract three 4-digit numbers with or without renaming. 2. add and subtract three 4-digit numbers taking two at a time. 3. Solve quantitative aptitude problems involving addition and subtraction of three 4-digit numbers taking two at a time.

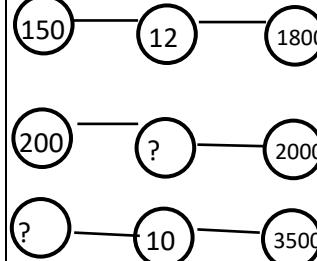
					<p>ii. $4297 - 2672 - 1816$.</p> <p>b. Solve quantitative aptitude problems involving addition and subtraction of three 4-digit numbers.</p>		
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THEME: BASIC OPERATION

11.	Addition and Subtraction of Fractions and Decimals.	Learners should be able to: 1. Add and subtract: i. proper fraction II. improper fraction. ii. mixed numbers. 2. Correctly add and subtract proper and improper fraction in everyday life activities. 3.Solve quantitative aptitude problems	1. Addition and subtraction of two proper fractions; -improper fraction; -mixed numbers. 2. Quantitative reasoning on addition and subtraction of fractions. 3. Addition and subtraction of decimal up to 3 decimal numbers. 4. Quantitative reasoning on	Guide learners to revise addition of fractions e.g. $\frac{1}{2} + \frac{3}{4} = \frac{2}{4} + \frac{3}{4}$ $= \frac{5}{4} = 1\frac{1}{4}$ 2. Guide learners to add and subtract proper fraction and mixed numbers. 3. Guide learners to give examples of everyday activities where addition and decimals are used. 4. Guide learners to solve quantitative aptitude problems involving addition and subtraction of fractions. e.g.	1. Revise addition and subtraction of fractions. 2. Carry out addition and subtraction involving proper fractions and mixed numbers. 3. give examples of everyday life activities where accuracy of addition and subtraction of fractions and	Fraction charts, Quantitative aptitude chart. Addition cards.	Learners to: i. add and subtract proper fractions and mixed fraction. ii. give three or more examples of everyday life activities that require addition and subtraction of fractions. 3. Solve quantitative aptitude problems involving addition and subtraction of fractions. 4. Given four examples of
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		<p>involving addition and subtraction of fractions.</p> <p>4. Add and subtract decimal up to 3 decimal places.</p> <p>5. Correctly add and subtract decimal.</p> <p>6. Solve problems on quantitative reasoning involving addition and subtraction of decimals.</p>	<p>decimal numbers.</p>	<pre> graph TD 1((1)) --- 1_2_1((1/2)) 1((1)) --- 1_2_2((1/2)) 1_2_1 --- 3_4((3/4)) 1_2_2 --- 3_4((3/4)) </pre> <p>4. Guide learners to solve problems on addition and subtraction of decimals to 3 decimal places e.g. $4.263 + 5.123 = 9.386$</p> <p>5. Lead learners to correctly add and subtract decimals in everyday life activities.</p> <p>7. Guide learner to solve quantitative aptitude problems involving addition and subtraction of decimals. E.g.</p> <p style="text-align: center;">18.22cm 11.45cm 29.67cm</p>	<p>decimals are required.</p> <p>4. Solve quantitative aptitude problems involving addition and subtraction of fractions.</p> <p>5. Add and subtract series of problems involving decimal numbers up to 3 decimal places.</p> <p>6. Correctly add and subtract decimal numbers giving examples.</p> <p>7. Apply addition and subtraction to everyday life activities.</p> <p>8. Solve quantitative aptitude</p>		<p>everyday activities that require correct addition and subtraction of decimal numbers.</p> <p>5. Solve problems on addition and subtraction on decimal number up to 3 decimal places.</p> <p>6. Solve quantitative aptitudes problems involving addition and subtraction of decimal numbers with up to 3 decimal places.</p>
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					<p>problems involving addition and subtraction, And subtraction of decimals numbers with up to 3 decimal places.</p>  <p>The diagram shows a central rectangular box representing a scale pan. Two arrows point from the text '14.28kg' and '9.70kg' towards this central box, indicating they are being combined.</p>		
12.	Revision and Examination						

WEEK	TOPIC	PERFORMANCE OBJECTIVES	CONTENT	TEACHER'S ACTIVITIES	LEARNERS' ACTIVITIES	TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
THEME: BASIC OPERATION							
1	Multiplication of whole numbers by 2-digit numbers.	Learners should be able to: 1. Multiply whole number by 2-digit numbers not exceeding 50. 2. Solve quantitative aptitude problems involving multiplication of whole numbers by 2-digit numbers.	1. Multiplication of whole numbers by 2-digit number not exceeding 50. 2. Quantitative on multiplication of whole numbers.	1. Guide learners to revise multiplication of whole number. 2. Guide learners to carry out multiplication of whole numbers in 2-digit numbers e.g. 40×12 . 3. Guide learners to solving quantitative aptitude problems on multiplication of whole numbers with 2-digit numbers e.g. 	1. Carry out multiplication of whole numbers by 2-digit numbers. 2. Solve problems involving multiplication of whole numbers by 2-digit number. 3. Solve quantitative aptitude problems involving multiplication of whole numbers not exceeding 50.	Flash card, Multiplication charts etc. Quantitative aptitude chart etc.	Learners to: 1. Multiply whole numbers by 2-digit numbers not exceeding 50. 2. Solve quantitative aptitude problems involving multiplication of whole numbers by 2-digit numbers not exceeding 50.
2	Multiplication of decimals by 2-digit numbers.	Learners should be able to: 1. Multiply decimals numbers by 2-digit numbers. 2. Quantitative reasoning on	1. Multiplication of decimals by 2-digit numbers. 2. Quantitative reasoning on	1. Guide learners to solve multiplication of decimal numbers by 2-digit numbers. 2. Guide learners to solve quantitative aptitude problems	Give examples of everyday activities that require correct multiplication of decimals with 2-digit numbers.	Flash cards, Multiplication chart on decimal numbers, Quantitative aptitude charts etc.	1. Multiply decimals by 2-digit numbers. 2. Solve quantitative aptitude problems involving

		2. Solve quantitative aptitude problem involving multiplication of decimal numbers by 2-digit numbers.	multiplication of decimal numbers.	involving quantitative aptitude problems involving multiplication of decimal numbers by 2-digit whole numbers.	2. Solve problems on multiplication of decimal numbers with 2-digit numbers. 3. Solve problems on quantitative aptitude involving multiplication of decimal numbers -2-digit whole numbers.		aptitude problem involving multiplication od decimal numbers by 2-digit numbers.
3	Squares and Square Roots.	Learners should be able to: i. calculate square of 1 and 2-digit numbers. ii. find square root of perfect squares up to 400 using: - squares chart; -factor method. iii. identify objects with perfect square faces like cubes. iv. Solve quantitative aptitude exercises on	1. Square of 1 and 2-digit numbers. 2. Square root of perfect squares up to 400 using: - squares chart; -factor method. 3. Quantitative reasoning on squares and square roots of numbers not greater	Guide learners to find the square of a number say 3 by locating the intersection of 3 by 3 on the vertical and horizontal rows and columns respectively on the square chart to get 9. 2. Guide learners to identify objects of perfect square face. 3. Guide learners in locating the square root of any perfect square on the chart e.g. square root of 256 is 16.	1. Use the square chart to find squares of any given number. 2. Give examples of objects with perfect square faces. 3. Find square roots of perfect squares not exceeding 400 using the square root chart. 4. Find square rood of perfect squares by factors methods.	-20 by 20 square charts. -charts on quantitative reasoning square root chart.	Learner to: 1. find the square of given number using 20 by 20 square chart. 2. find the square roots of given number using 20 by 20 square roots. 3. Give example of objects with perfect square faces in their home and schools. 4. Find square roots of perfect

		<p>square roots of perfect squares not more than 400.</p>	<p>than four hundred.</p>	<p>4. Guide learners to find square roots by factor method e.g. $256 = 4 \times 4 \times 4 \times 4$.</p> <p>5. Guide learners to solve quantitative aptitude problems involving square of 1 digit and 2-digit numbers and square root of perfect square not greater than 400, illustrating with chart e.g.</p> <p>1.</p>	<p>5. Solve series of quantitative aptitude problems involving squares of 1-digit and 2-digit numbers and square root of numbers not exceeding 400.</p>		<p>squares using factor method.</p> <p>5. Solve quantitative aptitude problems involving finding square and square root of numbers.</p>
4	Division	<p>1. Divide 2 or 3-digit number by:</p> <p>i. numbers up to 9 with or without a remainder.</p>	<p>1. Division of 2 or 3-digit numbers by:</p> <p>i. numbers up to 9 with or without a remainder.</p>	<p>Guide learners to divide 2 or 3 decimals by numbers not more than 9.</p> <p>2. Guide learners to divide a given number by 10, 20, 30 etc.</p>	<p>1. Divide 2 and 3-digit numbers by numbers not than 9.</p> <p>2. Divide given numbers by 10, 20, 30 etc.</p>	<p>1. Sticks, bottle tops etc.</p> <p>2. Division charts,</p> <p>3. Quantitative aptitude charts.</p>	<p>Learners to:</p> <p>1. Divide a given two- or three-digit numbers by numbers between 2 and 9.</p>

		<p>ii. multiples of 10 up to 50.</p> <p>2. identify equality of sharing things like money, fruits, book etc at home and in school.</p> <p>3. Solve quantitative aptitude exercise involving division.</p>	<p>ii. multiples of 10 up to 50.</p> <p>2. Quantitative aptitude on division.</p>	<p>3. Bring chart showing examples on quantitative aptitude.</p> <p>4. Guide learners through examples on quantitative aptitude</p>	<p>3. Solve quantitative aptitude problems involving division.</p>		<p>2. Divide a given two- or three-digit numbers by 10 up to 50.</p> <p>3. Solve quantitative aptitude problems involving division.</p>
5	Estimate	Learner should be able to give meaningful estimate of sums and products of numbers.	<p>1. Estimate sums and products.</p> <p>2. Quantitative reasoning problems involving number line.</p>	<p>1. Guide learners to find estimate of sum and product of numbers.</p> <p>2. Guide learners to find the estimate of $99.7 + 59.5$ as $100 + 60 = 160$.</p> <p>3. Guide learners to estimate 213×32 as $210 \times 30 = 6300$.</p>	<p>1. Estimate sums and products numbers.</p> <p>2. Work series of exercises on estimation involving sums and product of their ages.</p> <p>3. Give examples of estimation where it is required.</p>	Chart on Estimates.	<p>1. Estimate the sum and product of numbers, height and widths within and outside the school.</p> <p>2. Carry out estimate involving sum and product of number.</p>
6. ALGEBRAIC PROCESSES							
6	Open Sentence	Learners should be able to:	Open Sentences	<p>i. define open sentence.</p> <p>1. Explain that open sentence are Mathematical statements that</p>	<p>1. Define open sentences.</p> <p>2. solve series of problems</p>	Chart contain worked exercise on open sentences of different forms.	<p>1. Define open sentences.</p> <p>2. Solve many exercises on open</p>

		<p>2. find the missing number in an open sentence.</p>		<p>involving the equality sign (at this level) and a missing quantity (represented with an empty box). Open sentences involve the four arithmetic operation: addition +, Subtraction - , Multiplication x and division ÷.</p> <p>Some examples are:</p> <ul style="list-style-type: none"> a. $10 + \boxed{\quad} = 19$ b. $5 - \boxed{\quad} = 3$ c. $\boxed{\quad} + 6 = 15$ d. $\frac{\quad}{3} = 15$. e. $5 \times \boxed{\quad} = 15$ <p>2. Lead learners to find the missing numbers in the above examples.</p> <p>3. Quantitative reasoning on open sentences.</p>	<p>involving open sentences.</p> <p>3. Solve quantitative aptitude problems on open sentences.</p>	<p>2. Quantitative aptitude chart.</p>	<p>sentences involving the four-arithmetic operation.</p> <p>3. Find missing numbers in quantitative aptitude exercise.</p>
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MID-TERM TEST

8	Open Sentences	Learners should be able to: 1. relate open sentences to everyday activities.	1. Open Sentences; 2. Quantitative reasoning on open sentences.	1. Lead learners to establish the relationship between: i. addition and subtraction; ii. multiplication and division.	1. State the need for open sentences in daily life. 2. Give examples of open sentences in daily life.	Chars containing worked exercises on open sentences of different forms.	1. Solve many exercises on open sentences involving daily life. 2. Find the missing numbers in
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		<p>2. state the relationship between:</p> <ul style="list-style-type: none"> i. addition and subtraction; ii. multiplication and division. 		<p>2. Lead learners to solve quantitative exercise e.g.</p> <pre> graph TD A1[+] --- B1[6] A1 --- C1[13] A2[x] --- B2[4] A2 --- C2[3] A3[÷] --- B3[12] A3 --- C3[3] </pre>	<p>3. Solve quantitative aptitude problems on open sentences.</p>		quantitative aptitude exercises.
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THEME: MENSURATION AND GEOMETRY

9	Money	<p>1. Solve problems on addition of money.</p> <p>2. Solve quantitative aptitude exercises involving addition of money.</p>	<p>1. Addition of money.</p> <p>2. Subtraction of money.</p> <p>3. Quantitative aptitude exercise on addition and subtraction of money.</p>	<p>1. Set up the shopping corner in the class and place a price tag on each item.</p> <p>2. Lead learners to select any two items from the shop and add their costs.</p> <p>3. Display some money denominations e.g. ₦5, ₦10, ₦20, ₦50 etc.</p>	<p>1. Provide some items for the shopping corner e.g. empty packets of sugar, match box, etc.</p> <p>2. Take any two items and add their cost.</p> <p>3. Give the sum of any two</p>	<p>1. Empty packets of sugar, match boxes etc.</p> <p>2. Addition table chart,</p> <p>3. Charts containing samples of quantitative aptitude on addition and subtraction of money.</p>	<p>1. Solve exercise on addition of money.</p> <p>2. Solve problems on subtraction of money.</p> <p>3. Solve quantitative aptitude on addition and</p>
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		<p>3. State the essence of correct addition of money in business transactions.</p> <p>4. Solve exercises on subtraction of money.</p> <p>5. Solve quantitative aptitude problems involving subtractions of money.</p> <p>6. State the essence of correct subtraction of money in business.</p>		<p>4. Guide learners to solve exercise on addition and subtraction of money. E.g. ₦4.20 + ₦3.10 = ₦7.30 ii. ₦4.20 – ₦3.00 = ₦1.20.</p> <p>5. Let learners buy and sell items and thus determine the money to be collected.</p> <p>6. Solve quantitative aptitude problems involving subtraction of money.</p>	<p>denominations of money bills.</p> <p>4. Role play a shop keeper and customer showing how change due is calculated.</p> <p>5. Solve questions on addition and subtraction of money.</p> <p>6. Solve quantitative aptitude exercise on addition and subtraction of money.</p>		<p>subtraction of money.</p>
10	Money	<p>Learners should be able to:</p> <ol style="list-style-type: none"> Multiply money by a whole number. Divide money by a whole number. Solve some quantitative 	<ol style="list-style-type: none"> Multiplication of money by whole numbers. Division of money by whole numbers. 	<ol style="list-style-type: none"> Lead learners on multiplication of money by whole number using sum cards e.g. N7 x 3 = N21. Solve quantitative aptitude problems related to multiplication of money. 	<ol style="list-style-type: none"> Solve problems on multiplication of money by whole number. Solve problems on division of money by a whole number. 	<ol style="list-style-type: none"> Card on multiplication of money by whole numbers. Real and model of money. Empty packets of : sugar, matchbox, Empty tins of: Bournvita, tomatoes, milk, etc. 	<ol style="list-style-type: none"> Solve problems on multiplication of money by whole numbers. Solve problems on division of money by

		<p>reasoning problems on multiplication and addition of money.</p> <p>4. Calculate profit and loss.</p> <p>5. Solve quantitative aptitude problems on profit and loss.</p>	<p>3. Calculation of profit and loss.</p> <p>4. Quantitative reasoning on profit and loss.</p>	<p>3. Guide learners to solve problems on division of money by a whole number.</p> <p>4. Guide learners to solve quantitative aptitude problems on division of money.</p> <p>5. Give exercises on division of money.</p> <p>6. set up a shopping corner in the classroom and engage learners in buying and selling.</p> <p>7. lead learners to realize that when one sells an article at a price higher than the cost price than a profit is said to have been made.</p> <p>8. Calculate the profit by subtracting cost price (CP) from the selling Price (SP) i.e. $\text{Profit} = \text{SP} - \text{CP}$</p> <p>9. Solve quantitative reasoning involving profit and loss.</p>	<p>3. Solve quantitative aptitude problems on multiplication and division of money.</p> <p>4. Calculate profit and loss.</p> <p>5. Solve problems on profit and loss.</p> <p>6. Solve problems on quantitative reasoning involving profit and loss.</p> <p>7. State skill in making profit in real life through entrepreneurship and enterprise activities.</p> <p>8. Solve problems on quantitative reasoning involving profit and loss.</p>	<p>Real and model of money.</p>	<p>whole numbers.</p> <p>3. Solve quantitative aptitude problems involving division of money.</p> <p>4. Solve problems on the calculations of profit and loss.</p> <p>5. Solve problems on quantitative reasoning involving profit and loss.</p> <p>6. State ways on how to make profit in life.</p>
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				<pre> graph TD Mode[Mode] --> SD[Set of data] SD --> Mean[Mean] </pre>			
11.				Revision			
12 & 13	Examination						

WEEK	TOPIC	PERFORMANCE OBJECTIVES	CONTENT	TEACHER'S ACTIVITIES	LEARNERS' ACTIVITIES	TEACHING AND LEARNING RESOURCES	EVALUATION GUIDE
THEME: MENSURATION AND GEOMETRY							
1	Length	Leaners should be able to: 1. estimate distance in Kilometers and length in meters or centimeters and compare with measurements. 2. add and subtract length	1.Estimating length and measurements 2.Addition and subtraction of length	1.Guides learners to estimate and measure objects in centimeter 2.Guides learners to estimate and measure bigger objects in meters and centimeters and record all their result in a tabular form. 3.Guides learners to compare their results. 4.Guides learners to add and subtract length e.g. $8\text{km } 120\text{m} + 4\text{km } 4\text{m} = 12\text{km } 124\text{m}$ $6\text{km } + 2\text{km } 8\text{m} = 9\text{km } 8\text{m}$ $7\text{km } 45\text{m} - 5\text{km } 20\text{m} = 2\text{km } 25\text{m}$	1.Estimate and measure small object in centimeter bigger objects in meter and centimeters. 2.Make comparison of their results and subtract given length.	1)Tape measure, meter rule etc. 2)Addition and subtraction charts involving lengths.	1. Estimate given length and distances 2. Estimate given object and distances. 3. Compare estimates and actual measurement 4. Solve given problems on quantitative reasoning on addition and subtraction of lengths.
THEME: MENSURATION AND GEOMETRY							
2	Weight	1. Add and subtract weights in Kilogrammes (kg) and grammes (g). 2. Multiply weights in Kilogrammes (kg) and	1. Addition and subtraction of weights in Kilogrammes and grammes. 2. Multiplication of weights in Kilogrammes and grammes	1. Lead learners to solve exercise involving addition and subtraction of weights e.g. a. $500\text{kg} - 340\text{kg}$ b. $3\text{kg} + 567\text{g}$ etc. Note: Explain that $1\text{kg} = 1000\text{g}$. 2. Lead learners to solve exercise on multiplication	Solve problems on addition, subtraction, multiplication and division of weights in Kilogrammes and grammes through active participation.	Flash card, cardboard with examples of calculations involving addition, subtraction, multiplication and division of weights.	1. Solve exercise on multiplication of weights. 2. Solve exercise on division of weights. 3. Solve exercise and addition and

		<p>grammes (g) by whole numbers.</p> <p>3. Divide weights in Kilogrammes (kg) and grammes (g) by whole numbers.</p>	<p>by whole numbers.</p> <p>3. Division of weights in Kilogrammes and grammes by whole numbers.</p>	<p>of weights by whole numbers e.g. $45\text{kg} \times 2 = 90\text{kg}$.</p> <p>3. Lead learners to solve exercise on division of weights by whole numbers e.g. 650kg divided by 5, etc.</p> <p>4. Give learners some questions to solve</p>			subtraction of weight.
3	Time	<p>1. Tell the time on the clock.</p> <p>2. Read the Calendar.</p> <p>3. Use the notation "am" and "pm" for the time of the day.</p> <p>4. Write dates.</p> <p>5. Mention the importance of time and different seasons.</p> <p>6. Solve quantitative aptitude exercise on time.</p>	<p>1. Time, Calendar and dates.</p> <p>2. Using the notation a.m. and p.m. for time of the day.</p> <p>3. Quantitative aptitude.</p>	<p>1. Guide learners to bring clocks and calendars to class.</p> <p>2. Ask learners to tell important times of the school day on the clock faces.</p> <p>3. Tell the time from the clock face.</p> <p>4. Tell and write their birthdates.</p> <p>5. Recognize the need for time and different seasons.</p> <p>6. Indicate the time of the day using the notation "am" and p.m.</p> <p>7. Solve quantitative aptitude exercise.</p>	<p>1. Bring clock and Calendars to class.</p> <p>2. Indicate important time of the school day on the clock face.</p> <p>3. Tell the time from the clock face.</p> <p>4. Tell and write their birthdates.</p> <p>5. Recognize the need for time and different seasons.</p> <p>6. indicate the time of the day using the</p>	<p>1. Real clocks faces, Models and Calendars.</p> <p>2. Quantitative aptitude, sample charts.</p>	<p>1. Tell the time of the day and determine the special dates such as birth dates from the calendar.</p> <p>2. Wirte the dates of some given important events.</p> <p>3. Solve quantitative aptitude exercise on time date.</p> <p>4. Record at least four important times of the (school) day and the activities associated with learner</p>

					notation "am" and "pm". 7. Do quantitative aptitude exercise on time. 8. Learners should copy quantitative aptitude samples in their exercise books.		indicating which times are a.m. and which are p.m.
4	Area	Learners should be able to: 1. find the area of rectangles using the formula. 2. Calculate areas of shapes, farmland etc in the environment.	1. Area of rectangle including squares. 2. Area of farmlands and towns or cities. 3. Quantitative aptitude on area. 4. Solve problems on quantitative aptitude related to areas.	1. Guide learners to find area using square units. 2. Lead learners to find area by using formula. 3. Guide learners to find areas of shapes, farmlands etc in their environment.	Find small areas using unit squares. 2. Use formula to find areas of rectangles and squares. 3. Find areas of shapes, farmlands etc in their environment. 4. Guide learners to develop interest in finding areas of shapes, structures and	Cardboard and unit square chart, classrooms, desktops, farmland etc.	Learners to: 1. find areas using formula. 2. find large areas in square meter and hectares.

					farmlands in their environment. 5. Guides them to solve problems on qualitative aptitude related to areas.		
5	Capacity	Learners should be able to: 1. Add and subtract in liters. 2. Multiply and divide in litres with whole numbers. 3. Solve problems on quantitative aptitude related to addition, subtraction, multiplication and division involving liters.	1. Addition and subtraction involving litres. 2. Multiplication and division involving litres. 3. Quantitative aptitude involving addition, subtraction, multiplication and division involving litres.	1. Lead Learners to solve problems in addition and subtraction involving litres e.g. $7.5 \text{ litres} + 2.7 \text{ litres} = 10.2 \text{ litres}$. 2. Lead learners to solve problems on multiplication and division involving litres e.g. $9.2 \text{ litres} \times 6 = 18.2 \text{ litre}$ $2.16 \text{ litres} \div 6 = 0.36 \text{ litres}$. 3. Guide learners to solve problems on quantitative reasoning involving multiplication and division using litres.	Solve problems in addition and subtraction involving litres. 2. Solve problems on multiplication and division involving litres. 3. Solve problems on quantitative aptitude involving litres.	Cardboard with solved exercises on addition, subtraction, multiplication and division involving litres.	Learners to: i. add and subtract given problems in litres. 2. divide and multiply with whole number in problems involving litres. 3. Solve problems on quantitative aptitude on addition, subtraction, multiplication and division involving litres.
6	Plane Shapes	Leaners should be able to: i. identify symmetrical plane shapes.	1. Symmetry or non-symmetry of plane shapes. -square	1. Guide learners to fold the cut-out plane shapes to find their line(s) of symmetry.	1. Carry out the folding and cutting out plane shape to	Plane shapes etc. Chart, plane shapes etc, Chart and model of the four cardinal points.	1. identify line(s) of symmetry of given plane shapes.

		<p>2. locate line(s) of symmetry of objects in the school and homes.</p>	<ul style="list-style-type: none"> -rectangle -equilateral and isosceles triangle. -Rhombus -Trapezium -Parallelogram -Kite 	<p>2. Lead learners to locate the line(s) of symmetry of each of the plane shapes.</p> <p>3. Lead learners to appreciate symmetry in life situations.</p> <p>4. Guide the learners to locate vertical and horizontal line in the classroom and other materials around them.</p>	<p>find the line(s) of symmetry.</p> <p>2. locate the line(s) of symmetry of the plane shapes.</p> <p>3. Locate various horizontal and vertical lines in the classroom and other materials around them.</p>		<p>2. Locate line of symmetry of given objects in their homes.</p> <p>3. Locate the horizontal lines on given objects.</p>
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7	MID-TERM TEST						
8	Plane Shapes	<p>1.Distrigush between horizontal and vertical lines.</p> <p>2. Indicate four cardinal point and relate the setting and rising of the sun on the cardinal point on the east and west.</p>	<p>Horizontal and vertical lines</p> <p>Cardinal point</p> <ul style="list-style-type: none"> ➤ North ➤ South ➤ East ➤ West 	<p>5.guides the learner to locate the four cardinal points and relate them to the geography of Nigeria</p> <p>6, loads learners relate the rising and setting of the sun to the cardinal point</p>	<p>4.locate the four cardinal points and relate them to the geography of Nigeria</p> <p>5.relate the rising and setting of the sun to the cardinal point</p>	<p>Plane shapes Etc Charts and the model of the cardinal points</p>	<p>Mention five object or material that home Horizontal and vertical lines in their environment</p> <p>5locate Gwen cardinal on the charts and model</p> <p>6mention the of two given capital of states in Nigeria</p>

9	Three Dimensional Shapes.	Learners should be to: 1. distinguish between open and closed shapes. 2. identify the uses of 3-dimensional shapes in homes and their environment.	Cuboids, Cubes and cylinders.	1. Guide learners to separate the open shapes and closed shapes and discuss their features. 2. Lead learners to identify uses of 3-dimensional shapes in homes and environment.	1. Mention and write down the features of open and closed shapes. 2. Identify the uses of 3-dimensional shapes in homes and environment.	Cartons, Milk tins, Plastic buckets etc. Water	Lead to distinguish between open and closed shapes from a given collection of shapes.
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THEME: EVERYDAY STATISTICS

10	Bar Graph	Learners should be able to: 1. draw bar graphs. 2. read bar graphs. 3. identify bar graph mode. 4. identify the most common events/data in daily life activities.	1. Bar graph. 2. Bar graph mode.	1. Guide learners to revise pictogram and idea of mode. 2. Guide learners to generate and present data for the construction of bar graphs. 3. Lead learners to read and interpret information in bar graphs. 4. Lead learners to use bar graphs in presenting information. 5. Guide learners to identify results involving bar graphs and mode of giving data. 6. Lead learners to determine bar graph mode	1. Construct bar graphs by representing given data on bar graphs. 2. Read and interpret information from bar graphs. 3. Use of bar graphs in representing information in their environment. 4. Identify the relation between bar graph and	1. Cardboard showing horizontal and vertical bar graphs. 2. Mathematical game or demonstration designed by the teacher. 3. Bar graph chart.	Learners to: 1. construct horizontal and vertical bar graphs of a given data. 2. Solve problems from their environment where data can be represented using bar graphs. 3. identify bar graphs. 4. determine the mode of a bar graphs generated from their environment.
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				<p>and list value from bar graphs.</p> <p>7. Lead learners to identify and find the mode of bar graphs of such statistical data as population distribution, amount of rainfall by months etc.</p>	<p>mode of a given data.</p> <p>5. Give the mode on the bar graph and also the least value from bar graphs.</p>		
11.	Revision						
12 & 13	Examination						