

CLASS VII

Conceptual Area	Learning Indicators
<ul style="list-style-type: none"> • Numbers • Consolidates the sense of numberness up to 5 digits in terms of its size of estimation • Gets familiar with large numbers up to 8 digits • Understands the importance of brackets and other symbols like, =, <, >. • formulates divisibility rules of 2, 3, 4, 5, 10 and uses them as and when required • Appreciates the classification of numbers as even, odd, prime, co prime etc. 	<ul style="list-style-type: none"> • Create situations around her in which she finds numbers. • Through situations like money transactions, measuring of height budget etc. child uses larger numbers and thus appreciates their use. • child attempts to construct examples through which she demonstrates the operations on large numbers
<ul style="list-style-type: none"> • Understands the significance of HCF and LCM and finds them • By observing patterns identifies and formulates rules for whole numbers • Appreciates the need for negative numbers • Through patterns formulates rules for ordering of integers, their representation on number line, addition and subtraction of integers etc. • represents fractions and decimals pictorially and on number line • Finds sum and difference of two fractions 	<ul style="list-style-type: none"> • Given a fraction child identifies a situation for the given fraction • uses divisibility rules to find factors of a number • demonstrates her ways of finding HCF and LCM of two numbers • devises her strategies to identify appropriate situations to use the concepts of HCF and LCM. • creates daily life situations where opposites are involved and represents such quantities by positive and numbers • makes her own strategies of ordering, adding and subtracting integers
<p>2. Algebra</p> <ul style="list-style-type: none"> • Understands variables through patterns • Classifies quantities as variable and constant 	<ul style="list-style-type: none"> • child tries to identify a pattern • child tries to formulate the pattern identified by her and tries to suggest a symbol for a general term of the pattern • Child tries to construct examples that require the concept of ratio.
<p>Ratio and Proportion</p> <ul style="list-style-type: none"> • Understands how the comparison of two quantities through ratio is different from comparisons done earlier • Understands the meaning of proportion • knows how ratio and proportion are related to unitary method. • solves problems related to daily life using unitary method. 	<ul style="list-style-type: none"> • By constructing examples child tries to know how the concept of proportion is built upon that of ratio. • While solving problems on unitary method child tries to understand unit of which quantity is to be found. <p>Finds rate and the total amount in related context using unitary methods</p>
<p>3. Geometry</p> <ul style="list-style-type: none"> • Differentiates between different 	<ul style="list-style-type: none"> • classifies angles in different groups/types • Child tries to draw different types of

Conceptual Area	Learning Indicators
<p>geometrical figures on the basis of their observable properties</p> <ul style="list-style-type: none"> • Classifies angle into different types on the basis of their measurement • Understands the difference between different types of triangles and the basis on which they are classified. • Classifies Quadrilaterals as trapezium, parallelogram, rectangle, square, rhombus • Identifies 3-D shapes and their parts. • Identifies 2-D symmetrical objects. • Understands reflection symmetry. • Constructs angles of different measures using compasses. <p>Draws perpendicular line segments</p>	<p>triangles and quadrilaterals.</p> <ul style="list-style-type: none"> • Child attempts to prepare solids using their Nets. • Child observes the objects and tries to make strategies to decide about the symmetry of the object. • Child observes the reflection of objects in mirror and then tries to formulate rules about the symmetry of the object. • Child tries to see the logic behind drawing an angle of certain measure using geometrical properties. • After learning to draw an angle of certain measure child tries to device ways to draw related angles.
<p>Mensuration</p> <ul style="list-style-type: none"> • Understands the concept of perimeter of a shape. • Understands the concept of area of a shape. 	<ul style="list-style-type: none"> • Child tries to calculate the perimeter of different shapes given. She tries to formulate the perimeter of shapes like rectangle, square etc. • Child tries to calculate the areas of rectangle and square by dividing them into appropriate smaller units. She tries to think of such small units.
<p>Data Handling</p> <ul style="list-style-type: none"> • Understand the use of organizing data. • Represent data through pictograph, bar graph. 	<ul style="list-style-type: none"> • Child tries to identify daily life situations in which the information is required to be properly arranged. • Child tries to explore different ways to organise and represent data.