

Class-VI
Part-1
Arithmetic

Time	Topic	Subject Matter	Activities
Unit-1 Number System			
25 hrs	Number system	<ul style="list-style-type: none"> • History of number system. Natural numbers, concept of zero. • Whole numbers, Number line, Order relation ($>$, $=$, $<$) • Properties of natural numbers (closure, Commutative, Associative, Identity element, Inverse & distributive) for addition & multiplication. • Subtraction is not commutative. • Concept of Integer • Representation on number line. • Basic operation of integers. • Notion of rational number. 	Help of number line must be taken to represent the numbers & to specify their order relation.
Unit-II Factors and Multiples			
17 hrs	Factors & Multiples	<ul style="list-style-type: none"> • Review of Prime numbers, Composite numbers, Co-prime 	Through simple examples

		<p>numbers.</p> <ul style="list-style-type: none"> • Even & Odd numbers <p>Prime factorization of a number.</p> <ul style="list-style-type: none"> • Divisibility by 2, 3, 4, 5, 6, 7, 8, 9, 10 and 11. • HCF by prime factorization method & by long division method. • LCM by prime factorization method & common division method. • Property of HCF and LCM. 	<p>First No. x Second No. = LCM x HCF of these two numbers.</p>
Unit-III Ratio, Proportion & Unitary Method			
12 hrs	Ratio, Proportion & Unitary Method	<ul style="list-style-type: none"> • Concept of Ratio • Ratio of numbers(some problems) • Equality of two ratios. • Proportion • Problems on finding 1st, 2nd, 3rd or 4th proportion. • Concept of Unitary method with the help of examples from everyday life. • Proportion method. • Direct Variation method. 	<p>By comparing quantities of same kind & same units. Through various examples on Black board.</p>
Unit-IV Percentage			
15 hrs	Percentage	<ul style="list-style-type: none"> • Introduction of percentage conversion of 	<p>By comparing the marks of their</p>

		<p>a fraction and decimal into percentage and vice-versa</p> <ul style="list-style-type: none"> • Problems based on percentage. • Comparison between percentages and daily life problems in continuation to Vth class. 	<p>previous class in different subjects & aggregate.</p>
Unit-V Speed, Distance & Time			
8 hrs	Speed, Distance & Time.	<ul style="list-style-type: none"> • Introduction of distance & speed • Relation between speed, distance & time. • Problems based on this relation from every day life. 	<p>By solving problems on this relation</p> $\text{Distance} = \text{Speed} \times \text{Time}$ <p>on black board.</p>
Unit-VI Calendar			
8 hrs.	Calendar	<ul style="list-style-type: none"> • History of old & new system of calendar. • Concept of leap year & odd days. • Utility of problems based on calendar in our daily life. • To find the day of a week corresponding to a given date. 	<ul style="list-style-type: none"> • Leap year, odd days with illustration. • Number of odd days in an ordinary year = 1 odd day. • Number of odd days in a leap year = 2 odd days. • 100 years contain 5 odd day • 200 years contain

			<p>3 odd days</p> <ul style="list-style-type: none"> • 300 years contain 1 odd day • 400 years contain zero odd days.
<p>Part-II Algebra Unit-VII Algebraic Expression</p>			
20 hrs	Algebraic expression	<p>(Discussion to be limited upto integral coefficients)</p> <ul style="list-style-type: none"> • Concept of constant • Variable • Coefficient, term (like & unlike) • Monomial • Binomial • Trinomial • Polynomial algebraic expressions. • Addition & Subtraction by row & column method. • Verification of commutative & associative laws for addition <p>To find the value of an algebraic expression for given values of variables.</p>	By taking examples from daily life.
<p>Unit-VIII Linear Equation</p>			
10 hrs	Linear Equation in	<ul style="list-style-type: none"> • Concept of linear equation in one variable & root. 	By taking examples from daily life.

	one variable	<ul style="list-style-type: none"> • Solutions of linear equations in one variable & their verification. • Simple problems from daily life (only upto integral coefficient) 	
Part-III Geometry Unit-IX Basic Concepts of Geometry (2D)			
15 hrs	Basic concepts of geometry (2D)	<ul style="list-style-type: none"> • Concept of line • Line segment • Ray • Plane • Point of intersection of lines. • Collinear and non-collinear points. • Coincident lines. • Parallel & non-parallel lines. Point of intersection • Bisection of a line segment • Bisection of an angle • Construction of an angle equal to a given angle. • Perpendicular from a point to a given line • To draw a line parallel to a given line • Kind of angles i.e. Acute, Obtuse, Right, straight, 	<ul style="list-style-type: none"> • Comparison of line segments by observation measurement (scale & divider) • Angles should be illustrated with the help of cutting of card board using at the most three sticks and then lines on the black board.

		Reflex & Compute angles, Complimentary & supplementary Angles.	
Unit-X Concept of Three Lines			
15 hrs	Concept of three lines.	<ul style="list-style-type: none"> • Transversal • Concurrent & non-concurrent lines. • Kinds of angles between three lines (Adjacent, Linear pair, Vertically opposite, Corresponding, Alternate, Interior opposite and Exterior opposite angles)and problems. 	
Unit-XI Triangles			
15 hrs	Triangles	<ul style="list-style-type: none"> • Interior & Exterior point with respect to a triangle • Interior & exterior angles of a triangle. • Relation between exterior & interior angles of a triangle. • Relation between the sides of a triangle (sum of two sides and difference of two sides, Pythagoras theorem) • Construction & classification of triangle on the basis of sides and angles (SSS, SAS, ASA and RHS) 	With the help of card board & black board.

		<ul style="list-style-type: none"> • Construction of altitudes. • Bisectors of sides • Bisection of angles • Medians and their points of concurrence (Orthocenter, Circum center, in centre and centroid. 	
Part-VI Unit-XII Mensuration			
10 hrs	Perimeter & Area	Perimeter & Area of Rectangle, Square & Triangle with the help of formulas.	Perimeter of rectangle = $2(\text{length} + \text{breadth})$ Perimeter of a square = $4(\text{side})$ Perimeter of triangle = sum of length of sides Area of rectangle = $\text{length} \times \text{breadth}$ Area of square = $\text{side} \times \text{side}$ Area of Triangle = $\frac{1}{2} \text{Base} \times \text{height}$ Examples based on these formula will be done by the teacher on the black board.

Part-V
Unit - XIII
Statistics

10 hrs	Data handling	<ul style="list-style-type: none">• Concept of data.• Choosing data to examine a hypothesis• Collection and organization of data• Example of organizing it in Tally bars and Tables.• Pictograph• Need for scaling a pictograph• Its construction	Measure height & weight of students in group.
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