

NISHAN-E-SIKHI INTERNATIONAL SCHOOL, KHADUR SAHIB

(PEDAGOGICAL PLAN)20-21

CLASS- VIII

SUBJECT- MATHEMATICS

MONTH	WEEK	TOPIC	LEARNING OBJECTIVES	ACTIVITIES	ASSESSMENT USED
APRIL	WEEK 1	Rational Numbers	<ul style="list-style-type: none"> To learn the concept of Rational number. Consolidation of operations on rational number 	Class tests	<ul style="list-style-type: none"> Marks for correct responses
	WEEK 2		<ul style="list-style-type: none"> To understand that between any two rational number there are many more rational numbers Enable students to Represent the Rational numbers on the number line 	Worksheet and oral assessment	<ul style="list-style-type: none"> Time involved in solving the worksheet. Accuracy Correct responses
	WEEK 3	Powers	<ul style="list-style-type: none"> To understand the laws of exponents with integral powers. To Enable to understand the use of powers in scientific work 	Quiz	<ul style="list-style-type: none"> Accuracy Understanding spontaneity
	WEEK 4	Powers (cont...)	<ul style="list-style-type: none"> To learn, how to write a very large or a small number, using exponential notation. 	MCQ's	<ul style="list-style-type: none"> •understanding •Accuracy
MAY	WEEK 1	Square and Square roots	<ul style="list-style-type: none"> To understand the concept of square and square roots. To learn square roots using factor method and division method 	Class tests	<ul style="list-style-type: none"> Marks for activity
	WEEK 2	Algebraic Expressions	<ul style="list-style-type: none"> To learn how to multiplying and divide algebraic exp.. Solving linear equations in one variable in contextual problems involving multiplication and division. 	Oral test	<ul style="list-style-type: none"> Observation of level of understanding
	WEEK 3	Factorisation of Algebraic expressions	<ul style="list-style-type: none"> To enable the students to use different identities (ex. $(a + b)^2 = a^2 + 2ab + b^2$ etc 	To verify the algebraic identities $(a + b)^2$, by paper	<ul style="list-style-type: none"> Accuracy Checking Geometrical skills

			<ul style="list-style-type: none"> factorising the difference of two squares Factorising a perfect square trinomial 		
	WEEK 4	Time and Work	<ul style="list-style-type: none"> To learn the General Rules used in solving the word problems. 	Class test	Marks for correct responses
JULY	WEEK 1	Understanding Shapes	<ul style="list-style-type: none"> To learn the properties of quadrilaterals- sum of angles of a quadrilaterals is equal to 360°. To understand the properties of parallelogram 	<ul style="list-style-type: none"> To verify angle sum property of a quadrilateral using paper cutting and pasting To verify Pythagoras theorem using tan gram pieces 	<ul style="list-style-type: none"> Observation of level of understanding. Accuracy in construction.
	WEEK 2	Understanding Shapes(cont..)	<ul style="list-style-type: none"> To learn the diagonals of a square are equal and bisect each other at right angles. Opposite angles of a parallelogram are equal. 	To make cube and cuboids of different dimension. (Using unit cubes)	<ul style="list-style-type: none"> Accuracy Checking Geometrical skills
	WEEK 3	Area of trapezium and polygon	<ul style="list-style-type: none"> To understand the concept of Area of trapezium Enable student to use the formula to solve the problems . 		<ul style="list-style-type: none"> Marks for correct responses
	WEEK 4	Polygon	<ul style="list-style-type: none"> Enable students to know the properties of polygon 	To construct different type of polyhedron using frames	<ul style="list-style-type: none"> Accuracy
AUGUST	WEEK 1	Bar Graph	<ul style="list-style-type: none"> To learn how to read a bar graph Enable students to know how to represent data into bar graph. 	Class test	<ul style="list-style-type: none"> Number of correct answers Calculation
	WEEK 2	Pie chart	<ul style="list-style-type: none"> To make students to represent the simple pie charts with reasonable data numbers 	To make pie chart using paper cutting of given data	<ul style="list-style-type: none"> Time taken to solve worksheet understanding 1 mark for each correct answer

	WEEK 3	REVISION OF PT-2 AND	To recall the concepts	Class test	<ul style="list-style-type: none"> Marks for correct responses
					<ul style="list-style-type: none">
SEPTEMBER	WEEK 1	REVISION	Recall the concepts	Class tests	<ul style="list-style-type: none"> Marks for correct responses
	WEEK 2	REVISION OF FIRST TERM CHAPTERS	Recall the concepts	Class tests	<ul style="list-style-type: none"> Marks for correct responses
	WEEK 3	1st term Exams	-----	-----	-----
	WEEK 4	1st term Exams	-----	-----	-----
OCTOBER			<ul style="list-style-type: none"> 		<ul style="list-style-type: none">
	WEEK 2	Cubes and cube roots	<ul style="list-style-type: none"> To understand the concept of cube and cube root Enable factor method for numbers containing at most 3 digits 	Blackboard test	<ul style="list-style-type: none"> Observation of level of understanding
	WEEK 3	Playing with numbers	<ul style="list-style-type: none"> Numbers puzzle and games Deducing the divisibility test rules of 2,3,5,9,10 for a two or three-digit number expressed in the general form. 	To observe some given number patterns and write their next three steps/rows.	<ul style="list-style-type: none"> Marks assigned according to rating scale
	WEEK 4	Linear equations	<ul style="list-style-type: none"> Enable students to understand the concept of linear equation How to represent a line on the graph Solving linear equations in one variable in contextual problems involving multiplication and division. 	<ul style="list-style-type: none"> Crossword puzzle worksheet 	<ul style="list-style-type: none"> Time involved in solving the worksheet Number of correct answers
NOVEMBER	WEEK 1	Compound interest	<ul style="list-style-type: none"> To understand the concept of compound interest. Calculating the compound interest Annually, half and quarterly . Calculating compound interest, using formulae. 	<ul style="list-style-type: none"> Oral test 	<ul style="list-style-type: none"> Observation of level of understanding
	WEEK 2	Direct and inverse variations	<ul style="list-style-type: none"> To understand the concept of direct and inverse variations Application of direct variation Application of inverse variation 	<ul style="list-style-type: none"> Peer teaching 	<ul style="list-style-type: none"> Observation of thinking skills
	WEEK 3	Representing 3D in 2D	<ul style="list-style-type: none"> To identify and match pictures with objects 	To draw front view,	<ul style="list-style-type: none"> Checking thinking

			<ul style="list-style-type: none"> • Drawing 2-D representation of 3-D objects • Counting vertices, edges & faces & verifying Euler's relation for 3 D figures with flat faces 	top view and side view of three dimensional shapes made by combining unit cubes.	and logical mindedness
	WEEK 4	Construction of Quadrilateral	<ul style="list-style-type: none"> • Enable students to draw or construct Quadrilaterals using basic tools • To construct two adjacent sides and three angles • To construct three sides and two included angles 	To construct general quadrilateral	<ul style="list-style-type: none"> • Marks for correct responses
DECEMBER	WEEK 1	Volume and surface Area	<ul style="list-style-type: none"> • To understand the concept of volume and surface area of different objects • To learn the surface area of a cube , cuboid , cylinder etc 	<p>To drive the formula for total surface area of cylinder.</p> <p>. To calculate the volume of cube & cuboids using unit cube by the given dimensions.</p>	<ul style="list-style-type: none"> • Observation of thinking skills
	WEEK 2	Probability	<ul style="list-style-type: none"> • To understand the terms associated with probability • Probability ,using visual Representation of outcomes • Independent and dependent events 	To find the probability of occurrence of numbers 1, 2, 3,4,5,6 on the top face of die.	<ul style="list-style-type: none"> • Concept clarity • Observation of understanding level of students.
	WEEK 3	Graphs	<ul style="list-style-type: none"> • Enable students to know the use of Cartesian plan • To learn the graph of a linear equation in two variables • Practical applications of graphs • Enable students to reading a linear graph. 	Class test	<ul style="list-style-type: none"> • Marks for correct responses
JANUARY	WEEK 1	REVISION OF PT-4	To recall the concepts	Class tests	<ul style="list-style-type: none"> • Marks for correct responses
	WEEK 2				
	WEEK 3				

	WEEK 4				
FEBRUARY	WEEK 1	REVISION	To recall the concepts	Class tests	<ul style="list-style-type: none"> • Marks for correct responses
	WEEK 2				
	WEEK 3				
	WEEK 4				