

**D.A.V. Public School**  
**Affiliated to CBSE(10+2)**  
**Sector – 3 Dhurwa Ranchi-4**

**Class VIII MATHEMATICS Syllabus(2019-2020)**

<b>Months</b>	<b>Chapter</b>	<b>Topic</b>	<b>Exam / Tests Portion</b>
APRIL	CH-1 (Rational Numbers)	Introduction, properties of rational numbers ,additive identity, additive inverse, multiplicative inverse, representation of rational numbers on the number line, rational numbers between two rational numbers.	
	CH-2 (Linear equation in one variable)	Introduction, solving equations having the variable on both sides, some applications, reducing equations to simpler form, equations reducible to the linear form.	
MAY	Ch-3 (Understanding Quadrilaterals)	Introduction, polygons, classification of polygons, convex and concave polygons, regular and irregular polygons, angle sum property, exterior angles, kinds of quadrilaterals, some special parallelograms.	
JUNE	CH-4 (Practical Geometry)	Constructing a quadrilateral, 4 sides and a diagonal are given, two diagonals and three sides are given, 2 sides and 3 angles are given, 3 sides and 2 included angles are given.	
	Ch-5( Data Handling )	Grouping data, pie chart, chance and probability, equally likely outcomes, outcomes an event.	
JULY	CH-6(Squares and Square Roots)	Introduction, properties of square numbers, finding the square of a number, Pythagorean triplets, square roots, finding square roots, finding square roots through prime factorization, square roots of decimals estimating square root	
	CH-7 (Cubes and Cube Roots)	Cubes, smallest multiple that is a perfect cube, cube roots, Cube root through prime factorization method, Cube root of a number	
	CH-8 (Comparing	Ratios and percentages, finding discounts, finding cost	

	Quantities)	price/selling price, profit%/loss%,	
AUGUST	CH-8 (Comparing Quantities)	Compound interest, rate compounded annually or half yearly, application of compound interest formula.	<b>PT-1 EXAM Portion Ch-1,2,3,4 ,5</b>
SEPTEMBER		<b>REVISION for HALF YEARLY EXAM</b>	<b>HALF YEARLY EXAM Portion Ch-1 to 8</b>
OCTOBER	Ch-9 (Algebraic expressions and identities)  Ch-10( Visualizing solid shapes)  Ch-11 (Mensuration)	What are expressions?, terms, factors and coefficients, monomials, binomials, and polynomials, addition and subtraction of algebraic expressions, multiplying a monomial by a monomial/binomial/trinomial, standard identities, applying identities.  Introduction, Faces, edges and vertices,  Area of trapezium, area of a quadrilateral, area of a polygon , surface area of cube, cuboid and cylinder, volume of cube, cuboid and cylinder.	
NOVEMBER	Ch-12(Exponents and powers)	Powers with negative exponents, Laws of exponents, use the exponents to express small numbers in standard form, comparing very large and very small numbers.	<b>PT-2 EXAM Portion Ch-9 to 12</b>
DECEMBER	Ch-13 (Direct and inverse proportions)  Ch-14 (Factorisation)	Introduction, inverse proportion,  Factors of natural numbers, factors of algebraic expressions, what is factorization?, factorization by regrouping terms, factorization using identities, factors of the form $(x+a) (x+b)$ , division of algebraic expressions.	
JANUARY	Ch-15 (Introduction to graphs)  Ch-16 (playing with numbers)	A bar graph, A pie graph, a line graph, linear graphs, some applications,  Numbers in general form, test of divisibility	<b>PT-3 Exam Portion Ch-ch-13 to 16</b>
FEBRUARY		<b>REVISION &amp; ANNUAL EXAM (Syllabus-Complete book).</b>	