



MAHARAJA AGARSAIN PUBLIC SCHOOL
a Cambridge International School
Ashok Vihar, Delhi
CLASS - VIII
SUBJECT - MATHEMATICS
SESSION - 2023-24

DURATION	SYLLABUS COVERED	SYLLABUS TESTED	SUBJECT ENRICHMENT/PRACTICAL/ ENGLISH/ CONVERSATION/ VISUAL STIMULUS	LEARNING OUTCOMES SWBAT	RESOURCES	SDG
PT1 (JULY-AUG)	Ch-1:Rational Number	Ch-1:Rational Number Ch-5)Square and square roots Ch-6)Cube and cube roots PT 1 date – 31st JULY Tentative syllabus completion – 2nd July	Mind Map	1)To generalize properties of addition, subtraction, multiplication and division of rational numbers through patterns 2) To find out as many rational numbers as possible between two given rational numbers. 3)To interpret rational numbers, the properties of commutativity and associativity .4) To locate different Rational Numbers on the Number Line and Interpret Distributivity of multiplication over addition for rational numbers.	https://www.youtube.com/watch?v=SkKS1KgM5fA	SDG_9 Industry, Innovation and Infrastructure

	Ch-5) Square and square roots		Square Root Clock:	<p>1.To Find squares, and square roots of numbers using different methods</p> <p>2 To observe patterns in square numbers and to form their rules for perfect square numbers and square roots.</p> <p>3) To conceptualize Square and square root and apply it in their real life.</p>	https://www.youtube.com/watch?v=nGIFM-n-Itw	SDG-13 Climate Action
	Ch-6:Cube and cube roots		Cube Roots Maze	<p>1) To calculate the Cube of negative and positive numbers.</p> <p>2)To find Cube root of a cube number.</p> <p>3)To develop the sense to use application of problem-solving strategies in various real life problems.</p>	https://www.youtube.com/watch?v=AIRXl1wMXeY	GOAL 15 : Life on land
	Ch-3)Understanding Quadrilaterals		<p>Activity 1: Fold a paper 8 times in any way. Unfold and locate various convex and concave polygons.</p> <p>Activity 2: To verify that the sum of interior angles of a quadrilateral is 360° by paper cutting and pasting.</p>	<p>1. To verify properties of parallelograms and establish the relationship between them through reasoning</p> <p>2) To interpret the angle sum property of quadrilaterals.</p> <p>3)To interpret Classification of polygons.</p>	https://www.youtube.com/watch?v=BoAL-PZjW4s	SDG_9 Industry, Innovation and Infrastructure

			<p>Activity 3: To verify that the sum of measures of the exterior angles of any polygon is 360° by paper cutting and pasting.</p> <p>Activity 4: To make the following by paper folding & cutting (i) Kite (ii) Rhombus</p>			
	Ch-2) Linear equation in one variable.		Linear Equations Maze	<p>1)To solve puzzles and daily life problems using variables</p> <p>2.To solve the linear equation in one variable</p> <p>3. To interpret the word problems and be able to frame and solve the equations.</p>	https://www.youtube.com/watch?v=IDOYdBgtnjY	SDG-8 Decent Work & Economic Growth

	Ch-7) Comparing quantities.		Portfolio Activity: Explore Math in Supermarket: To calculate the discount and discount % on different items of your choice.	1.To calculate profit/loss percent and rate Of percentage in various problems. 2. To differentiate between simple Interest and compound interest. 3. To calculate VAT and discount. 4. To apply these concepts in real life situations.	https://www.youtube.com/watch?v=vprJDENPDVk	SDG 10 Gender Inequality
HALF YEARLY (SEP)	Ch. 10. Exponents and Powers	Chap-1) Rational Number Ch-2) Linear equation in one variable. Ch3: Understanding quadrilaterals Ch-5) Square and square roots Ch-6) Cube and cube roots Ch-7) Comparing quantities. Ch 10) Exponents and Powers	5. To verify by paper folding the exponents of two .	1.To express large numbers More conveniently using exponents. 2) To use Exponents to express Small Number in Standard form.	https://www.youtube.com/watch?v=USXYW64eg4s	GOAL 7 : Affordable and Clean energy
PT2 (NOV-DEC)	Ch-4) Data handling	Ch-4) Data handling Ch-13) Direct and Inverse Proportions Ch 15) Introduction to graphs PT2 date 29 th NOV	Portfolio Activity:(Group Activity): Each student will write, how much they spent during a day in the following headings in tabular form (i)school (ii)homework iii) play (iv)sleep (v)watching Tv vi) others Represent the	1.To recall the meaning of term statistics and the need of collection of data and statistical analysis 2. To Calculate the probability of defined events. 3. To Solve real life word problems involving Probability of an event.	https://www.youtube.com/watch?v=6tKWbKAq3Ro https://www.youtube.com/watch?v=zPXbqZCY4GE Watch this video after 2:25 minutes	SDG 11 Sustainable cities and communitie

			information in a Pie chart.			
	Ch-11) Direct and Inverse Proportions		Direct and Inverse proportion- Sorting Activity	1) To differentiate between the proportion of two quantities x and y. 2) : To calculate the missing value of the quantity x or y in various real life situations.	https://www.youtube.com/watch?v=LvZe9dSvvo8	SDG 4 -Quality Education
	Ch-13) : Introductions to Graphs		Coordinate Grid Puzzle	1. To draw the various type of graphs e. g. bar graph, line graph etc 2. To locate points on graph for ordered pair (x,y) 2. To differentiate among the data for various types of graphical representation.	https://www.youtube.com/watch?v=3lPspTetBws	SDG 8: Decent Work and Economic Growth
	Ch-8: Algebraic Expressions and Identities		Activity6: Algebra with Paper cutting $(a+b)^2 = a^2 + b^2 + 2ab$	1.To Identify and distinguish variables and constants 2. To perform addition and subtraction of algebraic expressions by using the concept of like terms. 3. To perform multiplication of algebraic expressions. 4. To apply the knowledge of various algebraic identities in different problems.	https://www.youtube.com/watch?v=OOvQ6iIU50c	SDG 8: Decent Work and Economic Growth
	Ch-12) Factorisation		Factoring Puzzle	1) To interpret Factors of algebraic expressions. 2) To do Factorization by	https://www.youtube.com/watch?v=nJrEUZkdNpI	QUALITY EDUCATION

				regrouping terms 3) To find factors of given algebraic expression by using different methods and various algebraic Identities.		
FINAL TERM (FEB)	Ch 9) : Mensuration	Ch-2) Linear equation in one variable. Ch-5) Square and square roots. Ch-4) Data handling Ch-8) Algebraic Expression and identities Ch 9) Mensuration Ch 10) Exponents and powers Ch 11) Direct and inverse proportions. Ch 12) Factorization Ch13) Introduction to graphs	7.To verify by paper cutting and folding method" curved surface area of a cylinder is $2\pi r h$ 8 : To Explore the relationship between Length (cm) and perimeter (cm) Length (in cm) and area (in cm^2) of 5 squares of different Dimensions drawn on a squared paper	1.To calculate the Volume of a given solid. 2. To solve real life word problems involving Volume of the solids done. 3. To apply the concept of Total & Lateral Surface area in real life situations. 4. To deduce the formula of total & lateral surface area of solid shapes.	https://www.youtube.com/watch?v=bKnu2Gw53cA	SDG 8: Decent Work and Economic Growth

- Math week – 3 to 17 May
- Presentation week – 19 to 26 July
- Research Based Project topic – Affordable and clean Energy
- Integrated Project Topic – G 20

➤ The above mentioned dates are tentative.