Cambridge International School, Mohal, Kullu
Class –VIII
Subject- Mathematics
First Term Curriculum
Session – 2020-21

	FEBRUARY /MARCH	APRIL	MAY	JUNE
Concepts	• Rational Numbers • Linear equation in One Variable • Exponents and Powers	• Exponents and Powers(contd.) • Visualising Solid Shapes • Algebraic Expressions and Identities	• Algebraic Expressions and Identities(contd.) • Squares and Square Roots • Cubes and Cube Roots	• Cubes and Cube Roots(contd.) • Comparing Quantities
Learning Outcomes	**Students will able to:** • Define the properties of rational numbers • Plot the rational numbers on number line • Find rational numbers between two given rational numbers • Learn the concept of multiplicative and additive identities • **ACTIVITY:** ➢ **Group Activity: Number Line** Students created number line using flash cards in the class (before Lockdown) **Students will able to:** • Knows the difference between the algebraic expression and equation • Form linear equations • Solve the linear equations • Simplify the complex linear equations • Analyse the given problem, form the equation and find its solution **ACTIVITY:** ➢ **Flash cards: Linear equations** (Students created Flashcards to the different linear equations and their solutions) **Students will able to:** • Understand laws of exponents	• Apply the laws of exponents for evaluating positive and negative components • Develop the ability to analyze and differentiate between various laws of exponents • Compare very small ad very large numbers • Perform numerical skills like simplification using laws and develop critical thinking and collaboration in the process **Students will able to:** • Identify the faces and edges • Understand the use of Euler's formula • Identify the shapes **Activity:** **Short videos (prepared by Teachers/Students)** Short videos were prepared by the teachers to elaborate the concept of shapes and students also prepared the videos as a part of recapitulation of the topic(during lockdown) **Students will able to:** • Frame expressions • Add, subtract and multiply algebraic expressions	• Find the value of algebraic expression • Apply identities • **Videos shown for reference:** ➢ **https://youtu.be/qyJPzAdVOw8** ➢ **https://youtu.be/Nn_hTcN8iAs** **Students will able to:** • Define the Square numbers • Define properties of Square numbers • Find the square roots by Prime factorization • Find the square roots by long division **Videos shown for reference:** ➢ https://youtu.be/aBs8Wcl8Log ➢ **Students will able to:** • Define what is Cube root • Define the properties of Cube root	**Students will able to:** • Find Cube root by Prime Factorization • Solve the problem sums concerning Cube root • Find Cube root by Estimation **Students will able to:** • Calculate increase and decrease percentage • Find profit, loss, cost price and selling price • Find the simple interest and amount • Find Compound interest and amount **Videos shown for the reference**
Assessment	• Online Assessment • Quiz/Questionnaire • HW Updates • Online Assignment • Subject Enrichment: Online Quiz **Main Book: NCERT** **Resource : DIKSHA App**			

Cambridge International School, Mohal, Kullu
Class - VIII
Subject- Mathematics
Final Term Curriculum
Session – 2020-21

	JULY/AUGUST	SEPTEMBER	OCTOBER	NOVEMBER
Concepts	• Direct and Inverse Proportions • Data Handling	• Mensuration • Factorisation	• Understanding Quadrilaterals • Practical Geometry	• Introduction to Graphs
Learning Outcomes	**Students will able to:** • Learn the variations in quantities • Dependence of one quantity over another • **Videos shown for reference:** ➢ https://youtu.be/kuvdMCDqmKg **ACTIVITY:** ➢ **Individual Activity** (Students created a table comparing the area and perimeter of given figures in proportion) **Students will able to:** • Define the terms like frequency and class interval • Represent the data using bar graphs and Histogram • Represent the data in pie charts • Explain the meaning and concept of probability • Apply and solve the questions of probability **ACTIVITY:** ➢ **Double doodle** (Students performed Double doodle activity and represent the data in Histogram in the online class) ➢ **Pie Chart making using a paper circle** (Students will create a paper model of pie chart in the online class)	**Students will able to:** • Find the area of polygon like trapezium • Find the area and volume of solid shapes • Finds surface area and volume of cuboidal and cylindrical shapes **ACTIVITY:** ➢ **Proving the area of Trapezium** (Students will prove the area of Trapezium equal to half the product of its altitude and sum of its parallel sides in the online class) **Students will able to:** • Divide polynomials • Apply identities to find factors • Use middle term method of factorization **ACTIVITY:** ➢ **Grid Paper** (students will use grid paper to represent a polynomial and its factorization in the online class)	**Students will able to:** • Define Concave and Convex polygons • Define regular and irregular polygons • Define and apply the angle sum property • Apply the properties of parallelograms and solve the questions **ACTIVITY:** ➢ **Proving the angle sum property of quadrilaterals** (Students will prove the angle sum property of quadrilateral that the sum of all interior angle of a convex quadrilateral is always 360 degrees) **Students will able to:** • Construct a quadrilateral when four sides and one diagonal is given • Construct a quadrilateral when three sides and two diagonal is given • Construct a quadrilateral when two adjacent sides and two included angles are given • Construct a quadrilateral when other special properties are known **ACTIVITY:** ➢ **Construction practice the** (Students will construct quadrilaterals using cutting and pasting of paper)	**Students will able to:** • Plot the coordinates • Represent the data in line graphs • Interpret the data in graphs **ACTIVITY:** ➢ **Plotting Points in Cartesian Plane** (Students will plot the points in Cartesian plane as per the data provided to them)
Assessment	• Online Assessment • Quiz/Questionnaire • Online Assignment • HW Updates • **Subject Enrichment**: Art Integration Project(Math: Data Handling/Science: Sound) **Main Book: NCERT** **Resource :DIKSHA App**			