

Espalier Heritage School

Annual Planner 2025-26

Grade VII												
Subject: Maths												
Sr No	Lesson Name	Point to cover	Lesson flow	learning objectives	Methodology	Pedagogical Process	Learning outcome	Teaching Aid	Teaching Place	Reff.books with pg.no.	No.of lectures required	Class Activities /Diagrams / Map work
1	Integers	1. Introduction of integers	1. Set induction to check the previous knowledge of student about numbers and integers.	1. Students will understand a bigger collection of numbers which is formed by whole numbers and their negatives.	Explanation	The learning may be provided opportunities in pairs/ groups / individually and encouraged to provide contexts for exploring the rules of multiplication and division of integers. This can be done through number line or number patterns	The learn multiplies/ divides two integers	Chart of number line	Online Classroom	Text book	10	To practice addition, subtraction and multiplication of integers
		2. Properties of addition and subtraction	2. Solving exercise based on basic concept of integers given in the textbook.	2. They will understand how integers will be multiply and find the product of a positive	Inductive and deductive			Paper tiles				Material required: 50 flashcards, pen, notebook
		3. Multiplication of integers	3. Introduce the operations of integers.	3. Students will understand properties of commutativity,								
		4. Properties	4. Explain properties of									
		5. Division of integers	5. Solving exercise in									
		6. Properties	6. To teach multiplication and									
			7. Solving exercise in									
			8. To teach division and its									
			9. solving exercise in									
2	Fractions and Decimals	1. Introduction of fraction and decimal	1. Set induction to check the previous knowledge about basic fraction and their types	1. Students will learn about fraction and decimal along with the operation of addition and subtraction on them	1. Explanation	The learning may be provided opportunities in pairs/ groups / individually and encouraged to explore the multiplication and	The interprets the division and multiplication of fractions and decimals	1. Fraction Circle	Online Classroom	Text book	14	Understanding multiplication of decimal numbers
		2. Multiplication of	2. Solving exercise based on basic concept	2. They will understand operations of	2. Inductive and deductive							Aim: To represent the product of two decimal numbers

		3. Division of fractions by a whole	3. Explanation of multiplication and division of fraction	3. Students will learn how to multiply and divide two decimal								Material required: Squared sheet of paper, crayons of
		4. Division of whole	4. Solving textbook exercise									
		5. Introduction	5. Introduction about decimal									
		6. Multiplication of decimal	6. Explain operation of decimal number									
		7. Division of decimal number by a whole	7. Solving textbook exercise based on the give concept.									
3	Data Handling	1. Introduction of data handling and	1. Set induction to check the previous knowledge of students which	1. Students will understand the data is always collected for specific purpose	1. Explanation	The learning may be provided opportunities in pairs/ groups / individually and encouraged to find a	The learner interprets data using bar graph such as	Online Classroom	Textbook	12	Collection of data and arranging data in tabular form for analysis	
		2. Concept of arithmetic mean,	2. Explain the concept of data, purposes for collection of data	2. Students will understand collection, recording and presentation of	2. Inductive and deductive	2. To discuss the situations where the term 'chance' can be used, for example, what are the	The learner fine various representative values for				Activity to find measure of Central tendency	
		3. Uses of bar graphs with different purposes.	3. Solving textbook exercise based on above concept	3. Students will understand the measure of Central tendency in data handling			The learner recognises variability in real life situation such as					
		4. Concept of probability	4. To explain the concept of mean, median and mode and its uses in	4. Students will understand there are situations in our life, that are certain to								
			5. Solving textbook exercise									
			6. To explain what are the purposes of graph and how to									
			7. Solving textbook exercise									
			8. To explain concept of									
4	Simple Equation	1. Introduction of constant and variable	1. Set induction to check the previous knowledge about constant and variables	1. Students will understand and equation is a condition on a variable such that two expressions in	Inductive and deductive	The learner may be provided opportunities in pairs/groups/individually and encourage to provide situations from daily life that lead to setting up of	The learner represents daily life situations in the form of a simple	Mind reading game	Online Classroom	Textbook	14	Activity: To complete 3 x 3 magic square by using linear equations
		2. To explain concept of equation	2. Start with mind reading game to introduce the concept of variable and	2. Students will understand the value of variable for which the equation is satisfied is called the		It is also provide to conduct activity of adding/subtracting number of objects of same category from daily						Pre-requisite: Knowledge of solving linear equations.

			8. To explain the concept of right angled triangle								
7	Congruence of triangle	1. Introduction	1. To explain the meaning of congruent by doing an activity and also the	1. Students will understand congruent objects are exact copy of one another	Explanation	The learner may be provided opportunities in pairs/groups/individually and encouraged to establish	The learner explains congruency of triangles on the basis	Shape of Triangles	Online Classroom	Textbook	6
		2. Concept of congruence	2. To solve exercise 7.1 based on above	2. Students will understand various criteria to prove	Demonstration						
		3. Criteria for	3. To explain the criteria to prove or		Inductive and deductive						
			4. To solved								
8	Comparing Quantities	1. Introduction of topic	1. Set induction to introduce the concept of comparing	1. Students will understand the comparison of two quantities in our daily	Inductive and deductive	1. The learner may be provided opportunities in pairs/groups/individually and encourage to evolve	1. The learner solved problems	Online Classroom	Textbook	12	Activity: To find the ratio between the price and weight of any
		2. Concept of ratio and equivalent	2. Introduce the concept of ratio and equivalent	2. Students will understand about profit and loss and		2. Encouraged to provide daily life situation based on profit and loss and	2. The learner calculates				
		3. Percentage	3. To solve exercise 8.1								
		4. Ratio to percentage, profit and loss chapter	4. To explain the concept of percentage and converting								
			5. To solve								
			6. To teach the concept of converting ratio to								
			7. Solving								
9	Rational Number	1. Introduction of rational numbers and need	1. Set induction to check about the knowledge of numbers	1. Students will understand all integers and fractions	Inductive and deductive	1. The learner may be provided opportunities in pairs/groups/individually and encourage to explains congruency of	1. The learner solves problems related to	Chart of number system	Online Classroom	Textbook	6
		2. Rational numbers on	2. To teach concept of	2. Students will understand there are							
		3. Rational numbers in standard form and	3. To teach how to represent rational numbers on number line	3. Students will understand and able to do operations of rational numbers							
		4. Operations	4. To teach how to find other								
			5. Solving								
			6. To teach how to add subtract								
10	Practical Geometry	1. Introduction	1. To explain the six elements of a triangle	1. Students will understand the methods of some ruler and compasses constructions	Constructing	1. The learner may be provided opportunities in pairs/groups/individually and encourage to demonstrate the	The learner using ruler and a pair of compasses constructs a	Geometry tools	Online Classroom	Textbook	10
		2. Construction of line parallel to a	2. To teach how to construct parallel lines	2. Students will understand the method of drawing a triangle using		2. Encouraged to construct the simple triangle by using ruler and compasses					

		3. Constructing a triangle when the	3. To teach the step for constructing a triangle by using								
		4. Constructing a triangle when the length of two sides	4. Solving exercise based on above concept								
		5. Constructing a triangle when the measures of two of its	5. To teach the step for constructing a triangle by using SAS criterion								
		6. Constructing a right-angled triangle	6. Solving exercise based on above concept								
		7. To teach the									
		8. Solving									
		9. To teach the									
11	Perimeter and Area	1. Introduction about Perimeter and area of	1. Set induction to check the knowledge about area and its boundary	1. Students will understand that perimeter is the distance around a closed figure where	Inductive and deductive	The learner may be provided opportunities in pairs/groups/individually and encourage through discussion motivate them	1. The learner finds out approximate area of	Square grid	Online Classroom	Textbook	16
		2. Perimeter and area of parallelogram	2. To teach the concept of area and perimeter of	2. Students will table to find perimeter and area of square,	Problem solving		2. The learner calculates				Material required: pencil, protractor, sheets of paper
		3. Area and circumference	3. Solving exercise based	3. Students will understand that							
		4. Applications	4. To teach the concept of area								
		5. Solving									
		6. To teach the									
		7. Solving application based									
12	Algebraic Expressions	1. Introduction of variable, constant and terms	1. Set induction to check the knowledge about algebra	1. Students will understand the concept of an algebraic expressions are	Explanation	The learner may be provided opportunities in pairs/groups/individually and encourage to explore the possible	The learner adds/subtracts algebraic expressions		Online Classroom	Textbook	10
		2. Classification of algebraic	2. To explain the concept of variable and constant and also	2. Students will able to classify an algebraic expressions	Inductive and deductive						-
		3. Addition and subtraction	3. To explain classification of algebraic	3. Students will able to add and subtract.							
		4. Finding the value of	4. Solving exercise based	4. Students will able to find the value of an							
		5. To teach the addition and	5. To teach the addition and								

