	Espalier Heritage School											
						Annual Planner 202	2-23					
Gra	de 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. Multiplicatio n 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	Fraction s and Decimal s	1. Introduction of fraction and decimal	1. Set induction to check the previous knowledge about basic fraction and	1. Students will learn about fraction and decimal along with the operation of addition and	1. Explanation	The learning may be provided opportunities in pairs/ groups / individually and encouraged to explore	The interprets the division and multiplication of fractions	1. Fraction Circle	Online Classroom	Text book	14	Understanding multiplication of decimal numbers
		2. Multiplicatio n of	2. Solving exercise based on basic concept	2. They will understand operations of	2. Inductive and deductive		pon ancimale.					Aim: To represent the product of two decimal numbers

		3. Division	3. Explanation of	3. Students will learn								Material required:
		of fractions	multiplication and	how to multiply and								Squared sheet of
		by a whole	division of fraction	divide two decimal								paper, crayons of
												paper, erayene er
		4. Division	4. Solving									
		of whole	textbook exercise									
		5.	5. Introduction									
		Introduction	about decimal									
		6.	6. Explain									
		Multiplicatio	operation of									
		n of decimal	decimal number									
		7. Division	7. Solving									
		of decimal	textbook exercise									
		number by	based on the give									
		a whole	concent									
			concept.									
3	Data	1.	1. Set induction to	1. Students will	1. Explanation	The learning may be	The learner		Online	Textbook	12	Collection of data
–	Handling	Introduction	check the	understand the data		provided opportunities in	interprets		Classroom		[·-	and arranging
		of data	nrevious	is always collected		pairs/ groups /	data using					data in tabular
		bandling		for specific nurnose		individually and	har granh					form for analysis
		land	studente which	for specific purpose								IOTTI IOT analysis
		anu					SUCITAS					
		2. Concept	2. Explain the	2. Students will	2. Inductive and	2. To discuss the	The learner					Activity to find
		of	concept of data,	understand	deductive	situations where the term	fine various					measure of
		arithmetic	purposes for	collection, recording		'chance' can be used, for	representativ					Central tendency
		mean,	collection of data	and presentation of		example, what are the	e values for					-
		3 Uses of	3 Solving	3 Students will			The learner					
		bar graphs	textbook evercise	understand the			recognises					
		bai graphs	based on should	moodure of Control			voriobility in					
		vviui i										
		amerent	concept									
		purposes.		nandling			situation					
		4 Concept	1 To explain the	1 Students will			such as					
		4. Concept	4. TO explain the	4. Students will								
			concept of mean,									
		probability	median and mode	situations in our life,								
			and its uses in	that are certain to								
			5. Solving									
			textbook exercise									
			6 To explain									
			what are the									
			Graph and now to									
			7. SUIVING									
			8. To explain									
			concept of									
4	Simple	1.	1. Set induction to	1. Students will	Inductive and	The learner may be	The learner	Mind	Online	Textbook	14	Activity: To
	Equation	Introduction	check the	understand and	deductive	provided opportunities in	represents	reading	Classroom			complete 3 x 3
		of constant	previous	equation is a		pairs/groups/individually	dailv life	dame				magic square by
		and variable	knowledge about	condition on a		and encourage to provide	situations in	5				using linear
			constant and	variable such that		situations from daily life	the form of a		1			equations
			variables	two expressions in		that lead to setting up of	simple		1			
		2. To	2. Start with mind	2. Students will		It is also provide to			1			Pre-requisite:
		explain	reading game to	understand the value		conduct activity of			1			Knowledge of
		concept of	introduce the	of variable for which		adding/subtracting			1			solving linear
		equation	concent of	the equation is		number of objects of			1			equations
			variable and	entiefied is called the		some estagent from deily			1			equations.
1	1			saustieu is calleu lhe	1	same calegory norn dally		1	1		1	1

		3. Solving	3. Explain the	Students will								Material required:
		of an	concept of	understand how to								Incomplete magic
		4. Path of	4. Solving									
		equation.	exercise 4.1									
		a) Normal	5 To ovelain how									
		D. Applications	5. TO explain now									
		Applications	and then student									
		loguations to										
			6 To explain how									
			the concept of									
			7. To solve									
			application based									
5	Lines	1.	1. Set induction to	1. Students will	Inductive and	1. The learner may be	1. The	Chart of	Online	textbook	7	
	and	Introduction	check the	understand basic	deductive	provided opportunities in	learner	lines and	Classroom			
	Angles	aap basic	previous	concept about angles		pairs/groups/individually	classify of	angles				
		concept of	knowledge about	and its properties.		and encouraged to	angles based					
		basic	point, lines and			explore different	on thier					
		geometry	angles.			examples from daily life	properties as					
		i.e. point,				in which pair of angles	linear,					
		lino analos				are involved with a	cupplomontar					
		2. Concept	2. To teach the	2. Students will		2. Encourage to visualise	2. The					
		of related	concept of related	understand		the relationship between	learner verify					
		angles:	angles and start	properties of angles		various pairs of angles	the					
		complement	solving exercise	formed by parallel		when a transversal cuts	properties of					
		ary angle,	5.1.	line and its		two lines(parallel and non	various pairs					
		supplement		transversal		parallel)	of angles					
		3. Pairs of	3. To teach the									
		lines:	concept of line									
		intersecting	and transversal									
		lines,	and property of									
		transversal,	angle intercept by									
		andles	parallel lines and									
			4. To solved									
6	The	1.	1. Set induction to	1. Students will	Inductive and	1. The learning may be						
	Triangle	Introduction	know the basic	understand about	deductive	provided opportunities in						
	and its	of triangle	concept and	triangle and its		pairs/groups/individually						
	Propertie		properties of	properties.		and encouraged to draw						
	s		triangle.			different types of						
		2. Concept	2. To explain the	2. Students will		2. Encourage to explore	1. The	Shapes of	Online	Textbook	12	1. Activity to
		of medians	concept of	understand the		exterior angle property of	learner find	Triangles	Classroom			understand the
		and	median and	practical use of		triangles;	unknown					median and
		altitudes of	altitude of triangle	triangle shape in our		and Pythagoras theorem	angle of a					altitude concept of
		3. Exterior	3. Solving									2. Paper cutting
		angles of a	exercise 6.1									activity to verify
		triangle and	4 To some 1 1 11									the angle sum
		4. Angle	4. To explain the									
		sum	concept of									
		5. Types of	5. Solving					1	1			3. Activity to verify
		triangle and	exercise 6.2									the concept of
		sum of the										Pythagoras
		6. Right-	6. To explain the					1	1			
		angled	concept of angle									
		triangle and	sum property of						ļ			
			7. Solving									
1	1	1	Lovorciso 6 3 on	1	1	1	1	1	1	1	1	1

			8. To explain the concept of right									
7	Congrue nce 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	Activity to find the measure of dimension of various shape to understand the
		2. Concept of	2. To solve exercise 7.1	2. Students will understand various	Demonstration							
		3. Criteria	3. To explain the		Inductive and							
			4. To solved									
8	Compari ng Quantitie s	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	2. Introduce the concept of ratio	2. Students will understand about		2. Encouraged to provide daily life situation based	2. The learner					
		3. Percentage	3. To solve exercise 8.1									
		4. Ratio to percentage, profit and loss_charge	4. To explain the concept of percentage and <u>converting</u>									
			5. To solve									
			concept of									
			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	3. Students will understand and able to do operations of rational numbers								
		4. Operations	4. To teach how to find other									
			5. Solving									
			6. I o teach how									
10	Practical Geometr y	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 todemonstrate the	The learner using ruler and a pair of compasses constructs a	Geometry tools	Online Classroom	Textbook	10	-
		2. Constructio n offer 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.	3. To teach the									
		Constructin	step for									
		g a triangle	constructing a									
		when the	triangle by using									
		4.	4. Solving									
		Constructin	exercise based									
		g a triangle	on above concept									
		when the										
		length of										
		two sides	E. To togoh the									
		D. Constructin	5. TO leach the									
		y a manyle										
		measures	SAS criterion									
		of two of its										
		6.	6. Solving									
		Constructin	exercise based									
		g a right-	on above concept									
		angled										
		triangle	7 T - 4 b 4 b -									
			7. To teach the									
			8. Solving									
			9. To teach the									
			cton for									
11	Perimete	1.	1. Set induction to	1. Students will	Inductive and	The learner may be	1. The	Square grid	Online	Textbook	16	Activity: To find
	r and	Introduction	check the	understand that	deductive	provided opportunities in	learner finds		Classroom			the area of a
	Area	about	knowledge about	perimeter is the		pairs/groups/individually	out					circle
		Perimeter	area and its	distance around a		and encourage through	approximate					
		and area of	boundary	closed figure where		discussion motivate them	area of					
		2. Perimeter	2. To teach the	2. Students will table	Problem solving		2. The					Material required:
		and area of	concept of area	to find perimeter and			learner					pencil, protractor,
		parallelogra	and perimeter of	area or so square,			calculates					sheets of paper
		3. Area and	3. Solving	3. Students will								
		circumferen	exercise based	understand that								
		4. A	4. To teach the									
		Applications	concept of of area									
			D. Solving									
			6. To teach the									
			7. Solving									
			annlication based									
12	Algebrai	1.	1. Set induction to	1. Students will	Explanation	The learner may be	The learner		Online	Textbook	10	-
	с	Introduction	check the	understand the		provided opportunities in	adds/subtract		Classroom			
	Expressi	of variable,	knowledge about	concept of an		pairs/groups/individually	s algebraic					
	ons	constant	algebra	algebraic		and encourage to explore	expressions					
		and terms		expressions are	la du ationa ana d	the possible						
			2. To explain the		Inductive and							
		Classificatio		lo classily an	deductive							
		algebraic										
				2 Studente will akt								
		o. Audition	o. To explain	o. Suuteriis Will able								
		cubtraction	an algebraic									
		4. Finding	4. Solving	4. Students will able								
1		the surface of	Lovoroigo bagad	Ita find tha value of an		1	1	1	1		1	
			5. To teach the									

			6. Solving									
13	Exponen	1.	1. To teach the	1. Students will	Inductive and	The learner may be	The learner	Chart of	Online	Textbook	10	-
	ts and	Introduction	concept of	understand that very	deductive	provided opportunities in	uses	laws of	Classroom			
	Powers	of	Exponents and	large numbers are		pairs/groups/individually	exponential	indices				
		Exponents	powers	difficult to read,		and encourage to involve	form of					
		and powers		understand,compare		children in exploring how	numbers to					
				and operate upon		repeated multiplication of	simplify					
		2. Laws of	2. To teach how	To make all these								
		Exponents	to write number in	easier, we use								
			exponential form	exponents								
		3. Decimal	3. Solving									
		number	exercise based									
		4.	4. To teach the									
		Expressing	concept and laws									
			5. Solving									
			6. To teach how									
			7. Solving exercise based									