

			<p>4.1 Introduction</p> <p>4.2 Rational Numbers on A Number Line</p> <p>4.3 Rational Numbers In the Standard Form</p> <p>4.4 Equivalent Rational Numbers</p> <p>4.5 Comparison of Rational Numbers</p>	<ul style="list-style-type: none"> To Represent rational numbers on a number line. To Represent rational numbers in its standard form. To Find equivalent rational numbers. To Compare and order rational numbers. 	<p>Task 1: Activity - Students will be asked to make a flow chart on number system.</p> <p>Task 2: Activity - Comparison and ordering rational numbers - Abandon Ship</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental</p>	<p>Represent the population of ABUDHABI emirate as men, women and kids as a rational number.</p>	<p>Science, Social Studies - Geograpy.</p>	<p>Paper Craft</p>	<p>Maze of Word Problems Using Operations with Rational Numbers</p>	<p>4.1 Introduction</p> <p>4.2 Rational Numbers on A Number Line</p> <p>4.3 Rational Numbers In the Standard Form</p> <p>4.4 Equivalent Rational Numbers</p> <p>4.5 Comparison of Rational Numbers</p> <p>4.6 Rational Numbers Between Two Rational Numbers</p> <p>4.7 Adding, Subtracting, Multiplying and Dividing Rational Numbers</p> <p>4.8 Rational Numbers</p> <p>https://alainjuniors-my.sharepoint.com/:w/p/sreedevi_naresh/ESe_injmY05PkNGWXm0ZDwEBSWHFmB8OhG7pDhlop_0lpQ?e=XFqJcf</p>	
		6	<p>4.6 Rational Numbers Between Two Rational Numbers</p> <p>4.7 Adding, Subtracting, Multiplying and Dividing Rational Numbers</p> <p>4.8 Rational Numbers as Decimals</p> <p>4.9 Application problems based on Rational Numbers</p>	<ul style="list-style-type: none"> To Insert rational numbers between two given rational numbers. To Apply the basic perations on rational numbers. To Convert rational number as decimals. To Solve real life situation problems basd on rational numbers. 	<p>Task 3: Puzzle – fun with rational numbers. Task 4: Activity - to solve the real life situation problem given.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental</p>	<p>Compare the time zone in UAE and your Mother country. Also compare it with Greenwich Mean Time.</p>	<p>Science, Social Studies - Geograpy.</p>		<p>4.6 Rational Numbers Between Two Rational Numbers</p> <p>4.7 Adding, Subtracting, Multiplying and Dividing Rational Numbers</p> <p>4.8 Rational Numbers</p> <p>https://alainjuniors-my.sharepoint.com/:w/p/sreedevi_naresh/ESe_injmY05PkNGWXm0ZDwEBSWHFmB8OhG7pDhlop_0lpQ?e=XFqJcf</p>		
		6	<p>9.1 Lines and Angles</p> <p>9.2 Special Pairs of Angles</p> <p>9.3 Pairs of Lines</p>	<ul style="list-style-type: none"> To Recognise and define pairs of Lines and Angles. To State the properties of pairs of Lines and Angles. 	<p>Task 1: Activity - to find examples from our daily life for pairs of Lines and Angles.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning</p>	<p>Identify pairs of lines and angles from different historical monuments in UAE.</p>	<p>Social Studies - History & Geograpy.</p>	<p>Make a shape poem. Using any basic shape, write a poem around that shape. Incorporate the theme of the shape into the poem</p>	<p>Autodrew.com</p>	<p>9.1 Lines and Angles</p> <p>9.2 Special Pairs of Angles</p> <p>9.3 Pairs of Lines</p>	
		6	<p>9.4 Transversal</p> <p>9.5 Propertie of Transversal</p>	<ul style="list-style-type: none"> To Recognise and define transversal and angles formed in it. To State the properties of angles formed in a transversal. 	<p>Task 2: Math Lab Activity – Lab activity on Transversal. Task 4: Puzzle - to solve the puzzle using the properties of angles in a transversal.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental</p>	<p>Identify the transversal - its angles in historical monuments or buildings in UAE.</p>	<p>Social Studies - History & Geograpy.</p>	<p>Movement/Drama: demonstrate with a series of exercises how the body can represent different shapes and figures Ask students to body can represent different shapes and figures.</p>	<p>Autodrew.com</p>		
		6	<p>11.1 Line Symmetry</p> <p>11.2 Point Symmetry</p> <p>11.3 Reflection Symmetry</p> <p>11.4 Rotational Symmetry</p> <p>11.5 Figures with both Reflection and Rotational Symmetries</p>	<ul style="list-style-type: none"> To Identify lines of symmetry in different symmetrical shapes To define Reflection symmetry and identify objects with reflection symmetry To Define Rotational symmetry and identify objects with Rotational Symmetry To Find the order of rotational Symmetry and angles of rotation 	<p>Task 1: Activity - To identify symmetry in nature - examples from our daily.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental awareness. Values: Respect, integrity, empathy, resilience,</p>	<p>Identify the symmetry in historical monuments or buildings in UAE.</p>	<p>Social Studies - History & Geograpy Biology</p>	<p>Symmetry in nature - create an album by identifying symmetry in nature around you.</p>	<p>Autodrew.com</p>		
July	SUMMER VACATION												
August													
		6	<p>5.1 Exponents</p> <p>5.2 Laws of Exponents</p>	<ul style="list-style-type: none"> To State the meaning of exponential expression. To Identify exponent and base in an expression. To Convert the given numbers into power notation. 	<p>Task 1: Activity - to represent the given number in exponential form and describe it.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation,</p>	<p>Represent the rounded population of 7 emirates in UAE as exponential form.</p>	<p>Science - Physics, Social Studies - Geograpy.</p>		<p>Cross Curricular Link with Science - Metals and Non metals</p>		
		6	<p>5.2 Laws of Exponents</p> <p>5.3 Scientific Notation</p>	<ul style="list-style-type: none"> To State and Apply the laws of exponents. To Express very large and very small numbers using Scientific notation. 	<p>Task 2: Puzzle – fun with exponents.</p>	<p>PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.</p>	<p>Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning.</p>	<p>Represent the rounded population of 7 emirates in UAE in scientific notation.</p>	<p>Science - Physics, Social Studies - Geograpy.</p>	<p>Scientific Notation - Water Colour</p>			

September	5	Chapter: 6 ALGEBRAIC EXPRESSION (12)	6	6.1 Introduction 6.2 Generating Algebraic Expressions 6.3 Types of Algebraic Expressions 6.4 Degree of an Algebraic Expression	<ul style="list-style-type: none"> To State the meaning of algebraic expressions Define and identify: Constants, coefficients, powers ;like and unlike terms in the given algebraic expressions To Generate algebraic expressions involving one or two variables To State the degree of the polynomials. 	Task 1: Puzzle – fun with expressions. Task 2: Code Breaker Activity – finding the value of the expressions.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental	Research on the origin of the word ARAB ALGEBRA (Al Jabr) and the contributions	Science -Biology, Economics etc.	Visually representing the equations with Art.	Personalizing Algebra to Students' Individual Interests
			6	6.4 Addition of Algebraic Expressions 6.5 Subtraction of Algebraic Expressions 6.6.Value of an Algebraic Expression	<ul style="list-style-type: none"> To Add and subtract algebraic expressions To Find the value of an algebraic expression by substituting numerical values 	Task 2: Math Lab Activity – Addition and Subtraction of expressions.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning.	Using the concept of variables, find the numerical values that varies, e.g. Etisalat Billing and Taxi/Bus Fare in UAE	Science -Biology, Economics etc.		
		Chapter: 7 SIMPLE LINEAR EQUATIONS (9)	6	7.1 Equations, Solution / Root of an Equation 7.2 Methods of solving an Equation 7.3 Framing Equations from Solutions 7.4 Applications of Simple Equations	<ul style="list-style-type: none"> To State the meaning of an equation the term root/solution of an equation with examples To Solve/frame equations To verify the equations by substituting their roots. To Solve problems based on real life situations 	Task 1: Puzzles - Frame, solve and verify equations	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental	A farm in AlAin has placed 8 saplings half meter apart find the distance between first and last sapling	Science -Biology, Economics etc.		
October	4	Chapter: 8 COMPARING QUANTITIES (13)	6	8.1 Ratio 8.2 Proportion 8.3 Unitary Method 8.4 Percentage	<ul style="list-style-type: none"> To State the meaning of ratio, write the ratio in its simplest form and compare ratios. To State the meaning of proportion and use it in solving mathematical problems To Solve mathematical problems using unitary method To Explain the concept of percentage To Convert fractions,decimals or ratio into percentages and 	Task 1: Puzzles Task 2: Conversion of percentatage to ratio and fractions.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and environmental awareness. Values:	Prepare a grocery bill. Amonut in Dirhams and fills. VAT amonut also must show in it.	Science, Social Studies etc.	Create a Rangoli using the concept ratio, proportion and percentage.	
			6	8.4 Percentage 8.5 Profit and Loss 8.6 Simple Interest	<ul style="list-style-type: none"> To Find a given percent of a given quantity. To Express a number as a percentage of another number. To Calculate the whole quantity and increase or decrease as percent. To Apply the concept of percenatage in findind profit, loss and simple interest. 	Task 3: Prepare a bill finding profit/Loss.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and		Science, Social Studies etc.		
		Chapter: 10 TRIANGLE AND ITS PROPERTIES (12)	6	10.1 Triangle 10.2 Types of Triangles 10.3 Medians of a Trianlge 10.4 Altitudes of a Trianlge	<ul style="list-style-type: none"> To Define a trianlge and explain the elements and terms associated with triangles To Classify triangles on the basis of the length of their sides and measure of thier interior angles To State the meaning of medians and altitudes of a trianle. 	Task 1: Prepare a flip book to show types of triangles.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self confidence, global and	Abu Dhabi Zayed Sea port crane needs a length of cable replaced. The length of the arm of the crane is 50 m and the height from the arm to the cable is 15 m. How long is the cable that needs to be replaced?	Social Studies - History & Geograpy Engineering etc.		
			6	10.5 Properties of a Traianlge 10.6 Two Special Triangles 10.7 Pythagoras Theorem	<ul style="list-style-type: none"> To State and verify properties related to the sum of interior angles, exterior angles and the length of sides of a trianlge To State and verify the Pythagoras Theorem and form Pythagorean triplets 	Task 2: Math Lab Activity to verify the properties of triangles.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competance, critical thinkng, cultural awareness, creativity and innovation, independent learning,		Social Studies - History & Geograpy Engineering etc.		

November	4	Chapter: 13 CONGRUENCE OF TRIANGLES (12)	6	13.1 Congruence through Superposition 13.2 Congruence of Simple Geometrical Shapes	<ul style="list-style-type: none"> To State the meaning of congruence with the examples from the the things around us To State and verify the conditions for congruence of simple geometrical figures such as line segments, angles, circles,squares, rectangles and quadrilaterals 	Task 1: Math Lab Activity to verify the congruence of simple geometrical shapes.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and innovation, independent learning, responsibility, self	Identify the congruence of triangles from different historical monuments in UAE.	Science, English, Social Studies - History & Geograpy Engineering etc.	Create a design using the concept congruence.	Congruence in nature.
			6	13.4 Congruence of Triangles 13.5 Congruence criterias of Triangles	<ul style="list-style-type: none"> To State and verify conditions for congruence of trianlges Use the congruency conditions in solving simple problems 	Task 2: Math Lab Activity to verify the congruence different types of congruence.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness,		Science, English, Social Studies - History & Geograpy Engineering etc.		
		Chapter: 14 PRACTICAL GEOMETRY (10)	6	14.1 Construction of Parallel Lines 14.2 Construction of line bisectors and angle bisectors.	<ul style="list-style-type: none"> To Construct a parallel line to from a given point outside it. To construct line bisectors and angle bisectors using compass. 	Task 1: Math Lab Activity to construct parallel lines and angle bisectors.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and innovation, independent learning.	Use the Autodrew tool to construct a model of Alain city.	Engineering	Art in Construction	Autodrew.com
			6	14.2 Construction of Triangles	<ul style="list-style-type: none"> To Construct a Trianlge when lengths of three sides given : SSS criteria, SAS Criteria, ASA criteria, RHS criteria 	Task 2: Math Lab Activity to construct triangles using given conditions.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and innovation,		Engineering		
December		Chapter: 15 PERIMETER AND AREA (10)	6	15.1 Perimeter 15.2 Area	<ul style="list-style-type: none"> Find the perimeter of different figures Find the area of paths in and around a rectangular sqare field 	Task 1: Puzzle	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and	Create a model of AIAin - Hili Fun city and find the area and perimeter.	Science, Social Studeies - Geograpghy & History, Engineering, Economics etc.		
			6	15.3 Area of a parallelogram 15.4 Area of a Trianlge	<ul style="list-style-type: none"> Derive the formula for area of parallelogram and triangle. To calculate thier areas 	Task 2: Codebreaker using the formulas.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and innovation,		Science, Social Studeies - Geograpghy & History, Engineering, Economics etc.		
WINTER VACATION												
January	1st week	Chapter: 15 PERIMETER AND AREA (10)	6	15.5 Circumference of a Circle 15.6 Area of a Circle	<ul style="list-style-type: none"> Derive the formula to find the circumference and area of a circle Calculate the area between two concentric circles 	Task 3: Math Lab Activity to derive the formula to calculate the circumference and area of a circle.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and	Create a model of AIAin Bus station and find its area and perimeter.	Science, Social Studeies - Geograpghy & History, Engineering, Economics etc.		
	2nd week		6	15.7 Application questions based on area and perimeter	<ul style="list-style-type: none"> Use problem solving skills to apply the concept of perimeter and area in real -life situations 	Task 4: Real life situation to solve.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativity and innovation		Science, Social Studeies - Geograpghy & History, Engineering, Economics etc.		
	3rd week		6	16.1 Introduction of Data 16.2 Collection and Organisation of Data 16.3 Frequency Distribution table	<ul style="list-style-type: none"> Collect the relevant data and state the type of data Organise data using tally marks Find range of given data 	Task 1: Math Lab Activity to create a frequency distribution table.	PPT, VIDEO Lessons, Ms office, Ms Forms for Assignments, Quizziz and Mentimeter for starters and plenaries.	Competencies: Communication, problem solving, Digital competence, critical thinkng, cultural awareness, creativitv and	Create a frequency distribution table to make a study on population of 7 emirates of UAE.	Science, Social Studeies - Geograpghy & History, Engineering, Economics etc.		

