



BISHOP SCOTT BOYS' SCHOOL

STUDENT CURRICULUM MANUAL

Class : VII

Subject : MATHEMATICS

Academic Plan : 2025 -26

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
April	Chapter : 1 INTEGERS	<ul style="list-style-type: none">• By the end of this chapter students will be able to understand integers including positive and negative numbers.• Real life situation with integers.• Perform different operation with integers.	Addition of integers without solving. Using paper cutting and pasting.	8	
	Chapter 2: FRACTIONS	<ul style="list-style-type: none">• Students will be able to identify different types of fractions.• Students will be able to compare and contrast different types of fractions.• Students will be able to perform different operations with fractions.	Representing fractions using different shapes.	6	
	Chapter 23: Probability	<ul style="list-style-type: none">• Students will be able to identify all possible outcomes of a simple experiment.• Students will come to know that sum of possible outcomes will be equal to 1.	Finding the product of decimals using squared paper.	2	
May	Chapter 4: Rational Numbers	<ul style="list-style-type: none">• Classify rational numbers as integers terminating decimals or repeating decimals.• Students will be able to compare and order rational numbers.• Students will be able to perform different operations with rational numbers.	Represent Rational numbers using cutting and pasting.	7	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
June	Chapter 5: Exponents	<ul style="list-style-type: none"> Students will be able to understand that powers are the results of raising a base to an exponent. Students will be able to express large number in a concise way. Students will be able to solve different types of problems using laws of exponents. 	Paper folding activity to understand the concept of powers.	3	
	Chapter 18: Reflection and Rotational Symmetry	<ul style="list-style-type: none"> Students will be able to recognize common shapes like circles, squares and regular polygons. Understand the order of rotation as the number of times a shape looks identical. 	Represent the line of symmetry of different shapes using paper folding.	2	
	Chapter 19: Three - Dimensional Shapes	<ul style="list-style-type: none"> Students will be able to differentiate between 2D and 3D shapes. Students will be able to understand the number of faces, edges and vertices on a given 3D shape. 	To draw a cube with an edge of 5 cm on an isometric dot paper.	2	
July	Chapter 3: Decimals	<ul style="list-style-type: none"> Students will be able to understand, recognize and define decimals and their place value. Students will be able to know convert fractions to decimals and vice versa. Students will be able to understand real life applications using decimals. 	Decimal Place Value Chart.	6	PT 1 Portion Chapter 1: Integers Chapter 2: Fractions Chapter 4: Rational Numbers Chapter 5: Exponents Chapter 18: Reflection and Rational Symmetry Chapter 23: Probability
	Chapter 6: Algebraic Expressions	<ul style="list-style-type: none"> Students will be able to understand the concept of variables, identifying constants. Performing simple operations with algebraic expressions. 	To verify the algebraic identity- $(a + b)^2 = a^2 + 2ab + b^2$	6	
	Chapter 13: Lines And Angles	<ul style="list-style-type: none"> Students will be able to understand the concept of supplementary, complementary, adjacent and linear pair of angles. Students will be able to understand that the sum of all angles around a point is 360°. 	To verify that vertically opposite angles are equal.	2	

July	Chapter 14: Properties of Parallel Lines	<ul style="list-style-type: none"> Students will be able to identify parallel lines by recognizing the corresponding lines, alternate interior and exterior angles formed by a transversal. Students will be able to find missing angles measures using the properties of parallel lines. 	Represent parallel lines using parallel lines and transversal.	7	
August	Chapter 7: Linear Equations In one Variable	<ul style="list-style-type: none"> Students will be able to solve equations in one variable algebraically. Students will be able to understand word problems using linear equations. 	To solve linear equation using paper cut outs.	9	Term 1 portion Chapter 1: Integers Chapter 2: Fractions Chapter 3: Decimals Chapter 4: Rational Numbers Chapter 5: Exponents Chapter 6: Algebraic Expressions Chapter 7: Linear Equations In one variable Chapter 8: Ratio and Proportion Chapter 9: Unitary Method Chapter 13: Lines and angles Chapter 14; Properties of parallel lines Chapter 18: Reflection and Rational Symmetry Chapter 19: Three Dimensional shapes Chapter 23: Probability
	Chapter 8: Ratio and Proportion	<ul style="list-style-type: none"> Students will be able to understand what a ratio is, how to determine it, how it compares quantities. Students will be able to understand what a proportion is, how to determine it and how it relates with ratio. Students will be able to use proportion to solve problems 		7	
	Chapter 8: Unitary Method	<ul style="list-style-type: none"> Students will be able to identify and solve problems involving proportion by finding the value of a single unit (like cost per item or distance per hour) and then using that value to calculate the value of a desired quantity by multiplying with the required number of units. 		5	

September	Revision				
Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
October	Chapter 10 Percentage	<ul style="list-style-type: none"> Students will be able to understand that a percentage is a fraction with a denominator of 100. For example, 50% means 50 out of 100. Students will be able to calculate percentages of quantities, and calculate percentage increases and decreases. Students will be able to use percentages to solve problems in everyday life and in the classroom. 	Analysis of the marksheet using percentage.	6	PT - 2 portion Chapter 10: Percentage Chapter 11: Profit and loss
	Chapter 11: Profit And Loss	<ul style="list-style-type: none"> Students will be able to understand how to calculate profit and loss, analyzing financial statements, and understanding the concept of profit and loss in business. 		8	
November	Chapter 12: Simple Interest	<ul style="list-style-type: none"> Students will be able to understand what simple interest means and how it is calculated. Apply the simple interest formula ($I = PRT$) to solve problems for any given variable. Use simple interest calculations to solve practical problems related to loans, savings accounts, or investments. 	Role play activity (students will impersonate themselves as different terms used in simple interest and depict the calculation)	6	
	Chapter 15: Properties Of Triangles	<ul style="list-style-type: none"> Students will be able to understand Identify the basic parts of a triangle: Recognize vertices, sides, and angles within a triangle. Understand that the sum of all angles in a triangle is always 180 degrees. 	To verify that a triangle can be drawn if the sum of two sides is greater than the third side.	9	
	Chapter 17: Constructions	<ul style="list-style-type: none"> Identify basic geometrical shapes and their properties, using a ruler and compass to accurately construct lines, angles, and simple geometric figures like triangles and squares, understand concepts like perpendicular bisectors and angle bisectors, and apply these skills to solve basic construction problems; demonstrating proficiency in using geometric tools while developing a foundational understanding of geometric principles. 		5	

Month	Course Description	Learning Outcome	Activity	No. of Periods	Portion for PT & TERM Assessment
December	Chapter 16: Congruence	<ul style="list-style-type: none"> Students will be able to understand that two triangles are congruent if they have the same shape and size, meaning all corresponding sides and angles are equal. 		4	
	Chapter 20: Mensuration	<ul style="list-style-type: none"> Students will be able to understand apply their knowledge of perimeter and area to solve real-life problems involving measurements of objects around them. Analyze problems, identify relevant information, choose the appropriate formula, and perform calculations to find solutions. 	To find the circumference of the circle using thread.	15	
January	Chapter 21: Collection and Organization of Data (Mean, Median and Mode)	<ul style="list-style-type: none"> Students will be able to understand and define each term, calculate them from a given data set, understand when to use each measure based on the data distribution, and interpret the results in real-world contexts. Represent the average value, calculate by adding all data points and dividing by the total number of points. 		8	Term 2 portion- Chapter 4: Rational Numbers Chapter 5: Exponents Chapter 10: Percentage Chapter 11: Profit and Loss Chapter 12: Simple Interest Chapter 15: Properties of Triangles Chapter 16: Congruence Chapter 17: Construction Chapter 20: Mensuration Chapter 21: Collection and Organization of Data Chapter 22: Bar Graphs
	Chapter 22: Bar Graphs	<ul style="list-style-type: none"> Students will be able to define what a bar graph is, identify its key components like axes and labels, interpret data presented visually, compare different categories represented by the bars, construct their own bar graphs based on given data, and analyze trends or patterns within the data displayed. Students will be able to understand and compare the values between different categories represented by the bars and Identify the highest and lowest values on a bar graph. 	To compare the marks obtained in all the subjects by a student in the first and second term examinations.	8	
February	Revision				