Overview of Year

7th Grade Math Curriculum

SEPT	OCT	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE
Unit 1 Comparing Bits and Pieces – 10 days	Unit 2 Stretching and Shrinking – 22 days	Unit 3 Comparing and Scaling -22 days	Unit 4 Probability Mini Unit - 5 days	Unit 5 Accentuate the Negative -26 days	Unit 6 Percent Mini Unit – 15 days	Unit 7 Algebra Unit – 25 days	Unit 8 Data About Us – 20days	Unit 9 Circles – 5 days	Unit 10 Shapes and Designs – 20 days

Unit 1	**Understanding**	**Essential Question**
Comparing Bits and Pieces **10 days**	• Understanding fractions and decimals as numbers that can be located on the number line, compared, counted, partitioned and decomposed • Understand ratios as comparisons of two numbers • Apply a variety of strategies to solve problems involving rates and unit rates • Understand equivalence of fractions and ratios, and use equivalence to solve problems • Build and use rate tables of equivalent ratios to solve problems	• What are different ways that fractions can be interpreted and used? • How can we compare fractions? • What is equivalence and how can it be used to solve problems? • What are ratios and how can they be used to solve problems?
Performance Task:		

Unit 2	**Understanding**	**Essential Question**
Stretching and Shrinking **22 days**	• Develop and understanding of similarity • Use proportional reasoning to solve problems involving similarity	• What does it mean for two shapes to be similar? • How can similarity properties be used to solve problems?
Performance Task:		

Unit 3	Understanding	Essential Question
Comparing and Scaling **22 days**	• Make intelligent comparisons of quantities – using fractions, decimals, ratios, rates, unit rates and percents • Develop strategies to reason proportionally and use this to solve problems • Understand ratios, rates and percents • Understand proportionality in tables, graphs, and equations	• How can quantities be compared • How can scaling be used in problem solving?
Performance Task:		

Unit 4	Understanding	Essential Question
Probability Mini Unit **5 days**	• Understand and Reason about probability • Understand the difference between theoretical and empirical probability • Make connections between probability and rational numbers, geometry, statistics, science, and business	• How can probability be used to make predictions? • How can probability models be used to solve problems?
Performance Task:		

Unit 5	Understanding	Essential Question
Accentuate the Negative **26 days**	• Extend the number system to include rational numbers – positive and negative integers, fractions and decimals • Locate on the number line and compare rational numbers • Develop an understanding of strategies for adding, subtracting, multiplying, and dividing rational numbers • Use rational numbers to solve problems • Revisit and Extend order of operations and the distributive property	• What is the rational number system and how can we compare rational numbers? • How can we develop strategies for computing with rational numbers? • How can we use strategies to solve problems involving rational numbers?
Performance Task:		

Unit 6	Understanding	Essential Question
Percent Mini Unit **15 days**	• Use proportional reasoning strategies to solve problems involving percent	• How can proportional reasoning strategies be used to solve real life problems with percent?
Performance Task:		

Unit 7	Understanding	Essential Question
Algebra Unit **25 days**	• Use the idea of pouches and coins to solve two step equations before solving these symbolically • Extend the symbolic reasoning and graphing on the number line to include inequalities • Understand equivalence	• How can symbolic reasoning and the number line be used to solve linear equation and inequalities? • How can the solutions of equations and inequalities be interpreted in the context of the word problem?
Performance Task:		

Unit 8	Understanding	Essential Question
Finishing Data About Us **20 days**	• Compare data distributions using the graphs, and measures of central tendency and spread	• How can data distributions be compared? • What does it mean to reason statistically? • How can statistics be used to make inferences about situations?
Performance Task:		

Unit 9	Understanding	Essential Question
Circles **5 days**	• Measurement in a circle • Area and perimeter • Understand the area and perimeter of a circle and how they are related	• How can circle measurements be used to solve problems?
Performance Task:		

Unit 10	Understanding	Essential Question
Shapes and Designs (Post Test) **20 days**	• Recognize, analyze, display, measure and reason about shapes and patterns • Analyze properties that make certain shapes unique • The relationship between form and function • Understand the properties of polygons that determine their shape • Understand special relationships among angles • Understand the properties needed to construct polygons	• What properties are unique to a particular polygon? • How are angles related? • How can we use geometric relationships to solve problems?
Performance Task:		