YEAR AT A GLANCE: *MATH 6 (updated Dec 2022)*

	UNIT 1	**UNIT 2**	**UNIT 3**	**UNIT 4**	**UNIT 5**
Title	Whole Numbers	Fractions	Decimals	Negative Numbers	Algebraic Expressions
Unit Length *(weeks taught)*	3 weeks	3 weeks	3 weeks	2 weeks	3 weeks
Enduring Understanding (The big ideas, the "why" we include these ideas	How do we add, subtract, multiply and divide multi-digit numbers? How do we determine what math operation should be used when solving word problems?	What does it mean to multiply and divide fractions? How do we multiply fractions? How do we divide fractions?	How do we use the four basic operations with decimals? How are fractions and decimals related to one another?	What is the difference between positive numbers and negative numbers? What does a number line look like? How can we use a number line to help us to compare integers?	What is the difference between an algebraic expression and an algebraic equation? How do we solve algebraic equations? How do we evaluate algebraic expressions?
	What kinds of numbers do you know about and how do mathematical properties apply to operations with different kinds of numbers? Why are order of operations important when performing mathematical computations? Why is it important to understand the procedures for working with different kinds of numbers?	Why can you use either a fraction or a decimal to name the same rational number? How are operations with fractions similar to and different from operations with whole numbers?	Why can you use either a fraction or a decimal to name the same rational number? How are fractions, percents and decimals related? How is estimation helpful when adding and subtracting decimals?	How can we use integers to describe specific situations? How do we use integers in ordered pairs to graph coordinates on a coordinate plane? What do the ordered pairs look like in each quadrant of a coordinate graph?	How are the properties of real numbers useful when solving equations and simplifying expressions?

	UNIT 6	**UNIT 7**	**UNIT 8**	**UNIT 9**	**UNIT 10**
Title	Equations and Inequalities	Ratio and Rate	Percent	Area	Solids
Unit Length *(weeks taught)*	3 weeks	3 weeks	3 weeks	3 weeks	2 weeks
Enduring Understanding (The big ideas, the "why" we include these ideas	There are many ways to represent the same number. There are a lot of ways to solve problems, but some are more efficient than others. Compare similar relationships using proportions. How can exponents be used to abbreviate numerical expressions? How is the order of operations used to evaluate numerical expressions?	How do you use equivalent rates in the real world? How can I use ratios to compare quantities? How can I use proportions to solve problems? How are ratios used to find unit rates? Students will learn to understand measurement in the customary system by using the appropriate unit of measurement as well as personal references. Students will use ratios and proportions to convert units of measure.	How are fractions, decimals and percents all related to one another? What is the meaning of a percent? What is the relationship between fractions, decimals and percents? What kinds of numbers are there? How do mathematical properties help us to simplify our work?	What is the difference between area and perimeter? How do I find the area of a quadrilateral? How do I find the perimeter of a quadrilateral? How do I find the area and the perimeter of irregular shaped polygons? Solve real-world and mathematical problems involving area and perimeter. Students will recognize and understand geometric relationships	Solve real-world and mathematical problems involving surface area and volume. Students will be able to identify the different types of solids. Students will be able to identify the number of faces, edges and vertices on the different types of solids. Students will recognize and understand geometric relationships among different types of solids.
Essential Questions (What do we want students to think about)	What are the similarities and differences in the procedures for solving and expressing the solutions of equations and inequalities?	Why are proportional relationships an important part of mathematics? How is percent related to fractions and	How do I convert a fraction to a decimal and a percent? How do I convert a decimal to a fraction and a percent?	What characteristics do various quadrilaterals share, and why is it possible to determine perimeter and area of quadrilaterals using related formulas?	What does surface area mean and how can we find the surface area of different solids? What does volume mean and how can we find the

	Why is it important to understand how to solve linear equations and inequalities?	decimals, and why is it such a useful tool in everyday life? How is proportional reasoning used to solve real-world problems? What are transformations and how are they useful in solving real-world problems?	How do I convert a percent to a fraction and a decimal?	How does measurement help you solve problems in everyday life? How is shape important when measuring a figure? How do we determine what can be measured and what the appropriate methods and formulas to use are?	volume of different solids?

	UNIT 11	**UNIT 12**
Title	Statistics	Probability
Unit Length *(weeks taught)*	3 weeks	2 weeks
Enduring Understanding (The big ideas, the "why" we include these ideas	Standard units of measure allow us to describe objects and interpret events. Develop an understanding of statistical variability. Display numerical data in line plots and graphs. How can we analyze and interpret data?	Develop an understanding of simple probability. How do I find the probability of something "not happening?" How do I find the probability of an impossible event? How do I find the probability of a certain event?
Essential Questions (What do we want students to	How do measures of central tendency help us to interpret data?	What is probability? When do I use probability in the real

think about)	How are the mean, median, mode and range helpful in describing data? How do the measures of variation help us to organize and interpret data? How can I interpret and analyze data in line and bar graphs? How can I select an appropriate display for a specific set of data?	world? What are the 3 different ways to write a probability answer? Why are these 3 answers all equal to one another?