

Semester 1 of 2				
Unit Number: Title and Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 1: Introduction to 6 th Grade Math 2 weeks	<p>The purpose of this unit is to set students up for success in the 6th grade math classroom.</p> <p>Week 1: Instruction and modeling with continued emphasis with embedded instruction and modeling throughout entire year.</p> <p>Week 2: i-Ready Diagnostic testing provides correct placement for students into our high, medium, and low math classes.</p>	--	<p>Students will be able to</p> <ul style="list-style-type: none"> • set up their math notebooks • label their papers • fill in their planners • set up a math assignment in their notebooks with a label and a “Bullseye goal” along with spacing problems out neatly • identify how their book is set up, including resources such as the glossary 	SMc Curriculum: <i>Core Focus on Math</i>

<p>Unit 2: Math Computation Instruction</p> <p>1 week</p>	<p>The purpose of this unit is to teach and reteach foundational computations in math (without calculators) while demonstrating the importance of showing all work.</p> <p>Computations will continue throughout the 36 weeks of the school year as students receive mini lessons reviewing content that they have/have not covered.</p>	<p>6.NS.B.2 Fluently divide multi-digit numbers using accurate, efficient strategies and algorithms.</p> <p>6.GM.A Solve real-world math problems involving area, surface area, and volume.</p> <p>6.AEE.B Reason about and solve one variable equations and inequalities</p>	<p>Students will be able to</p> <ul style="list-style-type: none"> • add and subtract whole numbers • multiply and divide whole numbers • add and subtract decimals • multiplication and divide decimals • add and subtract fractions • multiply and divide fractions • estimate • measure geometric figures • write number sentences, exponents, definitions 	<p>Teacher resource folder</p>
<p>Unit 3: Ratios and Conversions</p> <p>6 weeks</p>	<p>The purpose of this unit is to understand the concept of a ratio and how to write it in three ways. It will also cover how to convert customary and metric measurements, using this to find area and perimeter.</p>	<p>6.RP.A Understand ratio concepts and use ratio reasoning to solve problems.</p>	<p>Students will be able to</p> <ul style="list-style-type: none"> • Define vocabulary such as: <i>term, ratio, conversion, perimeter, area, and sequence.</i> • Concept of a ratio • Simplifying a ratio (fractions) • How to write a ratio in 3 ways (fraction, colon, "to") 	<p>SMc Curriculum: <i>Core Focus on Math: Ratios, Rates and Statistics</i></p> <p>(BLOCK 1, Lessons 1.1- 1.5)</p>

			<ul style="list-style-type: none"> • How to read a ratio • How to find equivalent • Ratios (fractions) 	
Unit 4: Rates 5 weeks	The purpose of this unit is to understand how to convert fractions and decimals; round decimals; understand the concept and purpose behind finding a unit rate, as well as problem solving comparing rates and motion rates.	6.RP.A.2 Understand the concept of a unit rate in authentic contexts and use rate language in the context of ratio relationship 6.RP.A.3 Use ratio and rate reasoning to solve problems in authentic contexts that use equivalent ratios, unit rates, percents, and/or measurement units	Students will be able to <ul style="list-style-type: none"> • Define vocabulary such as: <i>rate, unit rate, motion rate, rate conversion, repeating decimals, terminate, and equivalent fractions.</i> • Turn a fraction into a decimal, and a decimal into a fraction both with and without using a calculator. • Round repeating decimals and will therefore need to be taught decimal place value. • How to find a unit rate, recognize rates in their real world, and problem solve with rates. 	SMC Curriculum: <i>Core Focus Math: Ratios, Rates & Statistics</i> (BLOCK 2, Lessons 2.1 – 2.6)
Unit 5: Percents and Probability 3 weeks	The purpose of this unit is for students to understand what a percent is as a ratio comparing a number to 100, and the whole	6.RP.A.3 Use ratio and rate reasoning to solve problems in authentic contexts that use equivalent ratios, unit	Students will be able to <ul style="list-style-type: none"> • Define vocabulary such as <i>percent and probability.</i> 	SMC Curriculum: <i>Core Focus Math: Ratios, Rates & Statistics by Shannon McCaw</i> (BLOCK 3, Lessons 3.1 & 3.2)

	number relationship between fractions, decimals, and percents.	rates, percents, and/or measurement units	<ul style="list-style-type: none"> • Know percents as ratios compared to 100. • Convert decimals, fractions, and percents as well as what that looks like visually and in their real world. 	
Unit 6: Measures of Center 1 week	The purpose of this unit is to introduce students to the three measures of center (mean, median, mode) as a way of looking at, organizing, and understanding data	6.DR.C Analyze, summarize, and describe data	Students will be able to <ul style="list-style-type: none"> • Define vocabulary such as Mean, Median, and Mode, Statistical Questions, Non-Statistical Questions, Categorical Data and Numerical Data. • How to find mean, median, and mode measures of center from a given set of numbers. • Identify Non-Statistical Questions vs. Statistical Questions, Categorical data vs. Numerical Data. 	SMc Curriculum: <i>Core Focus Math: Ratios, Rates and Statistics by Shannon McCaw</i> (BLOCK 4, Lessons 4.1 & 4.2)
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Unit Number: Title and Duration	Purpose	Priority Grade-Level Standards	Content Goals and Learner Outcomes	Resources and Materials
Unit 7: Algebra: Order of Operations	The purpose of this unit is to find values of expressions using addition,	6.AEE.A Apply and extend previous understandings of	Students will be able to	SMc Curriculum: <i>Core Focus Math: Introductory</i>

4 weeks	subtraction, multiplication and division along with writing and computing with exponents and finding values using grouping symbols.	arithmetic to algebraic expressions	<ul style="list-style-type: none"> Define vocabulary such as <i>Order of Operations, Powers, Exponents, Base, Squared, Cubed, Grouping Symbols, Numerical Expressions, Associative Property and Commutative Property.</i> Solve expressions with various operations successfully using GEMDAS Know how to write a power in expanded form and find the value of Identify and reasonably understand “Commutative” and “Associative” Properties. 	<i>Algebra</i> (Block 1 Lessons 1.1-1.5)
Unit 8: Algebraic Expressions 4 weeks	The purpose of this unit is for students to learn how to write expressions (the language of algebra); how to evaluate expressions and use that skill to solve formulas; simplify expressions; and use the distributive property.	6.AEE.A Apply and extend previous understandings of arithmetic to algebraic expressions	<p>Students will be able to</p> <p>Define vocabulary such as <i>Algebraic Expressions, Like Terms, Equivalent Expressions, Distributive Property, Coefficient, Variable, Term, Evaluate, Constant, and Formula.</i></p> <ul style="list-style-type: none"> Translate algebraic expressions into 	SMc Curriculum: <i>Core Focus Math: Introductory Algebra</i> (Block 2 Less 2.1-2.2, 2.3, 2.5, 2.6, and 2.7)

			<p>phrases and phrases into algebraic expressions.</p> <ul style="list-style-type: none"> • Evaluate expressions, plugging in given values for the variables. • Use formulas to find area, perimeter, and volume. • Combine like terms to simplify algebraic expressions. • Use the DISTRIBUTIVE PROPERTY to perform calculations and simplify those expressions. 	
<p>Unit 9: Solving Equations 4 weeks</p>	<p>The purpose of this unit is for students to learn how to solve one-step equations in addition, subtraction, multiplication and division, and use these skills to plug in “Knowns” into a formula to solve for an “Unknown.”</p>	<p>6.AEE.B Reason about and solve one-variable, equations and inequalities</p>	<p>Students will be able to</p> <ul style="list-style-type: none"> • Define vocabulary such as <i>Inverse Operations</i>, <i>One-Step Equations</i>, and <i>Solution</i>. • Know how to solve a one-step equation in addition, subtraction, multiplication, and division by setting it up properly and working down in layers vertically in at least three layers with checking at the end. 	<p>SMc Curriculum: <i>Core Focus Math: Introductory Algebra</i> (Block Lesson 3.3.-3.7)</p>

			<ul style="list-style-type: none"> Understand how an input-output table works, how to set it up, and how to show all their work including graphing the (x, y) coordinates at the end. 	
Unit 10: Integers and Functions 5 weeks	The purpose of this unit is for students to understand integers, compare integers, graph on a coordinate grid, and understand, write, and graph inequalities.	6.AEE.B Reason about and solve one-variable, equations and inequalities	Students will be able to <ul style="list-style-type: none"> Define vocabulary such as <i>Inequality, Quadrant, Absolute Value, X-Axis, Y-Axis, Coordinate Plane, Quadrilateral, Origin, Start Value, Function, Integer, Quadrilateral, Input-Output Table, Ordered Pair, Opposites, Zero Pairs, Negative Number, Positive Number, Linear Function.</i> Understand integers and place them on a number line. Compare and order integers. Graph points on a coordinate plane. Identify <i>parallelograms, rhombi, rectangles,</i> 	SMC Curriculum: <i>Core Focus Math: Introductory Algebra</i> (Block Lesson 4.1, 4.2, 4.3, 4.5, 4.6, and 4.9)

			<i>squares, and trapezoids.</i> <ul style="list-style-type: none">• Create and use input-output tables.• Identify function rules.• Write and graph inequalities.	
End of Semester 2				