

Curriculum Map 5 Math

	CONCEPT	SKILLS	ASSESSMENT
S E P T E M B E R	Numbers and Operations: Comparing Fractions Equivalent Fractions Order Fractions Adding and Subtracting Fractions Mixed Numbers Improper Fractions Model Addition and Subtraction of Fractions 5.1.2.3; 5.1.2.4; 5.1.3.1	Read, write, represent, and compare fractions Use inverse relationship between size of denominator and size of numerator Order fractions with unlike denominators from least to greatest Change mixed numbers to improper fractions	<i>Formative:</i> Use of benchmarks ($\frac{1}{4}$; $\frac{1}{2}$; $\frac{3}{4}$; $\frac{1}{3}$) to compare fractions Comparing fractions using mental images Correct usage of manipulatives to show equivalent fractions Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Chapter 9 Quick Quiz #1, #2 <i>Summative:</i> Whiteboard Write-Out (students solve problem on the whiteboard at the same time) Student Self-Report Note Chapter 9 Test
O C T O B E R	Numbers and Operations: Order Fractions on a Number Line Simplify Fractions Recognize Equivalent Fractions Generate Equivalent Fractions Find Common Denominators 5.1.2.3; 5.1.2.4	Represent part of a whole or a group Find the Greatest Common Factor (GCF) Simplify (reduce fraction to its lowest term) Find Least Common Multiple (LCM) Write equivalent fractions Solve word problems involving fractions	<i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Activity Card 3-1 Worksheets and Textbook Problems Chapter 3 Quick Quiz #1, #3 <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Pizza Project
N O V E M B E R	Numbers and Operations: Understanding Number Forms Read and Write Decimal Numbers Place Value of Decimal Numbers Solve Real-World and Mathematical Problems Equivalent Decimals Adding and Subtracting Decimal Numbers Model Addition and Subtraction of Decimal Numbers 5.1.2.1; 5.1.2.2; 5.1.1.4; 5.1.2.4; 5.1.3.1; 5.1.3.2	Differentiating between Standard, Word, Expanded (powers of ten), and Expanded Forms of numbers Understanding place value Understanding and using powers of ten to locate the decimal number Adding and subtracting decimal numbers with tenths, hundredths, thousandths, and ten-thousandths Solve word problems involving decimals	<i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Unit 2 Quick Quiz #1, #6 <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Foldable of Number Forms Unit 2 Test

Curriculum Map

	CONCEPT	SKILLS	ASSESSMENT
D E C E M B E R	Algebra: Commutative, Associative, and Distributive Properties of Addition Graphs with Decimal Numbers Bar Graphs with Decimal Numbers Numbers and Operations: Estimating Sums and Differences of Decimal Numbers Solve Real-World and Mathematical Problems 5.2.2.1; 5.1.3.3; 5.1.3.4; 5.2.1.1	Rounding decimals to any place Adding and subtracting decimal numbers to any place Solve word problems involving decimals Evaluate expressions and use parentheses, brackets and braces to define the order of operations Display measurement data on a line plot Display measurement data in a bar graph	<i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Activity Card 2-9 Unit 2 Quick Quiz #1, #6 <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note
J A N U A R Y	Algebra: Bar Graphs with Decimal Numbers Evaluate Expressions using Variables and Multiplication of Fractions Data Measurement: Double Bar Graphs Numbers and Operations: Adding and Subtracting Decimals Multiplying Fractions 5.2.1.1; 5.1.3.1; 6.1.3.1; 5.4.1.2; 5.2.3.3	Evaluate expressions and use parentheses, brackets and braces to define the order of operations Display measurement data in a bar graph Multiplying numerators by numerators; denominators by denominators Reduce fractions to lowest equivalent fraction	<i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Unit 2 Quick Quiz #8 <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Unit 2 Tes
F E B R U A R Y	Numbers and Operations: Multiply a Fraction by a Fraction Multiply Fractions and Mixed Numbers Multiply Mixed Numbers Relate Fraction Division and Multiplication Divide Fraction by a Whole Number using Inverse Method Algebra: Evaluate Expressions involving Variables 6.1.3.1; 6.1.3.2; 5.2.3.3	Multiplying numerators by numerators; denominators by denominators Reduce fractions to lowest equivalent fraction Convert mixed numbers to improper fractions Convert improper fractions to mixed numbers Use inverse method to divide fractions Recognize variables as unknown numbers	<i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Activity Card 3-5 Unit 3 Quick Quiz #1, #10 <i>Summative:</i> Whiteboard Write-Out Student-Self Report Note Unit 3 Test

Curriculum Map

	CONCEPT	SKILLS	ASSESSMENT
M A R C H	<p>Algebra: Represent Real-World Patterns with Inequalities Use Patterns and Sequences to Solve Problems; Fibonacci Numbers and the Golden Ratio Coordinate Plane Ordered Pairs</p> <p>Numbers and Operations: Divide Multi-Digit Numbers</p> <p>5.2.3.2; 5.1.1.1; 5.2.1.1; 5.2.1.2</p>	<p>Create rule-based number patterns Explain relationship between patterns Plot ordered pairs on a coordinate system with x and y-axis Graph and interpret points on the first quadrant of a coordinate grid Divide up to a four-digit dividend and a two-digit divisor</p>	<p><i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Activity Card 7-4 Unit 7 Quick Quiz #5</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Unit 7 Test</p>
A P R I L	<p>Number and Operations: Divide with Decimal Numbers Multiply with Decimal Numbers</p> <p>Geometry and Measurement: Perimeter and Area of Rectangles Visualize Volume</p> <p>6.1.3.1; 5.3.2.1; 5.3.2.2</p>	<p>Multiplying and dividing decimals with tenth, hundredths, thousandths, ten-thousandths Identifying a repeating decimal, or a decimal that will continue into infinity Understanding perimeter and area properties of 2 dimensional shapes Understanding volume involves 3 dimensional shapes</p>	<p><i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Unit 4 Quick Quiz #3, #5</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Unit 4 Test</p>
M A Y	<p>Geometry and Measurement: Area of Triangles and Parallelograms Cubic Units of Volume Volume Formulas</p> <p>5.3.2.1; 5.3.2.3; 5.3.2.4</p>	<p>Generate formula for area: $A=LxW$ Generate formula for volume: $V=LxWxH$</p>	<p><i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Unit 8 Quick Quiz #8, #11</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Unit 8 Test</p>

Curriculum Map 6 Math

	CONCEPT	SKILLS	ASSESSMENT
S E P T E M B E R	<p>Numbers and Operations: Use Reasoning Solve Real World Problems Multiply and Divide Fractions Prime Factorization Composite Numbers</p> <p>Algebra: Understand and Interpret Equations Properties of Arithmetic-Exponents</p> <p>6.1.3.5; 6.1.3.4; 6.1.3.1; 6.1.3.2; 6.1.3.4; 6.2.3.2; 6.1.1.5; 6.2.3.1; 6.2.3.2</p>	<p>Represent real-world situations using equations Interpret a solution Assess the reasonableness of results Estimate solutions Solve real-world problems using number sense Utilize standard algorithms to multiply and divide fractions Use the meaning of fractions to solve various problems Factor numbers Express prime factorization with exponents Evaluate algebraic expressions</p>	<p><i>Formative:</i> Thumbs Up (to indicate understanding of concept) 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Factor Trees</p> <p><i>Summative:</i> Whiteboard Write-Out (students solve problem on the whiteboard at the same time) Student Self-Report Note Chapter 1 Mid-Chapter Quiz</p>
O C T O B E R	<p>Numbers and Operations: Use Reasoning Solve Real World Problems Estimate Solutions</p> <p>Algebra: Patterns, Tables, and Graphs Equations and Inequalities</p> <p>Geometry & Measurement: Area</p> <p>6.1.3.4; 6.1.3.5; 6.2.1.2; 6.3.1.1; 6.2.3.1; 6.1.1.5</p>	<p>Create tables to solve real-world problems Use a variable in a function table Represent the relationship between variables in a data table Calculate area of quadrilaterals Represent real-world situations with equations and inequalities Understand and interpret equations and inequalities Analyze data using bar graphs</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) <i>Geology Rocks</i> Project Chapter 1 Review</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 1 Test</p>
N O V E M B E R	<p>Data Analysis: Determine Mean, Median, Mode, and Range</p> <p>Numbers and Operations: Compare Positive Rational Numbers Relate Integers and Factors Determine Equivalences Represent Numbers as Fractions, Decimals, Percents Use Reasonable Estimation Define Greatest Common Factor</p> <p>5.4.1.1; 5.4.1.2; 6.1.1.1; 6.1.1.4; 6.1.1.6; 6.1.3.3</p>	<p>Understand Mean as a “leveling out” of data Determine Median Compute Mode Calculate Range Locate positive rational numbers on a number line Compare positive and negative integers Use rounding to estimate solutions Determine percentage of numbers Assess Greatest Common Factor (GCF)</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Chapter 2 Review Quick Quiz Chapter 3</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 2 Test</p>

Curriculum Map

	CONCEPT	SKILLS	ASSESSMENT
D E C E M B E R	<p>Numbers and Operations: Define Greatest Common Factor Multiply and Divide Fractions Equivalent Fractions Determine Least Common Multiple Express Decimals as Fractions</p> <p>Algebra: Interpret Equations and Inequalities</p> <p>6.1.1.6; 6.1.3.1; 6.1.3.2; 6.1.1.4; 6.1.1.2; 6.1.1.7; 6.2.3.1</p>	<p>Calculate Greatest Common Factor (GCF) Simplify fractions Find Least Common Multiple (LCM) Convert between equivalent representations of positive rational numbers Solve equations using number sense</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Zombie Elves Project</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note</p>
J A N U A R Y	<p>Numbers and Operations: Express Decimals as Fractions Identify Components of a Coordinate Plane Identify Coordinate Pairs on a Coordinate Plane Understand Ratios and Relationship to Fractions</p> <p>Algebra: Evaluate Expressions</p> <p>6.1.1.4; 6.1.1.1; 6.1.1.3; 6.1.3.2; 6.1.2.1; 6.1.2.2; 6.1.2.3; 6.1.2.4; 6.2.2.1</p>	<p>Convert between equivalent representations of positive rational numbers Understand a rational number as a point on the number line Identify the four quadrants, the x-axis, the y-axis, and the origin on a coordinate plane Form ordered pairs Graph the ordered pairs on a coordinate plane Differentiate between x-coordinates and y-coordinates. Identify ratios Use ratios to compare quantities Construct ratio tables Apply associative, commutative, and distributive properties</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Chapter 4 Review Chapter 6 Mid-Chapter Quiz</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 4 Test</p>
F E B R U A R Y	<p>Algebra: Evaluate Expressions Interpret Reasonable Solutions</p> <p>Data Analysis & Probability: Use Probability to solve Real-World Problems Represent Probability using Fractions, Decimals, and Percents Use Probability to solve Real-World Problems</p> <p>Geometry and Measurement: Systems of Measurement Estimate weights, capacities, temperatures Solve problems involving conversion of weights, capacities, times, temperatures 6.2.2.1; 6.2.3.2.; 6.3.3.2; 6.3.3.1; 6.4.1.1; 6.4.1.2; 6.4.1.3; 6.4.1.4</p>	<p>Apply associative, commutative, and distributive properties Construct a function table Assess reasonableness of results Determine sample space Use fractions, decimals, and percents to represent probability Determine the probability using ratios Calculate experimental probability Perform experiments to test probability Compare experimental probability to know results Conversion of weights, capacities, and times Benchmarks for Units of Measurement</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Probability Stations Chapter 7 Review</p> <p><i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 7 Test</p>

Curriculum Map

	CONCEPT	SKILLS	ASSESSMENT
M A R C H	<p>Geometry and Measurement: Systems of Measurement Estimate weights, capacities, temperatures Solve problems involving conversion of weighs, capacities, times, temperatures Identifying, Comparing and Measuring Angles Sum of Angles in a Triangle = 180° Algebra: Represent Relationships between Varying Quantities</p> <p>6.3.3.2; 6.3.3.1; 6.3.2.1; 6.2.1.1</p>	<p>Conversion of weights, capacities, and times Benchmarks for Units of Measurement Use a protractor Solve problems using the relationship between angles Classify angle relationships Represent a quantity that can change with a variable Use variables in various contexts</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Chapter 8 Mid-Chapter Quiz <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 8 PowerPoint or Foldable</p>
A P R I L	<p>Geometry and Measurement: Parallel and Perpendicular Lines Angles in Quadrilaterals Sum of Angles in a Quadrilateral = 360° Calculate Area and Perimeter of Angles, Quadrilaterals Introduce Diameter and Circumference of a Circle</p> <p>6.3.1.1; 6.3.2.1; 6.3.2.2; 6.3.2.3; 6.3.1.3; 7.3.1.1</p>	<p>Calculate the area of quadrilaterals Solve problems using intersecting lines Determine missing angle measurement Use models of triangles, quadrilaterals Estimate perimeter and area of irregular figures Find circumference of a circle using radius and diameter Evaluate value of Pi Compute area of triangles Calculate volume of rectangular prisms</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Chapter 9 Mid-Chapter Quiz Chapter 9 Review <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 9 Test</p>
M A Y	<p>Geometry and Measurement: Calculate Surface Area and Volume of 3 dimensional figures Algebra: Use Properties of Arithmetic Interpret Equations and Inequalities using Integers</p> <p>6.3.1.1; 6.3.1.2; 6.2.3.1; 6.2.3.2</p>	<p>Calculate the surface area of quadrilaterals Construct a surface net Use net to determine surface area of 3D figures Apply the associative, commutative, distributive properties to integers</p>	<p><i>Formative</i> Thumbs Up 3-2-1 Exit Ticket Homework Pathways Worksheets and Textbook Problems Math Journal (Interactive Notebook) Chapter 11 Mid-Chapter Quiz <i>Summative:</i> Whiteboard Write-Out Student Self-Report Note Chapter 11 Test</p>

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
S E P T E M B E R	1 – The Real Numbers	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Categorize numbers into the Real Number System • Classify numbers as rational or irrational • Classify a decimal as terminating or repeating • Express rational numbers as terminating or repeating decimals • Identify a rational number as a fraction • Interpret the output of a calculator as a rational number • Compare positive and negative rational numbers • Differentiate between $\leq, \geq, <$, and $>$. • Create equivalent representation of positive and negative rational numbers • Accurately use order of operations to evaluate expressions and equations with rational numbers 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Adding & Subtracting Fractions Coloring Activity • Fraction, Decimal, Percent, Scientific Notation - Drag and Drop • Fractions Relay Race • Integer Rules - Notes & Puzzle • Multiplying & Dividing Fractions Coloring Activity • Fraction & Decimal Operations - Pumpkin Smash Bingo • Fractions Decimals Percents Sci Notation - Math Lib • Fractions Math Lib (Positive and Negative) • Fractions Math Lib (Positives Only) • Gone Fishin with Fraction Operations • Real Number System Lesson <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
O C T O B E R	2 – Algebraic Expressions	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Use and identify properties when simplifying or solving equations • Use order of operations on expressions • Evaluate expressions for given variable replacements • Translate expressions, equations, and inequalities • Produce equivalent expressions using the distributive, commutative, and associative properties. • Recognize and apply order of operations, grouping symbols, and exponents when using calculators and other technologies. 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • A Rolling Review (One-Step Equations, Evaluating Expressions, Order of Ops) • Evaluating Expressions Coloring Activity • Evaluating Expressions Scavenger Hunt • Order of Operations Cross Number • Order of Operations Pluggin Away Relay • Order of Operations Triples Activity • Order of Operations Turkey Coloring Activity • Evaluating Expressions Math Lib • Order of Operations Math Lib • Order of Operations Spin to Win • Properties Spin to Win (Pre-Algebra Version) <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
N O V E M B E R	3 – Equations and Inequalities	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Solve multi-step equations • Solve a multi-variable equation for a specific variable • Solve multi-step inequalities • Solve real-world problems involving equations and inequalities • Solve equations using the properties of equality • Produce algebraic equations and inequalities that represent a real world mathematical situation 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Combining Like Terms Math Lib • Multi-Step Equation Koosh • One-Step Equation Koosh • One-Step Equations Holiday Math Lib • Simplifying Expressions Bingo • Two-Step Equation Fly Swatter Bingo • Two-Step Equations Math Lib • Two-Step Inequalities Math Lib • Multi-Step Equations Pluggin Away Relay • Multi-Step Equations Rolling Review • Multi-Step Equations Scavenger Hunt • One-Step Equations Word Problems Task Cards • Translating Two-Step Equations Scavenger Hunt • Two-Step Equations & Inequalities Find Someone Who • Two-Step Equations Notes & Maze • Two-Step Equations Pluggin Away Relay • Two-Step Inequalities Coloring Activity • Two-Step Inequalities Task Cards <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
D E C E M B E R	4 – Rations, Proportions, and Percents	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Represent proportional relationships with words, tables, symbols, equations, and graphs • Find the unit rate (constant or proportionality) using a variety of strategies <ul style="list-style-type: none"> ○ tables, ○ equations, ○ symbols, ○ words and ○ graphs • Produce equivalent representations or proportional relationships <ul style="list-style-type: none"> ○ tables ○ graphs, and ○ equations • Calculate discounts, tips, and taxes • Use dimensional analysis to convert between measurement systems 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Percent Increase Decrease Math Lib • Percent Proportion Math Lib • Proportions Fly-Swatter Bingo • Proportions Math Lib • Ratios & Rates Math Lib • Scale Drawings & Models Math Lib • Simple Interest Math Lib • Percent Proportion Coloring Activity • Percents Task Cards • Pluggin Away Proportions Relay • Proportions Pumpkin Coloring Activity <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
J A N U A R Y	5 – Functions and Linear Relationships	Students will be able to: <ul style="list-style-type: none"> • Evaluate functions given in $f(x)$ form • Detect patterns in data and be able to represent algebraically • Evaluate functions given in $f(x)$ form 	Formative Assessments <ul style="list-style-type: none"> • Evaluating Functions Math Lib • Arithmetic Sequences Task Cards • Evaluating Functions Scavenger Hunt • Evaluating Functions Task Cards with QR Codes • Evaluating Functions Triples Activity • Functions Find Someone Who • Relations and Functions Task Cards Summative Assessments <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
F E B R U A R Y	6 – Systems of Equations	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Solve systems of equations graphically • Solve systems of equations by substitution or elimination • Write a system of equations to model a real-life situation • Solve systems of inequalities graphically 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Systems of Equations Fly-Swatter Bingo • Systems of Equations Math Lib • Solving Systems (By Graphing) Scavenger Hunt • Solving Systems Valentine's Day Partner Activity • Systems Coloring Activity • Systems Holiday Coloring Partner Activity • Systems of Equations Flip Book • Systems of Equations Method Comparison • Systems of Equations Relay Races • Systems of Equations Scavenger Hunt (with QR codes) • Systems of Equations Triples Activity • Systems of Equations Word Problems Scavenger Hunt • Systems of Inequalities Scavenger Hunt • Systems Task Cards with QR Codes <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
M A R C H	7 – Geometry	<p>Students will be able to:</p> <ul style="list-style-type: none"> • identify the legs and hypotenuse of a right triangle. apply the Pythagorean Theorem to right triangles in order to find unknown values. • use the Pythagorean Theorem to verify whether a given triangle is a right triangle. • apply the Pythagorean Theorem to find the distance between two points on a coordinate plane or in real world situations. • reflect or translate a point or figure to its new location. • identify the new coordinates of the transformed image. • analyze the patterns between the image and pre-image coordinates for each type of transformation. • differentiate and describe the type of transformation. • identify and describe the proportional nature of similar figures, including corresponding sides. • determine and justify whether figures are similar. find the scale factor of similar figures. • list corresponding sides and angles of similar figures. 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Geometry Review Math Lib • Pythagorean Theorem - Notes & Bingo • Pythagorean Theorem Math Lib • Similar Figures Math Lib • Transformations Math Lib • Angle Relationships Puzzle • Pythagorean Theorem Coloring Activity • Similar Figures Coloring Activity • Transformations Coloring Activity • Transformations Flip Book • Transformations Scavenger Hunt <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
A P R I L	8 – Measurement (Area & Volume)	<p>Students will be able to:</p> <ul style="list-style-type: none"> • distinguish between area and circumference in all applications. • compare and contrast perimeter and circumference. • describe (π) as the ratio of a circle's circumference to its diameter. • derive the formulas for area and circumference of a circle and area of a sector. • apply formulas for area and circumference. • justify calculations of area and circumference using models, drawings, equations, and other representations. • calculate the volume and surface area. • demonstrate how the formulas for volume and surface area are derived. • determine unknown lengths when the volume or surface area is known. 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Area of Circles Math Lib • Area of Composite Figures Math Lib • Circumference of Circles Math Lib • Volume Surface Area - Math Lib • Volume & Surface Area Coloring Activity <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
M A Y	9 – Probability and Statistics	<p>Students will be able to:</p> <ul style="list-style-type: none"> • determine the probability of an event by using the sample space to determine the ratio of desired outcomes to total possible outcomes. • represent probabilities as fractions, decimals, or percents. interpret the probability to describe the likelihood of an event. • identify probability as part of a sample space. • connect the probability of an event with representations of fractions, decimals, and percents. develop a representation of a sample space from an experiment I create. 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Probability Review Fly-Swatter Bingo • Statistics Math Lib • Compound Probability Task Cards • Compound Probability Math Lib • MAD Math Lib <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

Curriculum Map: 7th Grade Math

Curriculum Map: 8th Grade Math

	CONCEPT	SKILLS	ASSESSMENT
S E P T E M B E R	1 - Algebra Basics	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Categorize numbers into the Real Number System • Use and identify properties when simplifying or solving equations • Simplify perfect square roots and cube roots • Simplify non-perfect square and cube roots • Use order of operations on expressions that contain absolute value, square roots, and cube roots • Evaluate expressions for given variable replacements • Translate expressions, equations, and inequalities 	<p>Formative Assessments:</p> <ul style="list-style-type: none"> • Combining Like Terms Math Lib • Evaluating Expressions Math Lib • Order of Operations Math Lib • Order of Operations Spin to Win Game • Properties Spin to Win Game • Real Number System Smart Board Lesson • Simplifying Expressions Bingo • Two-Step Equations Fly Swatter Bingo • Two-Step Equations Math Lib • Algebra Basics Task Cards (Reviews up to Quiz 1-3) • Buh-Bye Symbols • Number Challenge • Order of Operations & Evaluating Expressions Scavenger Hunt • Order of Operations Triples Activity • Properties Notes & Card Sort • Simplifying Expressions Triples Activity • Translating Graphic Organizer Poster • Two-Step Equations & Inequalities Find Someone Who • Two-Step Equations Notes & Maze <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT 1 TEST

	CONCEPT	SKILLS	ASSESSMENT
O C T O B E R	2 - Multi-Step Equations & Inequalities	Students will be able to: <ul style="list-style-type: none"> • Solve multi-step equations • Determine if an equation has one solution, no solution, or infinite solutions • Solve a multi-variable equation for a specific variable • Solve multi-step inequalities • Solve real-world problems involving equations and inequalities • Evaluate functions given in $f(x)$ form • Detect patterns in data and be able to represent algebraically 	Formative Assessments <ul style="list-style-type: none"> • Gone Fishin with Equations • Multi-Step Equations Koosh Ball Game • Multi-Step Equations Math Lib • Multi-Step Equations Turkey Trot Bingo • Multi-Step Inequalities Math Lib • Pumpkin Smash Bingo - Multi-Step Inequalities • Absolute Value Equations Scavenger Hunt • Absolute Value Inequalities Coloring Activity • Algebraic Proportions Dice Activity • Algebraic Proportions Relay Puzzle • Equations & Inequalities Review Flip Book • Multi-Step & Compound Inequalities Task Cards - with QR Codes • Multi-Step Equations - Rolling Review Activity • Multi-Step Equations Coloring Activity • Multi-Step Equations Find Someone Who • Multi-Step Equations Relay Race • Multi-Step Equations Scavenger Hunt • Multi-Step Equations Task Cards - with QR Codes • Multi-Step Inequalities Tic-Tac-Toe • Multi-Step, Compound, Absolute

			<p>Value Inequalities - Pumpkin Smash.zip</p> <ul style="list-style-type: none">• Plugging Away Equations Relay• Absolute Value Equations Math Lib• Equations Poster <p>Summative Assessments</p> <ul style="list-style-type: none">• Quiz 1• Quiz 2• Quiz 3• UNIT TEST
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	CONCEPT	SKILLS	ASSESSMENT
N O V E M B E R	3 - Relations & Functions	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine whether a relation is a function (given ordered pairs, tables, mappings, or graphs) • Identify the domain and range of relations and functions • Identify the zeros of a function. (Either graphically, or setting the equation equal to 0) • Evaluate functions given in $f(x)$ form • Detect patterns in data and be able to represent algebraically 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Domain & Range Puzzle • Evaluating Functions Scavenger Hunt • Evaluating Functions Task Cards with QR Codes • Evaluating Functions Triples Activity • Functions Find Someone Who • Relations and Functions Task Cards • Evaluating Functions Math Lib • Arithmetic Sequences Task Cards <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

	CONCEPT	SKILLS	ASSESSMENT
D E C E M B E R	4a - Linear Equations	Students will be able to: <ul style="list-style-type: none"> • Recognize the four types of slope (positive, negative, zero, and undefined) • Find the slope of a line (given the equation, a graph, or two ordered pairs) • Graph linear equations and inequalities (either in $y = mx + b$ or $Ax + By = C$ form) • Recognize and graph vertical and horizontal lines • Identify the x- and y-intercepts given an equation or graph • Describe how changes to the slope and y-intercept will affect a graph • Write the equation of a line (given the graph, a point and the slope, or two points of the line) 	Formative Assessments <ul style="list-style-type: none"> • Linear Equations Review Book & Stations Activity • Linear Equations Round Table Activity • Matching Graphs & Equations (Cut & Paste Activity) • Multiple Representations Triples Activity • Point-Slope & Two Points Relay Races • Point-Slope & Two Points Task Cards with QR Codes • Point-Slope & Two-Points Partner Activity • Slope and Graphing Find Someone Who • Slope Formula Holiday Coloring Activity • Slope Formula- Notes, Tic-Tac-Toe, & Puzzle • Slope Formula Triples Activity • Slope Task Cards with QR Codes • Slope Triples Activity • Writing Linear Equations Find Someone Who • Writing Linear Equations Given Two Points Holiday Coloring Activity • Gone Fishin with Linear Equations • Graphing Linear Equations Bingo • Linear Equations Fly-Swatter Review • Parallel & Perpendicular Lines Math Lib

			<ul style="list-style-type: none"> • Two Points Math Lib • Graphing Linear Equations Choice Board • Graphing Linear Equations Line-Up • Graphing Linear Equations Scavenger Hunt (with QR codes) • Line Match Activity • Linear Equations Bullseyes • Linear Equations Performance Task <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST
	<p>4b - Direct & Inverse Variation</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine whether a direct or inverse variation exists • Given a set of data, write an equation for direct variation • Given a set of data, write an equation for inverse variation • Given a situation that is either direct or inverse variation, solve for a missing variable • Recognize and graph direct and inverse variation situations 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Direct & Inverse Variation Task Cards • Direct Variation Bingo • Direct & Inverse Variation Card Sort Activity • Direct & Inverse Variation Cut & Paste Activity <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

	CONCEPT	SKILLS	ASSESSMENT
J A N U A R Y	5 - Systems of Equations & Inequalities	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine whether a system of equations has one solution, no solution, or infinite solutions. • Solve systems of equations graphically • Solve systems of equations by substitution or elimination • Write a system of equations to model a real-life situation • Solve systems of inequalities graphically 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Systems of Equations Fly-Swatter Bingo • Systems of Equations Math Lib • Systems of Inequalities Math Lib • Graphing Linear Inequalities Scavenger Hunt • Graphing vs. Substitution Partner Activity • Linear Inequalities Cut-Paste • Solving Systems (By Graphing) Scavenger Hunt • Solving Systems Valentine's Day Partner Activity • Systems Coloring Activity • Systems Holiday Coloring Partner Activity • Systems of Equations Flip Book • Systems of Equations Method Comparison • Systems of Equations Relay Races • Systems of Equations Scavenger Hunt (with QR codes) • Systems of Equations Triples Activity • Systems of Equations Word Problems Scavenger Hunt • Systems of Inequalities Scavenger Hunt • Systems Task Cards with QR Codes • Writing Linear Inequalities Given a Graph • Writing Systems of Linear Inequalities Given a Graph Task

			<p>Cards</p> <p>Summative Assessments</p> <ul style="list-style-type: none">• Quiz 1• Quiz 2• Quiz 3• UNIT TEST
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	CONCEPT	SKILLS	ASSESSMENT
F E B R U A R Y	6 - Exponent Rules	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Simplify monomial expressions using the product, power, quotient, and negative exponent rules • Simplify monomial square roots • Add, subtract, multiply, and divide polynomials • Factor polynomials (GCF, Difference of Squares, Basic Trinomials, Slip & Slide Trinomials) • Identify prime polynomials 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Exponent Rules Coloring Activity • Exponent Rules Review Book • Exponent Rules Rolling Review • Exponent Rules Task Cards • Exponent Rules Triples Activity • Exponents Rules Scavenger Hunt • Geometric Sequences Task Cards • Exponent Rules Koosh Ball Game • Exponent Rules Math Lib • Gone Fishin with Scientific Notation <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST
	7 - Polynomials & Factoring		<p>Formative Assessments</p> <ul style="list-style-type: none"> • Factoring Find Someone Who • Factoring Polynomials Review Book • Factoring Polynomials Task Cards • Factoring Trinomials Battleship • Factoring Trinomials Coloring Activity • Factoring Trinomials Task Cards (a = 1) • Multiplying Polynomials Coloring Activity • Polynomial Scavenger Hunt • Polynomials Triples Activity • Adding & Subtracting Polynomials Math Lib • Factoring Spin to Win • Factoring Trinomials Math Lib

			<ul style="list-style-type: none">• Gone Fishin with Factoring• Gone Fishin with Polynomials• Polynomial Operations Math Lib• Factoring a GCF (Drag & Drop Activity)• Factoring By GCF (I Have Who Has) <p>Summative Assessments</p> <ul style="list-style-type: none">• Quiz 1• Quiz 2• Quiz 3• UNIT TEST
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	CONCEPT	SKILLS	ASSESSMENT
M A R C H	8 - Quadratic Equations	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Graph quadratic equations using the axis of symmetry and vertex • Solve quadratic equations, either graphically by identifying the roots/zeros, or setting • equation equal to 0 and solving for x-values • Solve quadratic word problems • Solve projectile motion problems • Given a situation, determine whether a linear or quadratic relationship exists. • Then, find the equation for the line or curve of best fit • Using your equation or line or curve of best fit, make predictions on future outcomes • Statistics: 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Quadratic Equations Review Book • Solving Quadratics by Factoring Equation Bingo • Factoring vs. Quadratic Formula Partner Activity • Graphing Quadratic Equations - Stations Activity • Projectile Motion Scavenger Hunt • Quadratic Equation Puzzles • Quadratic Equations - Find Someone Who • Quadratic Equations Battleship • Quadratic Equations Flip Book • Quadratic Formula - Tic-Tac-Toe • Quadratic Formula Coloring Activity • Solving Quadratics - Color By Number Activity • Solving Quadratics Task Cards with QR Codes • Zeros, Factored Form, Standard Form - Cut & Paste Activity • Quadratic Equation Bingo • Quadratic Equations Math Lib <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

	CONCEPT	SKILLS	ASSESSMENT
A P R I L	9 - Statistics	<p>Students will be able to:</p> <ul style="list-style-type: none"> • Determine the mean, median, mode, and range for a given set of data • Construct a box-and-whisker plot using the lower extreme, lower quartile, median, upper quartile, and upper extreme of a data set. • Compare and contrast several box-and-whisker plots • Calculate the mean absolute deviation, standard deviation, and variance of a data set • Interpret what the standard deviation means for a data set • Calculate the z-score for a given data value in a set 	<p>Formative Assessments</p> <ul style="list-style-type: none"> • Normal Distribution & Z-Scores Task Cards • Bingo - Mean Absolute Deviation, Standard Deviation, Z-Scores • Mean Absolute Deviation - Math Lib Activity <p>Summative Assessments</p> <ul style="list-style-type: none"> • Quiz 1 • Quiz 2 • Quiz 3 • UNIT TEST

	CONCEPT	SKILLS	ASSESSMENT
M A Y	10 - Rational Expressions & Equations	<p>Students will be able to:</p> <ul style="list-style-type: none"> determine the value of an algebraic expression given the value of the variable even if it includes radicals and absolute values. determine the square roots of perfect squares. use technology to approximate the decimal equivalent to a non-perfect square. use exponents and radicals as inverse operations. 	<p>Formative Assessments</p> <ul style="list-style-type: none"> Gone Fishin with Rational Expressions Rational Expressions Math Lib Rational Expressions Scavenger Hunt <p>Summative Assessments</p> <ul style="list-style-type: none"> Quiz 1 Quiz 2 Quiz 3 UNIT TEST
	11 - Radical Expressions & Equations		<p>Formative Assessments</p> <ul style="list-style-type: none"> Radical Equations Scavenger Hunt Radical Equations Task Cards Radical Expressions & Equations Flip Book Simplifying Radical Notes & Puzzle Simplifying Radicals Task Cards Radical Expressions Bingo Radical Expressions Math Lib Simplifying Radicals Math Lib Radical Equations Relay Races <p>Summative Assessments</p> <ul style="list-style-type: none"> Quiz 1 Quiz 2 Quiz 3 UNIT TEST

