

Hamilton Heights School Corporation

Curriculum Map Template

Course Title: Math 7	Quarter 1:	Academic Year: 2025-26
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Essential Questions: - Where can I see absolute value being used in the real world? - Can I evaluate numerical expressions accurately? - Can I explain the relationship between squares and square roots? - Can I order rational numbers on a number line? - Can I perform basic operations on rational numbers?						
Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Intro Number Sense	10 days	7.NS.5 7.NS.6	Multiplication Division Addition/Subtraction on a number line Prime Numbers Composite Numbers Squares & Square Roots as inverse operations	- I can find the prime factorization of whole numbers. - I can determine if a number is divisible by numbers 2, 3, 5, and 10. - I can determine the squares/square roots of all perfect squares.	- Mastery Checks - Integers - Rational #s Oral Assessment - Q1 Math Menu Items	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7
Add/Subtract Rational Numbers	12 days	7.NS.1 7.NS.2 7.NS.7 7.AF.2	Add/Subtract whole numbers Add/Subtract Fractions Add/Subtract Decimals	- I can add rational numbers. - I can subtract rational numbers.	- Mastery Checks - Integers - Rational #s Oral Assessment	Big Ideas IXL Youcubed.org Number Talks 99Math

				3. I can use absolute value to explain adding and subtracting rational numbers.		Mindset Mathematics Gr. 7 -Operating with Opposites
Multiply/Divide Rational #s	12 days	7.NS.3 7.NS.4 7.NS.7 7.AF.2	Multiply/Divide Whole Numbers Multiply/Divide Fractions Multiply/Divide Decimals	1. I can multiply/divide whole numbers 2. I can multiply/divide fractions 3. I can multiply/divide decimals	• Mastery Checks • Oral Assessment	Big Ideas IXL Youcubed.org Number Talks 99Math Mindset Mathematics Gr. 7 -Operating with Opposites
Ratios & Proportions (Will Continue in Q2)	8 days	7.AF.5 7.AF.6 7.RP.1 7.RP.3 7.GM.1	Graph on a coordinate plane Rational # Multiplication Ratio Tables	1. I can find unit rates. 2. I can recognize proportional relationships from words, equations, tables, and graphs. 3. I can find the constant of proportionality. 4. I can graph proportional relationships.	• Mastery Checks	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Seeing Proportional Relationships

Course Title: Math 7	Quarter 2:	Academic Year: 2025-26
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Essential Questions: 1. Can I determine if a given situation, graph, equation, or table is representing a proportional relationship? 2. How do I determine if a relationship is linear or nonlinear from a graph? Table? Equation? 3. I can use percent proportions & percent equations to solve real world problems. 4. I can find simple interest for a given rate, time and principal. 5. How do I determine the constant of proportionality?						
Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Ratios & Proportions (Continued from Q1)	9 days	7.AF.5 7.AF.6 7.RP.1 7.RP.3 7.GM.1	Graph on a coordinate plane Rational # Multiplication Ratio Tables	5. I can find unit rates. 6. I can recognize proportional relationships from words, equations, tables, and graphs. 7. I can find the constant of proportionality. 8. I can graph proportional relationships.	• Mastery Checks	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Seeing Proportional Relationships
Scale Drawings/Similar Figures	5	7.GM.1	Ratios Proportions Measurements Corresponding parts Scale Factor Scale Drawing	1. I can find the actual lengths from a scale figure. 2. I can find the actual areas from a scale figure.	• Scale Drawings Mastery Check	Big Ideas IXL Youcubed.org Number Talks 99Math

				- I can reproduce a scale drawing for a different scale. - I can justify a scale drawing using proportions.		
Slope Work	7 days	7.AF.5 7.AF.6 8.AF.5	Rate of change $y=mx+b$ $\frac{\Delta y}{\Delta x} = \frac{\text{change in } y}{\text{change in } x}$	- I can find the slope of a line from its graph. - I can graph a line given its slope and a point on the line. - I can graph from $y=mx+b$.	Slope Mastery Check	TedEd Math Investigations from Making Number Talks Matter
Percents	16	7.RP.2	Convert Decimals to Percents Convert Percents to Decimals Percent is part of 100 Find percent of a number Proportion	- I can convert between fractions, decimals, and percents. - I can use the percent proportion to solve problems. - I can use the percent equation to solve problems. - I can calculate Percent of Change. - I can find Sales Tax, Tips, Markups and Discounts. - I can use the simple interest formula to solve finance problems.	- Mastery Checks Q3 Oral Assessment	Big Ideas IXL Youcubed.org Number Talks 99Math Mindset Mathematics Gr. 7 -Understanding Percents in the World

Expressions	10 days	7.AF.1	Adding/Subtracting Rational Numbers Multiplying/Dividing Rational Numbers Meaning of a variable Inverse Operations Distributive Property Associative Property Commutative Property	1. I can recognize terms, like terms, coefficients & constants. 2. I can simplify algebraic expressions by combining like terms. 3. I can use the distributive property to simplify algebraic expressions.	• Mastery Checks • Teacher designed Exit Ticket Quizzes	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Algebra as a Tool
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Essential Questions:

1. I can simplify and solve one and two step equations and inequalities.
2. I can find simple probabilities and use them to make predictions.
3. I can find the volume of figures composed of rectangular prisms and cylinders.
4. I can find the surface area of rectangular/triangular prisms and cylinders.

Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Equations & Inequalities	21 days	7.AF.3 7.AF.4 7.AF.5	Solving one-step equations Inverse operations Inequality signs How to graph inequalities	1. I can solve one-step equations. 2. I can solve two-step equations. 3. I can solve and graph solutions for one-step inequalities. 4. I can solve and graph solutions for two-step inequalities.	• Mastery Checks • Q2 Oral Assessment	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Algebra as a Tool
Circles	5	7.GM.2	Understand how to use a formula Use proportions to solve problems Diameter Radius	I can solve problems involving circumference and area of circles.	• Mastery Checks	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Exploring Circles

			Circumference			
Volume of Right-Rectangular Prisms and Cylinders	10	7.GM.3	Area formulas for rectangles, triangles, circles Perimeter Prisms Cylinders Diameter Radius Circumference Volume labels vs. Area labels	1. I can draw, construct, and discuss 3D geometric figures 2. I can describe the relationships between 3D geometric figures 3. I can solve problems involving volume.	• Mastery Checks	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7
Probability	9	7.DSP.4 7.DSP.5	Fractions Decimals Percents Tools of Probability (dice, spinner, coins, cards) 52 cards in a deck, 4 suits	1. I can identify possible outcomes of situations. 2. I can explain the meaning of theoretical and experimental probability. 3. I can make predictions using probabilities. 4. I can use probability to solve real-world problems.	• Mastery Check	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Modeling Probabilities -Building Intuition about Probabilities

Course Title: Math 7	Quarter 4:	Academic Year: 2025-26
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Essential Questions 1. I can find the measures of center and measures of spread for a set of data.						
Unit Name	Total Days	Standards Number	Knowledge Objectives	Skills Objectives	Specific Assessments	Specific Resources
Statistics	12	7.DSP.1 7.DSP.2 7.DSP.3	How to find mean, median, and mode Range Dot Plots How to read histograms and bar graphs	1. I can make inferences about a population 2. I can compare two populations 3. I can use probability models	Mastery Checks	Big Ideas IXL Youcubed.org Number Talks Mindset Mathematics Gr. 7 -Sampling to Understand Populations
Reteach Modules	15 days	7th grade standards	Varies by individual based of mastery check scores	Varies by individual based of mastery check scores	Varies by individual based of mastery check scores	Canvas Reteach Modules assigned based on individual student need
Expression/Equation Review	5 days	7.AF.1 7.AF.2 7.AF.3 7.AF.4	Denominator Numerator Lowest Terms	I can perform basic operations on rational numbers (specifically fractions).	Placemat Quiz	TedEd Math Investigations from Making Number Talks Matter
Slope & Graphing Lines	5 days	7.AF.5 7.AF.6 8.AF.5				TedEd Math Investigations from Making Number Talks Matter