

Current Staff		Mr. Haston				
Course	7th Grade Mathematics					
Unit/ Length	Unit Objectives/ Big Ideas	Basic Outline/ Structure	Materials/ Text	Content Vocabulary	Next Gen/ CCSS	Assessments & Activities
Module 1 (30 days)	Ratios and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. Draw, construct, and describe geometrical figures and describe the relationships between them.	<u>Engage NY (online resources)</u> Ratio Table Coordinate Plane Equations of the form $y=kx$	Proportional To Proportional Relationship Constant of Proportionality One-to-One Correspondence Scale Drawing Scale Factor	7.RP.1 7.RP.2 7.RP.3 7.EE.4 7.G.1	Lesson Assignments Mid-Module Quiz End-Module Quiz End-Module Test
Module 2 (30 days)	Rational Numbers	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	<u>Engage NY (online resources)</u> Equations Expressions Integer Game Number Line Tape Diagram	Additive Identity Additive Inverse Break-Even Point Distance Formula Loss Multiplicative Identity Profit Repeating Decimal Terminating Decimal	7.NS.1 7.NS.2 7.NS.3 7.EE.2 7.EE.4	Lesson Assignments Mid-Module Quiz End-Module Quiz End-Module Test
Module 3		Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and	<u>Engage NY (online resources)</u> Area Model Coordinate Plane	Expression in Expanded Form Expression in Factored Form Expression in Standard Form Coefficient of the Term	7.EE.1 7.EE.2 7.EE.3 7.EE.4	Lesson Assignments Mid-Module Quiz

(35 days)	Expressions and Equations	algebraic expressions and equations. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Equations and Inequalities Expressions Geometric Figures Nets for Three-Dimensional Figures Number Line Protractor Tape Diagram	Circle Diameter of a Circle Circumference Pi Circular Region or Disk	7.G.4 7.G.5 7.G.6	End-Module Quiz End-Module Test
Module 4 (25 days)	Percents and Proportional Relationships	Analyze proportional relationships and use them to solve real-world and mathematical problems. Solve real-life and mathematical problems using numerical and algebraic expressions and equations. Draw, construct, and describe geometrical figures and describe the relationships between them.	<u>Engage NY (online resources)</u> Calculator Coordinate Plane Double Number Line Diagrams Equations Expressions Geometric Figures Ratio Tables Tape Diagrams	Absolute Error Percent Error	7.RP.1 7.RP.2 7.RP.3 7.EE.3 7.G.1	Lesson Assignments Mid-Module Quiz End-Module Quiz End-Module Test
Module 5 (25 days)	Statistics and Probability	Use random sampling to draw inferences about a population. Draw informal comparative inferences about two populations. Investigate chance processes and develop, use, and evaluate probability models.	<u>Engage NY (online resources)</u> Graphing Calculator Dot Plots Histograms	Compound Event Inference Long-Run Relative Frequency Probability Probability Model Random Sample Simulation Tree Diagram	7.SP.1 7.SP.2 7.SP.3 7.SP.4 7.SP.5 7.SP.6 7.SP.7 7.SP.8	Lesson Assignments Mid-Module Quiz End-Module Quiz End-Module Test
Module 6 (35 days)	Geometry	Draw, construct, and describe geometrical figures and describe the relationships between them. Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	<u>Engage NY (online resources)</u> Familiar objects such as an apple, a car, a couch, a cup, etc Website illustrating cross sections: Annenberg Learner	Correspondence Identical Triangles Unique Triangle Three sides condition Two angles and the included side condition Two angles and the side opposite a given angle condition Two sides and the included angle condition Two sides and a non-included angle condition	7.G.2 7.G.3 7.G.5 7.G.6	Lesson Assignments Mid-Module Quiz End-Module Quiz End-Module Test

