Lehighton Area School District
Curriculum Framework

Course Title:	Math 7 (Applied, Academic, and Accelerated)
Content Area:	Mathematics
Grade Level(s):	7th Grade
Course Overview:	Math 7 focuses on four critical areas: (1) developing and understanding of an applying proportional relationship; (2) operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings, geometric constructions, surface area, and volume; and (4) drawing inferences about populations.
PA Core Standards:	PA Core Standards Mathematics PK-12
Key Course Text and Materials:	Glencoe Course 2 Volume 1 and 2, IXL, Delta Math, Wayground
Key Assessments/Projects:	There is one test per chapter with one or two quizzes. In-class assignments (ICA) happen independently or with a partner to review class material. There are also IXL assignments assigned weekly utilized as spiral review.

Big Idea/Unit: Numbers and Operations
Pacing: 51 days

Standards	Objective/Skill	Vocabulary	Additional Resources	Assessment/Project
CC.2.1.7.D.1 M07.A-R.1.1.1 M07.A-R.1.1.2 M07.A-R.1.1.3 M07.A-R.1.1.4 M07.A-R.1.1.5 M07.A-R.1.1.6	Analyze proportional relationships and use them to model and solve real-world and mathematical problems.	Rate Unit rate Complex fraction Dimensional analysis Unit ratio Cross product Quadrants Coordinate Ordered pair Origin x-axis y-axis Equivalent ratios Non-proportional Proportional Coordinate plane x-coordinate y-coordinate Rate of change Constant rate of change Constant of variation Direct variation Constant of Proportionality Percent proportion Percent equation Percent error Percent of change Percent of decrease Precent of increase Gratuity Markup Sales tax Selling price Tip Discount Markdown Principal Simple interest	Glencoe Course 2 Chapters 1 Lessons 1 through 7 and Lesson 9 and Chapter 2 Lessons 2 through 8 Pulse Rate Video White boards Worksheets Graphing project IXL	Independent practice Homework IXL White board practice Graphing project PSSA Practice Chapter assessment

CC.2.1.7.E.1 M07.A-N.1.1.1 M07.A-N.1.1.2 M07.A-N.1.1.3	Apply and extend previous understandings of operations with fractions to operations with rational numbers.	Additive inverse Opposites Bar notation Repeating decimal Terminating decimal Common denominator Least common denominator Rational number Like fractions Unlike fractions	Glencoe Course 2 Chapters 3 Lessons 1 through 5 and Chapter 4 Lessons 1 through 6 and lesson 8 Number Line Activity Integer Flow Chart Wayground White boards Graphic organizer Worksheets IXL	Activity Worksheets Independent Practice IXL Wayground Quiz Chapter assessment

Big Idea/Unit:	Algebraic Concepts			
Pacing:	26 days			
Standards	**Objective/Skill**	**Vocabulary**	**Additional Resources**	**Assessment/Project**
CC.2.2.7.B.1 M07.B-E.1.1.1	Apply properties of operations to generate equivalent expressions.	Constant Like terms Multiplicative identity Simplest form Term Define a variable Distributive property Equivalent expressions Factor Factored form Monomial	Glencoe McGraw Hil Chapters 5 Lessons 1, 3 through 8 and Chapter 6 Lessons 1 through 5 Worksheets White boards Scoot cards	
CC.2.2.7.B.3 M07.B-E.2.1.1 M07.B-E.2.2.1 M07.B-E.2.2.2 M07.B-E.2.3.1	Model and solve real-world and mathematical problems by using and connecting numerical, algebraic, and/or graphical representations.	Algebra Algebraic expression Coefficient Variable Linear expression Addition Property of Equality Equation equivalent Equation Solution Subtraction Property of Equality Division Property of Equality Multiplication Property of Equality Two-step equation Addition Property of Inequality Inequality Subtraction Property of Inequality Division Property of Inequality Multiplication Property of Inequality Two-step inequality	Glencoe Course 2 Chapter 5 Lessons 4 through 8 and Chapter 6 Lessons 6 through 8 Scoot cards White boards Worksheets	

Big Idea/Unit: Geometry **Pacing:** 18 days				
Standards	**Objective/Skill**	**Vocabulary**	**Additional Resources**	**Assessment/Project**
CC.2.3.7.A.1 M07.C-G.2.1.1 M07.C-G.2.1.2 M07.C-G.2.2.1 M07.C-G.2.2.2	Solve real-world and mathematical problems involving angle measure, area, surface area, circumference, and volume.	Acute angle Angles Congruent Obtuse angle Right angle Straight angle Vertex Vertical angles Supplementary angles Transversal Alternate exterior angles Alternate interior angles Same-side exterior angles Same-side interior angles Center Circle Circumference Diameter Pi Radius Semicircle Composite Figure Volume Surface area	Glencoe Course 2 Chapter 7 Lessons 1 through 6 and Chapter 8 Lessons 1 through 4, 6 and 8 Notecard Scoot cards Worksheets Foldable IXL	Worksheets Homework IXL Partner Activity Chapter Assessment
CC.2.3.7.A.2 M07.C-G.1.1.1 M07.C-G.1.1.2 M07.C-G.1.1.3 M07.C-G.1.1.4	Visualize and represent geometric figures and describe the relationships between them.	Scale drawing Scale factor Acute triangle Adjancent Congruent segments Triangle Obtuse triangle Right triangle Scalene triangle Parallel lines Cross section	Glencoe Course 2 Chapter 7 Lessons 3, 4, 6 and Chapter 8 Lessons 1 through 3	Worksheets Homework IXL Chapter Assessment

Big Idea/Unit: Measurement, Data, and Probability **Pacing:** 12 days				
Standards	**Objective/Skill**	**Vocabulary**	**Additional Resources**	**Assessment/Project**

CC.2.4.7.B.1 M07.D-S.1.1.1 M07.D-S.1.1.2	Draw inferences about populations based on random sampling concepts.	Complementary Events Outcome Random Probability Simple event Biased sample Convenience sample Population Random sample Simple random sample Stratified random sample Systematic random sample Unbiased sample	Glencoe Course 2 Chapter 9 Lessons11, 2, 3, 5, 7 and Chapter 10 Lessons 1 through 5 Worksheets Drag and Drop activity White boards Flow chart	Worksheets DeltaMath Chapter assessment
CC.2.4.7.B.2 M07.D-S.2.1.1	Draw informal comparative inferences about two populations.	Measure of center Statistics First quartile Interquartile range Measures of variability Outliers Quartiles Range Third quartile Mean absolute deviation Box plot Double box plot	Glencoe Course 2 Chapter 9 Lessons and Chapter 10 Lessons Worksheets Drag and Drop activity White boards Flow chart	Worksheets DeltaMath Chapter assessment
CC.2.4.7.B.3 M07.D-S.3.1.1 M07.D-S.3.2.1 M07.D-S.3.2.2 M07.D-S.3.2.3	Investigate chance processes and develop, use, and evaluate probability models.	Experimental probability Theoretical probability Uniform Probability Model Sample space Tree diagram Compound event Fundamental Counting Principle Indpendent events Dependent events	Glencoe Course 2 Chapter 9 Lessons 1, 2, 3, 4, 5, 7 and Chapter 10 Lessons 1 and 4 Worksheets White boards	Worksheets Chapter assessment