

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
8 th grade MATH Unit 2: Patterns, Relationships, Algebraic Thinking	8 th grade	2 nd and 3 rd 6 weeks	20 days
Objectives		Examples/Specifications	
<p>8.1B Select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships</p> <p>8.2A Select and use appropriate operations to solve problems and justify the selections</p> <p>8.2B Add, subtract, multiply, and divide rational numbers in problem situations</p> <p>8.2C Evaluate a solution for reasonableness</p> <p>8.2D Use multiplication by a constant factor (unit rate) to represent proportional relationships</p> <p>8.3A Compare and contrast proportional and non-proportional relationships</p> <p>8.3B Estimate and find solutions to application problems involving percents and proportional relationships, such as similarity and rates</p> <p>8.9B Use proportional relationships in similar shapes to find missing measurements</p> <p>8.14A Identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics</p> <p>8.14B Use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness</p> <p>8.14C Select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem</p> <p>8.14D Select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems</p> <p>8.15A Communicate mathematical ideas using language, efficient tools, appropriate units, and graphical, numerical, physical, or algebraic mathematical models</p> <p>8.16A Make conjectures from patterns or sets of examples and non-examples</p> <p>8.16B Validate his/her conclusions using mathematical properties and relationships</p>		<p>Solve problems of simple interest</p> <p>Use proportions to solve problems</p> <p>Express ratios as fractions in simplest form; determine unit rate</p> <p>Use similar triangles</p> <p>Find percent of increase and decrease</p> <p>Solve problems by drawing a diagram</p>	

Language of Instruction:	Textbook Correlations:
Center Congruent Constant of proportionality Constant rate of change Corresponding parts Cross products Dilation Enlargement Equivalent ratios Indirect measurement Linear relationship Nonproportional Polygon Proportional Rate Rate of change Ratio Reduction Scale Scale factor Scale drawing Scale model Similar Unit rate Compatible numbers Discount Interest Markup Percent Percent of change Percent of increase/decrease Percent equation Principal Selling price	Chapter 4 Chapter 5 Map applications – scale factor Applications of unit rate Sale tags – percent of decrease
	Weblinks/Other Resources:
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
Quizzes, Chapter tests, benchmarks, t-made assessments	Chapter 4: 10 days Chapter 5: 10 days