

8th Grade Math Curriculum Bundle # 4

Title	Suggested Dates
Percent Proportions and Introduction to Similarity	October 26 – November 13 (14 days)

Big Idea/Enduring Understanding	Guiding Questions
Percents are used in the real world in the form of sales tax, discounts, commissions, simple interest, percent of increase/decrease, etc...	1. What methods can be used to solve problems in real world situations like sales tax, discount, etc.?
Similar figures are the same shape, but can be different sizes. The scale factor between similar figures is the factor by which the image/object is reduced or enlarged, and can thereby help to determine lengths of unknown sides.	1. What are the properties of similar figures? 2. How can you use proportional relationships in similar two-dimensional figures to find missing measurements? 3. How is solving a problem about similar figures and solving a percent application problem similar? How are they different?

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the district curriculum.

Knowledge & Skills with Student Expectations	District Specificity/Examples	Suggested Resources (See Note Above)
<p>8.3 Patterns, relationships, and algebraic thinking. The student identifies proportional or non-proportional linear relationships in problem situations and solves problems.</p> <p>8.3B estimate and find solutions to application problems involving percents and other proportional relationships such as similarity and rates</p> <p>Note: Focus on percent applications and similarity. Also included in Bundles 2 and 3. Bundle 2 focuses on rates. Bundle 3 focuses on proportional relationships.</p>	<ul style="list-style-type: none"> • include real world situations such as tax, sale price, % change, mark-up/discount, commission, simple interest • find missing measures in similar figures including length and angle measures • mark congruent angles on similar figures and write ratios to compare corresponding sides 	<p><u>A.I.R.R. 8th Grade</u> Activity 32- Mix 'Em and Match 'Em Activity 35- Set Up A Percent Proportion Activity 36- What Type of Percent Problem Is It? Activity 37- Fraction or Decimal Activity 38- The Percent Proportion Activity 39- Using Proportions to Solve Percent Problems</p> <p><u>Region XIII 8th Sense</u> Objective 2 8.3B Pg. 143-145</p> <p><u>Region IV Accelerated Curriculum 8th Grade</u> Unit 2 Lesson 1 Percents</p>

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<p>8.6 Geometry and spatial reasoning. The student uses transformational geometry to develop spatial sense.</p> <p>8.6A generate similar figures using dilations including enlargements and reductions</p> <p>Note: Repeated in Bundle 5 for additional time</p>	<ul style="list-style-type: none"> • label dilations with 'prime notation' • find the scale factor • use scale factor to create similar figures 	<p><u>CMP2 Stretching and Shrinking</u> Pearson Investigation 3 (Can do Investigations 1, 2 if it was not used in 7th grade)</p>	<p><u>UT Dana Center Mathematics Toolkit Middle School Assessments</u> By the Sea: Geometry and Spatial Reasoning Pgs 133-146 (District will be purchasing CDs for each campus)</p> <p><u>Region IV Accelerated Curriculum</u> Unit 5 Lesson 2 Dilations</p>
<p>8.10 Measurement. The student describes how changes in dimensions affect linear, area, and volume measures.</p> <p>8.10A describe the resulting effects on perimeter and area when dimensions of a shape are changed proportionally</p> <p>Note: Repeated in Bundle 5 for additional time.</p>	<ul style="list-style-type: none"> • use a scale factor to change shape dimensions • find missing dimensions on changed shape • generalize the effects on perimeter and area if the dimensions are changed by the same scale factor 		