

PAP 7th Grade Curriculum Bundle #6

| Title | Suggested Dates |
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| Intro to Basic Percents and Unit Rate | December 7 – December 18 (10 days) |

| Big Idea/Enduring Understanding | Guiding Questions |
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| The relationship between some measurable quantity and one unit of another is called a unit rate. | 1. Why are unit rates needed to make effective comparisons? |
| Percents are used in the real-world to describe part of a whole. One percent is equal to one one-hundredth (1/100) of a whole. | 1. Why are percents used in store sales signs rather than fractions or decimals? 2. How can you use estimation and mental math to calculate a 20% tip? 3. How is a percent like money? (cents and dollars) |

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) | |
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| <p>8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.</p> <p>8.1A compare and order rational numbers in various forms including integers, percents, and positive and negative fractions and decimals</p> <p><i>Note: This bundle includes ordering all forms of rational numbers.</i></p> | <ul style="list-style-type: none"> • Percents in this bundle are more than the benchmarks • Include percents less than 1% and greater than 100% • Arranging on a number line • Identify equivalent forms • Finding rational numbers between different combinations of rational numbers. | | <p>PH Textbook (8th) 5.1</p> <p>AIRR 8th grade Activity #1-20</p> |
| <p>8.1 Number, operation, and quantitative reasoning. The student understands that different forms of numbers are appropriate for different situations.</p> <p>8.1B select and use appropriate forms of rational numbers to solve real-life problems including those involving proportional relationships</p> <p><i>Note: Teach operations with rational numbers in context. Just introduce percents – find the part of a number based on a given percent. More involved</i></p> | <ul style="list-style-type: none"> • Select and use a variety of forms of rational numbers within a problem to solve real-world applications in the form of fractions, percents, and decimals • Discount, Sale Price, Tax, Total, Tip, Mark-up, simple interest • Emphasize finding a percent of a number in this bundle | <p>CMP2 Bits and Pieces III Pearson Investigation 4, 5</p> | <p>Kamico- Developmental Series Math 8 Book 1. “Three Point Play” pg 28-41</p> <p>AIRR 8th grade Activity #91, 99-101, 107-108</p> <p>NCTM- Navigating Through Numbers and Operations: Activity- Science Fair Teacher notes- pg 20-23, student pg 115-116</p> |

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| <p>percent applications and proportions are in bundle 7.</p> | | | <p>PH Textbook (8th) Chapter 5-2, 5-6</p> <p>Accelerated Curriculum 8th Unit 2 Lesson 1 Unit 2 Lesson 2</p> <p>Closing the Distance 8th Lesson 4: Percents pg. 49-66</p> |
| <p>7.3 Patterns, relationships, and algebraic thinking. The student solves problems involving direct proportional relationships.</p> <p>7.3A estimate and find solutions to application problems involving percent</p> <p>Note: Percents will be continued in the next bundle.</p> <p>Note: Include opportunities where the problem requires students to work through several smaller separate problems and then compare the results of each of those in order to draw conclusions</p> <p>Note: Include problems looking for the part included and the part “NOT” included.</p> | <ul style="list-style-type: none"> • Recognize benchmark percents (for example: 10%, 20%, 25%, 50%...) • understand fractional equivalents for percents • identify and use part and whole • use percent bar representation | <p>CMP2 Bits and Pieces III Pearson Investigation 4, 5</p> | <p>Understanding Math Understanding Percent: Topic 5</p> <p>AIRR 7th grade Activity #117-119, 129-132, 136-141</p> <p>Closing the Distance 7th Lesson 8:Percents pg. 125-142</p> <p>AIRR 8th grade Activity #91, 99-101, 107-108</p> |
| <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 basic percents. Percent increase and decrease, working backwards and forwards with percents are in bundle 7.</p> | <ul style="list-style-type: none"> • include real world situations such as tax, sale price, mark-up/discount, total, simple interest | | <p>AIRR 8th grade Activity #91, 99-101, 107-108</p> <p>PH Textbook (8th) Lesson 3-2, 5-6</p> <p>Accelerated Curriculum 8th Unit 2 Lesson 1 Unit 2 Lesson 2</p> <p>Closing the Distance 8th Lesson 4: Percents pg. 49-66</p> |

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| <p>7.3 Patterns, relationships, and algebraic thinking. The student solves problems involving direct proportional relationships.</p> <p>7.3B estimate and find solutions to application problems involving proportional relationships such as similarity, scaling, unit costs, and related measurement units</p> <p><i>Note: Focus on unit costs</i></p> | <ul style="list-style-type: none"> • use data in a table • use unit price to determine best buy | <p>CMP2 Comparing and Scaling Pearson Investigation 3.1, 3.3, 3.4a</p> | <p>AIRR 7th grade Activity #147, 149</p> <p>PH Textbook (8th grade) Lesson 4-1</p> <p>Closing the Distance 7th Lesson 7: Proportions pg. 107-124</p> |
| <p>8.2 Number, operation, and quantitative reasoning. The student selects and uses appropriate operations to solve problems and justify solutions.</p> <p>8.2D use multiplication by a given constant factor (including unit rate) and solve problems involving proportional relationships including conversions between measurement systems.</p> <p><i>Note: The wording of this TEKS has changed to include conversions between measurement systems.</i></p> <p><i>Note: Focus on unit rates here. Repeated in Bundles 7 and 9 for measurement conversions.</i></p> | <ul style="list-style-type: none"> • select/write equations that represent a situation • include real world situations such as speed, density, price, and recipes • discuss appropriate labels and units | | <p>NCTM: Navigation Number and Operation Exchanging Currency Teacher notes pg 90-92 Student notes pg 133</p> <p>Closing the Distance 8th Lesson 5: Rates pg. 67-84</p> <p>NCTM: Navigating through Measurement pg 70-71, 131</p> |