


6th Grade Math Curriculum Bundle # 8

Title	 Suggested Dates
Addition and Subtraction with Decimals and Fractions and Geometry	February 1 – February 19 (13 days)

Big Idea/Enduring Understanding	Guiding Questions
Strategies for adding and subtracting decimals are related to adding and subtracting fractions with powers of ten in the denominator.	1. The following is a student’s response to an addition problem: $13 + .64 = .77$ What error was made by the student? Describe the thinking that occurred and what steps could be taken to correct it?
Geometric figures are classified by their attributes.	1. In what ways can a triangle be classified based on the combination of the sides and angles? 2. What is a set of possible angle measures for an obtuse-isosceles triangle? 3. What is a set of possible angle measures for a parallelogram that is not a rectangle?

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)	
6.2 Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions. 6.2B use addition and subtraction to solve problems involving fractions and decimals Note: All rationals	<ul style="list-style-type: none"> • use mixed numbers and fractions (revisit) • use decimals • relate to real-world applications involving dimensions, measurement units, deposits, withdrawals, etc. (revisit) 	CMP2 Bits and Pieces III Pearson Investigation 1	PH: Lessons 1-7, 5-2, 5-4, 5-5 Understanding Math Understanding Fractions: Topic 14 Kamico: “It all adds up”

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<p>6.2 Number, operation, and quantitative reasoning. The student adds, subtracts, multiplies, and divides to solve problems and justify solutions.</p> <p>6.2D estimate and round to approximate reasonable results and to solve problems where exact answers are not required</p> <p>Note: This SE should be addressed throughout the year.</p>	<ul style="list-style-type: none"> • round money to the nearest cent and dollar • round a number to a place value from billions to hundredths (1,000,000,000.00) • include problems where solutions are expressed as ranges • use strategies for estimation (compatible numbers, rounded numbers) • round all numbers in the set to largest place value of the smallest number in a series of numbers keeping the value of single digits • Present the information in various forms (tables, charts, etc.) 		
<p>6.6 Geometry and spatial reasoning. The student uses geometric vocabulary to describe angles, polygons, and circles.</p> <p>6.6A use angle measurements to classify angles as acute, obtuse, or right</p> <p>Note: use protractors to measure and determine angle measurements</p>	<ul style="list-style-type: none"> • Name angles by 3 points, a number, and/or a given vertex • Determine angle classifications from written descriptions and visual images. • Present angle measures on a protractor in various forms (left, right , center) 	<p>CMP2 Shapes and Designs Pearson Investigations 1, 2, 3 Note: Combine needed parts from all sections and shorten – there are pieces that are not needed like tessellations – will need supplemental materials</p>	<p>PH: Lesson 8-2</p> <p>Kamico I (2004): “Be an Expert Angler” pp. 223-237, “Angle Tangle” pp. 238-254</p>
<p>6.6 Geometry and spatial reasoning. The student uses geometric vocabulary to describe angles, polygons, and circles.</p> <p>6.6B identify relationships involving angles in triangles and quadrilaterals</p>	<ul style="list-style-type: none"> • find the sum of degrees in a triangle and a quadrilateral • use of ‘hash marks’ to describe congruent sides • solve problems involving angle sums of triangles and quadrilaterals involving the side/angle relationship (i.e obtuse isosceles triangle only given the obtuse angle) • problems in which only one angle of a parallelogram is given • right angle symbol • identify triangles and quadrilaterals by angles and sides 		

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<p>6.8 Measurement. The student solves application problems involving estimation and measurement of length, area, time, temperature, volume, weight, and angles.</p> <p>6.8C measure angles</p> <p>Note: use protractors to measure and determine angle measurements</p>	<ul style="list-style-type: none"> • use a pictorial representation of a protractor and use an actual protractor to measure and construct angles to the nearest degree • measure angles in a given geometric figure • understand angle symbols • measure angles where the rays do not lie on zero degree as shown on the pictorial protractor • use other tools to measure angles such as corner of paper • use angle classifications and benchmarks (0 degrees, 90 degrees, 45 degrees) to estimate and determine the reasonableness of angle measurements when reading a protractor • finding the missing angle measure of an angle in a triangle or parallelogram other than the one pictured with a protractor 		<p>PH: Lessons 8-2</p> <p>Kamico II (2004): “Protractor Pandemonium” pp. 46-72</p> <p>Middle School Pizzaz: D26</p>
<p>6.10 Probability and statistics. The student uses statistical representations to analyze data.</p> <p>6.10C sketch circle graphs to display data</p>	<ul style="list-style-type: none"> • use estimation to evaluate the reasonableness of the displayed data • use fraction, percent, and angle benchmarks to evaluate the reasonableness of the displayed data • focus on ratios and proportions to determine parts of wholes 		<p>PH: Lesson 7-8</p> <p>Region IV: Activity A p. 225, Activity B pp. 226-227 (protractor optional)</p> <p>Kamico: “Going in Circles”</p>
<p>6.13 Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions.</p> <p>6.13A make conjectures from patterns or sets of examples and nonexamples</p>	<ul style="list-style-type: none"> • process skill to be addressed with relevant content. 		<p>PH: Lesson 3-1</p> <p>Text Team Algebraic Reasoning: “Stretching Sequence”</p>
<p>6.13 Underlying processes and mathematical tools. The student uses logical reasoning to make conjectures and verify conclusions.</p> <p>6.13B validate his/her conclusions using mathematical properties and relationships</p>	<ul style="list-style-type: none"> • process skill to be addressed with relevant content. 		<p>PH: Lessons 1-3, 4-1, 8-3, 8-4, 8-5, 9-5</p>