Fourth Grade Compacted Mathematics Newsletter

Marking Period 4, Part 2

MT	Learning Goals by Measurement Topic (MT) Students will be able to . . .
Numbers and Operations-Fractions	• use equivalent fractions as a strategy to add and subtract fractions with unlike denominators. • solve word problems involving addition and subtraction of fractions with unlike denominators. • apply understanding of factors and multiples to generate equivalent fractions and add fractions with unlike denominators. • use equivalent fractions and decomposing (breaking apart) to solve problems.
Geometry	• graph and label ordered pairs on a coordinate grid. • classify two-dimensional shapes as polygons (a closed plane figure composed of only straight sides) or non-polygons. • classify, identify, and draw quadrilaterals and other polygons based on their properties.
Operations and Algebraic Thinking	• create and analyze two numerical patterns using two given rules. • create two numerical patterns and graph the corresponding ordered pairs.

Thinking and Academic Success Skills (TASS)		
	It is . . .	In mathematics, students will . . .
Flexibility	being open and responsive to new and diverse ideas and strategies and moving freely among them.	• make the connection that knowledge of equivalent fractions helps adding and subtracting fractions with unlike denominators easier. • use a variety of methods to add and subtract fractions with unlike denominators.
Intellectual Risk Taking	accepting uncertainty or challenging the norm to reach a goal.	• generate multiple ways to find solutions to word problems. • make adjustments to thinking when problem solving. • recognize that…. o mistakes can help one learn. o skillful students ask for help and feedback. o it is okay to not understand everything the first time around. o everyone is capable of high achievement.

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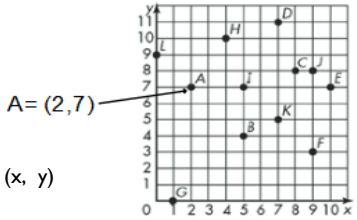
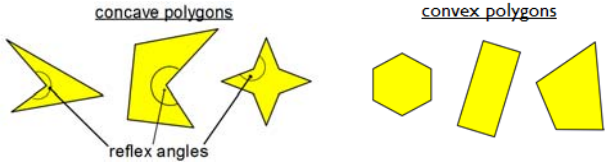
Learning Experiences by Measurement Topic (MT)

MT	In school, your child will . . .	At home, your child can . . .
Number and Operations - Fractions	• use pattern blocks and other **visual fraction** models to represent **equivalent fractions** as a strategy to add and subtract fractions with unlike **denominators**. • use **benchmark fractions** to estimate the answer to addition and subtraction of fractions with unlike **denominators**. Example: $\frac{7}{8} + \frac{5}{6}$ is less than 2 because each fraction is less than the benchmark of 1 whole. • create number line representations to add and subtract fractions with unlike **denominators**.	• create **equivalent fractions** to solve real-world problems involving adding and subtracting fractions with unlike **denominators**. (Look through recipes and add the fractional amounts.) Example: A recipe calls for $\frac{3}{4}$ cup of sugar and $\frac{1}{2}$ cup of flour. How many cups were used altogether? Possible questions: o What strategy is most efficient in helping to solve the problem? o How can using a **benchmark fraction** help to estimate the solution? o Synthesize by asking, "Is there anything you have learned about adding and subtracting whole numbers that may help you add and subtract fractions?"
Geometry	• graph and label ordered pairs on a coordinate grid.  • classify, describe, explain, and draw polygons including quadrilaterals based on their properties.	• design a unique game using a coordinate grid similar to Battleship, Tic Tac Toe, or Connect Four. • develop a scavenger hunt to search around the home, neighborhood, or natural surroundings for examples of concave and convex polygons. 
Operations and Algebraic Thinking	• create and analyze two numerical patterns given two rules. Rule A: Start with 32. Add 3 Rule B: Start with 55. Add 3	• create a rule to represent a numerical pattern. Example: At the beginning of the week you were on chapter 12. You read 2 chapters each night. What chapter will you be on in 5 days?

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