4th Grade Math Curriculum Bundle # 2

Title	Suggested Dates
Place Value Continued/ Measurement	September 14 – October 2 (14 days)

Big Idea/Enduring Understanding	Guiding Questions
Addition and subtraction can be used to solve problems involving whole numbers and decimals. Measurement can be used to impose order on objects and events and requires an understanding of the relationship between units.	How are adding or subtracting multi-digit decimals similar to adding or subtracting multi-digit whole numbers? How do you know whether to add or subtract in a given situation? How is measuring increasing and decreasing temperatures on a thermometer like adding and subtracting on a number line? How can you find the perimeter of any polygon? Why is it important to be able to read a thermometer and interpret the temperature? How do you choose which measurement tool (metric/customary) is appropriate to use?

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) **Teachers will use Math Investigations as the main instructional resource.** District resources are listed and categorized to indicate suggested uses. Any additional resources must be aligned with the TEKS.	
4.14 The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school. 4.14A Identify the mathematics in everyday situations.	Including but not limited to • Process skill to be addressed with relevant content.		**Small Group Lessons/Centers** Kamico Everyday Math Pages 461 – 464
4.3 The student adds and subtracts to solve meaningful problems involving whole numbers and decimals. 4.3A Use addition and subtraction to solve problems involving whole numbers.	Including but not limited to • use addition and subtract together involving whole numbers through 999,999,999 in problem solving situations • recognize that addition and subtraction are	**Math Investigations** Landmarks and Large Numbers Unit 5 Investigations 2	**Whole Group Lessons** Envisions Topic 2 Lessons 6 – 8

Teacher Note: Use addition and subtraction word problems which include charts, graphs, and tables.	inverse operations • analyze different problem situation to determine the operation(s) needed to solve problems • solve multi-step problems that use terminology such as less than, more than, greater than, fewer than (Ex: Robb has 50 fewer than Juan)	Sessions 1 – 2 pages 60 – 71 <u>Landmarks and Large Numbers</u> Unit 5 Investigations 2 Session 5 pages 86 -90 <u>Landmarks and Large Numbers</u> Unit 5 Investigations 4 Sessions 1 – 2 pages 132 – 143	**<u>Small Group Lessons/Centers</u>** <u>A.I.R.R</u> Rolling for Numbers #46 Understand Operation #44 Chose the Operation #47 What's the Problem #49 <u>Kamico</u> Add Vantage Pages 65 – 66 Subtraction Action Pages 67 – 72 Population Operations Pages 73 – 78
4.3 The student adds and subtracts to solve meaningful problems involving whole numbers and decimals. 4.3B Add and subtract decimals to the hundredths place using concrete objects and pictorial models. Teacher Note: At this time, you are only adding and subtracting decimals	Including but not limited to • model and explain addition and subtraction problems using a variety of concrete objects and pictorial models including money		**<u>Whole Group Lessons</u>** <u>Envisions</u> Topic 1 Lessons 4 – 5 <u>Envisions</u> Topic 2 Lesson 9 **<u>Small Group Lessons/Centers</u>** <u>A.I.R.R</u> Model the Number #41 Find and Make Decimals #42 <u>Kamico</u> Decimal Delirium Pages 79 – 81 Decimal Duos Pages 82 – 95 <u>Region IV Prep</u> Place Value lessons pages 17 – 25 Add/Subtract Whole Numbers and Decimals pages 48 – 58

4th Grade Math Curriculum Bundle # 2

4.12 The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius). 4.12A Use a thermometer to measure temperature and changes in temperature. Teacher Note; Temperature is included here to follow place value as a number line and to add and subtract temperatures with increase and decreasing temperatures.	Including but not limited to • conduct hands-on experiments measuring various temperatures • describe the temperatures using the appropriate label of Fahrenheit and Celsius degrees • associate thermometer with a number line and understand that the increments may vary on different thermometers (can vary by increments of 1, 2, 5, 10 etc) • read different thermometer measurements and describes the two temperatures (the temperature decreased by, increased by, dropped by, or rose by, up by, down by)		**Whole Group Lessons** Envisions Topic 19 Lessons 3 – 4 **Small Group Lessons/Centers** A.I.R.R Guess the Temperature #165 Kamico You're Getting Warmer Pages 385 – 414 Region IV Prep Temperature lessons pages 178 – 184
4.11The student applies measurement concepts. The student is expected to estimate and measure to solve problems involving length, (including perimeter) and area. The student uses measurement tools to measure capacity/volume and weight/mass. 4.11A Estimate and use measurement tools to determine length (including perimeter), area, capacity and weight/mass using standard units, SI (metric) and customary. Teacher Note: Focus on perimeter and length. Use a ruler to read and plot points between whole numbers including half inch, fourth inch, and eighth inch. *Beginning in Bundle 2, it is recommended that measurement be taught at least once a week.	Including but not limited to • understand measure means to decide "what" is to be measured and select the appropriate unit • estimates length, prior to any measuring • identify tools and units needed to measures length (perimeter), • use tools to measure and find perimeter • demonstrates measurement using a variety of different units and tools • measure using different starting point on measuring tools • identifies what concept (perimeter, capacity, is being asked in a real life situations (the length of a fence around the perimeter of a garden) • know abbreviations for all metric units		**Whole Group Lessons** Envision Topic 16 Lesson 3 **Small Group Lessons/Centers** Kamico Measure Marathon Pages 279 – 332 TEXTEAMS The Third Degree Pages 31 – 34 Maddening Measurement page 47 – 49 (Teacher Note: This game can be played now and again later adding the skills of area, volume, capacity, and weight).