Sedalia School District #200

Level: Elementary	**Subject Area:** Math	**Unit/Grade:** Unit 1---Third Grade

Essential Questions:

- How does place value support addition and subtraction?
- In what type of situation would rounding be useful?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 1 (Aug. 29- Sept. 13) **Chapter 2** (Sept. 16- Sept. 27) **21days**	**3.NBT.A.2 -** Read, write and identify whole numbers within one hundred thousand using base ten numerals, number names and expanded form **3.NBT.A.1 -** Round whole numbers to the nearest 10 or 100 **3.NBT.A.3 -** Demonstrate fluency with addition and subtraction within 1000 ***3.RA.E.11 -*** *Identify arithmetic patterns and explain the patterns using properties of operations* Missouri Learning Standards Show Me Standards	**Chapter 1: Numbers to 10,000 -**This first chapter cements student understanding of place value. Lessons move into large numbers quickly. Students are expected to (read, write, show, and compare) up to 10,000. The CPA (concrete, pictorial, abstract) sequence is critical for developing a deep understanding of this foundational topic. **Chapter 2: Mental Math and Estimation -** Chapter 2 is another important chapter; however, every student will not master all the mental strategies presented. The focus of this chapter is to enable students to become more flexible and fluent with their thinking. The rich content of this chapter is presented early in the year so that it can be reinforced. Base ten materials are used to enable more students to solve problems mentally. Strategies presented in this chapter are used all year.	**Chapter 1: Numbers to 10,000-** • Use base-ten-blocks to count, read, and write numbers to 10,000. • Use base-ten-blocks to compare and order numbers. • Use place value to compare and order numbers. **Chapter 2: Mental Math and Estimation-** • Add 2-digit numbers mentally with and without regrouping. • Round numbers to estimate sums and differences.

Sedalia School District #200

Level: Elementary **Subject Area:** Math **Unit/Grade:** Unit 2---Third Grade

Essential Questions:

- Why is understanding place value important?
- Does my approach make sense and does it remind me of a similar problem?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 3 (Oct. 1- Oct. 10) **Chapter 4** (Oct. 11- Oct. 23) **Chapter 5** (Oct. 24- Nov. 1) **23 days**	**3.NBT.A.3 -** Demonstrate fluency with addition and subtraction within 1000 **3.RA.D.9 -** Write and solve two-step problems involving variables using any of the four operations **3.RA.D.10 -** Interpret the reasonableness of answers using mental computation and estimation strategies including rounding Missouri Learning Standards Show Me Standards	**Chapter 3: Addition up to 10,000 -** The focus is on understanding addition as to how it relates to place value. Students will be expected to be able to rename numbers (3,000=two thousands and ten hundreds). Students will be adding 4-digit numbers to 10,000 with or without regrouping. Fluency is expected only within 1000 **Chapter 4: Subtraction up to 10,000-** For The focus is on understanding subtraction as it relate to place value. Students will be expected to be able to rename numbers (3,000=two thousands and ten hundreds). Students will subtract two four-digit numbers. The emphasis is on building procedural knowledge with deep understanding. Fluency is expected only within 1000. **Chapter 5: Using Bar Models: Addition and Subtraction -** Students will use bar models as a visual model to solve multi-step problems. Strips of paper will be used to help students build the models concretely. Encourage mental math solutions as well as paper pencil ones. Model how students can use these visuals as a way to explain their thinking.	**Chapter 3: Addition up to 10,000** • Fluently add to 1000 • Use and understand place value to add to 10,000 • Solve addition word problems **Chapter 4: Subtraction up to 10,000-** • Fluently subtract to 1000 • Use and understand place value to subtract two two-digit numbers • Solve subtraction word problems **Chapter 5: Using Bar Models: Addition and Subtraction-** • Use bar models to solve two-step real-world problems

Sedalia School District #200

Level: Elementary **Subject Area:** Math **Unit/Grade:** Unit 3---Third Grade

Essential Questions:

- What strategies can be used to learn multiplication facts?
- How does place value understanding support multiplication and division?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 16 (Nov. 4-Nov. 11) **Chapter 6-7** (Nov. 12-Dec. 6) **Chapter 8** (Dec. 13-Dec. 18) **30 days**	**3.RA.A.3 -** Describe in words or drawings a problem that illustrates a multiplication or division situation **3.RA.A.4** - Use multiplication and division within 100 to solve problems **3.RA.B.6 -** Apply properties of operations as strategies to multiply and divide **3.GM.B.4 -** Tell and write time to the nearest minute **3.GM.B.5 -** Estimate time intervals in minutes **3.GM.B.6 -** Solve problems involving addition and subtraction of minutes ***3.RA.A.1 -*** *Interpret products of whole numbers* ***3.RA.A.2 -*** *Interpret quotients of whole numbers* ***3.RA.A.5 -*** *Determine the unknown number in a multiplication or division equation relating three whole numbers* ***3.RA.C.7 -*** *Multiply and divide with numbers and results within 100 using strategies such as the relationship between multiplication and division or properties of operations. Know all products of two one-digit numbers* ***3.RA.C.8*** *- Demonstrate fluency with products within 100* ***3.RA.D.9****- Write and solve two-step problems involving variables using any of the four operations.* Missouri Learning Standards Show Me Standards	**Chapter 16: Time -** The big ideas of chapter 16 are telling time to the minute, converting hours to minutes and renaming the hours/minutes, adding and subtracting hours and minutes, solving problems involving elapsed time and problem solving with time and temperature. **Chapter 6: Multiplication Tables of 6, 7, 8, and 9-**The big idea for chapter 6 is to develop an understanding of multiplication, the distributive property and related pictorial representations, as well as learn the multiplication facts. Students are introduced to area models as well as arrays in this chapter. **Chapter 7: Multiplication -** This chapter emphasis mental multiplication facts and multiplication by 10. Time will be spent connecting the language with the concrete materials, the place value chart, and the symbols used to show an algorithm. **Chapter 8: Division -** Chapter 8 is critical for meeting MLS, particularly the meaning of division and the solving of problems within 100. Emphasis will be on using related multiplication facts and patterns to divide.	**Chapter 16: Time-** • Add and subtract time • Tell and write time to the nearest minute • Find elapsed time **Chapter 6: Multiplication Tables of 6, 7, 8, and 9-** **Chapter 7: Multiplication-** • Understand multiplication by using array and area models • Use and understand multiplication properties • Understand related multiplication and division facts **Chapter 8: Division-** • Understand and interpret quotients of whole numbers • Using place value understanding to divide 2-digit number by a 1-digit number

Sedalia School District #200

Level: Elementary **Subject Area:** Math **Unit/Grade:** Unit 4---Third Grade

Essential Questions:

- How do I choose the appropriate unit of measurement?
- What is the appropriate degree of precision for this particular measurement?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 19 (Jan. 7- Jan. 22) **Chapter 11 and 12** (Jan. 23- Feb. 4) **Chapter 15** (Feb. 5- Feb. 11) **25 days**	**3.GM.C.11** - Demonstrate that tiling a rectangle to find the area and multiplying the side lengths result in the same value **3.GM.C.12 -** Multiply whole-number side lengths to solve problems involving the area of rectangles **3.GM.C.13** - Find rectangular arrangement that can be formed for a given area **3.GM.D.15 -** Solve problems involving perimeters of polygons **3.GM.D.16 -** Understand that rectangles can have equal perimeters but different areas, or rectangles can have equal areas but different perimeters ***3.GM.B.7 -*** *Measure or estimate length, liquid volume and weight of objects* ***3.GM.B.8 -*** *Use the four operations to solve problems involving lengths, liquid volumes or weights given in the same units* ***3.GM.C.9 -*** *Calculate area by using unit squares to cover a plane figure with no gaps or overlaps* ***3.GM.C.10 -*** *Label area measurements with squared units* Missouri Learning Standards Show Me Standards	**Chapter 11: Metric Length, Mass, Volume -** Problems and conversions using number bonds are the big ideas within chapter 11. Vocabulary development is an important aspect of this chapter as students make sense of quantities and their relationships. Students will also be using bar models to visualizing the problems and understanding the concepts. **Chapter 12: Real World Problems: Measurement -** Problems and conversions using number bonds are the big ideas within chapter 12. Vocabulary development is an important aspect of this chapter. Students will also be using bar models to solve measurement problems with a focus on using models to visualizing the problems and understanding the concepts. **Chapter 15: Customary Length -** The big ideas of chapter 15 are understanding quantities and the relationship between units of measure. While working through the chapter, students will be asked to estimate and measure length, weight, and capacity. **Chapter 19: Area and Perimeter -** Chapter 19 is a critical chapter. The main focus is about understanding the meaning of area and perimeter, calculating and comparing area and perimeter.	**Chapter 19: Area and Perimeter-** • Understand the meaning of area • Calculate area by using unit squares • Understand that multiplying side lengths is the same as using unit squares **Chapter 11: Metric Length, Mass, Volume-** • Know and use the appropriate tools to measure in metric • Convert metric units of measurement **Chapter 12: Real World Problems: Measurement-** • Using the four operations solve real-world problems **Chapter 15: Customary Length-** • Know and use the appropriate tools to measure in customary • Convert customary units of measure

Sedalia School District #200

Level: Elementary **Subject Area:** Math **Unit/Grade:** Unit 5---Third Grade

Essential Questions:
- Why do we need to analyze data?
- How do models help in the understanding of fractions?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 13 (Feb. 19-Feb. 28) **Chapter 14** (Mar. 2-Mar. 26) **22 days**	**3.DS.A.2 -** Solve one- and two-step problems using information presented in bar and/or picture graphs **3.DS.A.4 -** Use data shown in a line plot to answer questions **3.NF.A.1 -** Understand a unit fraction as the quantity formed by one part when a whole is partitioned into equal parts ***3.DS.A.1 -*** *Create frequency tables, scaled picture graphs and bar graphs to represent a data set with several categories* ***3.DS.A.3 -*** *Create a line plot to represent data* ***3.NF.A.2 -*** *Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole* ***3.NF.A.3 -*** *Represent fractions on a number line* ***3.NF.A.4*** *- Demonstrate that two fractions are equivalent if they are the same size or the same point on a number line.* ***3.NF.A.5*** *- Recognize and generate equivalent fractions using visual models, and justify why the fractions are equivalent* ***3.NF.A.6*** *- Compare two fractions with the same numerator or denominator using the symbols >, =, < and justify the solution* ***3.NF.A.7 -*** *Explain why fraction comparisons are only valid when the two fractions refer to the same whole* Missouri Learning Standards Show Me Standards	**Chapter 13: Bar Graphs and Line Plots -** In chapter 13, the big idea focuses on creating bar graphs (vertical and horizontal) where each unit represents more than one. Students will be expected to answer questions using data from bar graphs and to create line plots from information given in a table. **Chapter 14: Fractions -** In chapter 14, emphasis is on understanding fractions with more than 4 equal parts, developing a conceptual understanding of equivalent fractions, finding simplest form and comparing fractions. Models will be used to add and subtract fractions.	**Chapter 13: Bar Graphs and Line Plots-** • Read and interpret data from bar and line graphs • Create line plots • Solve one and two-step problems using information presented in graphs **Chapter 14: Fractions-** • Understand what a unit fraction is • Identify equivalent fractions • Understand why fraction comparisons are only valid when the two fractions refer to the same whole • Represent fractions on a number line

Sedalia School District #200

Level: Elementary | **Subject Area:** Math | **Unit/Grade:** Unit 6---Third Grade

Essential Questions:

- How does my knowledge of multiplication and division help me to solve real-world problems?
- Why do we classify shapes by attributes?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 9 (Mar. 31- Apr. 17 **Chapter 18** (Apr.. 20- May 8) MAP Testing **Chapter 10** (May 11- May 21) **31 Days**	**3.RA.D.9 -** Write and solve two-step problems involving variables using any of the four operations ***3.GM.A.1 -*** *Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category* ***3.GM.A.2 -*** *Distinguish rhombuses and rectangles as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to these subcategories* ***3.GM.A.3 -*** *Partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole* Missouri Learning Standards Show Me Standards	**Chapter 9: Using Bar Models: Multiplication and Division -** Chapter 9 bar modeling enables students to meet the MLS to solve multi-step problems involving multiplication and division. Students are introduced to multiplicative comparison using bar models. This is critical to begin to develop the idea of scaling for multiplication. Encourage students to use the bar model so it becomes a useful part of their tool kit. **Chapter 18: Two-Dimensional Shapes -** In chapter 18, lesson 18.1 is the most critical lesson, spend two days on lesson 18.1 before MAP testing. Emphasis in this chapter is to understand that shapes in different categories share attributes. After MAP testing the remainder of the chapter will be completed. **Chapter 10: Money -** Students learned to count, read, and write money in 2nd Grade up to $5. These concepts are reviewed and extended to $100. Mental strategies will be used in adding and subtracting the symbolic form of money.	**Chapter 9: Using Bar Models: Multiplication and Division-** • Use bar models to solve two-step word problems using the four operations • Choose the correct operation to solve problems **Chapter 18: Two-Dimensional Shapes-** • Identify open and close figures • Identify and classify polygons • Combine and separate polygons to make other polygons **Chapter 10: Money-** • Add and subtract money in multiple ways • Solve real-world problems using money