Unit Objectives

Level: Elementary Subject Area: Math Unit/Grade: Unit 1---First Grade

Essential Questions:

Pacing/

- What kind of experiences do I need to develop number sense?
- How do I determine the best numerical representation (concrete objects, pictorial, number bonds, symbolic) for a given problem?
- Why is it important to add and subtract quickly?

Pacing/ Calendar	Standards	Big idea	Unit Objectives
Chapter 1 (Aug. 27- Sept. 6) Chapter 2 (Sept. 9-	1.RA.B.5 -Use properties as strategies to add and subtract 1.RA.A.1 - Use addition and subtraction within 20 to solve problems 1.RA.A.3 - Develop the meaning of the equal sign and determine if equations involving addition and subtraction are true or false	The first four chapters are the most crucial for developing number sense. The number bond model for composing and decomposing numbers will be used in later grades as will the ten frames. Chapters three and four should continue to be practiced all year so that students become fluent with these facts.	Chapters 1: Counting to 10: Count, read, and write numbers 0-10. Compare two sets of objects by using one to one correspondence. Understand the relationship between numbers and quantities; connect counting to cardinality.
Sept. 16)	1.RA.B.6 -Demonstrate that subtraction can be solved as an unknown-addend problem	Chapter 1: Counting to 10 - Students will learn to count, read, and write numbers within 10. Students	Chapter 2: Number Bonds:
Chapter 3 (Sept. 17- Sept. 30)	K.NS.B.5 - Say the number names when counting objects, in the standard order, pairing each object with one and only one number name and each number name with one and	will compare and verbally describe sets using same, more, or less. Students will understand the sequential order of the counting numbers and their relative magnitudes. Chapter 2: Number Bonds - Number bonds form	 Find different number bonds for numbers up to 10. Analyze parts and whole. Chapter 3: Addition Facts to 10
Chapter 4 (Oct. 1- Oct. 22)	only one object. K.NS.B.6 - Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in	an important foundation for the learning of addition and subtraction. Students will identify the parts and whole of a set. Chapter 3: Addition Facts to 10 - Understanding the connection between counting and addition.	 Count on to add. Use number bonds to add in any order. Tell, write, and solve addition stories. Chapter 4: Subtraction Facts to 10
	which they were counted. K.NS.B.7 - Demonstrate that each successive number name refers to a quantity that is one larger than the previous number. K.NS.B.8 - Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns Missouri Learning Standards	Understanding of the Commutative Property of Addition, which states that numbers can be added in any order and the sum will stay the same. Chapter 4: Subtraction Facts to 10- Learn how the part-whole concept relates to addition and subtraction. Students will learn different methods of subtraction such as counting on and number bonds.	 Take away, count on, and count back to subtract. Use number bonds to subtract. Tell, write, and solve subtraction stories.
40 days	Show Me Standards		

Level: Elementary Subject Area: Math Unit/Grade: Unit 2---First Grade

- Why are geometry and geometric shapes important?
- How can geometry be used to solve real-world problems?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 5 (Oct. 28- Nov. 7) Chapter 6 (Nov. 8- Nov. 15)	1.GM.A.1 - Distinguish between defining attributes versus non-defining attributes; build and draw shapes that possess defining attributes 1.GM.A.2 - Compose and decompose two-and three-dimensional shapes to build an understanding of part-whole relationships and the properties of the original and composite shapes 1.GM.A.3 - Recognize two- and three-dimensional shapes from different perspectives and orientations 1.GM.A.4 - Partition circles and rectangles into two or four equal shares, and describe the shares and the wholes verbally	Chapters 5: Shapes and Patterns - Students will compose and decompose plane and solid shapes, and make patterns with plane and solid shapes. They will develop a better understanding of part-whole relationships as well as the properties of the original and composite shapes. This will build a background for learning about measurement and properties of geometry such as congruence and symmetry at higher grades. Chapter 6: Ordinal Numbers and Position- Ordering numbers and number positions with ordinal numbers are key number concepts. Students learn to use ordinal numbers in their full and abbreviated forms.	 Chapters 5: Shapes and Patterns- Explore, identify, and compare plane and solid shapes in patterns and in the real world. Combine and separate plane and solid shapes. Chapter 6: Ordinal Numbers and Position- Understand how numbers and words can be used to describe order and position.
15 days	Missouri Learning Standards Show Me Standards	This chapter does provide time for students to practice +/- facts to 10, which will be crucial to chapter 8.	

Level: Elementary Subject Area: Math Unit/Grade: Unit 3---First Grade

- How do I know which mathematical operation to use (+, -)?
- Why do I measure?
- Why is data analyzed and collected?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 7 (Nov. 19- Dec. 4) Chapter 8 (Dec. 5- Dec.20) Chapter 9 (Jan. 7- Jan. 21) Chapter 11 (Jan. 22- Jan. 31)	1.NBT.A.1 - Understand that 10 can be thought of as a bundle of 10 ones – called a "ten" 1.NBT.A.2 - Understand two-digit numbers are composed of ten(s) and one(s) 1.RA.A.1 - Use addition and subtraction within 20 to solve problems 1.GM.B.5 - Order three or more objects by length 1.GM.B.6 - Compare the lengths of two objects indirectly by using a third object 1.GM.B.7 - Demonstrate the ability to measure length or distance using objects 1.RA.A.2 - Solve problems that call for addition of three whole numbers whose sum is within 20 1.RA.C.7 - Add and subtract within 20 1.RA.C.8 - Demonstrate fluency with addition and subtraction within 10 1.DS.A.1 - Collect, organize and represent data with up to three categories 1.DS.A.2 - Draw conclusions from object graphs, picture graphs, T-charts and tallies Missouri Learning Standards Show Me Standards	Chapter 7: Numbers to 10 - Chapter 7 is a chapter for place value and understanding of teen numbers. Students must be able to build teen numbers as ten plus so many ones, in order to learn strategies for adding over ten. Chapter 8: Addition and Subtraction to 20 MLS expects students to add and subtract within 20, with fluency with facts to 10. These strategies will continue to be practiced all year. Students don't need to master all the strategies or be fluent with subtracting from the ten, but they should know them so you can refer to them throughout the year. Chapter 9: Length - The basic idea is to determine how many times a specific unit fits the object to be measured. Chapter 11: Picture Graphs and Bar Graphs Students use their counting skills to organize and collect data. They will apply counting skills to identify the value and comparison skills to identify the differences between two of more categories.	Chapter 7: Numbers to 10 Count on from 10 to 20 Read and write numbers 11 to 20 in standard and word form Compare numbers to20 Chapter 8: Addition and Subtraction to 20 Use multiple strategies to add and subtract one and two digit numbers Solve real world story problems Chapter 9: Length Measure using non-standard units Compare the lengths of two objects Chapter 11: Picture Graphs and Bar Graphs Collect, organize and represent data Draw conclusions from graphs and tally charts
37 days			

Level: Elementary Subject Area: Math Unit/Grade: Unit 4---First Grade

- How does mental math help me be a mathematician?
- How might there be a better way to find sums and differences?
- Does my answer and approach make sense?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 12 (Feb. 4- Feb. 20) Chapter 13 (Feb. 21- Mar. 12)	1.NBT.A.1 - Understand that 10 can be thought of as a bundle of 10 ones – called a "ten" 1.NBT.A.2 - Understand two-digit numbers are composed of ten(s) and one(s) 1.NBT.B.6 -Calculate 10 more or 10 less than a given number mentally without having to count 1.GM.C.8 - Tell and write time in hours and half-hours using analog and digital clocks 1.RA.A.3 -Develop the meaning of the equal sign and determine if equations involving addition and	Chapter 12: Numbers to 40 - This is one of the most important chapters in first grade. This place value understanding is critical. Chapter 13: Addition and Subtraction to 40 - Students understand the process of exchanging ten ones for one ten and vice versa. Students spend most of the chapter with concrete materials to understand addition and subtraction and be prepared for second grade.	Chapter 12: Numbers to 40- Read and write numbers 21-40 in numerals and words Show objects to 40 as tens and ones Compare and order numbers to 40 Chapter 13: Addition and Subtraction to 40- Add a 2-digit number and a 1-digit number with and without regrouping Subtract a 2-digit and 1-digit number with and without regrouping
Chapter 14 (Mar. 13- Mar. 30)	subtraction are true or false 1.RA.A.4 - Determine the unknown whole number in an addition or subtraction equation relating three whole numbers	Chapter 14: Mental Math Strategies - The mental math chapter is intended to improve student number sense and should be practiced for the rest of the year. Encourage students to share their	 Add three 1-digit numbers Chapter 14: Mental Math Strategies- Mentally add 1-digit numbers, mentally add a 1-digit number to a 2-digit number, mentally add a 2-digit
Chapter 15 (Mar. 31- Apr. 6)	1.RA.C.7 - Add and subtract within 20 1.RA.C.8 - Demonstrate fluency with addition and subtraction within 10 Missouri Learning Standards Show Me Standards	own efficient strategies as well. Chapter 15: Time - This chapter is shortened to five days because calendar is not a MLS goal, though useful for future grades. The focus will be put upon the concept of time and the tools that measure time.	number to tens • Mentally subtract 1-digit numbers, mentally subtract a 1-digit number from a 2-digit number, mentally subtract tens from a 2-digit number Chapter 15: Time- • Relate time to daily activities • Tell and write time in hours and half-hours
36 days			



Level: Elementary Subject Area: Math Unit/Grade: Unit 5--First Grade

- How can I use numbers to 120?
- Why do we use base ten to add and subtract?

Pacing/ Calendar	Standards	Big Idea	Unit Objectives
Chapter 16 (Apr.14- Apr. 24) Chapter 17 (Apr. 27- May 8)	1.NS.A.1 - Count to 120, starting at any number less than 120 1.NBT.A.3 - Compare two two-digit numbers using the symbols >, = or < 1.NBT.B.5 - Add within 100 1.GM.C.9 - Know the value of a penny, nickel, dime and quarter	Chapter 16: Numbers to 120 - This chapter lays the foundation for developing addition and subtraction skills with larger numbers, a skill that they will learn in the next chapter. Chapter 17: Addition and Subtraction to 100 - This chapter should be developed conceptually; the abstract paper pencil	 Chapter 16: Numbers to 120- Count on from 41-120 Read and write numbers 41-120 in numbers and words Compare numbers to 100 using <,>, and = Chapter 17: Addition and Subtraction to
Chapter 19 (May 11- May 21) 27 days		algorithm is not necessary to be mastered. Students should understand regrouping and place value as the work with addition and subtraction, but at the concept level. Chapter 19: Money - Students must know the value of a penny, nickel, dime, and	 Add within 100 without and with regrouping Subtract a multiple of 10 from a 2-digit number Subtract a 2-digit number
	Missouri Learning Standards Show Me Standards	quarter.	 Chapter 19: Money- Know the value of penny,nickel, dime, and quarter Use different combinations of coins to show the same value