2 1st Unit 2

Grade: 1st

FCPS 2025-2026 Math Unit 2

Unit Title: Addition and Subtraction Within 20	**Estimated Time F**

Essential Standards: 1.OA.2, 1.OA.6, 1.NBT.2
Supporting Standards: 1.OA.1, 1.OA.3, 1.NBT.1, 1.MD.4
End of Unit Common Assessment

FCPS Supporting Links	**Additional Supporting Links**
Pacing Guide Standards Progression FCPS Math Guidance Document Elementary Intellectual Preparation Cycle Trauma-Informed Strategies Unit 1 Unit 2 Unit 3 Unit 4 Unit 5 Unit 6 CRA Examples (concrete, representational, & abstract) Unit 2: Unit Flow & Progression Video* *Must be logged into i-Ready to access this link	**Kentucky Academic Standards** Achieve the Core Progression Documents • Operations and Algebraic Thinking • Numbers and Operations in Base T Literary Connections Target of the Standards - conceptual, pro Multilingual Glossary of Vocabulary Unit 2 Language Support for English Learn Manipulative List* Centers Library Overview, Workmats, and *Must be logged into i-Ready to access this link. **See HQIR/Resource Considerations Column for C

Big Ideas

- Ten is an important number.
- Teen numbers are made up of a ten and some ones.
- You can break apart (decompose) numbers and put them together (compose) in different ways to help you a
- You can use what you know about adding and subtracting up to 10 to add and subtract up to 20.
- It is important to use math vocabulary to describe adding and subtracting to 20.

*For more information, view the **Math Background pages 131m-131p** in the Teacher's Guide (must be logged into i-Re*

Essential Questions	**Common Preconceptions/Misconceptio**
How can organizing objects into groups help us count? How can we use tens and ones to make (compose) and break apart (decompose) teen numbers? What happens when we change the order of addends? How can grouping numbers in different ways help us solve a problem? How can making a ten help us solve a problem? How can we use a ten to help us subtract from teen numbers? How can looking for doubles help you solve a problem?	• **CAUTION** before attempting to int 1st grade. Students are still learning numbers and how they can be grou may be better in 1st grade because grouped or separated, helping stud and basic addition or subtraction. E more complex concepts, and introd confuse students. By using connec build a strong foundation in unders to group them, making it easier for complex ideas later on with base te helps ensure that they have a solid value when they encounter base te • Students do not easily or quickly d groups of ten to represent quantity reinforcement to see a teen numbe have them build different models t

	connecting cubes, 10 cubes in a 10 beneath it; and a 10-cube train with how each model shows a ten and s more helpful to see the quantity 17. • If students think it is impossible to have them model a number with a the train into three parts. Ask stude in each part of the train. Then have of cubes. Repeat the process with combinations until students recogn can be added to find a total.
Standards for Mathematical Practices	**Kentucky Interdisciplinary Literacy Pra**
MP.1. Make sense of problems and persevere in solving them. MP.2. Reason abstractly and quantitatively. MP.3. Construct viable arguments and critique the reasoning of others. MP.4. Model with mathematics. MP.5. Use appropriate tools strategically. MP.6. Attend to precision. MP.7. Look for and make use of structure. MP.8. Look for and express regularity in repeated reasoning.	1. Recognize that text is anything that com 2. Employ, develop, and refine schema to text. 3. View literacy experiences as transactio transformational. 4. Utilize receptive and expressive langua understand self, others, and the world. 5. Apply strategic practices, with scaffold independently, to approach new literacy t 6. Collaborate with others to create new 7. Utilize digital resources to learn and sha 8. Engage in specialized, discipline-speci 9. Apply high-level cognitive processes to about text. 10. Develop a literacy identity that promot
Essential Standards	**Sample Learning Intentions & Success Criteria**
	❗ Indicates a misalignment with Kentu 🔷Indicates a consideration fo
Cluster: Represent and solve problems using addition and subtraction.	
KY.1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, and equations with a symbol for one unknown number to represent the problem. MP.1, MP.4, MP.5 ❑ Conceptual ❑ Procedural ❑ Application Students flexibly model or represent addition situations or context problems (involving adding three quantities and having a sum less than or equal to 20).	We are learning about math strategies so we can solve word problems with 3 addends. I know I am successful when: • I can solve word problems with 3 addends by grouping addends to make known facts.

Note: Drawings need not show detail, but accurately represent the quantities involved in the task.

KY.1.MD.4
Coherence KY.1.OA.2→KY.2.NBT.6

Supporting Standards: 1.OA.3, 1.NBT.1b

- I can solve word problems with 3 addends by grouping addends to make a ten.
- I can solve word problems with 3 addends by grouping addends to use double facts.
- I can represent word problems with three addends using an equation.

Attending to the Standards for Mathematical Practice

Students realize mathematics involves interpreting the meaning of problems and endeavoring to solve problems b appropriate tools and manipulatives (MP.1, MP.5). When reading/interpreting word problems, students recognize a represents a quantity (7 dots or 17 people) and consider what is happening to these quantities in the context of th represent situations using numbers and symbols. For example, students translate "There are ten apples. Some w How many were eaten?" into an equation such as 10 – __ = 3? (MP.4).

Cluster: Add and subtract within 20.

KY.1.OA.6 Add and subtract within 20.

a. ~~**Fluently**~~ **add and subtract within 10.**

b. **Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as ~~counting on~~; making 10; decomposing a number leading to a 10; ~~using the relationship between addition and subtraction;~~ and creating equivalent but easier or known sums.**

MP.2, MP.7, MP.8

❑ Conceptual ❑ Procedural ❑ Application

Students solve addition and subtraction tasks (with sums and differences within 10) efficiently, accurately, flexibly, and appropriately. Being fluent means students choose flexibly among methods and strategies to solve contextual and mathematical problems, they understand and explain their approaches, and they produce accurate answers efficiently.

Examples of Strategies

- Make 10
  - *8 + 6 = 8 + 2 + 4 = 10 + 4 =14*
- Decompose a number leading to a ten
  - *13 - 4 = 13 - 3 - 1 = 10 - 1 = 9*
- ~~Use the relationship between addition and subtraction~~
  - ~~*I know 8 + 4 = 12 and I also know 12 - 8 + 4*~~

We are learning about math strategies so we can add and subtract within 20.

I know I am successful when:

- I can compose and decompose addends to make a ten to help me add and subtract.
- I can show doubles as two equal groups.
- I can explain how near doubles are related to doubles.
- I can use doubles facts to add and subtract.
- I can use known doubles facts to help me solve near doubles facts.
- I can use reasoning to choose the mos efficient strategy when adding and subtracting.
- I can explain my reasoning for choosin the strategy I used to solve a problem.

- Create equivalent, but easier or known sums
  - *I can add 6 + 7 by creating 6 + 6 + 1 = 12 + 1 = 13*

Note: Fluency is an ongoing process that will take much of the year.

KY.1.NBT.4

Coherence KY.K.OA.2→KY.1.OA.6→KY.2.OA.2

KY.K.OA.3

Supporting Standards: 1.OA.1, 1.OA.3,

Attending to the Standards for Mathematical Practice

Students use tools to show sums and differences (MP.5). Students notice when they count two groups and count the total count is the sum (MP.8). Students employ counting strategies (forward and/or back) as strategies for add As students count on, they count on from the larger addend (solving 9 + 3 instead of 3 + 9) recognizing this is mor commutative (MP.7). Students recognize sums such as 8 + 9 are not efficiently solved by counting on and number to determine the sum. With repeated experiences, students notice relationships such as 9 + 8 = 10 + 7 (MP.8).

Cluster: Understand place value

KY.1.NBT.2 Understand the two-digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:

a. 10 can be thought of as a bundle of ten ones — called a "ten."

b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

~~**c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, and 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones). MP.5, MP.7**~~

☐Conceptual ❑ Procedural ❑ Application

Students use concrete models and drawings, as well as strategies based on place value, properties of operations, and the relationship between addition and subtraction. When solving any problem, students choose to use a concrete model or a drawing. Their strategy is based on place value, properties of operations, or the relationship between addition and subtraction. A written representation shows a strategy using words, pictures, and/or numbers.

Coherence KY.K.NBT.1→KY.1.NBT.2→KY.2.NBT.1

We are learning about tens and ones so w can represent two-digit numbers.

I know I am successful when:

- I can show a group of ten using ten ones.
- I can compose and decompose teen numbers into a ten and some more ones with concrete objects, pictures, words, and numbers.

Attending to the Standards for Mathematical Practice

Students understand the individual digits in a two-digit numeral each represent units of ten and one respectively. represent numbers, selecting tools such as popsicle sticks, linking cubes and straws that can physically be group

representing numbers with concrete tools, students see one ten unit (a bundle) can be thought of as "10, two as t
When comparing two two-digit numbers, students interpret the inherent value of each digit (22 is two tens with tw
determine which number is larger (MP.2). For example, students realize that 32 is greater than 23 because of the v

Supporting Standards	Sample Learning Intentions & Success Criteria
KY.1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, ~~and comparing~~, with unknowns in all positions. MP.1, MP.2 ❑Conceptual ❑ Procedural ❑Application Students flexibly model or represent addition and subtraction situations or context problems (involving sums and differences up to 20). **See Table 1 in Appendix A.** Note: Drawings need not show detail, but accurately represent the quantities involved in the task. KY.1.MD.4 Coherence KY.K.OA.2→ 1.OA.1→ KY.2.OA.1	We are learning about addition and subtraction within 20, so we can solve various types of word problems. I know I am successful when: • I can use objects and drawings to make sense of addition and subtraction word problems. • I can use objects, drawings, and equations to represent addition an subtraction word problems. • I can use objects, drawings, and equations to determine the unknown quantity in addition and subtraction word problems. • I can use objects, drawings, and equations to solve addition and subtraction word problems.
KY.1.OA.3 Apply properties of operations as strategies to add and subtract. MP.2, MP.7 ❑Conceptual ❑ Procedural ❑Application Students are not responsible for knowing the formal language of the different properties but have a conceptual understanding of each property (commutative and associative property). Coherence KY.K.OA.2→KY.1.OA.3→ KY.2.NBT.9	We are learning about math strategies so we can solve word problems with 3 addends. I know I am successful when: • I can group addends strategically when adding three numbers. We are learning about math strategies so we can fluently add and subtract within 20 I know I am successful when: • I can compose and decompose addends to make a ten to help me ad and subtract.
KY.1.NBT.1 Count and represent numbers. **a. Count forward to and backward from ~~120~~ *100*, starting at any number less than ~~120~~ *100*.**	We are learning to count forward and backward so we can understand the relationship of numbers.

b. ~~In this range~~ *Within 20*, read and write numerals and represent a number of objects with a written numeral. **MP.2, MP.5, MP.8** ❑Conceptual ❑Procedural ❑ Application Students use strategies based on place value, properties of operations, and the relationship between addition and subtraction; however, when solving any problem, students choose any strategy. A written representation shows a strategy using words, pictures, and/or numbers. Coherence KY.K.CC.2→KY.1.NBT.1→KY.2.NBT.2	I know I am successful when: ● I can count forward to 100 starting from any number. ● I can count back from 100 starting from any number. ● I can count by 10s to 100. We are learning to read and write numbers so we can represent objects with numerals. ● I can read and write numbers up to 20. ● I can represent a group of objects with a written numeral.
KY.1.MD.4 Investigate questions involving categorical data. **a. Pose a question that can be answered by gathering data.** **b. Determine a strategy for gathering data from peers.** **c. Organize and represent data in a table/chart with up to three categories.** **d. Interpret data to answer questions about the table/chart that connects to the question posed, including the total number of data points, how many in each category and how many more or less are in one category than in another.** **MP.1, MP.3, MP.4, MP.6** ❑ Conceptual ❑ Procedural ❑ Application Students create a table or chart to organize data. KY.2.MD.9 Coherence KY.1.MD.4→ KY.2.MD.10	We are learning about data so we can ask and answer questions about a table or chart. I know I am successful when: ● I can pose a question that can be answered by gathering data. ● I can determine a strategy to gather data. ● I can organize and represent data in a table or chart with up to three categories. ● I can count and read the data in a table or chart. ● I can determine how many more or less are in one category than in another. ● I can ask and answer questions using data in a table or chart.