Lesson 1

Objective: Solve word problems with three addends, two of which make ten.

Suggested Lesson Structure

- Fluency Practice (10 minutes)
- Application Problem (5 minutes)
- Concept Development (35 minutes)
- Student Debrief (10 minutes)
- Total Time (60 minutes)

Fluency Practice (10 minutes)

- Sparkle: The Say Ten and Regular Way 1.NBT.2 (3 minutes)
- Take Out 1 1.OA.5 (2 minutes)
- Equal Number Pairs for Ten 1.OA.6 (5 minutes)

Sparkle: The Say Ten and Regular Way (3 minutes)

Note: Say Ten counting reinforces place value and prepares students to add ten and some ones.

Count from 10 to 20, alternating between the regular way and the Say Ten way (e.g., 10, ten 1, 12, ten 3, 14, ten 5). If students are still building fluency with counting within the teen sequence, consider counting the regular way or the Say Ten way without alternating. If time permits, try counting back, too.

Students stand in a circle. Introduce the counting pattern, the start number, and end number: “Today we will count the Say Ten way from 10 to 20.” The number range may be adjusted to fit the size of the class. Before the game, practice the counting sequence as a group, and say, “Sparkle!” after the ending number is said aloud: “Let’s practice by counting from 10 to 15. Ten, ten 1, 12, ten 3, 14, ten 5, sparkle!”

Begin the game. Students count around the circle, each student saying one number in the counting sequence. After the ending number is said, the next student says, “Sparkle!” and the following player sits. Begin again with the start number, and continue counting in the same direction around the circle until only one player is standing.
Take Out 1 (2 minutes)

Note: This activity supports fluency with decomposing numbers within 10. This skill is critical for using the upcoming Level 3 addition strategy of make ten. Students need to fluently get 1 out of the second addend when adding to 9.

T: Take out 1 on my signal. For example, if I say “5,” you say “1 and 4.”
T: 3.
S: 1 and 2.
T: 10.
S: 1 and 9.

Continue with all numbers within 10.

Equal Number Pairs for Ten (5 minutes)

Materials: (S) 5-group cards 0 through 10 with two 5 cards, one “=” card, and two “+” cards per set of partners (Fluency Template)

Note: This activity builds fluency with partners to ten and promotes an understanding of equality.

Assign students partners of equal ability. Students arrange 5-group cards from 0 to 10, including the extra 5, and place the “=” card between them. Write 4 numbers on the board (e.g., 5, 9, 1, and 5). Partners take the 5-group cards that match the numbers written to make two equivalent expressions (e.g., 9 + 1 = 5 + 5).

Suggested sequence: 5, 9, 1, 5; 0, 1, 9, 10; 2, 5, 5, 8; 2, 3, 7, 8; 4, 1, 9, 6; 3, 4, 6, 7.
Application Problem (5 minutes)

John, Emma, and Alice each had 10 raisins. John ate 3 raisins, Emma ate 4 raisins, and Alice ate 5 raisins. How many raisins do they each have now? Write a number bond and a number sentence for each.

Note: This problem was chosen as an application of the culminating subtraction work from Module 1. All three subtraction sentences and number bonds focus on partners to ten, which are foundational to the first lesson of Module 2.

Concept Development (35 minutes)

Materials: (T) Bin, three different kinds of blocks/pattern blocks, 18-inch length of string tied to form a loop
(S) Three different kinds of pattern blocks (10 of each shape, e.g., trapezoid, triangle, and square blocks), personal white board

Have students sit in a semicircle at the meeting area with their personal white boards.

T: The first-grade classrooms each have these special bins with different types of blocks in them. Let’s figure out how many we have! (Lay out 9 triangle blocks in a 5-group configuration.) How many triangle blocks do we have?

S: 9 triangle blocks!

T: (Lay out 1 square block and 4 trapezoid blocks. Ask students to state the quantity of each group.) We need to figure out how many there are altogether. Help me write the expression.

S: 9 + 1 + 4 = ___.

T: (Write this on the board.)

T: Talk to your partner. What are some ways we could add these blocks together?

S: (As students discuss, the teacher circulates and selects students to share.) We could start with the larger number and count on. → We could add the groups together by counting them all.

T: True! Also, I wonder if we can make ten since it is such a friendly number. Talk with your partner.

S: (Discuss.) 9 and 1. → The 9 triangles and the 1 square.
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T: Let’s check to be sure your idea is true! (Select a student, one who may particularly benefit from proving this to be true, to move the 1 to the 9 in order to make ten.) Did 9 and 1 make ten?
S: Yes!
T: (Place the square block back in its original position.) I’m going to make the 9 and 1 one group to show this is 10. (Place string around the 9 and 1. Circle 9 and 1 in the equation.) We have 10 (gesture to the 10) and 4 more (gesture to the 4). How many blocks?

S: We have 14 blocks!
T: (Write 14 to complete the equation.)
T: Talk with your partner. Write the new number sentence explaining what we just did, starting with 10, on your personal white board.
S: (Discuss and write 10 + 4 = 14.)
T: Good! Now it’s your turn.

Assign partners, and hand out blocks. The following is a suggested sequence of stories to tell as students work with a partner to represent each problem on their personal white boards. Students should put their boards next to one another to make a larger board. Together, they write the expression, circle 10, and solve for the unknown.

- At lunch, Marcus put 2 pepper slices, 8 carrots, and 6 banana pieces on his tray. When he reached the checkout, how many pieces of food did he have?
- Lena was playing basketball during recess. She made 4 jump shots, 7 layups, and 3 free throws. How many baskets did Lena make?
- We had 5 upper-grade buddies come and visit our classroom with 3 more buddies following them. Soon after that, 5 more buddies came to our classroom. How many total buddies came?

NOTES ON MULTIPLE MEANS OF REPRESENTATION:
Facilitate students’ discovery of patterns and structure in math by allowing for a variety of responses to questions. For example, some students may use their pictorial representation and see 4 + 1 = 5 and then use the 5 triangles embedded in the 9 to make a ten.

NOTES ON MULTIPLE MEANS OF ACTION AND EXPRESSION:
Having students act out number stories is a great way to provide math-they-can-see. This may help students who are hearing impaired. It also provides visual and kinesthetic learners an opportunity to engage in the lesson using their preferred style of learning.
Problem Set (10 minutes)

Students may work individually, in pairs, or in groups when completing Problem Sets. For Problem Sets that include word problems, it may be best to read problems aloud, particularly early in the year. Students should do their personal best to complete the Problem Set within the allotted 10 minutes. Some problems do not specify a method for solving. This is an intentional reduction of scaffolding that invokes MP.5, Use Appropriate Tools Strategically. Students should solve these problems using the RDW approach used for Application Problems.

For some classes, it may be appropriate to modify the assignment by specifying which problems students should work on first. With this option, let the careful sequencing of the Problem Set guide your selections so that problems continue to be scaffolded. Balance word problems with other problem types to ensure a range of practice. Consider assigning incomplete problems for homework or at another time during the day.

Student Debrief (10 minutes)

Lesson Objective: Solve word problems with three addends, two of which make ten.

The Student Debrief is intended to invite reflection and active processing of the total lesson experience.

Invite students to review their solutions for the Problem Set. They should check work by comparing answers with a partner before going over answers as a class. Look for misconceptions or misunderstandings that can be addressed in the Debrief. Guide students in a conversation to debrief the Problem Set and process the lesson.

Any combination of the questions below may be used to lead the discussion.

- Earlier, we had 9 triangles, 1 square, and 4 trapezoid blocks on the floor. The teacher next door has 4 triangles and 10 squares in her bin of blocks. Does she have more, fewer, or the same number of blocks as we have? How do you know? (Re-create the configuration from the Concept Development if necessary.)
Lesson 1

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- What similarities do you notice between Problem 3 and Problem 4?
- How did the Application Problem connect to today’s lesson?
- What new way or strategy to add did we learn today? Talk with your partner. (Make ten.) Why is 10 such a friendly number?

Exit Ticket (3 minutes)

After the Student Debrief, instruct students to complete the Exit Ticket. A review of their work will help with assessing students’ understanding of the concepts that were presented in today’s lesson and planning more effectively for future lessons. The questions may be read aloud to the students.

Homework

Homework at the K–1 level is not a convention in all schools. In this curriculum, homework is an opportunity for additional practice of the content from the day’s lesson. The teacher is encouraged, with the support of parents, administrators, and colleagues, to discern the appropriate use of homework for his or her students. Fluency exercises can also be considered as an alternative homework assignment.
Lesson 1 Problem Set

Name _______________________________  Date ______________

Read the math story. Make a simple math drawing with labels. Circle 10 and solve.

1. Bill went to the store. He bought 1 apple, 9 bananas, and 6 pears. How many pieces of fruit did he buy in all?

   apple   banana   pears

   □      □□□□□□□□□ □□□□□□
   □□□□□ □

   1 + 9 + 6 = ___

   10 + ___ = ___

   Bill bought ____ pieces of fruit.

2. Maria gets some new toys for her birthday. She gets 4 dolls, 7 balls, and 3 games. How many toys did she receive?

   _____ + _____ + _____ = ___

   10 + ___ = ___

   Maria received ____ toys.
3. Maddy goes to the pond and catches 8 bugs, 3 frogs, and 2 tadpoles. How many animals did she catch altogether?

___ + ___ + ___ = ___

10 + ___ = ___

Maddy caught ____ animals.

4. Molly arrived at the party first with 4 red balloons. Kenny came next with 2 green balloons. Dara came last with 6 blue balloons. How many balloons did these friends bring?

___ + ___ + ___ = ___

10 + ___ = ___

There are ____ balloons.
Name _______________________________ Date ___________

Read the math story. Make a simple math drawing with labels. Circle 10 and solve.

Toby has ice cream money. He has 2 dimes. He finds 4 more dimes in his jacket and 8 more on the table. How many dimes does Toby have?

___ + ___ + ___ = ___

10 + ___ = ___

Toby has ____ dimes.
Lesson 1 Homework

Name ________________________________ Date ________________

Read the math story. Make a simple math drawing with labels. **Circle** 10 and solve.

1. Chris bought some treats. He bought 5 granola bars, 6 boxes of raisins, and 4 cookies. How many treats did Chris buy?

   ___ + ___ + ___ = ___

   10 + ___ = ___

   Chris bought ____ treats.

2. Cindy has 5 cats, 7 goldfish, and 5 dogs. How many pets does she have in all?

   ___ + ___ + ___ = ___

   10 + ___ = ___

   Cindy has ____ pets.
3. Mary gets stickers at school for good work. She got 7 puffy stickers, 6 smelly stickers, and 3 flat stickers. How many stickers did Mary get at school altogether?

\[\_
\_\_ + \_
\_\_ + \_
\_\_ = \_
\_\_
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\[10 + \_
\_\_ = \_
\_\_
\]

Mary got ____ stickers at school.

4. Jim sat at a table with 4 teachers and 9 children. How many people were at the table after Jim sat down?

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\_\_ + \_
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There were ____ people at the table after Jim sat down.
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5-group cards, first two pages double-sided, last page single-sided
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