

Grade 1	Lesson: 4-5 Making 10 on a Ten-Frame	Reference to English
Math Standard(s): 1.OA.6, & 1.OA.8		Domain: Operations and Algebraic Thinking
Content Objective(s):		Language Objective(s):
Students will use two ten-frames to model addition facts within 20. <i>I can use a ten-frame to model addition facts.</i>		Students will speak the numbers 1-10 while using a ten-frame to model addition facts with 20. <i>I can speak the numbers 1-10 while doing addition facts to 20.</i>
Essential Understanding: Ten can be shown in two parts in different ways and represented using addition number sentences.		Academic Vocabulary for Word Wall: Listen: ten-frame, addend, addition, plus, equals, number sentence, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 Read: plus, equals, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20 Write: Speak: ten-frame, addend, addition, plus, equals, number sentence, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20
Materials: <ul style="list-style-type: none">Counters (12 per pair)Number Cards 0-11 (1 set per pair)Whiteboards and dry erase markersGuided Practice page 134-135Problem Solving page 136		Additional Lesson Vocabulary: ten-frame, addend, addition, plus, equals, number sentence, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 20
Lesson: Making 10 on a Ten-Frame		Instructional Time: 40 minutes
<p>Opening: (2 minutes) T: "You have learned to use a ten-frame to compare numbers and to add. Today you will use ten-frames to think of addition facts as 10 and some more. Do you like to collect things?" S: will say "yes." T: "What do you collect?" S: Answers will vary (stickers, stuffed animals, rocks, dolls, toy cars, etc.). T: "What do you put your things in or on when you collect them?" S: Answers will vary.</p> <p>Introduction to New Material (Direct Instruction): (6 minutes) <ul style="list-style-type: none">Teacher will draw two ten-frames on the whiteboard.Provide counters, whiteboards, and dry erase markers to the children.Have students draw two ten-frames on their whiteboards. T: "Suzie collects teddy bears. She puts her teddy bears on shelves. Each shelf holds 10 bears. If she has 8 teddy bears on one shelf and collects 4 more, how many will she have in all? I want you to use your counters and ten-frames to find out. How many bears did I say were on the shelf?" (Demonstrate the story problem by using objects or drawing it on the board.) S: will say "8". T: "I want you to put 8 counters in your top ten-frame." (model for students) <ul style="list-style-type: none">Teacher will draw 8 counters in his/her top ten-frame. T: "How many more teddy bears did she collect?" S: will say "4". T: "I want you to put 4 counters in your bottom ten-frame." (model for students) <ul style="list-style-type: none">Teacher will draw 4 counters in his/her bottom ten-frame. T: "This shows two groups of bears. Will all of her bears fit on one shelf?" S: will say "no." T: "How many more can she fit on the first shelf?" S: will say "2". <ul style="list-style-type: none">The teacher will erase 2 counters from the bottom ten-frame board and draw them on the top ten-frame board.Have the students move 2 counters to fill the first ten-frame. T: "How many will she put on the next shelf?" S: will say "2". T: "How many teddy bears does she have altogether?" S: will say "12". T: "I want you to write $8 + 4 = 12$ on your whiteboard. And say to your neighbor, '$8 + 4 = 12$'."</p>		

S: will write $8 + 4 = 12$ and say to their neighbor " $8 + 4 = 12$."

•The teacher will write $8 + 4 = 12$ on the whiteboard.

T: "Now what number sentence do your ten-frames show?"

S: will say " $10 + 2 = 12$."

T: "I want you to write $10 + 2 = 12$ on your whiteboard. And say to your neighbor, ' $10 + 2 = 12$ '."

S: will write $10 + 2 = 12$ and say to their neighbor " 10 plus 2 equals 12 ."

•The teacher will write $10 + 2 = 12$ on the whiteboard.

Guided Practice: (15 minutes)

Use the modeling cycle:

Teacher Does:

T: "I am going to draw two ten-frame on my whiteboard again."

•Teacher will draw two ten-frame boards on the whiteboard.

T: "For this activity I am going to use the number cards and these 12 counters. I am going to take all of the number 11 cards out of the deck. Then I am going to place the cards face down in a pile. I am going to use the number cards to determine the number of counters I will place on the ten-frame boards."

•Take all of the number 11 cards out of the deck of number cards. Shuffle the number cards and place them face down.

T: "I am going to flip over a number card. This number on this card tells me how many counter I will place on my first ten-frame board. I drew a _____. So, I will draw _____ counters on my top ten-frame board."

•Teacher flips over the top card in the pile and draws the correct number of counters on the ten-frame board.

T: "I am going to flip over second number card. This number on this card tells me how many counter I will place on my bottom ten-frame board. I drew a _____. So, I will draw _____ counters on my bottom ten-frame board."

•Teacher flips over the top card in the pile and draws the correct number of counters on the ten-frame board.

T: "I need to fill up my top ten-frame. So, I will move _____ counters from my bottom ten-frame to fill up my top ten-frame."

•The teacher will erase counters from the bottom ten-frame board and draw them on the top ten-frame board.

T: "How many counters do I have altogether?"

S: will say "_____".

T: "Now what number sentence do my ten-frames show?"

S: will say "_____ + _____ = _____."

•The teacher will record this number sentence on the whiteboard.

Students Do with Teacher:

•Erase the counters drawn in the ten-frames on the whiteboard.

T: "I need a student to help me."

•Pick a student to come up and demonstrate the activity with the teacher.

T: "Let's look at another problem. We are going to use the number cards and these 12 connecting cubes again. First, I am going to flip over a number card. This number on this card tells me how many counter I will place on the top ten-frame board. I drew a _____. So, I will draw _____ counters on my top ten-frame board."

•Teacher flips over the top card in the pile and draws the correct number of counters on the ten-frame board.

T: "Now, it is your turn to pick a card."

•The student volunteer flips over the top card in the pile.

T: "The number on this card tells you how many counter to place on my bottom ten-frame board. You drew a _____. So, you will draw _____ counters on my bottom ten-frame board."

•The student volunteer draws the correct number of counters on the ten-frame board.

T: "We need to fill up our top ten-frame. So, we need to move _____ counters from the bottom ten-frame to fill up the top ten-frame."

•The teacher will erase counters from the bottom ten-frame board and draw them on the top ten-frame board.

T: "How many counters do we have altogether?"

S: will say "_____".

T: "Now what number sentence do the ten-frames show?"

S: will say "_____ + _____ = _____."

T: "Please write this number sentence on the whiteboard."

•The student volunteer writes this number sentence on the whiteboard.

T: "Great job! Thanks for helping me."

2 Students Do:

T: "I need 2 students to help me. Raise your hand if you want to help me use two ten-frames to solve addition problems."

•Teacher will choose 2 students.

T: "You two are going to demonstrate this activity for us today. The first thing you two need to do is draw two ten-frames on your whiteboard."

- One of the student volunteers will draw two ten-frames on the whiteboard.

T: "Student #1 will turn over the top card in pile and place that many counters on the top ten-frame. Student #2 will turn over the top card in the pile and place that many counters on the bottom ten-frame. Then the two of you will move counters from the bottom ten-frame board to fill up the top ten-frame board. Together you will write a number sentence that matches your ten-frames."

- Student #1 turns over the top card in pile and place that many counters on the top ten-frame.
- Student #2 turns over the top card in the pile and place that many counters on the bottom ten-frame.
- Both students help to move counters from the bottom ten-frame board to fill up the top ten-frame board.
- Then both students will write a number sentence that matches the ten-frames.

T: "Thank you for helping. You two may go back to your seats."

All Students Do:

T: "Now you all know how to do the activity. I am going to separate you into groups of two. When I say your name come up and get a deck of number cards. Then take all or your supplies and find a place to sit with your partner. You will have 5 minutes to do this activity with your partner. When I clap my hands I want your attention on me."

- Teacher will walk around the classroom as the students do the activity and make sure they are on task.

T: (Clap to get their attention.) "You have 10 seconds to put your supplies away and sit at the carpet. 10,9,8,7,6,5,4,3,2,1. Good, you all made it."

Independent Practice: (15 minutes)

T: "Now it is your turn to do it on your own. Each of you will be given this worksheet. Let's do the first problem together."

- Pass out guided practice page 134-135.

T: "What is the first addend?"

S: will say "9".

T: "Place 9 counters on your first ten-frame. What is the second addend?"

S: will say "3".

T: "Place 3 counters on your second ten-frame. What does $9 + 3$ equal?"

S: will say "12".

T: "12 is our sum. So, trace the number 12."

- Students trace over the number 12.

T: "The first addend in the second problem on number one is 10."

S: will say "10".

T: "Now I want to fill up my first ten-frame board. How many counters do I need to move up to my top ten-frame board?"

S: will say "2".

T: "I moved 2 counters. So, I will use a 2 as my second addend. Trace over the 2."

- Students trace over the number 2.

T: "What does $10 + 2$ equal?"

S: will say "12".

T: "Now it is your turn to do problems #2, 3, 4, 5, 6, 7, 8, 9, and 10. You will have 5 minutes, when I clap my hands come back to the carpet."

- Students will get to work finishing pages 134-135. As they are working independently the teacher will walk around the room asking students to answer questions and check for any misconceptions.

- Teacher claps hands and students return to the carpet. Do problems 11, 12, and 13 on the problem solving page together.

Closing: (2 minutes)

- Collect the papers and bring the class together on the floor.

T: "Let's look at question #8 on page 135. What is the first addend?"

S: will say "9".

T: "Place 9 counters on your first ten-frame. What is the second addend?"

S: will say "3".

T: "Place 3 counters on your second ten-frame. What does $9 + 3$ equal?"

S: will say "12".

T: "12 is our sum. So, trace the number 12."

- Students trace over the number 12.

T: "The first addend in the second problem on number one is 10."

S: will say "10".

T: "Now I want to fill up my first ten-frame board. How many counters do I need to move up to my top ten-frame board?"

S: will say "2".

T: "I moved 2 counters. So, I will use a 2 as my second addend. Trace over the 2."

•Students trace over the number 2.

T: "What does $10 + 2$ equal?"

S: will say "12".

T: "Great job today!"

Assessment:

Guided Practice