

Math: Grade 1, Lesson 5, Contextual Problems with Number Bonds Part 2

Lesson Objective: Students will use ten frames as a strategy to solve addition based contextual problems with a focus on making ten.

Practice Focus: Students will be adding within 20 using the following strategies: counting on and number bonds

TN Standards: 1.OA.C.5

Teacher Materials:

- Paper and pencil, or white board and markers

Students Materials:

- 10 counters (like goldfish crackers, M&Ms, dried beans or macaroni, pennies, etc.
- Paper and a regular pencil, and a surface to write on
- The student packet for Math, Grade 1, Lesson 5 which can be found at www.tn.gov/education

Teacher Do	Student Do
<p>Opening: (1 min)</p> <p>Hello! Welcome to Tennessee's At Home Learning Series for math! Today's lesson is for all our 1st graders out there, though all children are welcome to tune in. This lesson is the fifth in our series.</p> <p>My name is ____ and I'm a ____ grade teacher in Tennessee schools! I'm so excited to be your teacher for this lesson! Welcome to my virtual classroom!</p> <p>Today we will be learning about Making a 10 in mathematics! Before we get started, to participate fully in our lesson today, you will need:</p> <ul style="list-style-type: none">• 10 counters (like goldfish crackers, M&Ms, dried beans or macaroni, pennies, etc.• Paper and a pencil, and a surface to write on• The student packet for Math, Grade 1, Lesson 5 which can be found at www.tn.gov/education <p>If you didn't see our previous lesson, you can find it at www.tn.gov/education. You can still tune in to today's lesson if you haven't seen any of our others. But, it might be more fun if you first go back and watch our other lessons since we'll be talking about things we learned previously.</p> <p>Ok, let's begin!</p>	
<p>Intro</p> <p>Yesterday we used the strategy counting on. Let's review as a warmup!</p> <p>Say the number 10 touching your head.</p>	<p>Student touches head and says 10.</p>

<p>Let's count on two more numbers from 10. [Teacher uses punching motion to demonstrate counting on.] 11, 12. Now you try it. [Pause.] Nice moves!</p> <p>Let's count on using another number. Say the number 16 and touch your head. [Touch head.] 16. Let's count on from 16 by punching out the next three numbers. [Teacher uses punching motion to count on from 16.] 17, 18, 19, 20. Now it's your turn. [Pause.] Great job!</p>	<p>Student mimics teacher's moves and counts.</p> <p>Student touches head and says 16.</p> <p>Student mimics moves and counts.</p>
<p><u>Teacher Model</u></p> <p>Now we will use the Counting On strategy to solve a story problem. [This problem should be written so students can see it along with the teacher reading it aloud.]</p> <p>Let's read this problem together. You can read along with me! There are 12 children in the school cooking club. How many boys and how many girls might be in the class? [Pause.]</p> <p>Let's draw a number bond for the story. Do you remember how to draw a number bond from yesterday? [Pause.] [Teacher draws a number bond.] You draw one on your paper, too. Remember to make the squares big enough to write numbers inside each one. [Pause.]</p> <p>Which number goes in the biggest rectangle? [Pause.] Yes! We can write the number 12 in the biggest rectangle to show there are 12 children in all. Can you fill in the biggest square with the number 12 on your number bond? [Pause.]</p> <p>How many children could be girls? [Pause.] I'm hearing lots of good options. I heard someone say that there could be 6 girls. So let's fill in the number bond with 6. That would go in the smaller rectangle. [Teacher fills in a 6.]</p> <p>If 6 children are girls, how can we find out how many would be boys? [Pause.] Good idea! One way is to begin with the number 6 and count on until we get to 12. Count with me. [Teacher counts on to get to 12.] 6, 7, 8, 9, 10, 11, 12.</p> <p>How many boys did we count? [Pause.] Thank you! We counted on 6 more to get to 12.</p> <p>Let's complete our number bond. Fill yours in too! [Teacher completes the number bond with a 6.]</p>	<p>Student reads along.</p> <p>Student answers.</p> <p>Student draws number bond.</p> <p>Student answers 12.</p> <p>Student fills in number bond.</p> <p>Student answers 6.</p> <p>Student fills in number bond.</p> <p>Student answers.</p> <p>Student counts with teacher.</p> <p>Student answers 6 more to get to 12.</p> <p>Student fills in number bond.</p>

<p>What do the numbers in the small rectangles represent? [Pause.] Good job, we will write 6 in both small squares to represent the 6 girls and the 6 boys. [Teacher fills in number bond.]</p> <p>I also heard someone say there were 8 girls. What if we only had 8 girls instead of 6 girls? How would our number bond change? [Pause.] Let's start a new one and see! Draw a number bond with me! [Teacher draws number bond.]</p> <p>Did the number is the biggest rectangle change? [Pause.] You're right. It stayed as 12 because 12 is the whole number. Let's fill it in! [Teacher fills in number bond.]</p> <p>How did the small rectangles change? [Pause.] Yes, we had to change the small rectangle for girls from 6 to 8 because now there are 8 girls! Let's fill it in! [Teacher fills in number bond.]</p> <p>How do we find the number of boys? [Pause.] Counting on! Great job! 8, 9, 10, 11, 12. We counted on 4, so there are 4 boys! Let's fill in our number bond! [Teacher fills in number bond.]</p>	<p>Student answers. Student fills in number bond.</p> <p>Student answers. Student draws number bond.</p> <p>Student answers. Student fills in number bond.</p> <p>Student answers. Student fills in number bond.</p> <p>Student answers counting on. Student fills in number bond.</p>
<p><u>Guided Practice</u></p> <p>Let's do 1 more together! Draw your number bond to get ready! [Pause.]</p> <p>Let's read this problem together. You can read along with me! 14 little bears went to play in the forest. Then, some more bears came over. In the end, there were 18 little bears playing in the woods altogether. How many more bears do you think came to play? [Pause.]</p> <p>Can you fill in the number bond? Give it a go! [Pause.]</p> <p>[Teacher points to the top rectangle.] What did you put here? [Pause.] Why? [Pause.] You are right! 18 because there are 18 bears altogether!</p> <p>[Teacher points to one of the smaller rectangles.] What did you put here? [Pause.] Why? [Pause.] You are right! 14 because there were 14 bears playing first!</p> <p>What strategy did you use to decide? [Pause.] Let's use counting on to test our ideas. Do it with me. [Teacher touches head.] 14. [Teacher punches out.] 15, 16, 17, 18.</p>	<p>Student draws number bond.</p> <p>Student reads along.</p> <p>Student fills in the number bond.</p> <p>Student answers 18. Student answers.</p> <p>Student answers 14. Student answers.</p> <p>Student answers. Student mimics teacher.</p>

<p>So how many more bears came to play? [Pause.] That's right! 4 more came to play because we punched the air 4 times. Did you get 4? [Pause.] Great job! [Teacher fills in the number bond.]</p>	<p>Student answers 4.</p> <p>Student answers.</p>
<p><u>Independent Practice</u></p> <p>Great job students! Thanks for helping me use my number bonds to solve these problems! Now it's your turn to try some on your own. I'm going to read each problem for you and then you can work on your own after the show!</p> <p>Scott has 13 cookies. His mom gives him some more. Now, he has 17 cookies. How many cookies did his mom give him? [Pause.]</p> <p>Maria had 6 crayons. Her brother gave her some more. She now has 11 crayons. How many crayons did her brother give her? [Pause.]</p> <p>Kim and her mom were planting 16 flowers. They have already planted 7. How many more flowers do they need to plant? [Pause.]</p>	<p>Student completes independent practice sheet.</p>
<p><u>Closing</u></p> <p>Boys and Girls, I enjoyed doing some mathematics with you today! Thank you for inviting me into your home. I look forward to seeing you in our next lesson in Tennessee's At Home Learning Series! Bye!</p>	

This work is based on an original work of EngageNY/Eureka made available through licensing under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. This does not in any way imply that EngageNY/Eureka endorses this work. Licensing terms: <http://creativecommons.org/licenses/by-nc-sa/3.0/>