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| **Grade 2** | **Lesson: 3-2** | | | Reference to English |
| **Math Standard(s): 2.OA.1 Domain: Operations and Algebraic Thinking** | | | | |
| **Content Objective(s):** | | **Language Objective(s):** | | |
| Students will use addition doubles facts to solve subtraction problems.  *I can use addition doubles facts to solve subtraction problems.* | | Students will use the phrase “I know that double \_\_\_\_ is \_\_\_\_\_ so\_\_\_\_\_\_\_\_\_\_\_\_\_\_.”  *I can use the phrase “I know that double \_\_\_\_ is \_\_\_\_\_ so\_\_\_\_\_\_\_\_\_\_\_\_\_\_.”* | | |
| **Essential Understanding:**  Addition and subtraction have an inverse relationship. This can be used to find subtraction facts; every subtraction fact has a related addition fact | | **Academic Vocabulary for Word Wall:**  **Listen: thinking, double, to help you find**  **Read: so**  **Write:**  **Speak: doubles**  **Sentence Frame:**  I know that double \_\_\_\_\_\_ is \_\_\_\_\_\_\_ so \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.- | | |
| **Materials:**   * **Connecting cubes (teaching tool 1)** * **Number Cards 0-11 (Teaching tool 2)** * **Number cards 12-20 ( Teaching tool 3)** | | **Additional Lesson Vocabulary:**  so | | |
| **Lesson: Thinking Addition to Subtract Doubles** | | | **Instructional Time: 40 mins** | |
| **Opening: (5 minutes) –**  **T: “When I say a double, I want you to answer back as quick as you can. If I say it loud, you have to answer quietly. If I say it quietly, you have to answer loud. Ready?”**  S: will respond in a whisper or a loud voice  **T: “Double 2. Double 5. Etc etc.” Repeat to review all the double facts they know**  **“ Great! You’ve learned how to use doubles to help you with addition. Today we’re going to learn how doubles can help us with subtraction too.”**  **Introduction to New Material (Direct Instruction): (8 minutes)**  Arrange children in pairs. Give each pair connecting cubes, even number cards (2-18) , and page 75  Hold up two different colored cube trains of 7 cubes each.  **T: “What doubles fact do these show? Tell your partner”**  S: Will tell their partner double 7  **T: “ Write the matching addition sentence with your finger in the air.”** S: will use finger to write 7+7= in the air  **T: “Think to yourself for a minute. How can you use this double fact to help you find 14-7?” Write it on the board.**  S: will work in pairs to solve.  **T: “Let’s hear a few of your ideas!”**  S: will share ideas with the class  Write the numbers 9 and 10 large on the board  **T: “Which of these numbers is a doubles fact? How do you know?”**  S: will raise hands to share ideas with the class. (10 can be broken up into 2 equal parts)  **T: What doubles fact has a sum of 10? Show me with your fingers**  S: will hold up 5 fingers  **T: Great!**  Write the number 14 on the board. Choose a volunteer to come to the front.  **T: Can you show us how to make two equal trains with the 14 blocks?”**  S: will make 2 trains of 7  **T: How many cubes in all?**  S: 14  **T: How can we write this doubles fact?**  S: 7+7= 14  **T: “You can use this doubles fact to write a subtraction fact as well. You just turn it around so the whole is first, like this.”**  Write 14-7= 7  **T: “I know that double 7 is 14, so I know that 14-7=7”**  **Guided Practice: (12 minutes)**  **T: “Now it’s your turn to try it with a partner. One partner will pick a number card. Together, make two equal trains that add up to that number, and write your doubles fact addition sentence in the spaces. Then underneath write the subtraction sentence that goes with that double fact.**  **Each time, practice saying “I know that double \_\_\_ is \_\_\_\_, so \_\_\_\_\_\_\_\_\_.”When you hear me clap my hands, put your cubes and number cards away and get ready to listen. “**  S: will practice with partners, doing page 75 in partners.  *Use the modeling cycle:*  Clap hands  Teacher Does:  **T: “ Now look at page 76. Find number one and point to it”**  S: Students will point to number 1  **T: “We will use doubles facts to solve these subtraction problems. The first problem is 2-1= \_\_\_ First, think of the doubles fact you know that equals 2. Got it? Whisper it to your neighbor”**  S: will whisper 1+1 or double 1  **T: “That’s what we write in the next space, so it reads 1+1=2. Then it says *so* 2-1+\_\_\_\_\_\_. We know it has to be 1. So write in 1.”**  S: will write in 1.  **T: “Number 2-4 are done the same way. Look at number 5. What is different about number 5-8?”**  S: will say there are no counting cubes.  **T: “Right. So you need to first find the double fact, and write that in the spaces below, *then* write the answer above. If you want to use your own cubes, you may.”**  2 Students Do with Teacher:  **T: “Let’s have 2 helpers come show us how to do number 5, using their cubes.”**  S: two students will come up and lead the class in doing number 5  **Independent Practice: ( 7 minutes)**  **T: “Now you have time to practice on your own. Do through number 9. If you finish early, draw pictures by each problem to match the math story.”**  S: will work independently  Walk around the room watching how students are working.  **Closing: (5 minutes)**  Pass out half-sheets of paper  **T:” I’m going to draw a story on the board. On your paper, write the doubles fact, and then write the subtraction sentence to go along with it.”**  **Draw story. (Suggestion: A person holding 5 kites, 5 flying away in the sky.)**  S: will write, then turn in.  **T: Check student’s responses for understanding** | | | | |
| **Assessment:** | | | | |
| **Half-sheet of paper response** | | | | |