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| **NC.1.OA.1**  **Piggy Bank** | |
| **Domain** | Operations and Algebraic Thinking |
| **Clusters** | Represent and solve problems  Understand and apply the properties of operations  Add and subtract within 20 |
| **Standards** | **NC.1.OA.1** Represent and solve addition and subtraction word problems, within 20, with unknowns, by using objects, drawings, and equations with a symbol for the unknown number to represent the problem, when solving:  • Add to/Take from-Change Unknown  • Put together/Take Apart-Addend Unknown  • Compare-Difference Unknown  **NC.1.OA.4** Solve an unknown-addend problem, within 20, by using addition strategies and/or changing it to a subtraction problem.  **NC.1.OA.6** Add and subtract, within 20, using strategies such as:  • Counting on  • Making ten  • Decomposing a number leading to a ten  • Using the relationship between addition and subtraction  • Using a number line  • Creating equivalent but simpler or known sums  *Add to/Change Unknown* |
| **Materials** | SF, cubes or counters, pencil |
| **Task** | Provide materials to the student. Read the problem to the student: *12 pennies were in the piggy bank. Mary put some more pennies in the piggy bank. Now there are 20 pennies in the piggy bank. How many pennies did Mary put in the piggy bank? Write a number sentence that matches this story.* *Use a symbol for the unknown number.*  Once an equation is written, say: *Solve the problem and show your thinking with pictures, numbers, or words.* |

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| **Continuum of Understanding** | | |
| **Not Yet Proficient** | Response includes 0-1 of the descriptors in “Meets Expectations” | Strategies Used:   * Trial and Error * Counting All * Counting On * Think-Addition * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Other: |
| **Progressing** | Response includes 2 of the descriptors in “Meets Expectations” |
| **Meets Expectations** | Response includes all the descriptors in “Meets Expectations”   * Correctly solves the problem: 8 pennies * Clearly explains using strategies such as basic facts, near-doubles, making tens and/or the relationship between addition and subtraction (instead of counting all). * Equation is accurate (e.g., 12 + \* = 20; 20 = 12 + \*) |

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| **Standards for Mathematical Practice** |
| 1. **Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |
| 3. Constructs viable arguments and critiques the reasoning of others. |
| 4. **Models with mathematics.** |
| 5. Uses appropriate tools strategically. |
| 6. **Attends to precision.** |
| 7. Looks for and makes use of structure. |
| 8. Looks for and expresses regularity in repeated reasoning. |

**12 pennies were in the piggy bank. Mary put some more pennies in the piggy bank. Now there are 20 pennies in the piggy bank. How many pennies did Mary put in the piggy bank?**

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| Write a number sentence that matches this story. Use a symbol for the unknown number. |
| Solve the problem.  Show your thinking with pictures, numbers, or words.  pennies |