|  |  |
| --- | --- |
| **NC.1.OA.1**  **How Many Cats?** | |
| **Domain** | Operations and Algebraic Thinking |
| **Clusters** | Represent and solve problems.  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.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, 25 counters available |
| **Task** | Provide materials to the student. Read the problem to the student: *Three cats are drinking milk. Some more cats come to drink milk. Then there were nine cats drinking milk. How many cats came to drink milk with the first three? 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.* |

|  |  |  |
| --- | --- | --- |
| **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 * 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 descriptors in “Meets Expectations”   * Correctly solves the problem: 6 cats * Clearly explains using strategies such as basic facts, near-doubles, and/or the relationship between addition and subtraction (instead of counting all) * Equation is accurate (e.g., 3 + \* = 9; 9 = 3 + \*). |

|  |
| --- |
| **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. |

**Three cats are drinking milk. Some more cats come to drink milk. Then there were nine cats drinking milk. How many cats came to drink milk with the first three?**

|  |
| --- |
| 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.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cats |