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| **NC.1.OA.1**  **Birds at the Park** | |
| **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.3** Apply the commutative and associative properties as strategies for solving addition problems.  **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  *Put Together-Take Apart/Both Addends Unknown* |
| **Materials** | SF, cubes or counters, two colors (at least 15 of each) |
| **Task** | Provide materials to the student. Say: *There were 10 birds in the park. Some of the birds are red and some of the birds are yellow. How many red birds and how many yellow birds could be in the park? Find* ***all*** *the possible combinations of 10 birds. Show your thinking with pictures, numbers, or words. Write a number sentence for each solution.*  Provide an example if needed*: For the number 5, we know that 4 and 1 equals five. So, I would write a number sentence that looks like this: 4 + 1 = 5.* |

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| **Continuum of Understanding** | | |
| **Not Yet Proficient** | * Identifies one or more combinations that do not equal 10 * Does not write number sentences or writes one or more incorrectly | Strategies Used:   * Trial and Error * Counting All * Counting On * Basic Facts * Doubles * Doubles +/- 1,2 * Other:   Identifies Combinations:   * 1 + 9 &/or 9 + 1 * 2 + 8 &/or 8 + 2 * 3 + 7 &/or 3 + 7 * 4 + 6 &/or 6 + 4 * 5+5 |
| **Progressing** | * Shows combinations of 10, but does not include all * Relies on *counting all* as primary strategy for solving the problem * Uses number sentences to record combinations correctly |
| **Meets Expectations** | * Shows all possible combinations of 10 with ease * Uses strategies other than counting all * Recognizes similar combinations due to the commutative property of addition (e.g., 0 + 10 = 10 + 0) * Uses number sentences to record combinations correctly |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and persevere 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. |

**There were 10 birds in the park. Some of the birds are red and some of the birds are yellow. How many red birds and how many yellow birds could be in the park? Find *all* the possible combinations of 10 birds.**

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| Show your thinking with pictures, numbers, or words.  Write a number sentence for each solution. |