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| **NC.1.OA.4**  **Green Apples** | |  |
| **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  *Put Together-Take Apart/Addend Unknown* |
| **Materials** | Cubes or counters, pencil |
| **Task** | Provide materials to the student. Read the problem to the student: *20 apples are in the basket. 9 are red and the rest are green. How many green apples are in the basket?* *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: 11 green apples. * 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., 9 + \* = 20; 20 = 9 + \*) |

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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. |

**20 apples are in the basket. 9 are red and the rest are green. How many green apples are in the basket?**

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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.    \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ green apples |