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| **NC.2.MD.5 & OA.1**  **Grace’s String** | |
| **Domain** | Measurement and Data  Operations and Algebraic Thinking |
| **Cluster** | Relate addition and subtraction to length.  Represent and solve problems involving addition & subtraction. |
| **Standard(s)** | **NC.2.MD.5** Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.  **NC.2.OA.1** Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:   * One-Step problems:   o Add to/Take from-Start Unknown |
| **Materials** | SF, Cubes or counters, pencil |
| **Task** | Provide materials to the student. Read the problem to the student*: Grace measured a piece of string for the nature walk. She thought that it was too long, so she cut off 36 inches.*  *Then her string was 30 inches. How many inches was Grace’s string before she cut it?*  *Write an equation that represents this problem. Use a symbol for the unknown number. Solve the problem and use words, numbers or pictures to explain your reasoning.* |

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| **Continuum of Understanding** | | |
| **Not Yet Proficient** | * Provide conceptual instruction on making sense of the situation as a missing minuend problem * Provide procedural instruction on solving take from start unknown problems * Provide instruction on place value when adding and subtracting without regrouping | * Writes an accurate equation including a symbol for the unknown number * Solves the problem correctly * Clearly explains their thinking   Strategy(ies) Used:   * Counting All * Counting On * Makes Tens * Basic Facts * Creates easier or known sums * Doubles * Doubles +/- 1, 2 * Other: |
| **Progressing** | * Incorrectly solves the problem. * Relies on counting as primary strategy for solving problem. * Equation is inaccurate. * Explanation is lacking in detail or non-existent. |
| **Meets Expectation** | * Correctly solves the problem: 66 inches * Successfully uses strategies such as making tens, creates easier or known sums, and basic facts. * Equation is accurate e.g. - 36 = 30 * Equation includes a symbol for the unknown number * Explanation is clear and uses numbers, pictures, or words to show their thinking. |

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| **Standards for Mathematical Practice** |
| **1. Makes sense and perseveres in solving problems.** |
| **2. Reasons abstractly and quantitatively.** |

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| 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. |

**NC.2.MD.5 & NC.2.OA.1 Name**

**Formative Instructional and Assessment Tasks**

Grace measured a piece of string for the nature walk. She thought that it was too long, so she cut off 36 inches. Then her string was 30 inches. How many inches was Grace’s string before she cut it?

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| **Write an equation that represents this problem. Use a symbol for the unknown number.** |
| Solve the problem.  Use words, numbers or pictures to explain your reasoning.  inches |