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| **NC.2.MD.8, OA.1, NBT.6**  **Tyler’s Piggy Bank** | |
| **Domain** | Measurement and Data  Operations and Algebraic Thinking Number and Operations in Base Ten |
| **Cluster** | Work with time and money.  Represent and solve problems involving addition & subtraction.  Use place value understanding and properties of operations to add and subtract. |
| **Standard(s)** | **NC.2.MD.8** Solve word problems involving:   * Quarters, dimes, nickels, and pennies within 99¢, using ¢ symbols appropriately. * Whole dollar amounts, using the $ symbol appropriately.   **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 Put Together/ Take Apart (Total Unknown and Two Addends Unknown) **NC.1.NBT.6** Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90, explaining the reasoning, using:   * Concrete models and drawings * Number lines * Strategies based on place value * Properties of operations * The relationship between addition and subtraction |
| **Materials** | SF, pencil |
| **Task** | Provide the materials to the student. Read the problem to the student: *Tyler opened his piggy bank. He counted 67¢. He found two quarters, one dime, and some pennies. How many pennies did*  *Tyler find? Explain your reasoning with numbers and words.* |

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| **Continuum of Understanding** | | |
| **Not Yet Proficient** | * Provide conceptual instruction on making sense of the situation as a put together addend unknown problem * Provide procedural instruction on solving put together addend unknown problems * Provide instruction on place value when adding and subtracting without regrouping * Provide instruction on identifying dimes and quarters and relating their value to pennies (1st grade NC.1.MD.5) | * 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: Knows value of: * Quarter * Dime * Penny |
| **Progressing** | * Incorrectly identifies the value of one or more coins. * Incorrectly solves the problem. * Relies on counting as primary strategy for solving problem. * Explanation is lacking in detail or non-existent. |
| **Meets Expectation** | * Correctly solves the problem: 7 pennies or 7¢ * Successfully uses strategies such as making tens, creates easier or known sums, and basic facts. |

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|  | * Explanation indicates understanding of the value of the coins and illustrates strategies used to solve the problem. * Explanation is clear and uses numbers and 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.** |
| **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.8 NC.2.OA.1 & NC.1.NBT.6 Name**

**Formative Instructional and Assessment Tasks**

Tyler opened his piggy bank. He counted 67¢. He found two quarters, one dime, and some pennies. How many pennies did Tyler find?

Explain your reasoning with numbers and words.

pennies