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| **NC.2.MD.8, OA.1, NBT.6****Tyler’s Piggy Bank** |
| **Domain** | Measurement and DataOperations 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.
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| **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