Students in the Class

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| Grade Level: 1 |
| Mathematics Domain and Cluster:  Domain: Operations and Algebraic Thinking  Cluster: Represent and solve problems involving addition and subtraction. |
| Common Core standard(s) being assessed (if the task is intended to assess only one part of the standard, underline that part of the standard):  1.OA.1: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. |
| Student Materials:   1. Student Assessment Task : Students in the class 2. Pencil 3. Math Tools:    1. Prepare/set up materials that you will allow students to utilize when solving problems |
| Teacher Materials: |
| Directions (for teacher to administer assessment task):   1. Prepare copies of assessment task. 2. Prepare manipulatives that you will allow students to use when solving this problem. |
| Prompt:   1. **Say: We are going to pretend that we are visiting a classroom and helping a teacher figure out how many boys and girls are in the class.** 2. Read the directions aloud to the students. 3. **Say: I will read each question to you as you are working on the problems.** 4. **Say: Remember to include picture, words and a number sentence that matches how you solved each problem.** |
| Correct or Model Answer:   1. Total Unknown: 17 children were in the classroom    1. Possible number sentences:       1. 9 + 8 = .       2. 8 + 9 = .       3. ? = 8 + 9       4. ? = 9 + 8 2. Addend Unknown: There are 8 boys    1. Possible number sentences       1. 17 = 9 + ?       2. 17 = ? + 9       3. 9 + ? = 17       4. ? + 9 = 17       5. 17 – 9 = ? 3. Addened Unknown: There are 9 girls    1. Possible number sentences       1. 17 = ? + 8       2. 17 = 8 + ?       3. 8 + ? = 17       4. ? + 8 = 17       5. 17 – 8 = |

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| **Scoring Guide/Rubric** (a score should be awarded for each criterion below) | | | |
| **Criteria (CCSS code)** | **0 points** | **1 Point** | **2 Point** |
| Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. (1.OA.1) | Student may or may not be able to determine unknown amount in problem, even with assistance. | Student able to determine unknown amount in problem, with minor inaccuracies. | Student able to determine unknown amount with accuracy. |
| Uses objects, drawings, and equations with a symbol for the unknown number to represent the problem.  (1.OA.1) | Student may not be able to show their thinking using objects, drawings and equation with a symbol for the unknown number. | Student may be able to represent thinking by using objects, or drawings, and may or may not be able to show equation with a symbol for the unknown number. | Student able to represent thinking by using objects, drawings and equation with a symbol for the unknown number. |

Teacher Commentary:

1. Students may use addition or subtraction to solve these problems
2. The use of “in all” or “altogether” makes result unknown problems significantly easier for students. Students need experiences with problems both with and without such cues.

Name Date



Students in the Classroom

Solve the problems. Use pictures, numbers and words to show your thinking.

Include a number sentence to show how you solved each problem.

1. 8 boys and 9 girls were in class. How many children were in the class in all?
2. 17 children were in the class. 9 were girls and the rest were boys. How many boys were in the class?
3. 17 children were in the class. There were some girls and 9 boys. How many girls were in the class?