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| **NC.3.OA.2**  **Sherrin’s Breakfast Melon** | |
| **Domain** | Operations and Algebraic Thinking |
| **Cluster** | Represent and solve problems involving multiplication and division. |
| **Standard(s)** | **NC.3.OA.2** For whole-number quotients of whole numbers with a one-digit divisor and a one-digit quotient:   * Interpret the divisor and quotient in a division equation as representing the number of equal groups and the number of objects in each group. * Illustrate and explain strategies including arrays, repeated addition or subtraction, and decomposing a factor. |
| **Materials** | Paper, pencils, white boards and dry-erase markers (optional) |
| **Task** | **Use a picture and write an equation for each part of the task. Write a sentence explaining how you solved the problem.**  **Sherrin cut a melon for her family to eat at breakfast. She cut it into 48 pieces. If there are 8 people who eat breakfast in her family and everyone eats the same amount, how many pieces would each person get?**  **What if 2 people did not come to breakfast, so only 6 people ate? How many pieces would each person get?** |

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| **Rubric** | | |
| **Level I**  Not Yet | 1. **Level II** 2. Progressing | **Level III**  Meets Expectation |
| * Incorrect answer and work are given. | * Finds the correct answer, but there may be inaccuracies or incomplete justification of solution   **OR**   * Has partially correct work but does not have a correct solution. | * Accurately finds the answers (6, 8). **AND** * Accurate division or multiplication equation **AND** * The sentence clearly and accurately states student’s strategies. |

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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. |

**Sherrin’s Breakfast Melon**

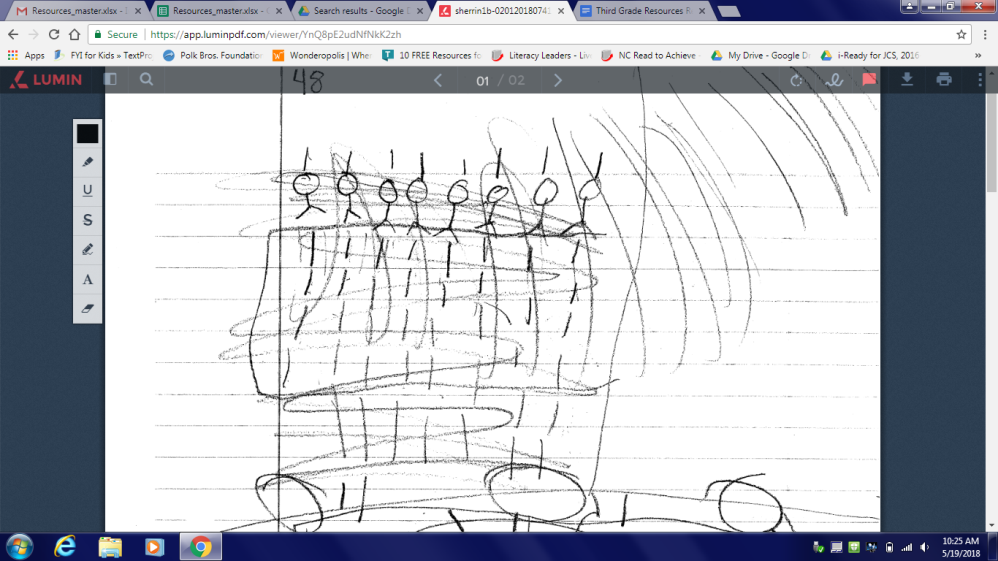
Use a picture and write an equation for each part of the task. Write a sentence explaining how you solved the problem.

Sherrin cut a melon for her family to eat at breakfast. She cut it into 48 pieces. If there are 8 people who eat breakfast in her family and everyone eats the same amount, how many pieces would each person get?

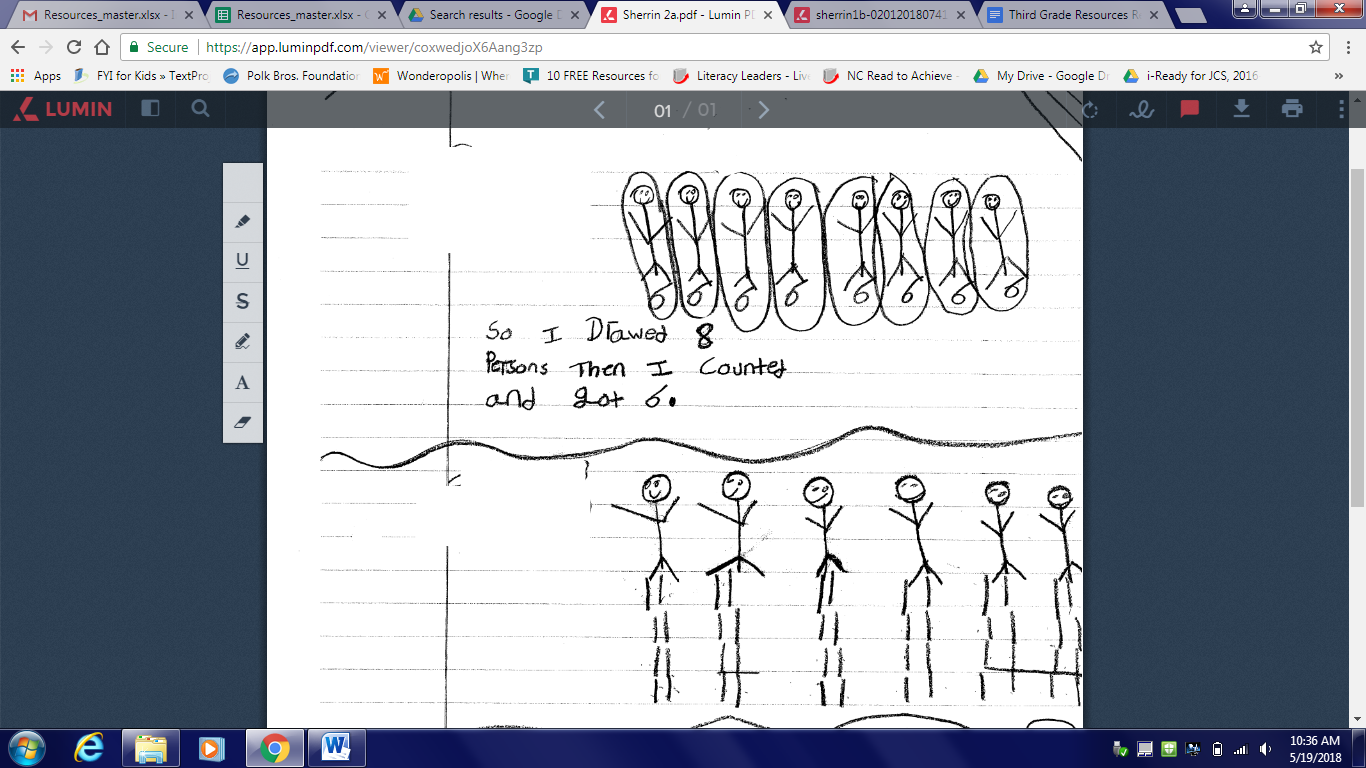
What if 2 people did not come to breakfast, so only 6 people ate? How many pieces would each person get?

**Scoring Examples**

**Not Yet:** The student is unable to correctly use the strategy of equally distributing melon pieces among eight people.



**Progressing:** The student successfully used the strategy of equally distributing melon pieces among people, but did not include an explanation of his/her thought process. Equations were not given.



**Meets Expectations:** Student showed an accurate strategy for solving both parts the problem, and included an explanation for that strategy that included equations.

