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| **NC.3.OA.3**  **Making Cards** | |
| **Domain** | Operations and Algebraic Thinking |
| **Cluster** | Represent and solve problems involving multiplication and division. |
| **Standard(s)** | **NC.3.OA.3** Represent, interpret, and solve one-step problems involving multiplication and division.   * Solve multiplication word problems with factors up to and including 10. Represent the problem using arrays, pictures, and/or equations with a symbol for the unknown number to represent the problem. * Solve division word problems with a divisor and quotient up to and including 10. Represent the problem using arrays, pictures, repeated subtraction and/or equations with a symbol for the unknown number to represent the problem. |
| **Materials** | 1-inch square tiles, Paper, Pencil |
| **Task** | A group of students want to make cards for 30 teachers in their school.   1. If they want to make the same number of cards each, how many cards would 5 students make? 2. To distribute the cards evenly, what other number of students could make cards? 3. Could 4 students make and distribute 30 cards evenly? Explain your answer with words or models. 4. Use your manipulatives to model the task. For every solution, write a division equation and draw a picture of your models. 5. Write a sentence explaining how you used manipulatives to solve this task. |

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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**   * Uses partially correct work but does not have a correct solution. | * Solutions: 30 cards could be 5 groups of 6, 6 groups of 5, 3 groups of 10 or 10 groups of 3. 4 tables cannot be distributed evenly from 30.   **AND**   * The sentence clearly and appropriately states how manipulatives were used.   **AND**   * Writes correct equation. |

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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. |

**Making Cards**

1. Students are making 30 cards. If they want to make the same number of cards each, how many cards would each of 5 students make? Use your manipulatives to model the task. Write a division equation and draw a picture of your models here:
2. To distribute the cards evenly, what other number of students could make cards? Use your manipulatives to model the task. Write a division equation and draw a picture of your models here:
3. Could 4 students make and distribute 30 cards evenly? Use your manipulatives to model the task. Explain your answer with words or models. Write a sentence explaining how you used manipulatives to solve this task.