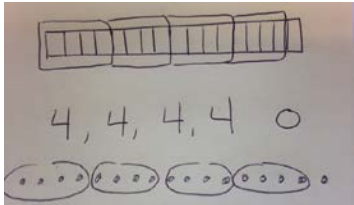| Lesson Title | Stacking Game Division  4.NBT.6 |
|---|---|
| **Common Core Standard** | 4.NBT.6 Use place value understanding and properties of operations to perform multi-digit arithmetic. 4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. |
| 1. Shared event: What might be the introduction to the task and description of the task the students will be experiencing? | Students will be in groups of 3-4 students.<br><br>Students will be given 20 seconds to stack as many unifix cubes as possible upright in a single stack. One student from each group will then pull out a card from a stack (Cards will act as divisors and includes numbers 0-9).  Students will then break apart their stacks into the number of groups indicated on the card drawn. By doing this each group member will potentially have a different number in each group based on how many unifix cubes were stacked.<br><br>Students will record each rounds work and answers for the entire group on their data sheet. |
| 2. Picture or model: What types of pictures might you see? | Stacking cubes, rolling dice, breaking apart cubes, making groups |
| 3. People-talk: What do we think students are going to say about the shared experience? | Stacking cubes as fast as you can<br>Breaking cubes apart into groups based on how they rolled dice<br>Different amount of cubes in groups<br>Recording their work |
| 4. Feature-talk: What terms, ideas, comments, do you think the students will bring out and what are the mathematical ideas you hope to flush out? | Cubes      Divide<br>Stacking   Add<br>Fast        Left Over<br>Timed<br>Groups<br>Dice |
| 5. Symbolic representation: What are some possible symbolic representations that may result from the feature talk? |  |

Materials needed:

Data Sheet
Dice (0-9)
Unifix Cubes (approx 35 each student)

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