CONSTRUCTING TASK: Order the Dice

Approximately 1 day

STANDARDS FOR MATHEMATICAL CONTENT

MCC.K.CC.1 Count to 100 by ones and by tens.

MCC.K.CC.2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

MCC.K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.

a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
c. Understand that each successive number name refers to a quantity that is one larger.

MCC.K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

(For descriptors of standard cluster please see the Grade Level Overview)

STANDARDS FOR MATHEMATICAL PRACTICE

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

BACKGROUND KNOWLEDGE

This activity task is designed for number sequence and recognition. It will also help students start at a number that may not be one and continue counting forward.

ESSENTIAL QUESTIONS

- How can we use counting in our everyday life?
- Why is it important to know how to put things in number order?
- How does putting things in order keep things organized?
- Why do we need to be able to put things in order?

MATERIALS

- Order the Dice game board
- Dice

GROUPING

Partner task

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

Player 1 throws (5) six-sided dice at once. Dice numbers are placed in order from smallest to largest. *Example: 5,2,5,1,3 are rolled and place in order. 1,2,3,5,5.* Player 1 receives 1 chip for having three numbers in counting sequence (1,2,3). 1 chip is added to Player 1's ten frame and they say the new total amount of chips. First player to fill their two ten frames win the game.

Dice in counting sequence	3	4	5
Points (chips collected)	1	2	3

FORMATIVE ASSESSMENT QUESTIONS

- How do you know that you counted correctly?
- What strategy did you use to help you put the numbers in order?

DIFFERENTIATION

Extension

- Use number cubes that are not numbered 1-6 (perhaps 4-9?) or increase the quantity of dice used from 5 to 10.

Intervention

- Give students 5 dice and have them arrange the dice so that they are sequenced 1-5.
- Give students a set of cards from *Numeral, Picture, Word* (use only one form of card). Shuffle the cards and have the students practice putting them in order.

Order the Dice

Player 1 throws five (5) six-sided dice at once. Dice are placed in order from smallest to largest. *Example: 5,2,5,1,3 are rolled and place in order: 1,2,3,5,5.* Player 1 receives 1 chip for having three numbers in counting sequence (1,2,3). 1 chip is added to Player 1's ten frame and they say the new total amount of chips. First player to fill their two ten frames wins the game.

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Player 1 Scoreboard

Player 2 Scoreboard
