

CONSTRUCTING TASK: Numerals-Pictures-Words

This task contains numerous activities where students can engage in use of the different representations of numbers.

STANDARDS FOR MATHEMATICAL CONTENT

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.

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.

BACKGROUND KNOWLEDGE

Students need to understand that quantity can be represented through numerals, pictures, and words. Students should be given ample time to explore this concept early on in kindergarten. These task cards are designed for students to see and recognize the different forms in which a quantity can be represented.

ESSENTIAL QUESTIONS

- How do we know if a number is more or less than another number?
- How can we show numbers in different ways?
- How do we use counting in our everyday life?
- Why are numbers important?
- What do numbers mean to us?

MATERIALS

- *Numerals, Pictures, Words* playing cards

GROUPING

Whole group, small group, partner, individual

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

Concentration/Memory: Shuffle the cards and lay them face down in a pattern. Let students decide the pattern, but they need to explain their pattern. On each turn, a player turns over two cards (one at a time) and keeps them if they match numbers. If they successfully match a pair of numbers, that player also gets to take another turn. When a player turns over two cards that do not match numbers, those cards are turned face down again and it becomes the next player's turn. Players keep each pair they find. At the end of the game, each pair scores one point. When all the pairs have been found, the player with the most points wins.

Squeeze: Cards are placed face down in a stack on the table. The first player takes two cards and places them face up on the table with a space between them and in order from smallest to largest. The second player does the same. They then turn up the top card in the pile. If this card squeezes between the two cards that player gets a point. If Player 1 has "2" and "5" and Player 2 has "4" and "9" and a "3" is flipped over, only Player 1 gets a point because "3" fits between their numbers. Keep score on a ten-frame. First player to 10 wins.

Got Dots: The subitizing activities listed in the task, *Got Dots*, can also be included and played with the *Numerals*, *Pictures*, *Words Cards*.

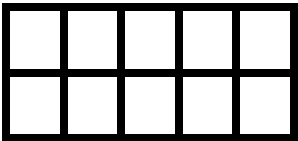
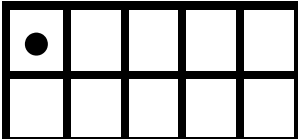
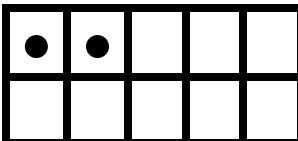
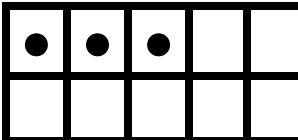
FORMATIVE ASSESSMENT QUESTIONS

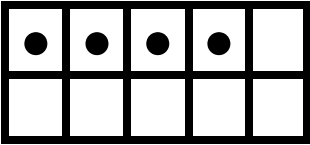
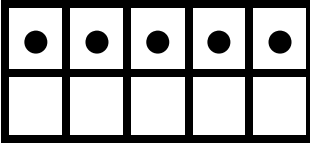
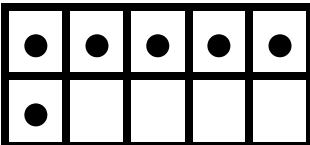
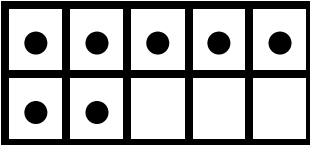
- How do you know that you counted correctly?
- How many dots did you see?
- How do you know?
- What way did you see the dots grouped together?
- How many more dots are in 8 than in 5? How many more dots would you need to make 10? (anchoring 5&10)

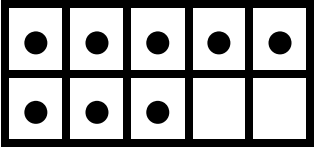
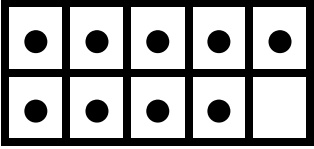
DIFFERENTIATION

Extension and Intervention

- Increasing or decreasing the quantity of dots on a card can help with differentiating subitizing activities.

0	zero	
1	one	
2	two	
3	three	

4	four	
5	five	
6	six	
7	seven	

8	eight	
9	nine	
10	ten	