PRACTICE TASK: Race to 20

Approximately 1-2 days

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.

d. 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.
e. 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.
f. Understand that each successive number name refers to a quantity that is one larger.

(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

Children will learn *how* to count (matching counting words with objects) before they understand that the last count word indicates the *amount* of a set or the *cardinality* of a set. Children who have made this connection are said to have the *cardinality principle*, which is a refinement of their early ideas about quantity. (Van de Walle, 2006)

ESSENTIAL QUESTIONS

- How can playing board games make me a better mathematician?

- What types of questions should I ask myself or my partner when playing a math game?

MATERIALS:

- 2 different colored counters
- 1 number cube (1-6)
- Race to 20 game board

GROUPING:

Partners (2 players)

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION:

- Each player places their counter in the starting square.
- Players take turns using the spinner and move their counter the corresponding number of spaces. Players must state what space they are on and count out loud in sequence to the new space.
- Players alternate turns until one player reaches 20.

FORMATIVE ASSESSMENT QUESTIONS

As students are engaged in Race to 20, observe how students move the counter to locate the new place on the game board. Is the student counting by ones, or are they using a strategy? If so, which one?

- How many spaces do you need to win the game?
- What space are you on now?
- What is the number of the next space?
- How can playing board games make me a better mathematician?

DIFFERENTIATION:

Extension

- Each time a student rolls a die they alternate between counting spaces forwards and backwards. The number of spaces is determined by the amount shown on the die. Example: If player one rolled a six, they would move forward six spaces. If on the next turn, player one rolled a three, they would move backwards three spaces. Students would continue on until a player reached 20.

Intervention

- Because the students must say the numerals aloud, the numerals could also be written on the game board to assist with location identification and sequential counting.

Start 0					5				
									10
Finish 20					15				

Materials:
2 different colored counters
1 number cube (1-6)

Directions:
-Each player places their counter in the starting space numbered 0.
-Players take turns using the spinner and move their counter the corresponding number of spaces. Players must state what space they are on and count out loud in sequence (forward or backward) to the new space.
-Players alternate turns until one player reaches 20.

Race to 20