(adapted from GaDOE Standards of Excellence Framework, Gr 2 Unit 2, pg 65 – 69)

Shake, Rattle, and Roll – Task Description

MATERIALS

- Two six-sided dice
- "Shake, Rattle, and Roll" recording sheet
- 0 – 120 Number lines (available for students)
- 120 charts (available for students)

Goal: The goal of the game is to be the person with the most points at the end of 7 rounds.

Task Directions
Model how to play "Shake, Rattle, and Roll." Provide each pair with a recording sheet and allow students time to complete the task.

Directions to students:
This is a two-player game that will help you practice your rounding skills.

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1. Play with a partner. You will need 2 dice and a recording sheet for each player.
2. Player One rolls two dice. One die will represent the number of tens and the other die will be the number of ones. Form the two possible, two-digit numbers (see example below):

Example: Using the digits 3 and 6, make the numbers 36 and 63. Identify the nearest multiple of 10 for each number. Using mental math, add the new numbers.

The sum of the rounded numbers = 40 + 60 = 100

3. Player One records the dice numbers, the actual smaller and larger numbers, the nearest multiple of each of these, and the sum of the rounded numbers. Player Two must agree with this sum. This ends Player One's first turn.
4. Player Two takes a turn, following steps 2 and 3 above.
5. Players take turns for a total of seven turns.
6. After seven turns, each player looks at the sums of his/her rounded numbers. The player with the highest sum for a SINGLE turn is the winner. Note: Players do not have to find the sum of all seven turns, they need to find their single highest turn and compare it with their partner's single highest turn to determine the winner.

FORMATIVE ASSESSMENT QUESTIONS

These questions may be used to facilitate thinking during student worktime.

- Explain how you found the closest multiple of ten.
- Do you think your estimated sum is higher or lower than the actual sum? Why? How could you check?
- What kinds of situations in life might be easier if you knew how to estimate and add numbers like this?
- How can benchmark numbers help us add?

DIFFERENTIATION

Extension

- Increase the number of dice to 3.

Intervention

- Use number lines and 120's charts to help students who are having difficulty determining to which multiple of ten to round. Use counting up and counting back to determine which multiple is the shortest distance away from the actual number. Help students understand this is the multiple they round to.

"Shake, Rattle, and Roll"
Game Directions

This is a two player game that will help you practice your estimation skills. The goal of the game is to be the person with the most points at the end of eight rounds.

Materials:

- Two six-sided dice
- "Shake, Rattle, and Roll" recording sheet
- 0 – 120 Number lines
- 120 charts

Directions:
This is a two-player game that will help you practice your rounding skills.

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1. Play with a partner. You will need 2 dice and a recording sheet for each player.
2. Player One rolls two dice. One die will represent the number of tens and the other die will be the number of ones. Form the two possible, two-digit numbers (see example below):

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