

## **High Roller**

#### **Mathematical Understanding:**

- Recognizing quantities and numerals that are greater than and less than
- Counting, counting on, using a derived fact, or recalling to find the greatest quantity and numeral
- \*\*Children may use the number grid for support as needed.

**Grade Level:** K-2

Number of Players: 2 to 4 players

per group

#### **Materials Needed:**

- Two dice per group
- High Roller Recording Sheet for recording work
- Number grid from 0-100 per group
- Optional Number Writing page

**NVACS Strand: CC** 

**Object of the Game:** To identify numbers that are greater than and less than and to combine numbers to get the greatest number

#### **Directions:**

Player 1 rolls two dice, identifies and keeps the one die that is greater, and rolls the lesser die again. If doubles are rolled Player can choose to keep the doubles as their two rolls, or roll one die again.

Player 1 then uses a strategy (such as counting all, counting on, using a derived fact, or recalling) to gets the sum for the dots on both dice and records that sum on the recording sheet. Player 1 then write the equation made above the sum on the Recording page and reads it aloud to the other players.

Each Player in turn repeats these steps.

Play continues until each Player has played 2 rounds. (If there are only 2 player, play continues until each Player has played 4 rounds, recording their scores in the space for Player 3 and Player 4.)

Each Player then combines the sums from all his/her rounds to get a total score.

The winner is the player with the greatest total score after all rounds of play.

#### **Optional**:

Players may need to work together to identify the greater number on the dice, to combine the two sums to get total scores for players, and/or to identify which total number is the greatest.



#### **Guiding Questions:**

What do you know?

Where do you think you will begin?

Where are you stuck? What is confusing? What are you wondering about?

What are you going to try?

What did you think about to come to your answer?

What strategies did you use?

#### Differentiation:

To keep all Players involved, other players may be given the responsibility of using the number grid to confirm the greater number and the greatest sum.

On an optional Number Writing page all students can write all player's scores in the appropriate box after each turn of play. After play is complete, this graph may be used in a discussion around which numeral was rolled the most and which numeral was rolled the least.

Children may also choose to roll 3 dice, keep the highest 2 dice, and roll the third dice again. Children would then find the sum of the 3 numbers. Children may record their dice quantities and sums on the back side of their recording sheet or use other blank space.

#### **Game Trajectory:**

**Pre K-K:** Players roll dice to recognize numerals, identify which is greater than or less than, write numerals, and determine the greatest value.

- **K-2:** Players roll dice to recognize numerals, identify which is greater than or less than, and determine the greatest value.
- **3-5:** Players roll dice and use the value to create the largest factor possible. The factors are combined to create the largest sum possible.
- **5-6:** Players roll three or more dice and multiply using three or more factors. Players may also keep and use a two-digit number to create a factor.

### Clean up Checklist for Game Bag:

Dice – 2 per group

**Pencils** 

Laminated Master of High Roller directions sheet

High Roller directions copies (extras)
High Roller recording sheet copies (extras)
Hundreds Grid copies (extras)
Number Writing pages copies (extras)



# **High Roller Recording Sheet:**

Player 1	Player 2	
High score for round 1	 High score for round 1	
High score for round 2	 High score for round 2	
Total	 Total	
Player 3	Player 4	
High score for round 1	 High score for round 1	
High score for round 2	 High score for round 2	
Total	 Total	



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