Bingo Deconstructed

≈20-30 mins

Mathematical Standards of Practice:

- MP 1 Make sense of problems and persevere in solving them.
- MP 3 Construct viable arguments and critique the reasoning of others.
- MP 6 Attend to precision.

Objective:

The objective of the game is to be the first to get Bingo by filling in a full line (any direction) or filling in a full card.

Set-Up Instructions:

- 1. Explain the objective, rules, and directions of the game to the class.
- 2. Assign roles.
- 3. Play!

Materials Needed:

- 1. Printed out Bingo card
 - Recommendation(s): Laminate Bingo cards for easy reuse.
 - Alternative(s): Whiteboards for hand-drawn Bingo cards or use editable PDF files.
- 2. Pencil or dry-erase marker
- 3. Bingo spinner cage with Bingo balls
 - Alternative(s): Mix Bingo balls in a bag, hat, or bucket. Or use a Bingo number generator.
- 4. Marker Chips (optional)

Game Instructions:

- 1. To start the game, a Bingo card and marker chips must be distributed to each student.
- 2. Each student then places a marker on the center "Free" space on their Bingo card.
- 3. The teacher spins the spinner and shares out the call-out letter and number. The teacher may assign a student to do this as well.
- 4. Students then look for the letter and number on their cards. If the number appears on a student's card, students must think of a way to mathematically get the number. If the

student is able to think of a way to get the number mathematically, they must write the equation/expression and place the chip on that square.

- 5. If the number does not appear on the student's card and there is a blank square available students can write it in as long as they are able to think of a way to get the number mathematically.
- 6. Repeat the process until a student has claimed a full line or full card by calling out *Bingo*!

Rules:

- When a Bingo number is called, write an expression or equation that equals that number. For example, B8, possible answers: $\sqrt{64}$, $35 \div 7 + 3$, 2^3
- Multiplying/Dividing/Adding/Subtracting by 1 is not allowed.
- If using the basic operations of Multiplying/Dividing/Adding/Subtracting, then you must use more than one in the answer.
- You cannot use the same basic operation twice in the answer.

Suggestions for Added Difficulty:

- All answers must be in equation form and must include one variable.
- Focus on exponentials.
- Answers must contain only one or a combination of numbers. For example, the answer can only contain 4s.
- Each round has a different theme. For example, in the first round, students must write their answers as a sum of exponentials.

Class Roles:

- 1. The **captain** is ready to spin the spinner and share out the call-out letter and number.
- 2. The **recorder** keeps a record of the numbers and wins that have been called out.
- 3. The **manager(s)** confirm that the winning player's card is correct.
- 4. The **balancer** assists in verifying the victory by double-checking that the winning player's card is accurately completed.

Play as a Team (Optional):

Allow students to team up with a classmate. In teams, students must play with two Bingo cards and both cards must be filled with unique answers. No duplicate answers are allowed. This version will aid in the development of class community by requiring students to collaborate and vocally justify their reasoning to their peers.