

Hot or Not?



Strands:

Number & Quantity	X
Algebra	
Functions	
Geometry	
Statistics & Probability	

Materials:

- Scrap paper
- Pencil

Where:

Outside	
Inside	X
On-line	
On-site	



In this game for grades 2 and up, use your logic and knowledge of place value to guess the target number in the least number of tries. (2 to 4 players)

Set-Up:

- Give each player a pencil and piece of paper.
- The youngest player begins the game as the Number Creator.

Object of the Activity: To increase understanding of place value and to practice stating number names correctly.

Playing the Game:

1. The Number Creator writes down a four-digit number, keeping it hidden from the other players. Play begins with the person to the left of the Number Creator.
2. On your turn, guess the number and write it down on your own sheet of paper.
3. Read your number aloud, saying the full number name using correct place value.
4. The Number Creator responds by naming the places of the digits that are hot, warm, and cold while also stating the place value of the digit.

Hot: Digit is correct and in correct place.

Warm: Digit is correct, but not in correct place.

Cold: Digit is incorrect.

Example: "The digits in the thousands and tens places are warm. The digits in the hundreds and ones places are cold." Play moves to the left.

5. As other players are receiving feedback from the Number Creator, use the Number Creator's feedback to form a new guess for your next turn.
6. Repeat steps 3 through 5 until the target number is guessed.
7. Hot or Not? continues until all players have a turn as Number Creator.

To Win:

The first player to guess the target number wins the round.

Think About It:

1. What does the clue, *warm*, tell you?
2. If a digit is *cold*, how does that help you?
3. How did you choose your initial guess?

Variations:

Expanding the Number: Instead of guessing by saying the number names, players must say the number in expanded form.

Use Fewer Digits: If a player is having difficulty with strategy, play the game with fewer digits.

Give Fewer Clues: For an added challenge, do not reveal the place values of the digits. Only tell how many digits are hot and how many are warm.

Team Play: Play the game using the same rules, with players split into two teams.