# Strand: Hot or Not?

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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?
- If a digit is cold, how does that help you?
- 3. How did you choose your initial guess?

## Where:

Number &

Quantity

Algebra

**Functions** 

Geometry

Statistics & Probability

Materials:

Pencil

Scrap paper

Outside
Inside X
On-line
On-site



#### Variations:

- Instead of guessing by saying the number names, players must say the number in expanded form.
- If a player is having difficulty with strategy, play the game with fewer digits.
- 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.
- Play the game using the same rules, but split into two teams.