## Mystery Number

## Object of the Game

Be a number detective. Use the clues to guess the mystery number.

## Materials

- 1 set of Number Cards (one each of cards 0-10)

Print the number cards or make your own. You can play an online version of this game in the free Number Line app at apps.mathlearningcenter.org/number-line/?1na0kgrf.

- Pencils or pens
- Scratch paper

$$
\begin{array}{|l|l|l|l|l|l|l|l|l|l|l|}
\hline 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & 10 \\
\hline
\end{array}
$$

## Skills

This game helps us practice:

- Numeral order
- Counting within 10
- Comparing within 10


## How to Play

1. Get ready to play:
» Decide who will choose the mystery number, and who will be the number detective and guess the number. To start, it's a good idea for an adult or older player to choose the mystery number and for the younger player to be the number detective.
» The player choosing the mystery numbers picks a number between 0 and 10 and writes it on a piece of scratch paper, hiding it from the number detective.
» The number detective places the number cards face-up in a line, in order from 0 to 10.

| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

2. The number detective guesses the mystery number by asking, Is the number $\qquad$ (names a number)? The number chooser answers by saying one of the following:
» The mystery number is less than $\qquad$ (the number detective's guess).
» The mystery number is greater than $\qquad$ (the number detective's guess).
3. The number detective turns over the cards that are eliminated by their guess and the clue.


Charlotte: Is the mystery number 8?
Mom: The mystery number is less than 8.
NOTE: Your child might be unsure if they should turn over the number they have guessed. In this example the number detective guessed 8 . If needed, ask a follow-up question: What about 8 ? Should we turn it over if the mystery number is less than 8 ? Why or why not?
4. Play continues until the number detective identifies the mystery number by guessing it exactly or by using clues to turn over all the cards that aren't the mystery number.


Charlotte I know! The mystery number is 5!
5. Have fun!

## Tips for Families

Before you play:

- Consider having your child make their own number cards. This helps them practice numeral writing-an important skill in kindergarten!
- The terms greater than and less than will probably be familiar to your child, but you may want to review them. Some children might be more familiar with the term more than. Feel free to use either.

During the game:

- Ask questions:
» Which numbers are less than your guess?
» Which numbers are greater than your guess?
» What numbers could the mystery number be?
» Can the mystery number be ___? Why or why not?
» Why did you guess that number?


## Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below.

- Instead of guessing a number, have the number detective ask questions such as:
» Is the mystery number greater than $\qquad$ ?
» Is the mystery number less than $\qquad$ ?
- In this version the number chooser will respond with yes or no.
- Challenge the number detective to guess the number with 4 or fewer clues.
- Play with a different range of numbers. If you're ready for a challenge, try playing with the numbers from 0 to 20 . You can also focus on a range of numbers, such as the teen numbers from 11 to 19.
- When your child is confident with the game play, switch roles, having your child be the number chooser while you play the number detective.
- You could also try playing the game using the free Number Line app. In this version, the number detective uncovers numbers as they are eliminated by clues. The game is ready to play with the numbers 0-10 at apps.mathlearningcenter.org/number-line/?1na0kgrf.



