## Feel for Shapes

## GOAL

Children identify shapes by feeling them (not looking).

## MATERIALS

Plastic, wood, or paper shapes


Bag or another container you cannot see through


VOCABULARY


Circle
Triangle
Rectangle
Square
Trapezoid

## QUESTIONS

Are the sides straight or curved?
How many sides?
How many vertices (or corners)?
Are the vertices/corners pointy or wide?

## HOW TO PLAY

1. Place one of each shape on the table for all to see. Place the remaining shapes in the bag.

Pick up two shapes and ask, "What do you notice about these shapes? What is the same? What is different?"


Encourage children to talk about the attributes, like the number of sides or vertices, that they will use to find a shape by feel.

Then, choose two new shapes for the children to talk about.
2. When children are ready, have them take turns holding the bag of shapes. Point to one of the shapes on the table, and ask the child holding the bag to find that same shape in the bag. Make sure they find the shape by feel only-no peeking!
3. You could say, "Okay, I put all of our extra shapes in this bag. I'm going to point to one of the shapes on the table, and I want you to think to yourself: what do you notice about that shape? Then, put your hand inside the bag and find that shape by feeling it. You can only use your hand to feel, not your eyes to look. When you think you've found it, describe it to us before you take it out. Then, you can take it out of the bag so we can all see it and talk about your shape."
4. Hand the bag to the next player, and choose a new shape for them to find by feel.

## TIPS FOR PLAYING

- You can use lots of different types of objects to play the game, such as toys, utensils, art supplies, anything that children can touch. Ask children to describe the objects (soft, fuzzy, pointy, round).
- As children get more practice with noticing and describing the attributes, or characteristics, of shapes and objects, they will be ready to take on more challenge in this game. You might want to start with only three shapes and, as children are ready, add more shapes.


## WHAT CHILDREN ARE LEARNING

- Knowing about a shape is more than just knowing the shape's name. This game helps children pay attention to the attributes, or characteristics, that define a shape.
- By describing the shapes, children are building their language and vocabulary skills. And, they are practicing an important mathematical habit of mind-giving precise descriptions of what they see using evidence.


## SHAPE ATTRIBUTES

| Circle | No vertices or corners. The curve is always the <br> same distance from a center point. |
| :--- | :--- |
| Triangle | Exactly 3 straight sides. |
| Rectangle | Exactly 4 straight sides and 4 right angles (like <br> the corner of a piece of paper). |
| Square | Exactly 4 straight equal sides and 4 right <br> angles. |
| Trapezoid | Exactly 4 straight sides. One pair of opposite <br> sides parallel (like train tracks). |
| Rhombus | Exactly 4 straight equal sides. Both pairs of <br> opposite sides are parallel (like train tracks). |
| Pentagon | Exactly 5 straight sides. |
| Octagon | Exactly 6 straight sides. 8 straight sides. |

* A note about the vocabulary: A vertex (plural: vertices [vur•tuh • seez]) is where two sides meet. An angle is the space between where two lines meet. Angles are usually measured in degrees. For example, a square has four vertices and four $90^{\circ}$ angles.


## MATH TOPICS

## Shapes and Geometry

## VIDEO



## Watch Game Video

View the QR code in your smartphone's camera app or $Q R$ code reader to watch a video that shows how to play Feel for Shapes.

