Pattern Blocks Shape Sort

Ages 2+

1-4 players

10-15 minutes

Materials:

Any pattern blocks or pattern block shape cutouts (3-5 of each shape)

Square

Rhombus (diamond)

Triangle

Trapezoid

Hexagon

GOAL of the game:

To sort the pattern blocks by shape into multiple sets

VOCABULARY words:

square rhombus

triangle trapezoid

hexagon

QUESTION prompts:

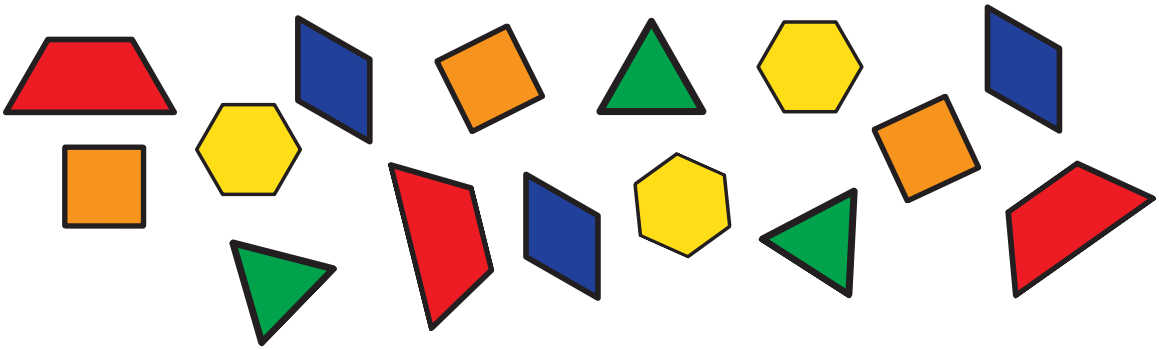
What do you notice about these shapes?

Which shapes do we have the most of?

Which shapes do we have the least of?

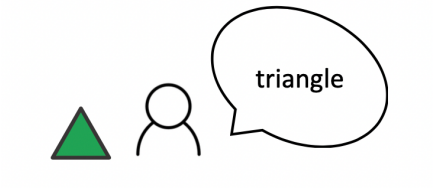
Setup:

1. Mix the shapes into a pile on the table or on the floor for all to see

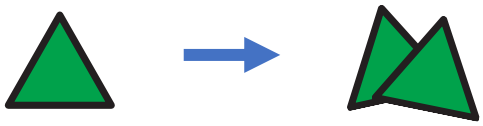


Play:

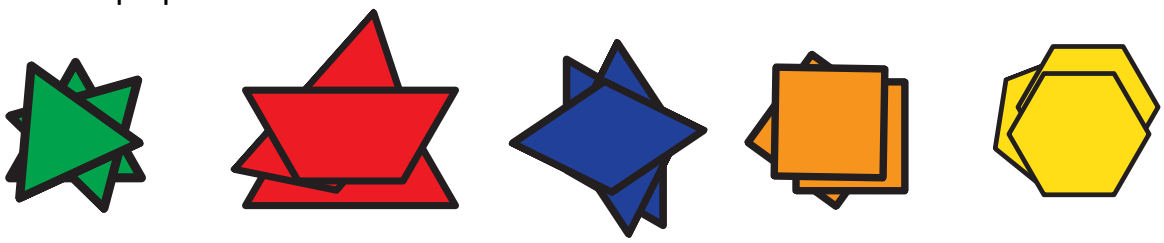
Take turns picking up one shape and telling the other players what the shape is.



Put the shape in a pile according to its shape. If there is already a pile of that shape, add your shape to the pile.



Once all of the cards are sorted by shape, take turns counting how many are in each shape pile.



Ask comparison questions about the quantities in each pile:

"Which shape do we have the most of?"
"Which shape do we have the least of?"
"Are there more squares than triangles? How many more?"
"There are three hexagons. If we added one more hexagon, how many hexagons would there be in all?"

What children are learning:

- This game helps children learn that items can be sorted and sorted sets can be counted and compared.
- Comparing quantities helps children think carefully about numbers. This is an important skill! Early practice with comparing quantities supports children's understanding of relations between real-world quantities (e.g., that one dollar is more than three quarters).

The Exact Match

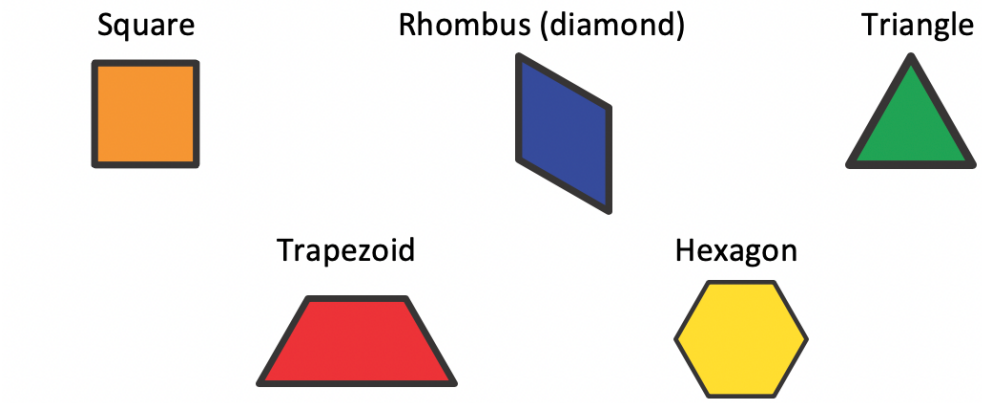
2-6 players

Ages 3+

10-15 minutes

Materials:

Any pattern blocks or pattern block shape cutouts (3-5 of each shape)



GOAL of the game:

Children observe the attributes of a shape and identify its exact match from a pile of shapes

VOCABULARY words:

vertex*	angle*
side	triangle
square	rhombus
trapezoid	hexagon

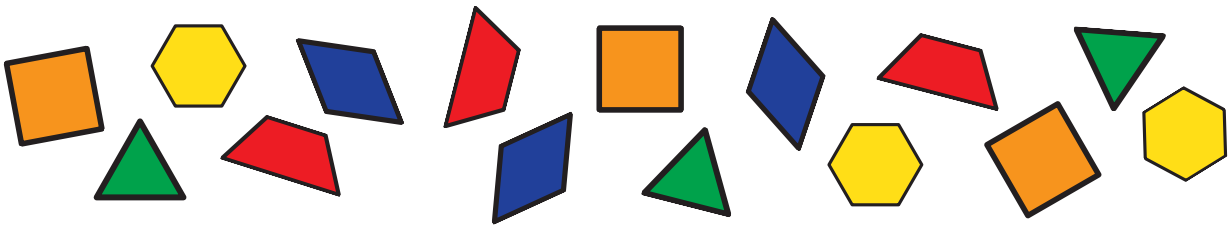
QUESTION prompts:

What do you notice about these shapes?

- About their sides?
- About their vertices?*
- About their angles?*

Setup:

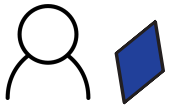
Shuffle the pattern block shapes and lay them down on a table or on the floor



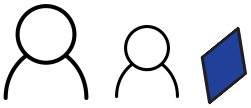
*A note about the vocabulary: A *vertex* (plural *vertices*) is where two sides meet. An *angle* is the space between where two lines meet. Angles are usually measured in degrees. For example, a square has four *vertices* and four 90° *angles.*

Play:

Choose one shape from the pile (e.g., a rhombus), hold it up, and describe it. Say, "I have a rhombus. A rhombus is shaped like a diamond. It has four sides and four vertices."



"Look at all of our shapes here on the table. Can you find the *exact* match of my rhombus? Find a shape that is *exactly* the same as my rhombus." Wait for the child to look through the shapes and select a matching rhombus.



Once the child finds the match, have them explain how they know it's an exact match.

Note: At first, children may match based on color. That's okay! Ask attribute questions to help them notice and talk about the sides, vertices, and angles of the shapes.

"Is your shape an *exact* match of my shape? How do you know?"
"How many sides does your shape have? Can you point to each side?"
"How many vertices? Can you point to each vertex?"
"How is the rhombus different from a square? How is it different from a triangle?"

Add the shape back to the pile and continue finding the exact matches of the other shapes.

What children are learning:

- Exact matching is an important beginner sorting skill! Exact match activities help children recognize the attributes of objects. With practice, children can use their knowledge of attributes to sort and compare sets of objects and to create patterns.
- Exact match activities can use all different items! Have children find the exact matches of socks in the laundry or treats in a trail mix. Make sure children explain their match using attribute words; "the chocolate chips match because they are *small* and *pointy on top* and the peanuts match because they are *ovals*."