

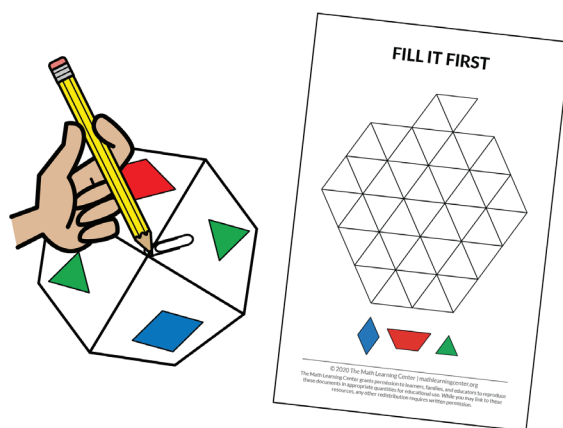
# Fill It First

## Object of the Game

Players take turns spinning the spinner and coloring in shapes on their Fill It First game board. The winner is the first player to fill their game board exactly.

## Materials

- Crayons, markers, or colored pencils in green, blue, and red. If you don't have the exact colors, it's okay. Just agree on a color for each shape: triangle, rhombus, and trapezoid.
- 1 Fill It First Spinner
- Pencil and paper clip or safety pin
- 2 Fill It First Game Boards



If you don't have copies of the Fill It First Game Board or can't print copies right now, you can still have lots of learning fun with the free Pattern Shapes app at [www.mathlearningcenter.org/resources/apps/pattern-shapes](http://www.mathlearningcenter.org/resources/apps/pattern-shapes).

## Skills

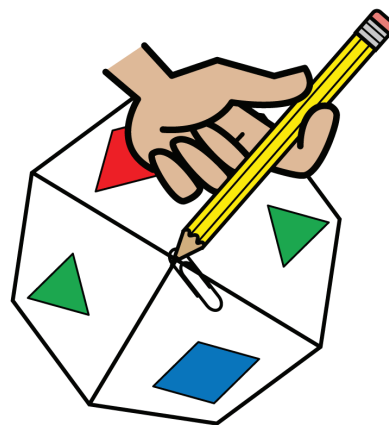
This game helps us practice:

- Identifying shapes
- Combining shapes to make new shapes

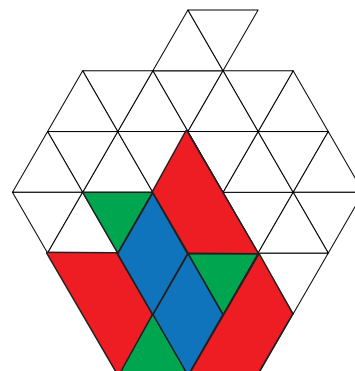
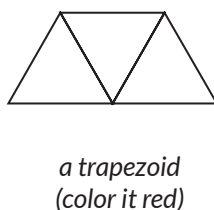
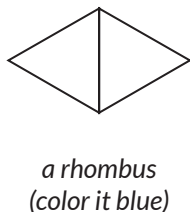
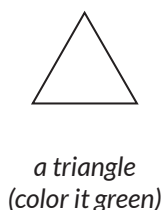
## How to Play

You might have played a game like this one at school with pattern blocks. At home, you can color in the shapes instead.

1. Play with a partner. Each of you will need a game board.
2. Decide who will go first.
3. Take turns using the pencil and paper clip or safety pin to spin the spinner.



4. Each time you spin one of the three shapes (triangle, rhombus, trapezoid) you can color it in anywhere on your game board.



5. The winner is the first player to fill their game board. The catch is, you have to fill it exactly. If you only have room at the end for a blue rhombus, and you spin a red trapezoid, you have to try for a rhombus or a triangle on your next turn. Keep playing until one player fills their board entirely.
6. Have fun!

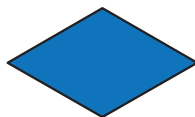
## Tips for Families

Before you play:

- Talk about the shape names. Not sure? Let's say the names together. The green shape is a *triangle*. The blue shape looks like a diamond, but it's called a *rhombus*. The red shape is called a *trapezoid*.



Triangle



Rhombus



Trapezoid

During the game:

- Talk about your strategies and how you're choosing where to color in the shapes:
  - » *I see you just spun a trapezoid. Do you see a good place to put it on your board? How many of the little triangles will you be able to cover with that trapezoid?*
  - » *What shape do you hope to spin next? Why?*
  - » *It looks like we're getting close to the end. What shapes do you need to finish filling your game board? You say you need three blue rhombuses? Is there anything else you could use to fill those spaces?*

After the game:

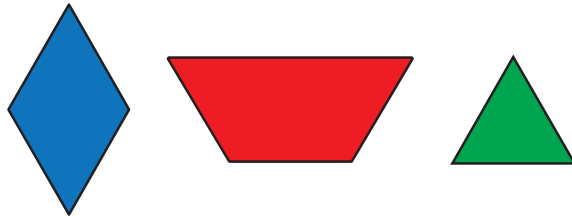
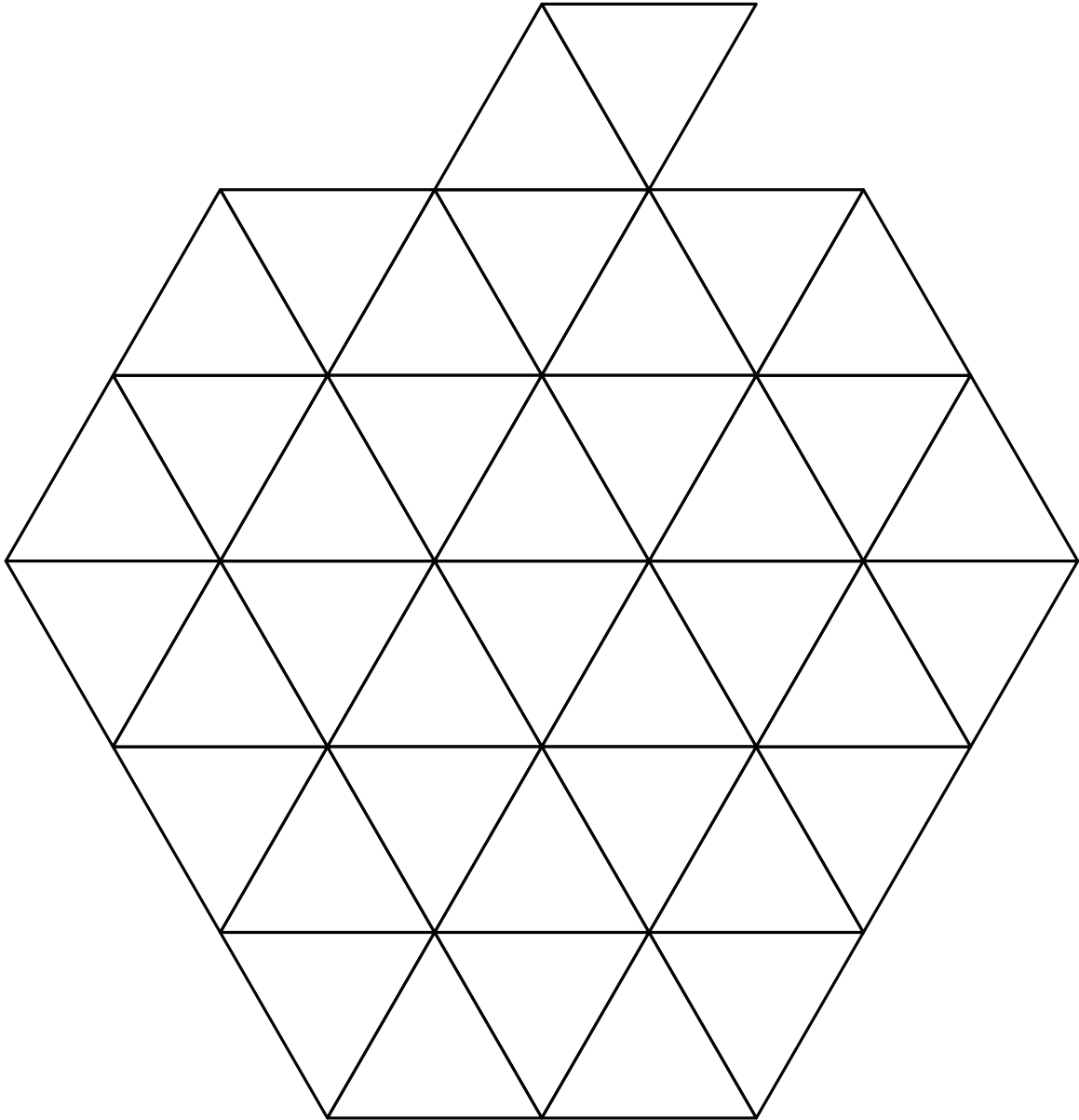
- Ask questions:
  - » *How many pieces did you color to fill your game board?*
  - » *What do you think is the smallest number of pieces needed to fill the board?*
  - » *What would be the most pieces needed to fill the board?*

## Change It Up

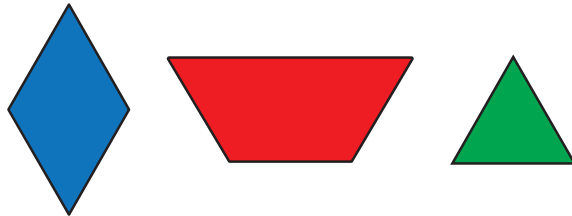
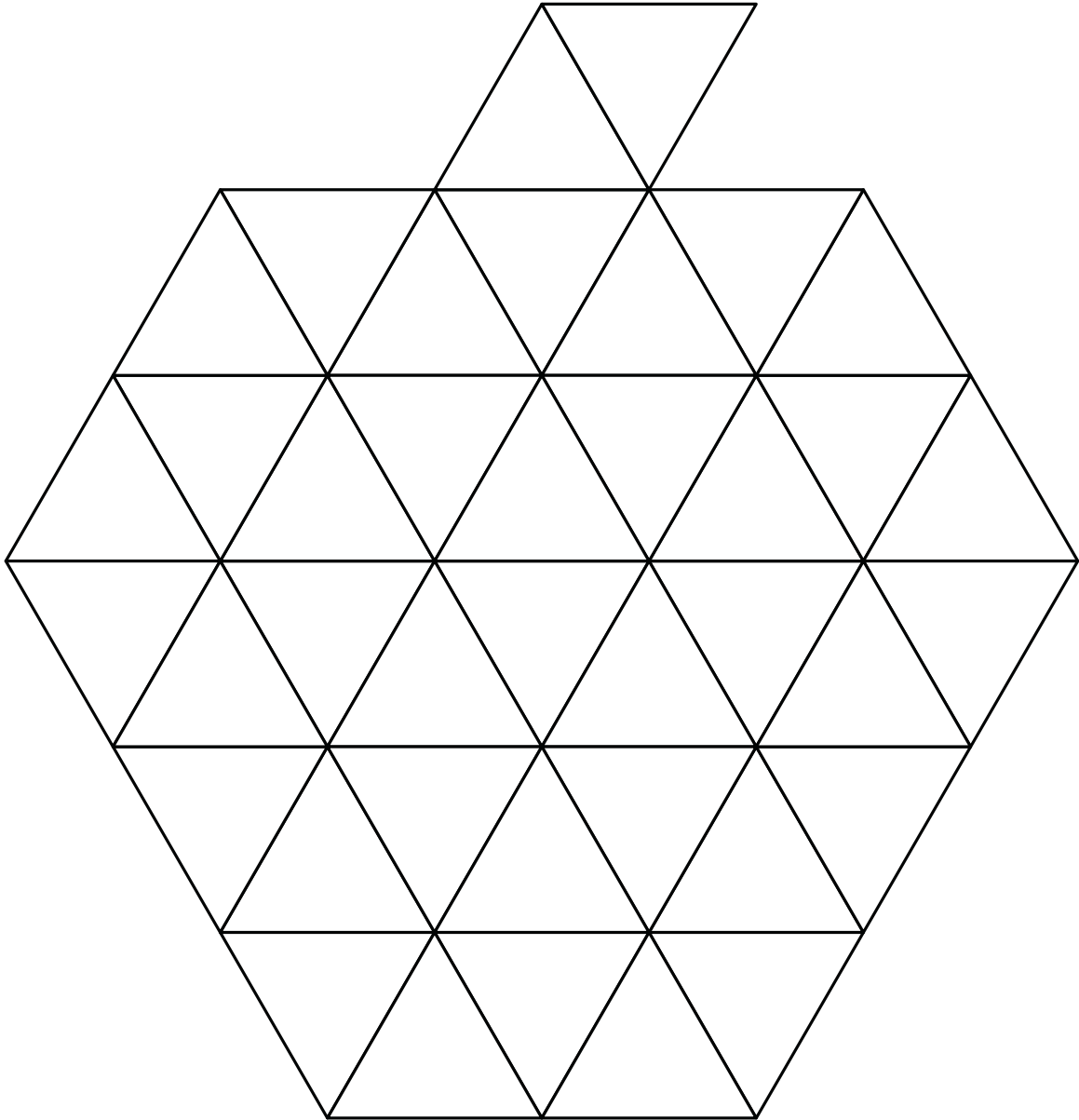
Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below.

- Play with one game board. In this version players take turns coloring shapes on the same game board. The winner is the player to color the last shape.
- Play as usual, but use just two shapes (triangles and rhombuses, for example, or trapezoids and rhombuses). If the spinner lands on the shape not being used, the player gets to choose which shape to use. Is it possible to fill the entire board?

# FILL IT FIRST



# FILL IT FIRST



# FILL IT FIRST SPINNER

