

Hands-On Fun with Pattern Pieces

Welcome to Hands-On Fun with Pattern Pieces! This unit is designed to give your kids and students hours of hands-on fun while they sharpen their critical thinking skills and put their creativity and problem-solving skills to work. There are more than 200 patterns separated into 24 themes. This unit has three levels:

- Level One is the basic level. Students are given a picture of a desired object broken down into the shapes (pattern pieces) needed to complete it. They are also given the number of each type of shape to use. They need to identify and count those shapes and assemble them in a way that matches the picture.
- Level Two is the intermediate level. Students are given the outline of a desired object and the number of each shape to use. Students need to identify and count those shapes and then determine what way they can assemble them in order to yield the desired object.
- Level Three is the hardest level. Students are given the outline of a desired object and the total number of shapes to use. It is up to them to determine how many of which shapes they can use to create the desired result.

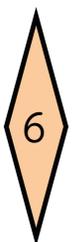
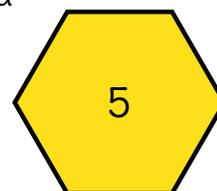
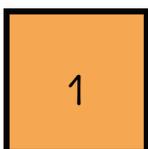
It is important to note that there are times when there is more than one correct answer. In Level Two, students may find more than one way to assemble the given pieces to match the outline. In Level Three, there are multiple ways to create some of the objects. This is especially true in Levels Two and Three when making the mosaic patterns and fun patterns at the end of the unit. Because the specific pattern is not given in the image students are to recreate (as it is in Level One), they may find many ways of creating a pattern to fit the outline. The goal in all these puzzles is creativity and following directions, not matching the answer key exactly.

There are several outlines of objects that include a gray shape. This is to represent an area where there should be no puzzle piece. There are numerous such areas; the only times they are grayed out on the example is when the area closely matches the shape of a puzzle piece in the unit.

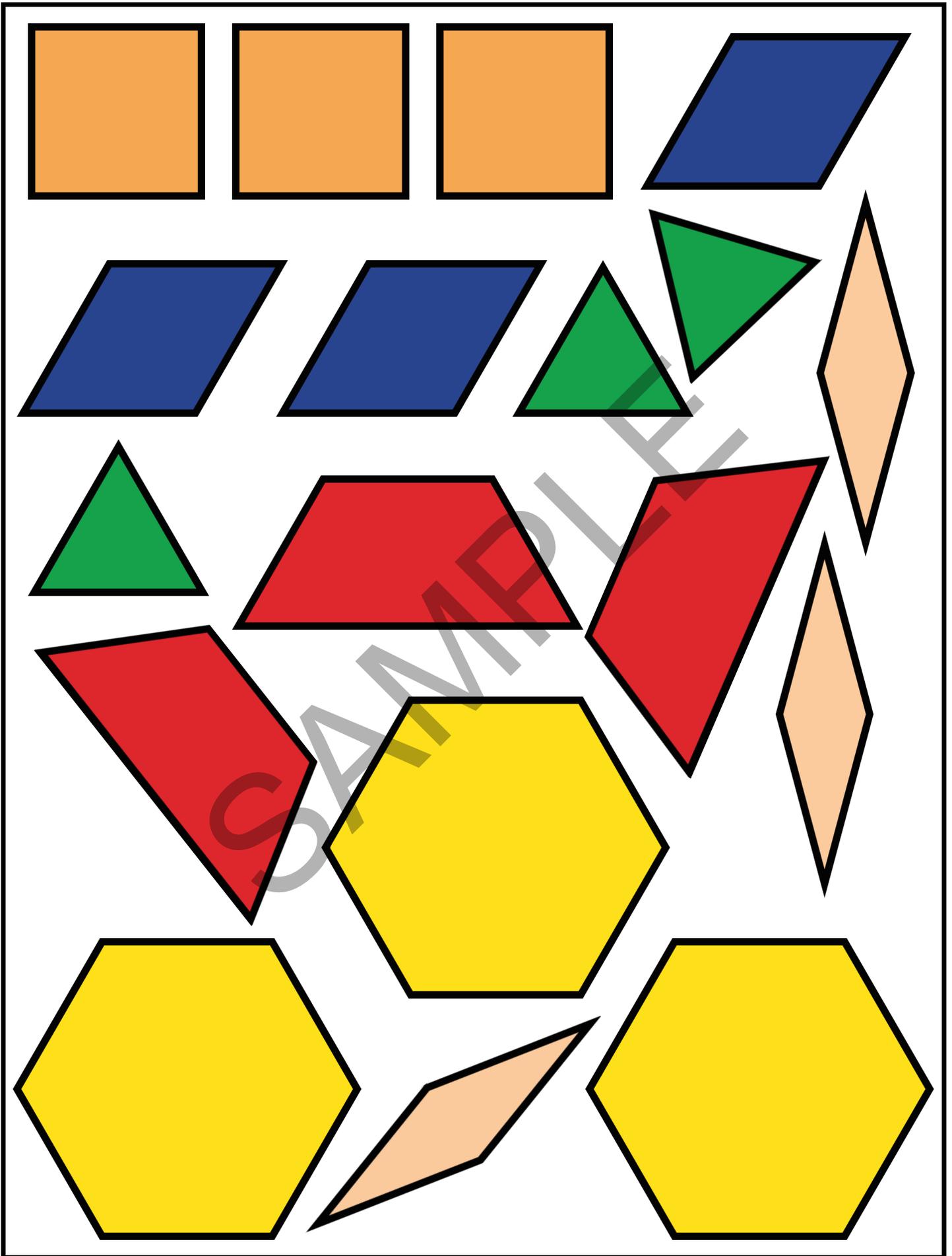
There are many ways to use this resource. One option is to print the pages and make them available to your students in a binder. They can flip to whatever theme they are interested in and dive into creating!

Quick shape identification key:

1-Square 2-Diamond 3-Triangle 4-Trapezoid 5-Hexagon 6-Thin Diamond









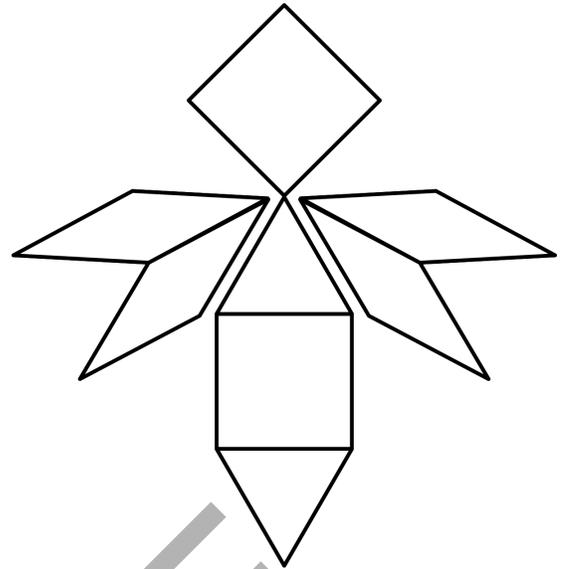


Make a bee out of:

2 squares

2 triangles

4 thin diamonds



Make a bird out of:

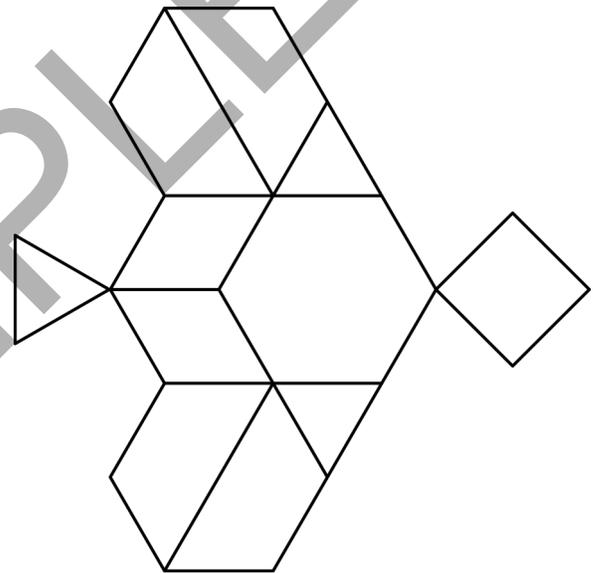
4 trapezoids

1 hexagon

3 triangles

1 square

2 diamonds



Make a birdhouse out of:

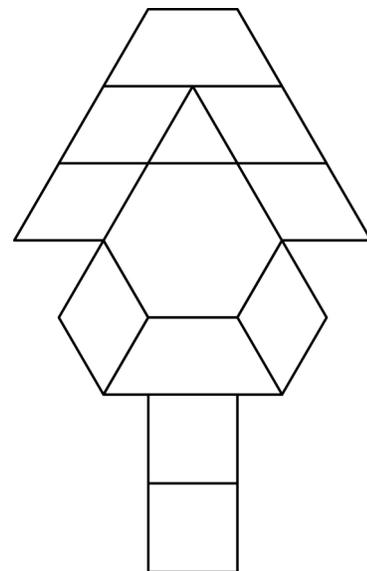
2 trapezoids

1 hexagon

1 triangle

2 squares

6 diamonds



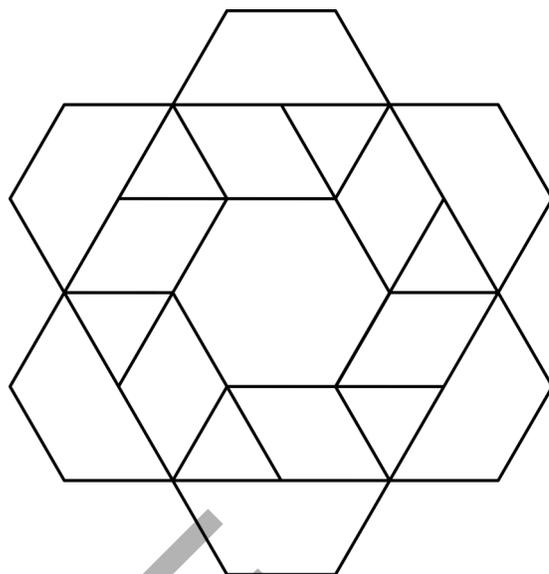
Make a blossom out of:

6 trapezoids

6 triangles

6 diamonds

1 hexagon



Make a bug out of:

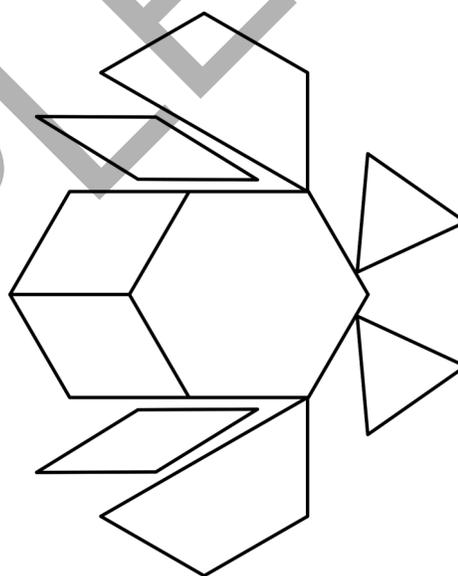
2 trapezoids

1 hexagon

2 triangles

2 thin diamonds

2 diamonds



Make a flower out of:

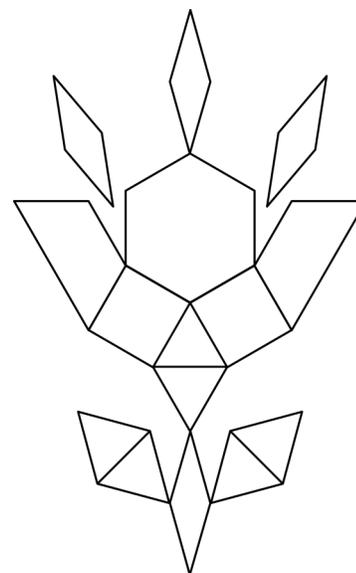
2 trapezoids

1 hexagon

6 triangles

2 squares

4 thin diamonds



Make a tulip out of:

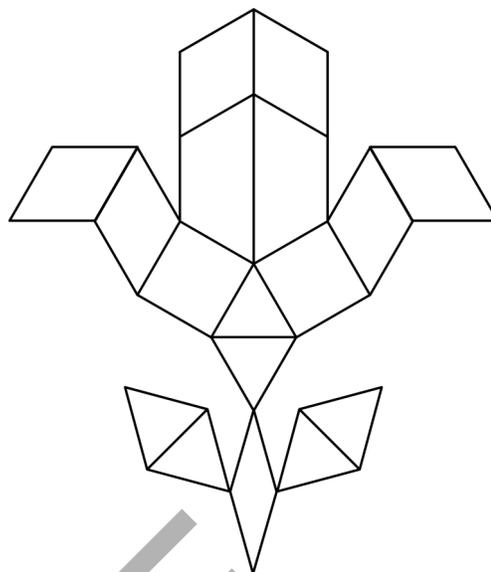
2 trapezoids

2 squares

6 diamonds

6 triangles

1 thin diamond



Make an umbrella out of:

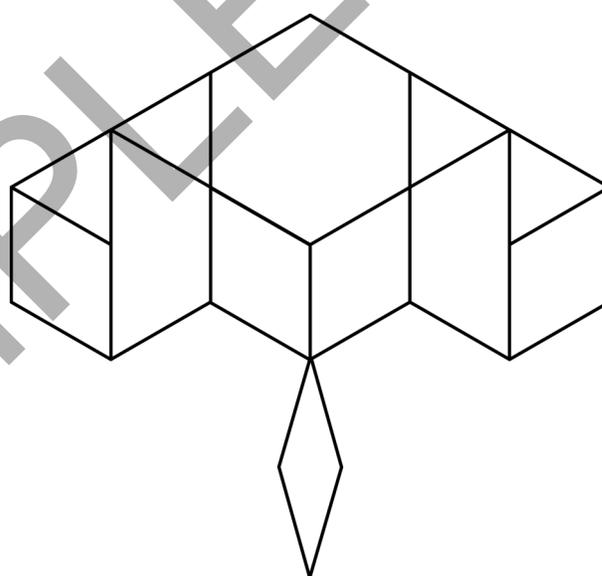
2 trapezoids

1 hexagon

4 triangles

1 thin diamond

4 diamonds



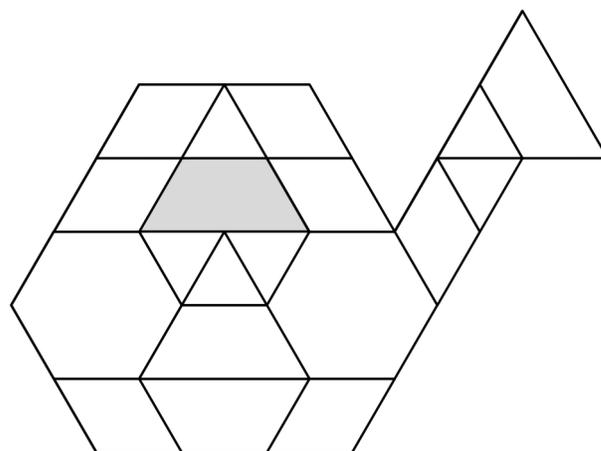
Make a watering can out of:

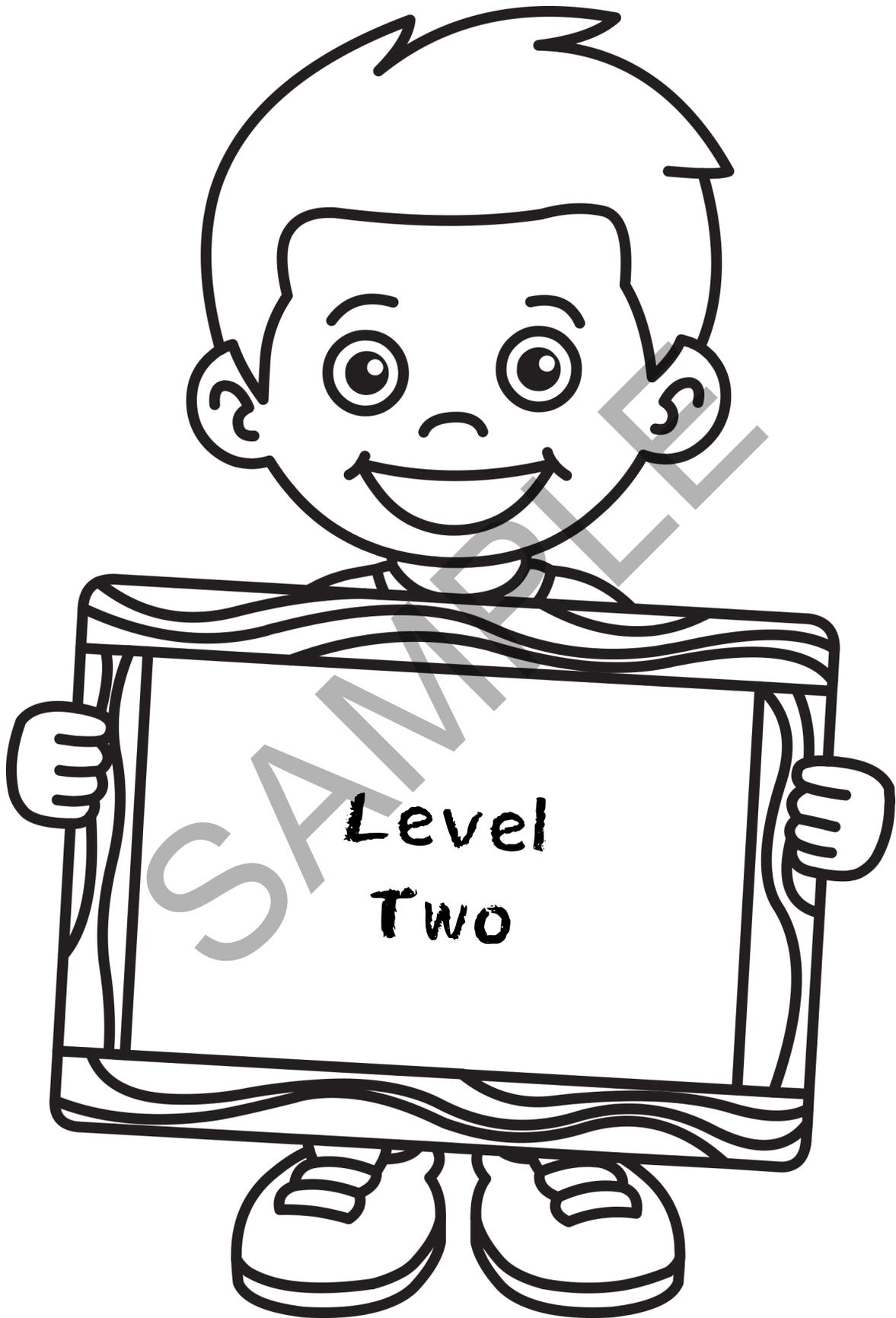
3 trapezoids

2 hexagons

6 triangles

7 diamonds





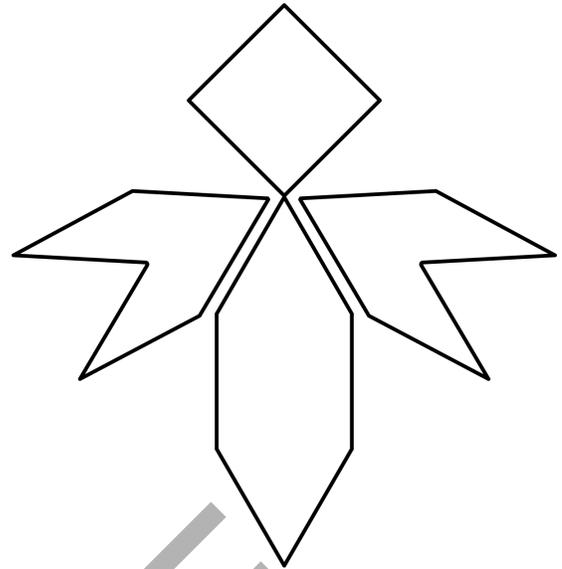


Make a bee out of:

2 squares

2 triangles

4 thin diamonds



Make a bird out of:

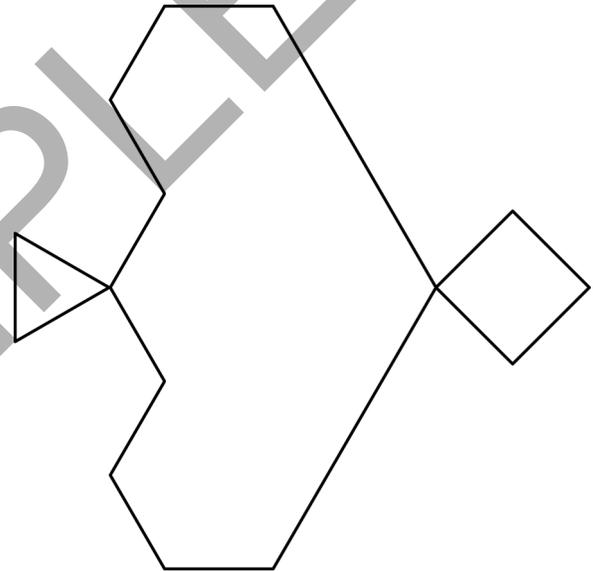
4 trapezoids

1 hexagon

3 triangles

1 square

2 diamonds



Make a birdhouse out of:

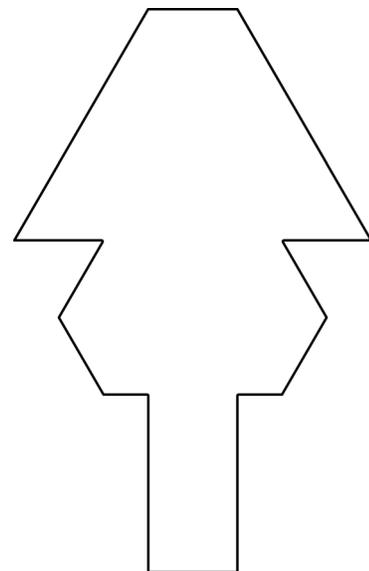
2 trapezoids

1 hexagon

1 triangle

2 squares

6 diamonds



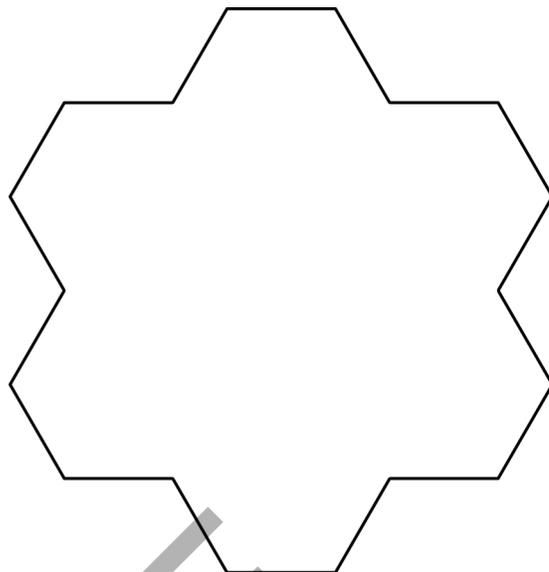
Make a blossom out of:

6 trapezoids

6 triangles

6 diamonds

1 hexagon



Make a bug out of:

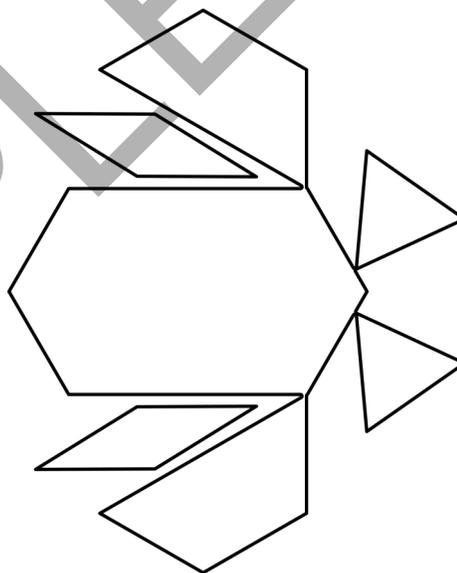
2 trapezoids

1 hexagon

2 triangles

2 thin diamonds

2 diamonds



Make a flower out of:

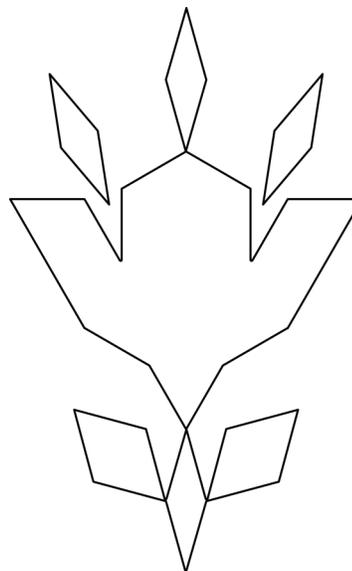
2 trapezoids

1 hexagon

6 triangle

2 squares

4 thin diamonds



Make a tulip out of:

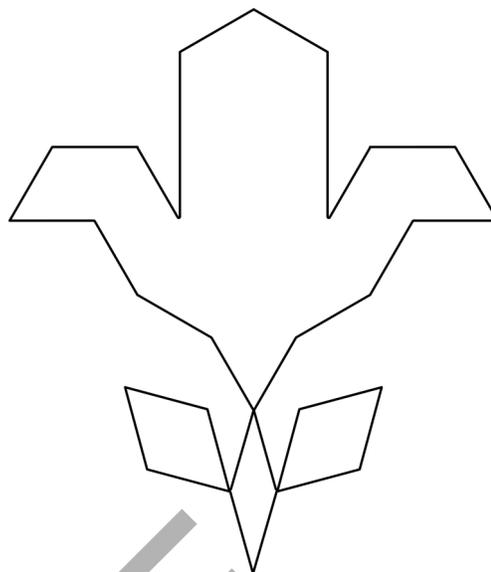
2 trapezoids

2 squares

6 diamonds

6 triangles

1 thin diamond



Make an umbrella out of:

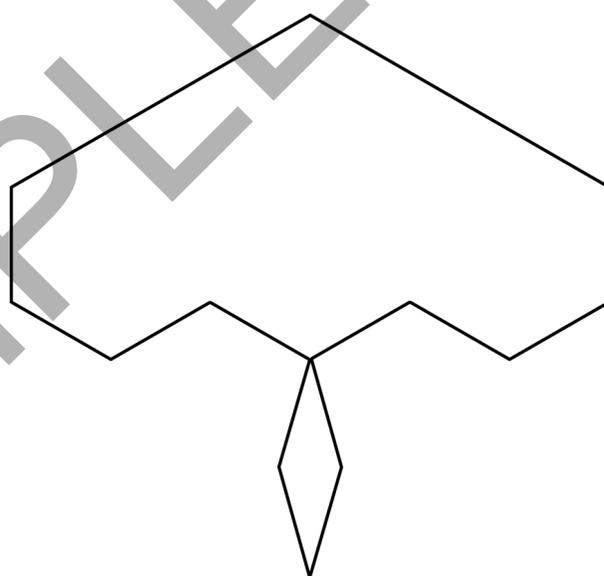
2 trapezoids

1 hexagon

4 triangles

1 thin diamond

4 diamonds



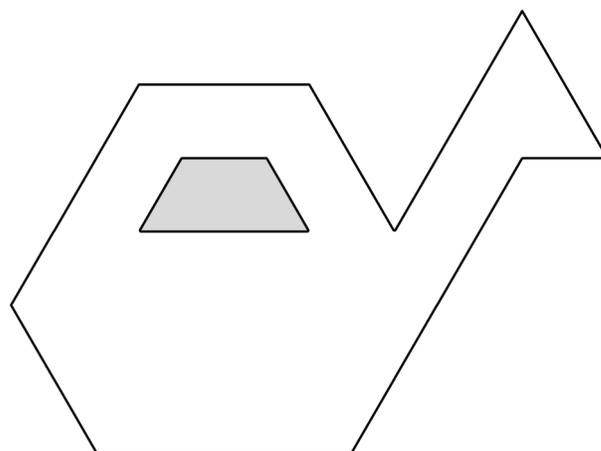
Make a watering can out of:

3 trapezoids

2 hexagons

6 triangles

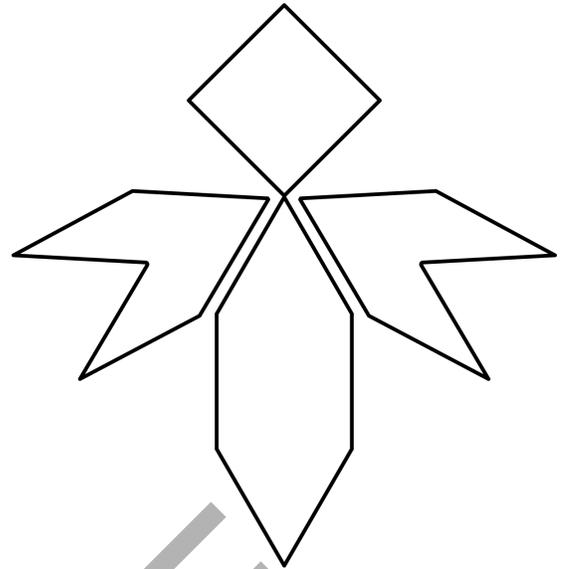
7 diamonds



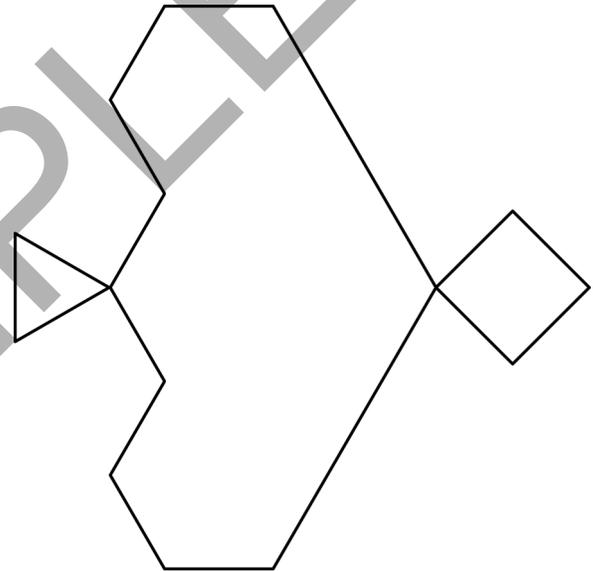




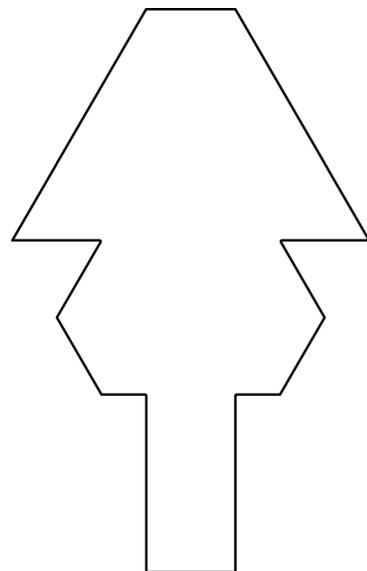
Make a bee out
of 8 shapes.



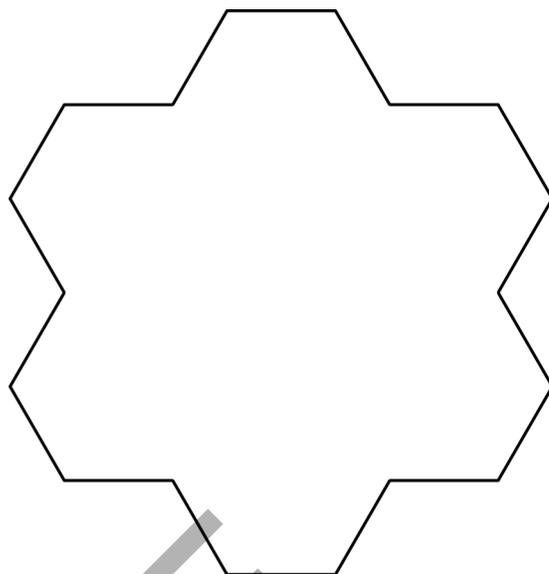
Make a bird out
of 11 shapes.



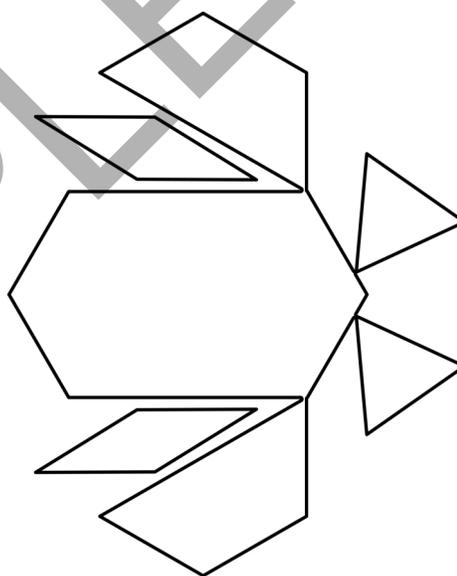
Make a birdhouse out
of 12 shapes.



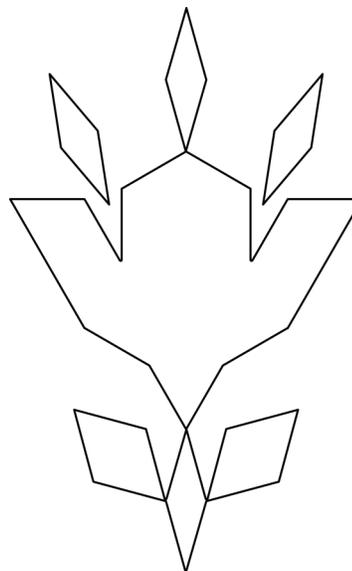
Make a blossom out
of 19 shapes.



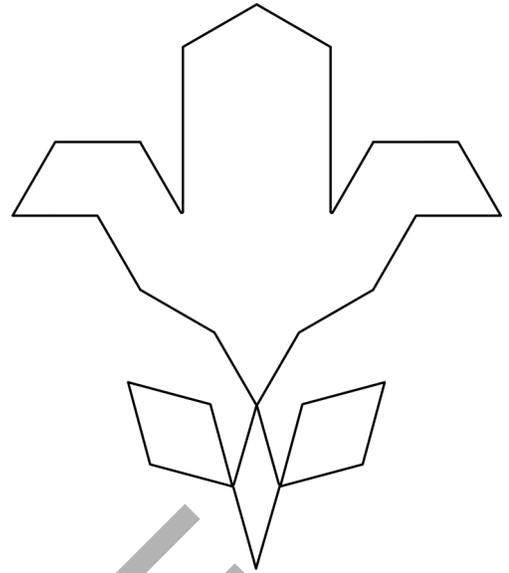
Make a bug out
of 9 shapes.



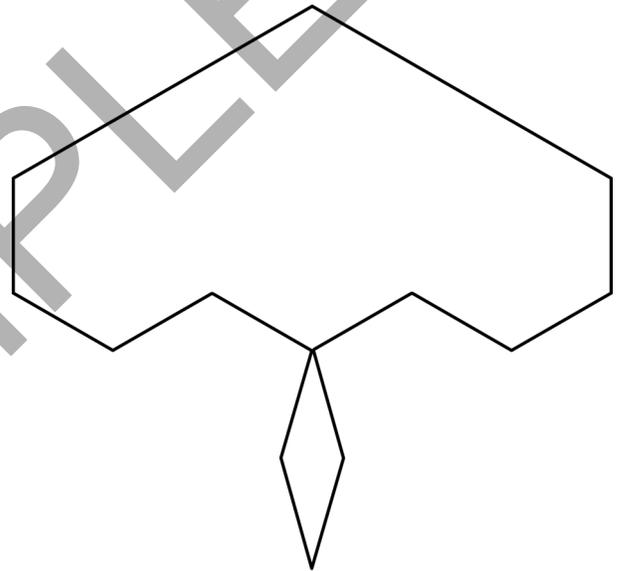
Make a flower out
of 15 shapes.



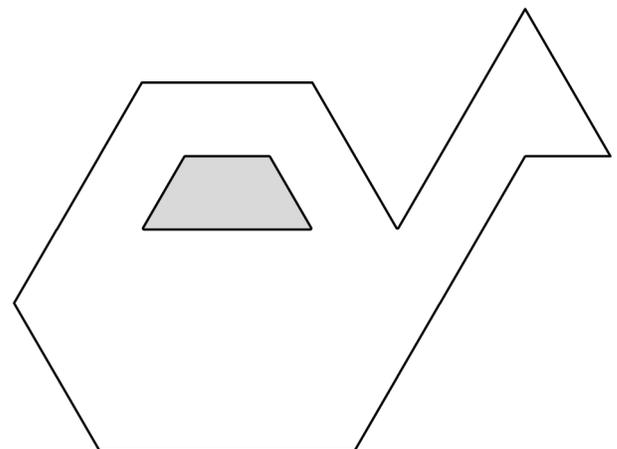
Make a tulip out
of 17 shapes



Make an umbrella out
of 12 shapes

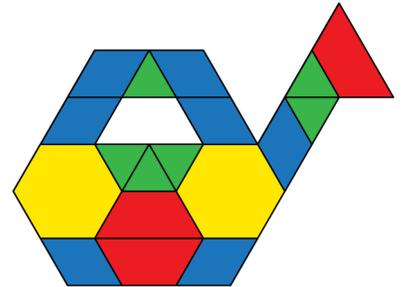
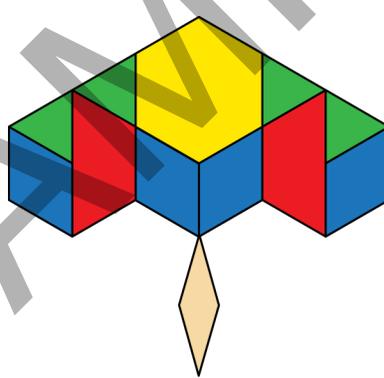
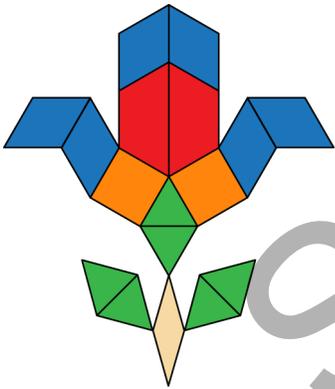
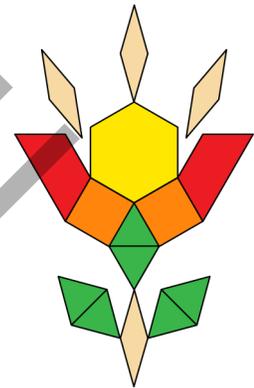
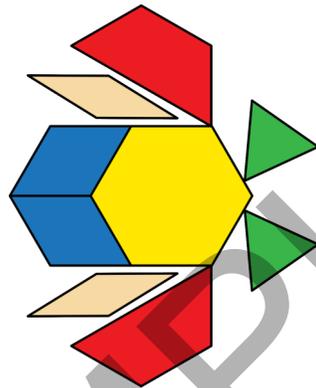
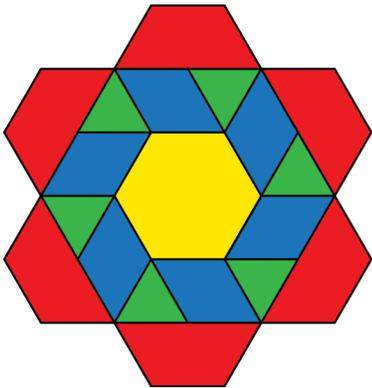
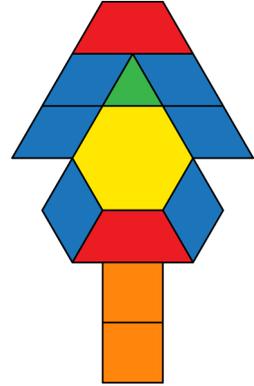
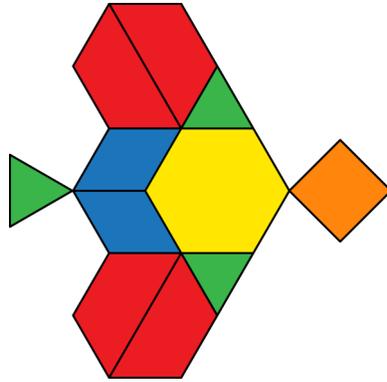
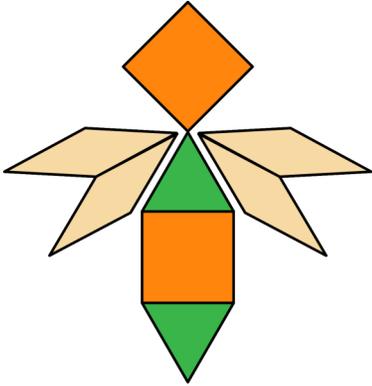


Make a watering can out
of 18 shapes





Spring



Summer

