Terrifically Twisted Tangrams

The Big Idea:

A tangram is an ancient Chinese puzzle made up of 7 shapes: five triangles, one square and one parallelogram. Move around the shapes to match a picture. Some of the pictures give no clues about where the shapes go – for those, you must figure it out!

You Will Need:

★ To print: Tangram puzzle and set of pictures
★ Pair of scissors

The Math Behind the Scenes:

Tangrams use geometry, a subject where many kids have natural abilities they hardly get to show off in school. In this game, kids use symmetry, rotational and spatial skills to see how shapes fit together. They also develop a sense of scale, since each triangle is twice the area of the next size down.

Make Your Own Tangrams

Cut out the square and cut the shapes along the light blue lines. Then use these shapes to match the pictures or make your own creations! Fun riddles about the shapes follow on the next page.
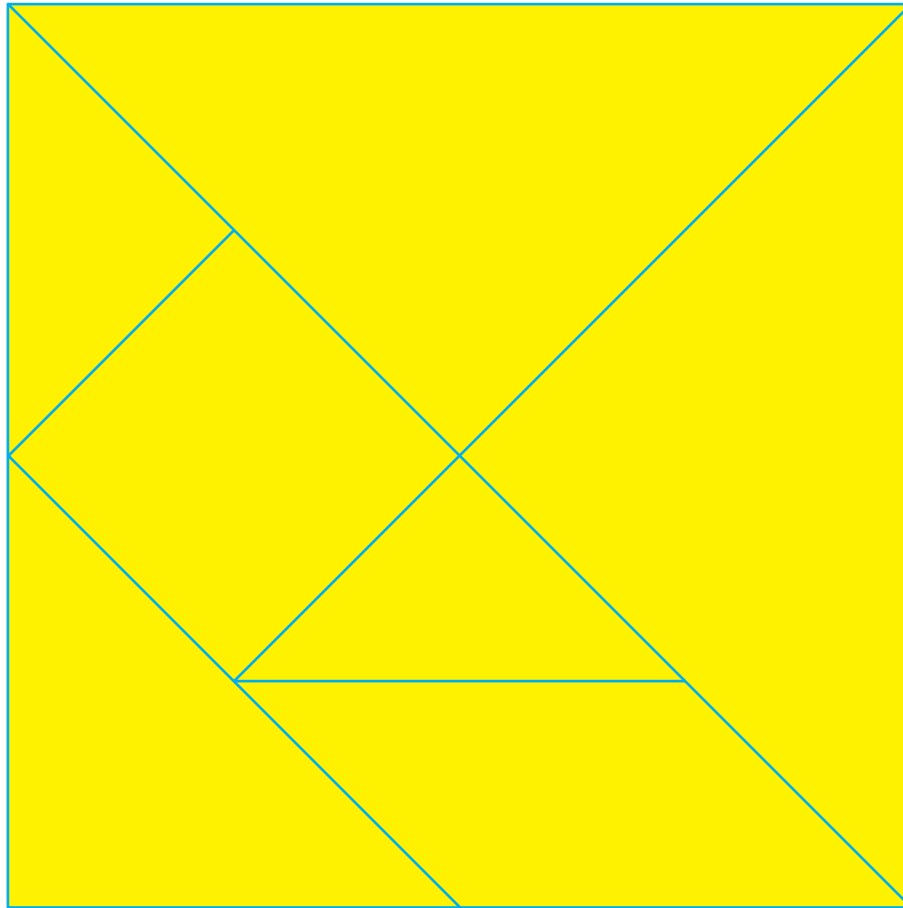
Terrific Tangram Teasers

Try as many questions as you can! Answers upside-down below.

PreK: Point to a triangle. How many sides does it have?

Kindergarteners: How many triangles are in the whole set? Count them up!

1st- graders: How many different sizes of triangles are there? How do they relate to each other? Try putting one size triangle on top of another to figure it out.

2nd-graders: Find the two smallest triangles. Which other shapes in the set can be formed from just those two small triangles?

3rd-graders: What do you call the two 4-sided shapes in the set?

4th-graders: Make a square using the two biggest triangles. Use the rest of the shapes to form that same size square.

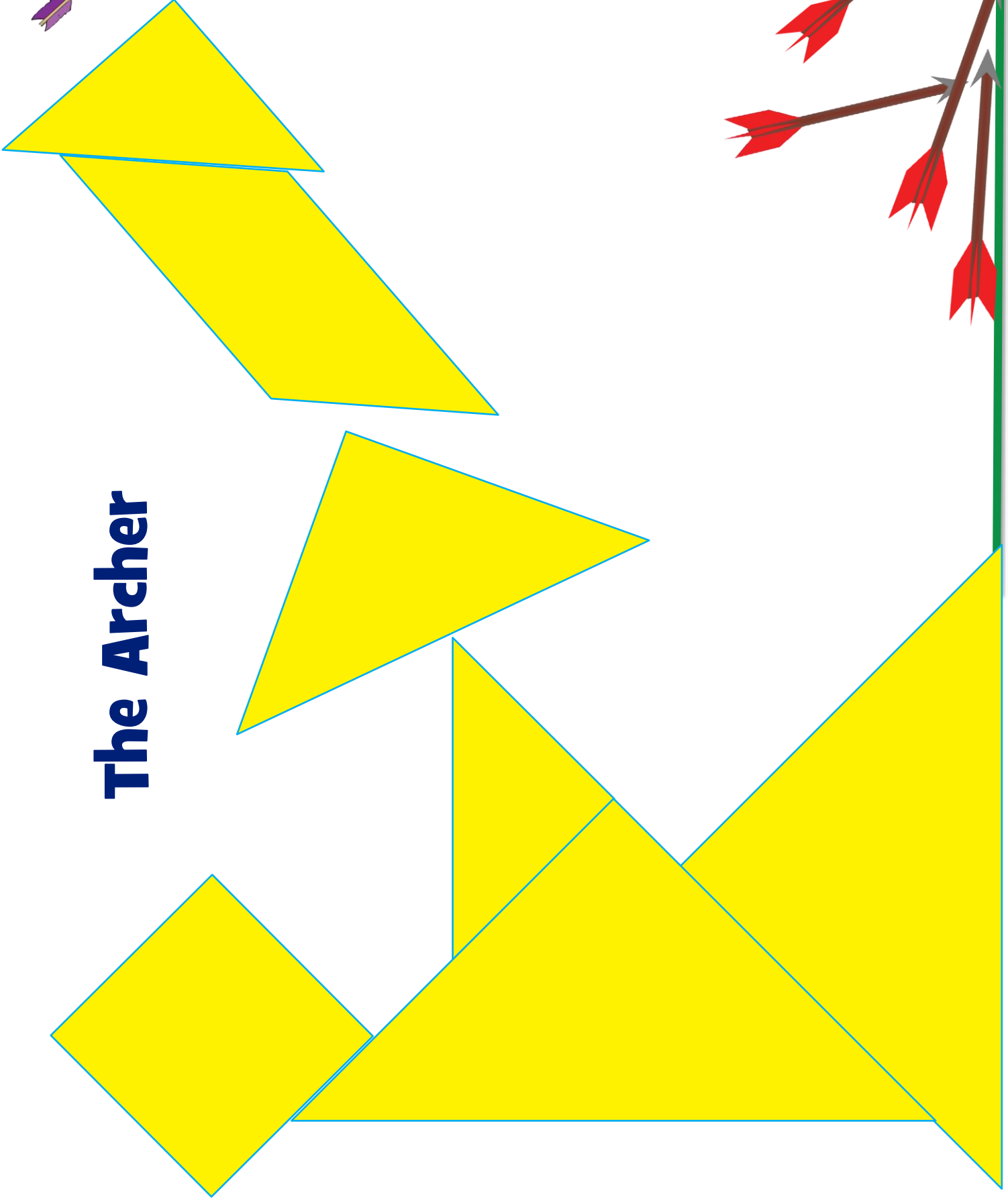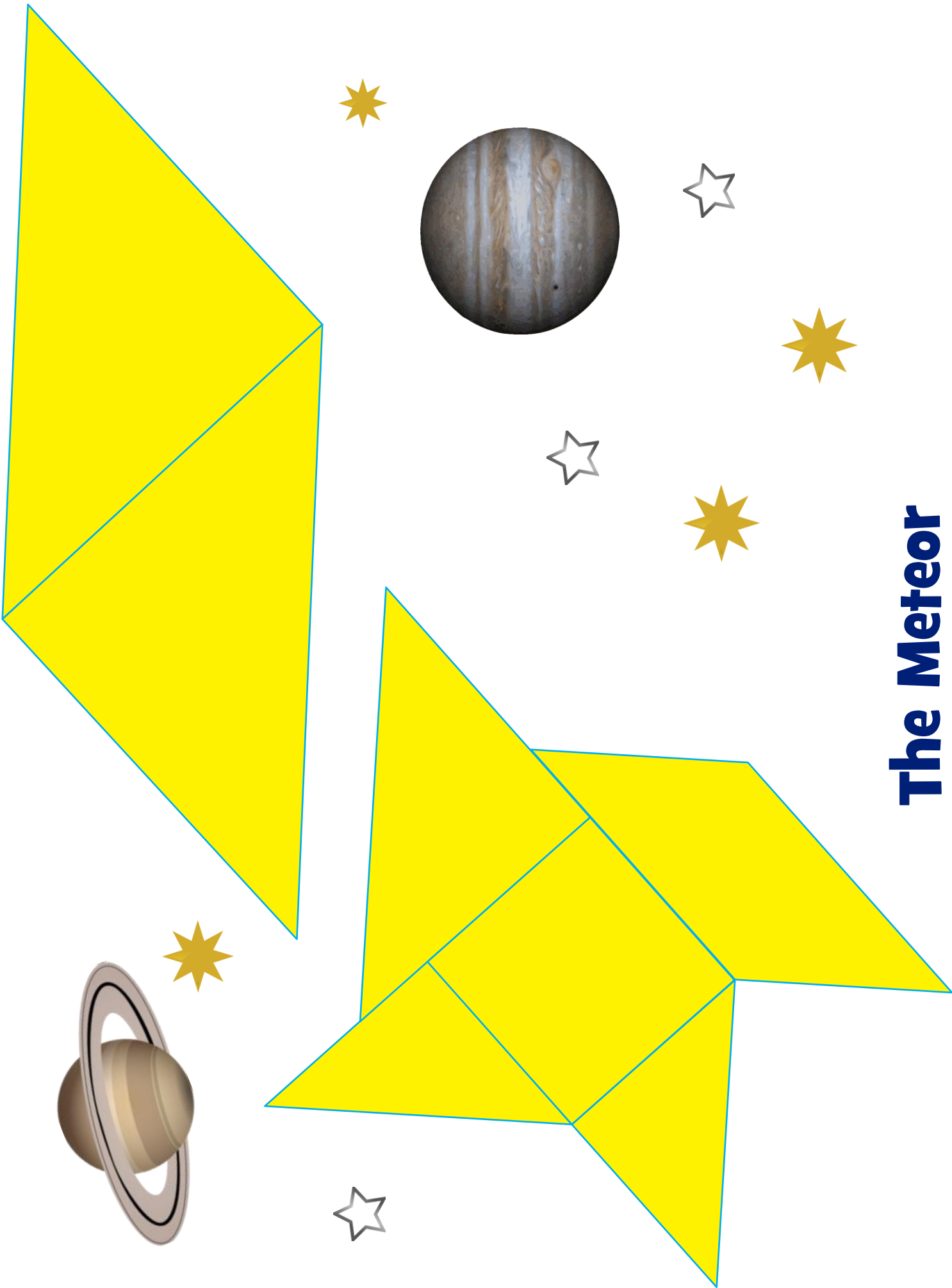**5th-graders:** See if you can put all the shapes back together to make the big perfect square from the start!

The Hare
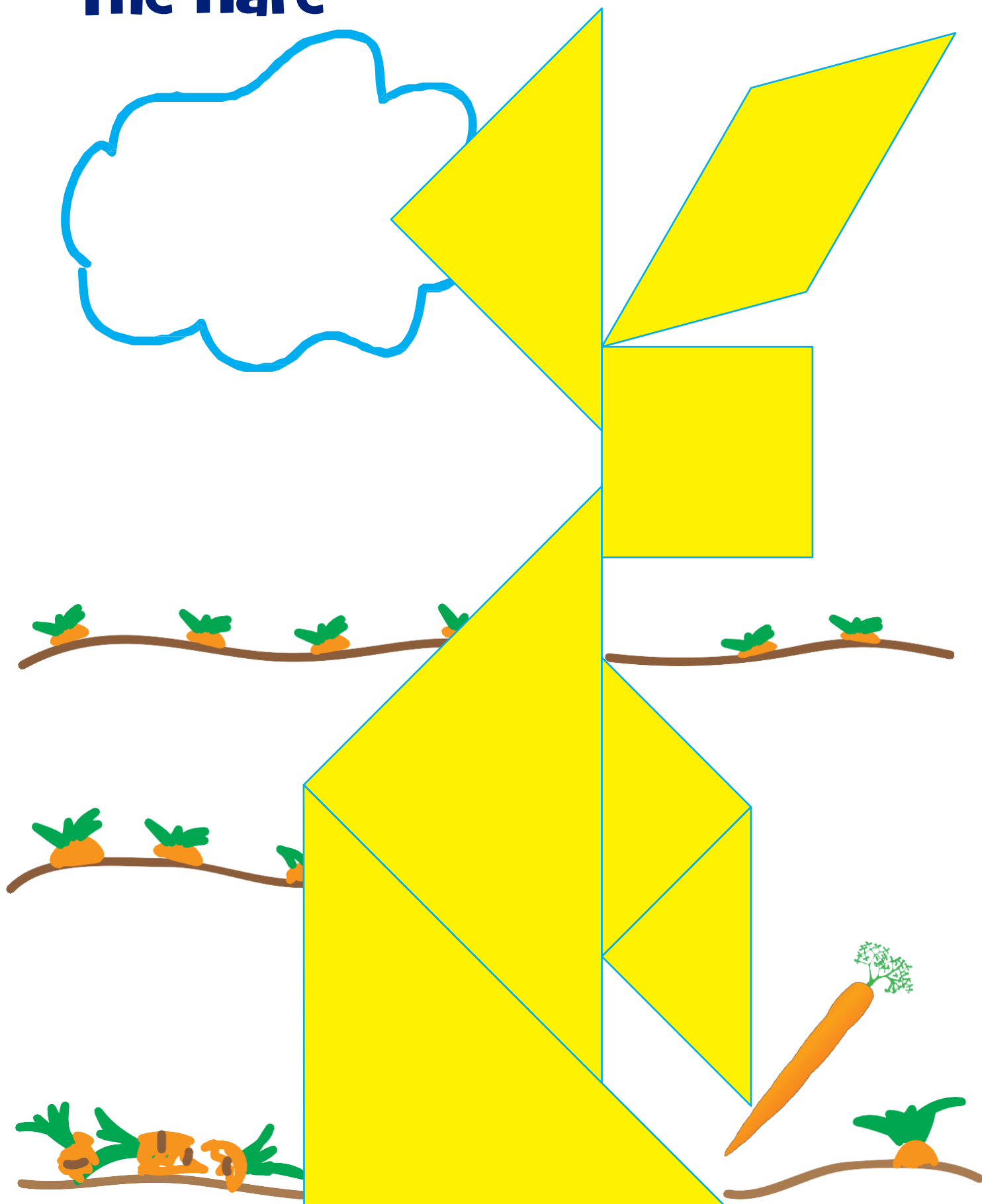
Scaredy Cat
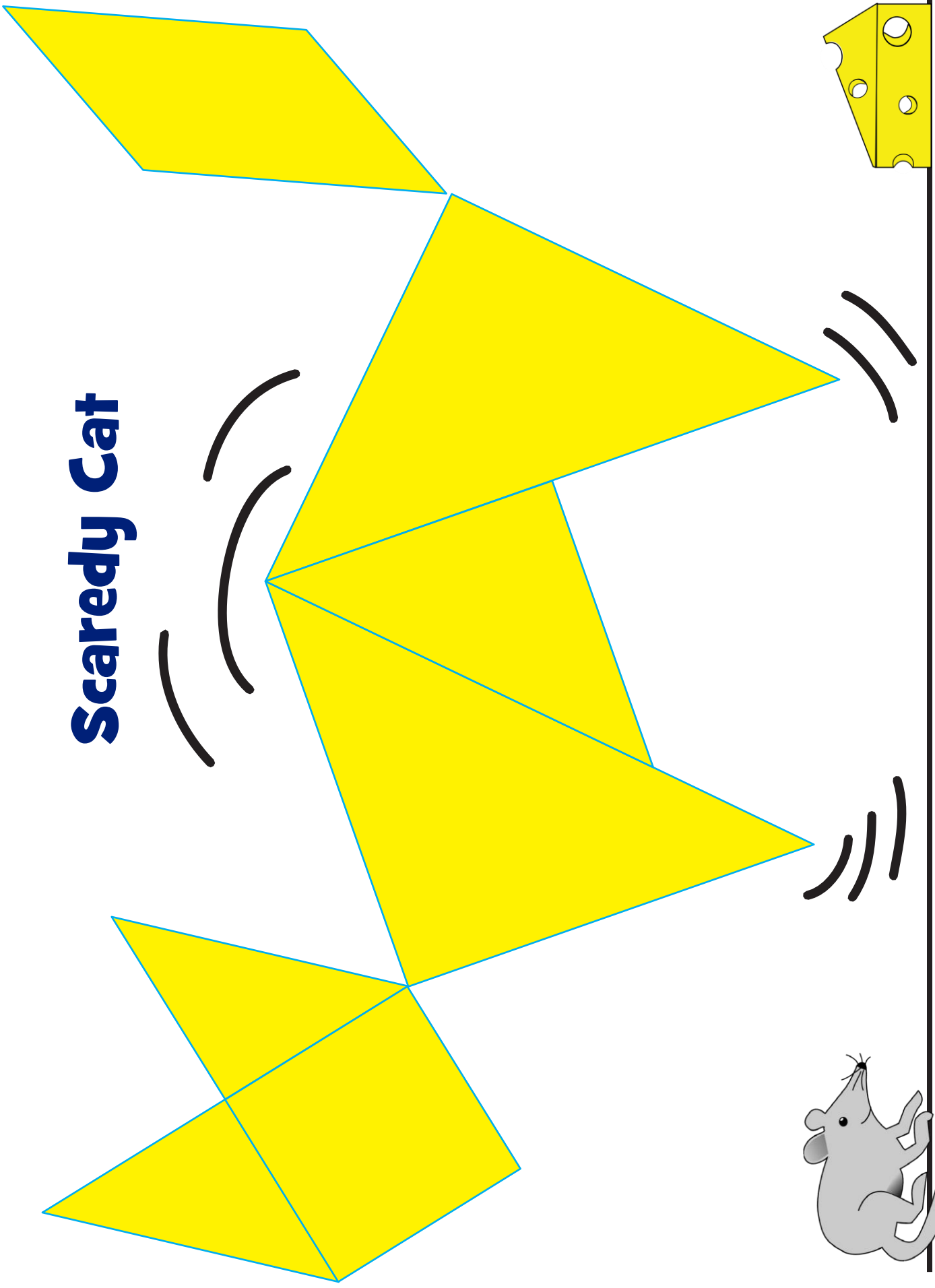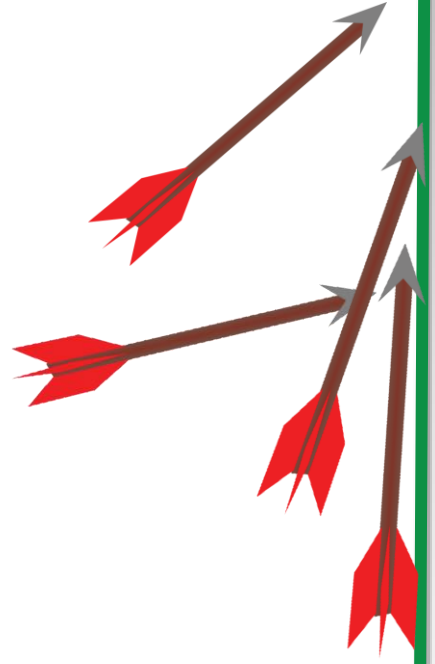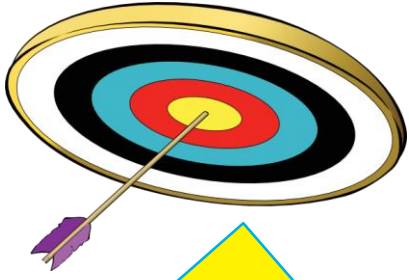
The Archer

The Meteor

The Swan