

Simply Symmetrical

Leader



Recognize geometric patterns and their lines of symmetry.



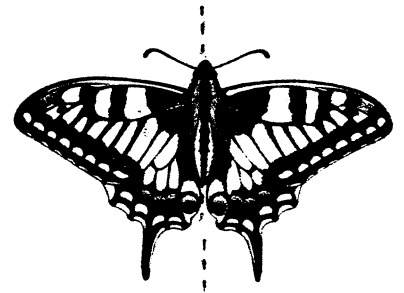
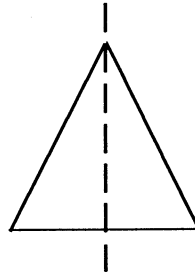
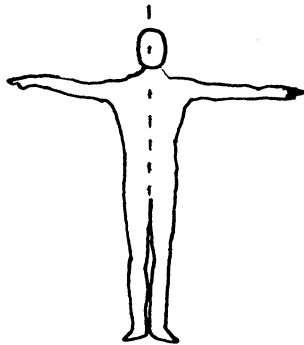
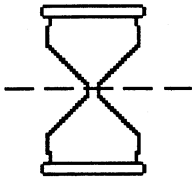
You will need:

- Pencil
- Grid or graph paper
- Scissors



Do this:

- Symmetry is all around us—in nature, in art, in numerals, in alphabets, in machines—even in our bodies.
- Mirror symmetry is a geometrical pattern which appears on both sides of a center line passing through an object, drawing or organism.



- Fold a piece of paper in half and cut out a shape along the fold. What do you think the shape will look like when you open the paper? Find the line of symmetry.
- On graph paper or on a grid print the letters of the alphabet in **BLOCK FORM** How many letters can you draw a line through so that the letter is divided into two identical parts? Try it! What percent of the letters of our alphabet are symmetrical?

$$\frac{\text{number of symmetrical letters}}{\text{number of letters in alphabet (26)}} = \text{percent of symmetrical letters}$$



-Kulm, Gerald, and American Association for the Advancement of Science. *Challenge of the Unknown: Community Leader's Resource Guide*. Washington, DC.

-Stenmark, J., V. Thompson, and R. Cossey. *Family Math*. Regents, University of CA, 1986.

Student _____



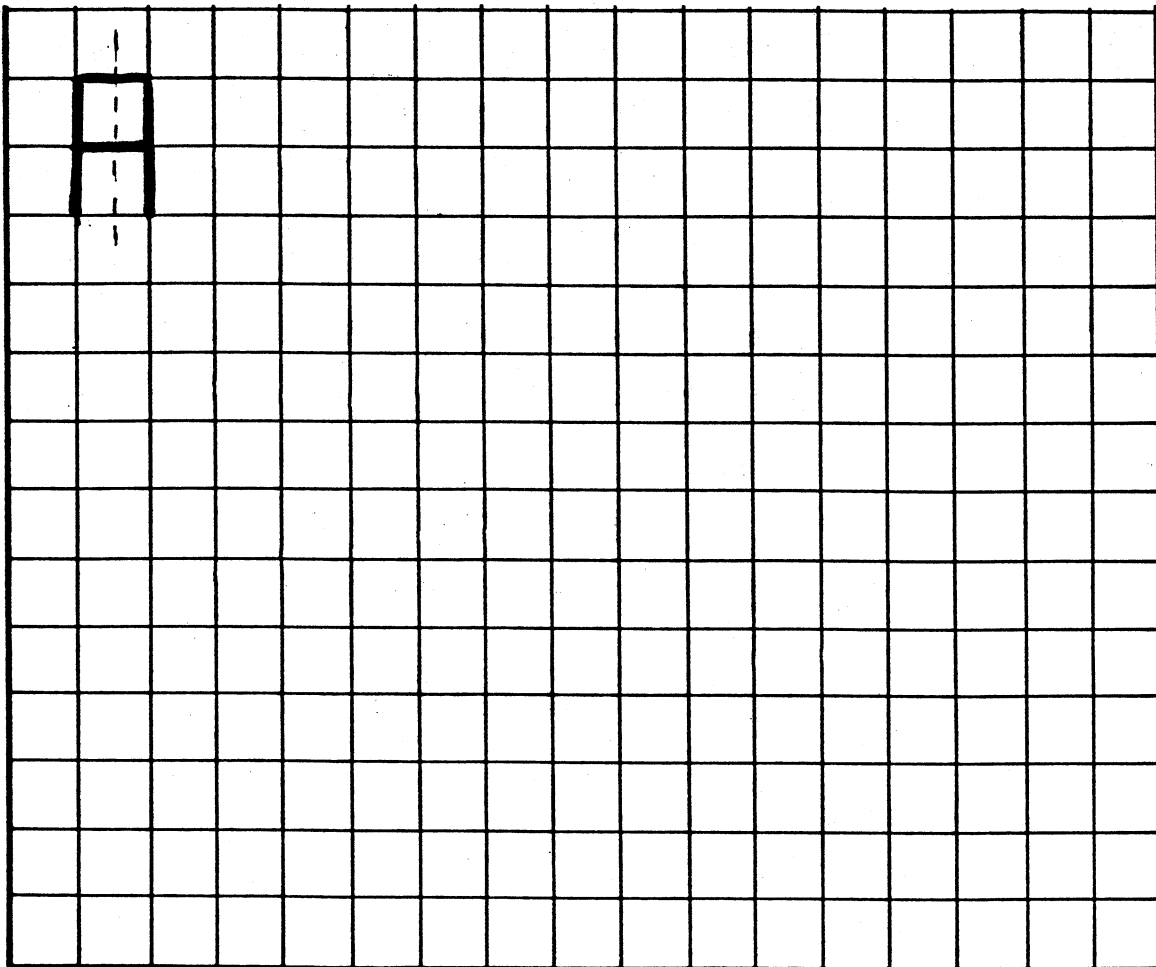
Do this:

- Fold a piece of paper in half and cut out a shape along the fold.
- What do you think the shape will look like when you open the paper?
- Now open the paper.
- Notice that the parts on each side of the fold are mirror images of each other. The fold is the line of symmetry.
- On the grid below print the letters of the alphabet in **BLOCK FORM** (Use a colored marker or crayon.)



1. How many letters can you draw a line through so that the letter is divided into two identical parts? Try it to find out!

- **Math Power Challenge:**
What percent of the letters of our alphabet are symmetrical?



WHAT I FOUND