Investigation 3

Alphabet symmetry

Symmetrical shapes are pleasing to look at because they appear balanced. There are examples of symmetry all around us. Symmetry can be seen in the natural world—for example, butterfly wings, leaves, and shells—as well as objects we create and construct in two- and three-dimensions, such as buildings.

Symmetry can also be found in letters and words, for example, the word BED, where we see a horizontal line of symmetry.

Investigate the upper case letters of the alphabet for symmetry. How many upper case letters have:

• vertical symmetry

- both vertical and horizontal symmetry
- horizontal symmetry
- rotational symmetry?

Write some words that are symmetrical. Can you write a symmetrical sentence?

Things to consider

There are different types of symmetry.

Mirror symmetry (also known as bilateral, reflection or line symmetry): When a shape is folded vertically or horizontally and its two halves match.

Rotational symmetry: Where the shape looks the same when turned around a central point less than a full turn (for example, an equilateral triangle).

Grades