**MOTHS**

[**See the mirror image in this moth's wings? Look for more examples of symmetry in nature**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

Look at this funny fish. Its bright red lips frown. Check out its fins. It's standing on them like they are legs. This fish can actually walk on its fins.

Yes, it's an odd fish. Yet in one way, this rosy-lipped batfish is like many other animals. It's got symmetry. Its two sides match.

How can you tell? Imagine a line that goes down the middle of the fish's face. The line divides the fish in half.

Now look at the fish's body parts. Each side has an eye. Each side has two fins. Each side has half a mouth.

These parts are all about the same size and shape. Both sides look the same. That's symmetry.

[**Seeing Double**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

The batfish has mirror symmetry. It's called that because it's a little like looking in a mirror. A copy of you looks back. That's your reflection.

It's the same way with the batfish. Its right side looks like a reflection of its left side.

In nature, though, both sides aren't always perfect matches. For example, one eye might be a little higher than the other. Both sides are almost alike, though. So it's still symmetry.

[**Making Matches**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

It's easy to see symmetry in a Luna moth. Its matching body parts are evenly spaced along its body. Matching wings grow from each side of its body. Two antennae stick up from its head.

The colors on the moth's wings have symmetry, too. Look at the purple along the edges. The wings also have spots. They look like eyes.

Look around. You may start to see other examples of symmetry. Most animals have it. Many leaves have it. Flowers can have it, too. Look at the bleeding heart flowers. Their petals form the shape of a heart. Each side of each flower looks the same.

[**Star Turn**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

Drawing a line can help you find symmetry. This line of symmetry makes it easy to tell if something has two matching sides. Many things have more than two sides, though. So there's another way to find symmetry

A sea star has five arms. They stick out from its center. Each arm is about the same size and shape. They are evenly spaced around the middle of the sea star. This is a kind of symmetry, too.

[**Heads or Tails**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

Animals with this kind of symmetry are easy to spot. They don't have a head or a tail. Here's another way to find their symmetry.

Pick up a sea star and turn it a little. Then put it down. It looks almost the same as it did before you moved it. That's symmetry.

A daisy is another good example of symmetry. Its white petals stick out in a circle from its yellow center. You can turn it and it still looks the same.

[**Symmetry in Snow**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

If you're looking for more examples of symmetry, take a walk in the snow. Try to catch a snowflake on your sleeve. Then look at it quickly before it melts.

A snowflake is an ice crystal. Its shape is a hexagon. A hexagon has six sides. The snowflake has six sides and six points. Six matching branches grow from each point. The branches of some snowflakes are feathery. In others, the branches look like spears.

It's tough to find perfect symmetry in a snowflake. Most snowflakes start out perfect. Yet snowflakes are fragile. As they fall, they slam into one another. Branches break or melt. They no longer have symmetry.

[**Seeing Symmetry**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

Symmetry is everywhere you look. Find a caterpillar. Draw a line down its middle. Look for a flower and turn it. They both have symmetry.

If you look, you'll start to see symmetry. It's all around.

[**WORDWISE**](http://web.b.ebscohost.com/sas/detail?sid=6edf74fe-3fca-4415-af4c-f89aae8d59ee%40sessionmgr110&vid=7&hid=122&bdata=JkF1dGhUeXBlPQ%3d%3d#toc)

**line of symmetry**: a line that divides an object into two sides that match

**mirror symmetry:** when a line can divide an object into matching halves

**symmetry:** when parts are spaced evenly along a dividing line or around a central point

Both sides of this batfish look the same.

Divide each bleeding heart flower in half. Both sides match.

Both sides of this Luna moth look almost alike. The moth is an example of symmetry.

If you pick up this sea star, turn it, and put it down, it still looks the same. That's a kind of symmetry.

Turn the photos of this passion flower and snowflake upside down. Do they still look the same?