

Insect Symmetry

Wyoming Science

Objectives:

- Students will learn and understand the concept of symmetry.

Activity Procedures:

Attach tape to yourself so that your body is split horizontally into two halves. Have each student do the same to themselves. Are you symmetrical? Prompt the students with questions such as, "Is there an arm at the same place on both sides of the tape?" until they understand that you (and they) are not symmetrical horizontally.

Divide yourself (and the students) in half with tape again, but this time, apply the tape vertically, so that you are split in half lengthwise.

Ask students the same questions: "Is there an arm (or eye, or leg, etc.) at the same place on both sides of the tape?" This time the answer is yes. You have divided yourself in half symmetrically, so that each side is a mirror image of the other. Discuss the term "symmetry" with the students.

Give each student a sheet of construction paper. Demonstrate how to fold the paper in half and draw the outline of half a butterfly on the fold. Cut out your example and unfold it to show the students that it creates a perfectly symmetrical butterfly. (Most children will have done this part of the activity using heart cutouts for Valentine's Day.) Have the students make and paint their butterflies in any pattern they wish, but on one side only. When they have finished, they should fold the butterfly in half, and press the two inside halves together.

In the Classroom

Use mirror tiles to reinforce the concept of symmetry. Show the students how to place an item such as their painted butterflies flat on a table. When a mirror is placed on its edge in the center of the butterfly, the mirror image is reflected in its surface, creating a complete and symmetrical butterfly.



Standards

Science

Life Systems: 1.2, 1.4,
1.5, 1.6

Materials

- Masking tape
- Construction paper
- Poster paint
- Paint brushes



Estimated Time

45 Minutes

Grades 5-6