Key Concepts:
- Create a visual model

Skills:
- Fine motor skills
- Hand-eye coordination
- Origami paper folding
- Observation
- Following directions

Materials:
- Square pieces of orange origami paper or orange copy paper (do not use construction paper)
- Scissors
- Permanent black markers to decorate wings
- White paint or correction fluid

Objective
To capture the likeness of a monarch butterfly with the art of paper folding.

Background
Butterflies often inspire creative expression—perhaps because of their vivid colors, or perhaps because of their delicate movements. In this lesson, students practice the art of origami, Japanese paper folding, to make simple models of monarch butterflies. Origami involves only the folding of paper, so by adding components such as gluing and cutting, the art becomes more like Kirigami. After students construct paper butterflies, they may choose to mount the paper butterflies on a model oyamel fir tree, creating a replica of an overwintering roost.

Procedure
1. Give students square pieces of orange paper. Have them follow the step by step instructions for making an origami butterfly on the next three pages.
2. If desired, have students observe real monarch butterflies, then modify their paper models to make them more realistic. They can round off the corners of the wings with scissors, draw veins with black markers and make white spots on the wings, abdomen and thorax.
3. Optional: Use double sided tape, paper clips or tacks to hang butterflies on a model oyamel tree.

Origami Monarch
Origami Butterfly

1. Using a square piece of orange copy or origami paper, fold your paper 4 times in the directions shown in the diagram.

2. Fold your paper once to create a triangle like this.

3. Fold the corner marked A toward B.

Then fold C towards B.
4. Fold in half along the line between A and C to make a triangle.

5. Then fold flaps C and A along the dotted lines to look like this:

6. Starting at the corner B, cut through both thicknesses of paper about half way along the diagonal.

7. Open and flatten the “butterfly” to look like this:

8. Rotate or flip the paper horizontally so that corner A is on the right and C is on the left.
9. Make a crease along the heavy dotted line from D (the bottom of the cut) to E, and again from D to F.

10. Fold crease D-E towards crease D-F. This creates a flap in the back (much like the bottom of a paper airplane).

11. Rotate the butterfly 180° so that from the top, your butterfly looks like this (the flap is on the other side).

12. You can use a staple or glue on the back flab to keep the butterfly shape. Trim the wings to resemble the shape of monarch wings. Color the black areas with a black marker (permanent markers work better) and dot white areas with white tempera or other opaque white paint.