



Flight of the Monarchs

Audience

Activity is designed for 6 years old and up.

Goal

Students will learn about the different stages of a Monarch butterfly lifecycle and how each stage is different.

Objective

- To identify the different stages of a monarch butterfly lifecycle.
- To compare each stage in the monarch lifecycle.
- To construct the lifecycle of a monarch butterfly

Conservation Message

Several species of animals call Oklahoma home. One such animal is the Monarch butterfly. These butterflies can travel up to 3000 miles in only a matter of months. In fact, Oklahoma is on the migratory path for Monarchs. They will stop here for food, water and rest. Monarchs are important pollinators that need to be protected. One such way is by building a monarch waystation, or a butterfly garden that has plenty of flowering plants and milkweed. These areas can provide a stopover for the butterflies so they can rest and then be on their way.

Background Information

Here in Oklahoma we have a large variety of insects that play important roles in the ecosystems. Flies are food for amphibians, ladybugs eat pesky aphids that attack our gardens and butterflies pollinate our flowers and trees!

One special species of butterfly travels up to 3000 miles in just a matter of months to reach their winter homes. The Monarch butterfly is the only known butterfly to make a two-way migration like birds. While some species of butterflies can overwinter in cooler parts of North America in their larvae or pupae stage monarchs cannot. Therefore, they overwinter in Mexico and the warm California coast. It takes multiple Monarch generations to make the trip to their wintering grounds. After winter, their offspring will make it back north in one trip.

The lifecycle of the monarch butterfly has four stages, the egg, the larvae, the pupa or chrysalis and finally the adult. The entire process from egg to adult is called complete metamorphosis. Complete metamorphosis means that every stage of the lifecycle of the insect looks different, whereas for incomplete metamorphosis the life stages look like small adults.

The complete metamorphosis of a Monarch begins with a cream-colored egg that is attached to the underside of a milkweed leaf. Inside the egg a larva grows and once it is ready to come out it will chew through the egg and begin eating. A larval butterfly is known as a caterpillar. A caterpillar can eat several times their body weight in one day!

At the end of the larval stage, the caterpillar will make a hard shell and transform into the pupa. The pupal stage can last up to two weeks. The insect has no antennae, eyes, or legs and it cannot move.

For Monarch butterflies, the pupal stage is referred to as the chrysalis stage. This is because the hard shell they make is called a chrysalis. The chrysalis of a Monarch butterfly is light green with a sparkling gold ring around the top of it. Finally, the chrysalis cracks open and a beautiful orange and black Monarch butterfly emerges. Its wings are wet and wrinkled. Once the butterflies wing dry, its ready to find its first meal!



Egg



Larva



Pupa (Chrysalis)



Adult

Materials Needed

- Lifecycle of a Monarch Butterfly Sheet (provided)
- Lifecycle labels (provided)
- Crayons or Markers
- Paper Plate
- Construction Paper
- 3 dried beans
- 1 spiral noodle
- 1 shell noodle
- 1 bowtie pasta
- Scissors
- Glue

Length of Activity

30 minutes

Procedure

The Lifecycle of a Monarch Butterfly

- Look at the picture included in the background section.
- Look closely at the colors of the different stages. What colors do you see? How are the different stages different?
- On The Lifecycle of the Monarch Butterfly Sheet label each of the life stages.
- Color the pictures to resemble what the insect looks like in real life.

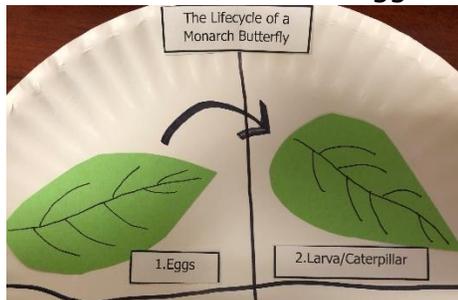
Paper Plate Butterfly Lifecycle

- Print and cut out the Lifecycle Labels.
- Using your construction paper, cut out four leaf-shaped pieces.
- Draw a vertical line down the middle of your paper plate dividing it in half.
- Draw a horizontal line in the middle of your paper plate, splitting the paper plate into fourths.



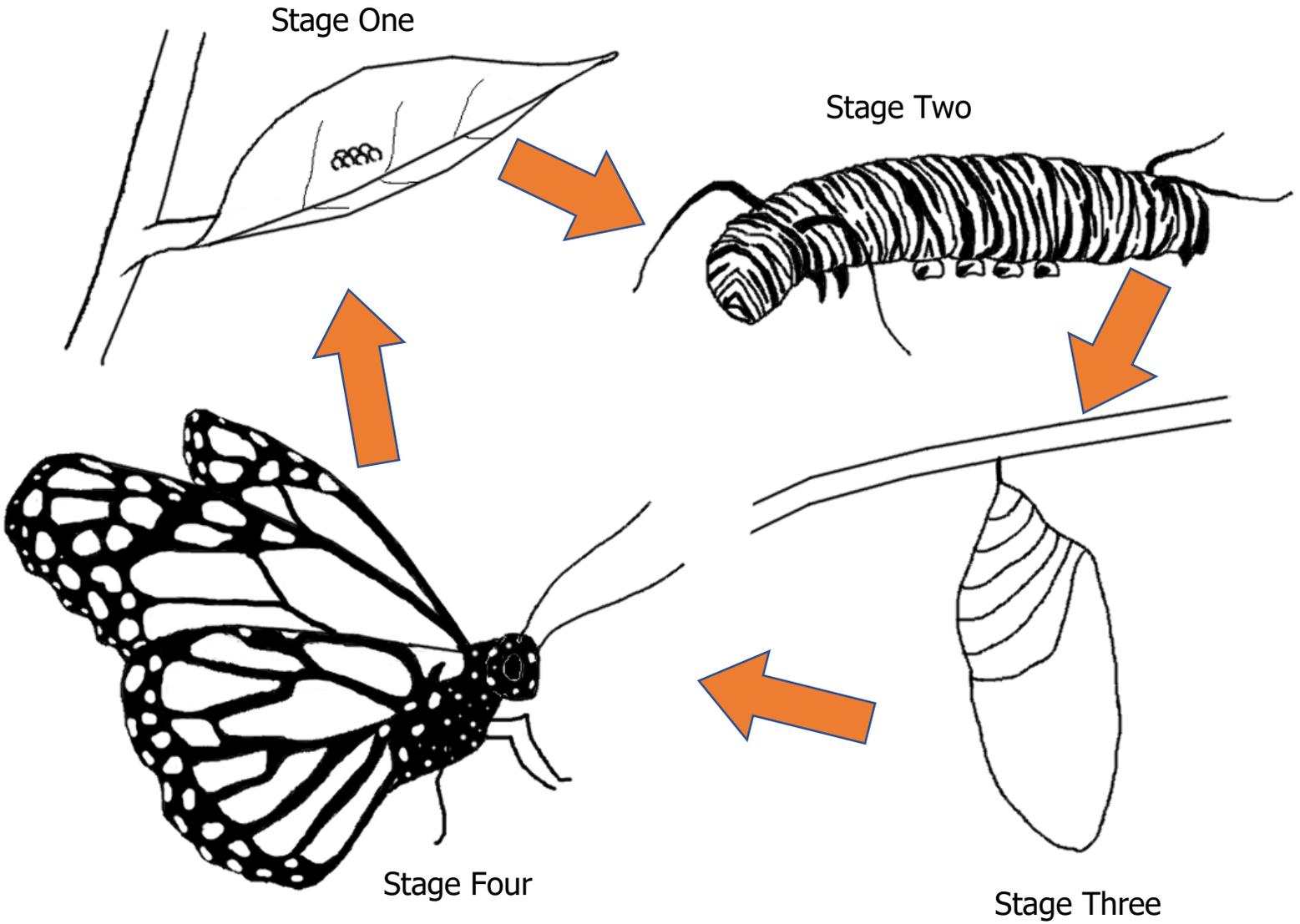
- Glue a green paper leaf in each section of the paper plate.
1. Egg Stage
 - Glue your egg label onto the one section of the plate.

- Now take the three dried beans and glue them onto the leaf in the egg stage.
2. Caterpillar Stage
- For this section take your larva/caterpillar label and glue it to a second section of the plate.
 - Grab the spiral pasta piece and glue it on the leaf in this stage.
3. Pupa/Chrysalis stage
- Now grab the stage 3 label which is the pupa/chrysalis stage.
 - Glue this label to a third section of the plate.
 - For this stage you will need the shell pasta piece. Glue the shell pasta onto the leaf outline.
4. Adult Butterfly
- Glue the adult butterfly label in the last remaining section of the plate.
 - The last pasta piece should be the bowtie pasta. Glue it on the leaf to represent the adult butterfly.
 - We know need to draw arrows to show what order the lifecycle takes place.
 - Draw an arrow from the eggs to the larva/caterpillar stage



- Draw an arrow from the larva/caterpillar stage to the pupa/chrysalis stage.
- Draw an arrow from the pupa/chrysalis stage to the adult butterfly stage.
- Finally, draw an arrow from the adult butterfly stage to the eggs stage. This is because adult butterflies lay eggs to start the lifecycle over again.
- Now we have completed the lifecycle of a butterfly we need to put the finishing touches on it and put the "The Lifecycle of a Monarch Butterfly" label at the top of the plate.

The Lifecycle of a Monarch Butterfly



Stage One is _____.

Stage Two is _____.

Stage Three is _____.

Stage Four is _____.

Lifecycle Labels

The Lifecycle of a
Monarch Butterfly

1.Eggs

2.Larva/Caterpillar

3.Pupa/ Chrysalis

4.Adult Butterfly