



## AN INSECT'S LIFE

### Goal of this Lesson

Youth will:

- Learn how insects grow and develop (the process of metamorphosis).

### What You Need to Know

- Insects hatch from small eggs.
- Insects change shape as they grow. The insects do this either by gradually, by shedding their skin as they grow bigger, or all at one time with a big change in how they appear.
- The Life of a Monarch Butterfly



The butterfly lays an **Egg** on the leaf of a Milkweed plant.



A **Caterpillar** is born. He eats the leaves of the plant for food.



The caterpillar creates a **Cocoon (Chrysalis)** around its body.



After some time, a **Butterfly** comes out of the chrysalis.

- The Life of a Grasshopper



The female lays many eggs in a hole in the ground.



The nymph looks just like a small adult except it has no wings. It molts (changes its skin) several times and gradually gets wings.



The adult grasshopper has long and powerful hind legs. Some kinds of grasshoppers can jump more than 100 times their length.



### **Materials Needed:**

- Butterfly and grasshopper life stages pictures (copied and cut apart)
- Paper, pencils, crayons, etc
- Paper plate
- Rice, fussilli (spiral shape) pasta, shell shape pasta, bowtie pasta
- Glue/glue stick
- Bug Snack ingredients

### **Learning Activities:**

1. Show and talk about the butterfly and grasshopper life stages pictures. What is the difference between the life stages of these insects? (butterfly changes suddenly and is a caterpillar and then changes into a cocoon before becoming a butterfly)
2. Have the youth draw a picture of their family. Their family can include parents, brothers and sisters, and grandparents. Which of insect life stages is their family most like? (gradual like a grasshopper) Why is their family like that? Which grasshopper stage is first? Where do they lay their egg? What stage is next? How is it different from an adult grasshopper? What is the third stage? Why would you like to be a grasshopper?
3. Give each child a few of the different types of types of pasta and a paper plate. Have them glue each piece on and review with them each of the life stages of the butterfly. (Rice for the egg, fussilli(spiral shape) for the caterpillar, shell for the chryssalis, and a bowtie for the butterfly.) Either before or after gluing the pasta, have them decorate their plate. **\*\*Hint:** This might be a good time to read The Very Hungry Caterpillar.

### **Other Fun Things To Do**

**Go on a walk.** Depending on the time of year you might go on a walk and look for grasshoppers and butterflies.

**Make a snack.** Here is a fun, nutritious snack that young children can make by themselves or with very little and eat. Before starting, have children and adults wash their hands.

### **Bug Snack**

- 1 - 4-inch piece of celery
- 1 Tablespoon peanut butter\*
- 4 mini pretzels
- 2 small pretzel pieces for antennae

1. Spread\*\* peanut butter on celery.
2. Place pretzels in center of celery stick to make wings.
3. Use small broken pieces of pretzel for antennae.



\* Make sure that children do not have an allergy to peanut butter. If they do, have them substitute a cheese spread for the peanut butter.

\*\*If children want to spread the peanut butter by themselves make sure they use a knife that is not too sharp or provide a plastic knife.

**Read a book.** Read a book together about insects and talk about what they have learned. Some book suggestions include:

The Very Hungry Caterpillar by Eric Carle.

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