

# Mosquito Bottle Breeder

## Project & Assembly Directions

### Objective

Students will observe the life cycle of the mosquito.

### Materials

1. 2 two liter empty soda bottles
2. water
3. mosquito larva
4. clear packing tape
5. scissors or utility knife

### Content

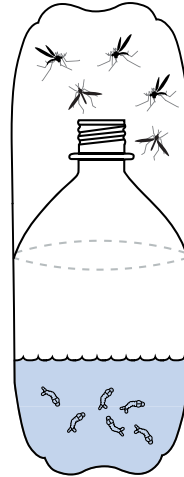
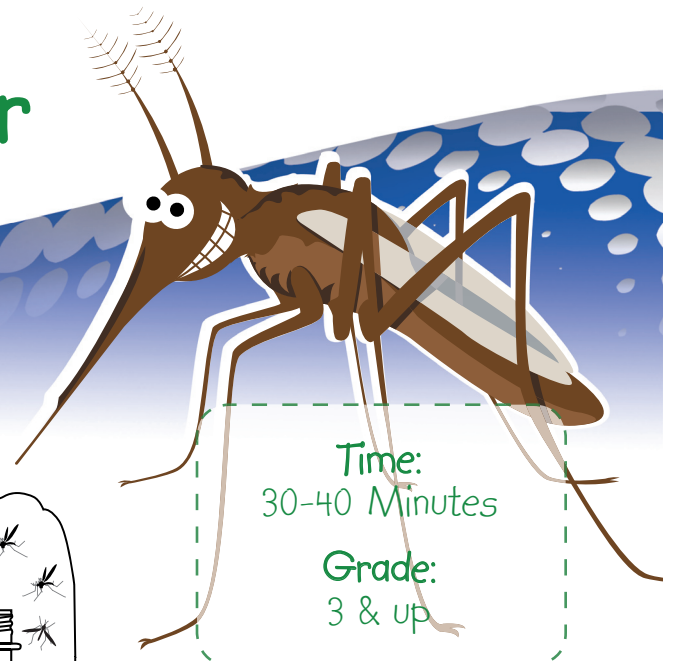
Mosquitoes go through four stages of life: egg, larva, pupa, and adult. The eggs are laid on the surface of the water. The larva live in the water and come to the surface to breathe. They molt (shed) their skin four times. On the fourth time, the larva molts and changes into a pupa. The pupa stage lasts about two days. This is a resting stage in which the pupa does not feed. When the pupa stage is over its skin splits and the adult mosquito emerges.

When the adult mosquito emerges from the pupa stage it rests on the water and dries its wings. Once its wings are completely dry they are able to fly.

Mosquito larva can often be found in containers that hold water. Look for containers around your house or neighborhood that hold water. Containers such as buckets, bird baths, tires or anything that can hold water can grow mosquitoes.

Mosquito larva look like little worms wiggling in the water. You can tell if they are mosquito larva by looking to see if they have a little tube at their tail-end. They use that tube (siphon) to breathe air by wiggling to the top of the water and sticking their siphon out of the water. Mosquito larva are quite small. A full grown larva is about the size of the lead on a newly sharpened pencil.

**REMEMBER.** You can reduce the number of annoying mosquitoes in your area by keeping objects that hold water empty. Bird baths and dog water bowls should be emptied and filled with clean water at least once a week. Turn buckets and other containers upside down.



(Sample Finished Product)



# Mosquito Bottle Breeder

## Project & Assembly Directions

### Procedure

1. Cut both of the two liter bottles in half to separate the top and bottom of each bottle.
2. Remove the lids of the bottles and recycle.
3. Fill the bottom of bottle half way with water. Fresh pond or ditch water is best.
4. Place mosquito larva into the water.
5. Turn the top of second bottle upside down and insert it into the bottom of the second bottle (see diagram).
6. Place this on top of the bottle containing the water and larva (see diagram).
7. Use clear tape to seal the two bottle parts together.
8. Recycle the remaining bottle top.
9. Have students observe the life cycle of the mosquito over the next several weeks.

### Sunshine State Standards

**Standard: LA.A.2.2** The student constructs meaning from a wide range of texts.

Benchmark: LA.A.2.2.1 The student reads text and determines the main idea or essential message, identifies relevant supporting details and facts, and arranges events in chronological order.

**Standard: SC.F.1.2** The student describes patterns of structure and function of living things.

Benchmark: SC.F.1.2.3 The student knows that living things are different but share similar structures

**Standard: SC.G.1.2** The student understands the competitive, interdependent, cyclic nature of living things in the environment.

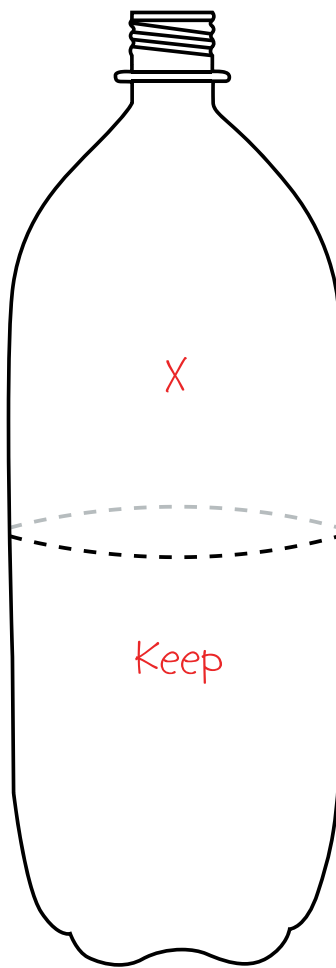
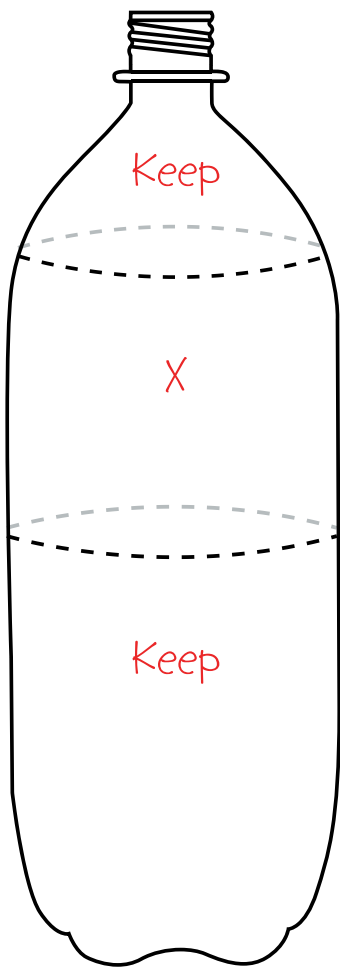
Benchmark: SC.G.1.2.2 The student knows that living things compete in a climatic region with other living things and that structural adaptations make them fit for an environment.

**Standard: SC.H.1.2** The student uses the scientific processes and habits of mind to solve problems.

Benchmark: SC.H.1.2.2 The student knows that a successful method to explore the natural world is to observe and record, and then analyze and communicate the results.



**Aquatic Systems**  
Mosquito Education Program



# 1-2

Cut bottle one around dotted lines. Cut bottle two along dotted line. Remove lids and recycle. Recycle sections of bottle marked with "X."

# 3-9

Place water and mosquito larvae into bottom half of bottle (1). Place bottle top (2) inside of bottom (1). Place bottom (3) over the top and tape the together.

