Build a Mosquito

Explore one of Alaska's most abundant flying insects!

Materials:

You can use any materials you have available. Suggestions: cardboard, pipe cleaners, pencils, paper, modelling clay, tissue paper, plastic bag pieces, beads, twigs. You will also need fastening materials (glue, tape, rubber bands, string, etc.).

Instructions:

Step 1: Gather materials. Look at the mosquito pictures on the next page, and talk about where you might see mosquitoes: as larvae swimming in water or as adults flying in the air. Discuss how mosquitoes can be both harmful and helpful to different species (see information sheets below).

Step 2: Start with the mosquito body and head. Build it out of any material *(modelling clay, cardboard, pipe cleaners, twigs, etc.)*. Be creative! For older children, explain that an insect body is made of three parts: head, thorax, and abdomen.

Step 3: Add eyes, two antennae, and one proboscis (mouth).

Step 4: Make six legs *(pipe cleaners or folded cardboard work best)*. Attach legs on each side of the body, close together near the head.

Step 5: Make 2 wings *(tissue paper, cardboard, plastic bag pieces, etc.)* and attach one to each side of the body. Mosquitoes are one of just a few insects that that have 2 wings instead of 4!

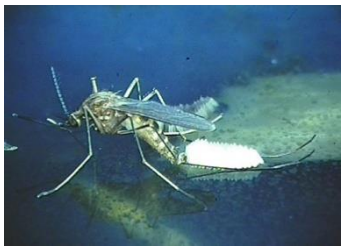
UNIVERSITY OF ALASKA MUSEUM OF THE NORTH

Mosquitoes Need Water

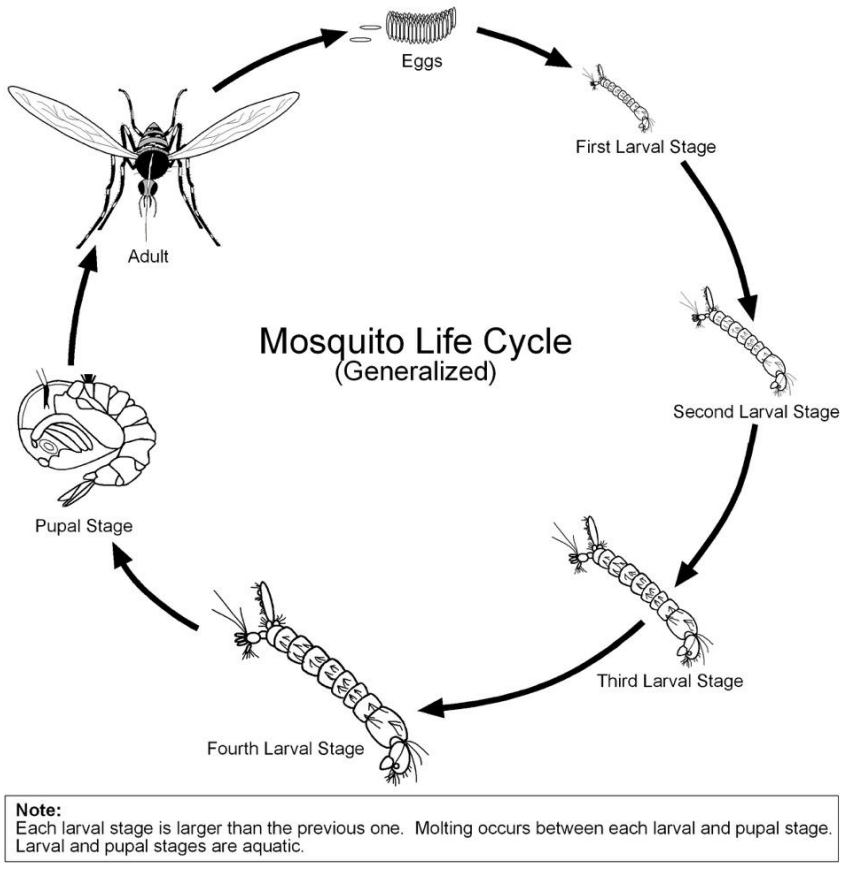
Where there is standing water, there are often mosquitoes. Female mosquitoes lay their eggs in water. When the larvae hatch, they feed on tiny aquatic organisms (bacteria and algae) and breathe through tubes in their tails! If the water is warm, they grow more quickly. After another few days as pupae, adult mosquitoes emerge and wait for their wings to dry off before taking flight.

Mosquito larvae.

Mosquito pupa.



Mosquito laying eggs.



UNIVERSITY OF ALASKA
MUSEUM OF THE NORTH

What Good are Mosquitoes?

Mosquito fossil in amber, 15-20 million years old. Wikimedia Commons.

Mosquitoes are ancient insects. The oldest mosquito fossil found was 79 million years old! Scientists think mosquitoes were around as early as 226 million years ago. Today, there are about 3,500 species of mosquitoes that have been identified.

Mosquitoes are a major problem for humans because some species bite. In some parts of the world, mosquitoes can be very dangerous to humans because they carry diseases.

Despite the nuisance to humans, mosquitoes are important to food chains around the world. Thousands of animal species feed on mosquitos. Many birds, bats, dragonflies, and fish depend on them. They help create more species diversity.

Like bees, mosquitoes are pollinators. A mosquito's favorite food is nectar from flowers. In some mosquito species, females need a meal of animal blood to develop eggs.

Scientists study mosquitoes to help create new medicines, including anesthetics (numbing medicines), and ways to fight the diseases spread by these insects. Better understanding mosquitoes could also help scientists develop new ways to treat heart disease.

UNIVERSITY OF ALASKA MUSEUM OF THE NORTH