Objective

Students will learn that mosquitoes feed on plant juices for energy. Female mosquitoes require blood for egg development.

Materials

1. student pages printed; second student page (with abdomen contents) printed on vellum paper
2. brass fasteners
3. crayons or markers
4. scissors

Content

Male and female mosquitoes feed on plant juices for energy. After mating, and before laying her eggs, the female mosquito (of most species) needs a blood meal. The protein contained in the blood is a necessary ingredient for the development of the eggs. Mosquitoes don't just feed on humans; other mammals, birds, reptiles and amphibians also fall victim to the blood needs of the female mosquito. Certain species of mosquitoes will, however, feed only upon a particular animal or group of animals. This is fortunate for people. Of the many species of mosquitoes found in a particular area, usually only a few provide problems for humans.

An individual mosquito may feed and lay eggs several times during her life span. It is important that the mosquito lands gently on her victim to avoid detection. She quickly pierces the surface of the skin with knife-like stylets located on the tip of her proboscis. She inserts her proboscis, pierces an available capillary and injects saliva into the blood. This saliva contains an anti-coagulant and makes it possible for the mosquito to suck the blood through her tiny proboscis. Saliva left in the host's body may cause an irritation in the form of bumps or sores. It is through this saliva that a mosquito may transmit a disease organism to a person or animal causing them to get sick.

Check out our website at www.MosquitoEd.com

Design by Think Tank Solutions: www.thinktank360.com
Mosquito Meal Wheel?
Project & Assembly Directions

After the female mosquito has mated and consumed a blood meal, she will search for the proper environment to lay her eggs on the surface of standing water, on plants or on moist soil where the eggs may lay for months or even years before they are covered with water and hatch into larvae.

Procedure
1. Print the two pages for the wheel for each child; the page with the abdomen content is to be printed on vellum paper.
2. Color each illustration on the full page using bright colors.
3. Cut out the mosquito wheel along the dotted lines from the wheel page.
4. Cut out the windows along the dotted lines from the wheel page.
5. Fasten the wheels together in the center with a brass fastener.
6. Spin your wheel to see and show how a mosquito feeds.

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.I.2** The student describes patterns of structure and function of living things.
   Benchmark: SC.F.I.2.3 The student knows that living things are different but share similar structures

**Standard: SC.G.I.2** The student understands the competitive, interdependent, cyclic nature of living things in the environment.
   Benchmark: SC.G.I.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.
   Benchmark: SC.G.I.2.5 The student knows that animals eat plants or other animals to acquire the energy they need for survival.
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Mosquito Meal Wheel

Name ____________________________

1. This is an adult female mosquito.

2. For food mosquitoes feed on plant juices.

3. Only females need blood to grow.

4. The blood is digested; now she will find a spot to lay her eggs.

5. and like again... (color red)

(Color Red)

(Color Yellow)

Aquatic Systems
Mosquito Education Program