

Lesson 3: Facts About Mosquitoes

Objectives:

Students learn the parts of a mosquito and facts about mosquitoes.

Essential Questions:

What do you already know about mosquitoes? What would you like to learn more about?

Alaska Native Values:

See connections-All things are related (human parts to mosquito parts)
Learn by doing, observing and listening.

Standards:

SSC1. Draws and constructs.
M7. Understands ordinal numbers and begins to read simple graphs.
M6. Sorts and groups objects.
M2. Know basic shapes.



Promoting Culture Self Assessment:

- I use visual aids, gestures, and physical prompts in my interactions with children who have limited English proficiency.
- I encourage and provide opportunities and experiences for children that support Alaska Native culture.

Whole Group- Facts about Mosquitoes

Materials:
Heavy paper or cardboard
Bubble wrap or mesh for compound-eyes
Pipe cleaners for legs
Clear plastic for wings (egg carton)
Stapler
String and tape to suspend in the air straw for mosquito 'needle' or sucker
Mosquito fact sheet

See activity below

Math/Science- Draw a mosquito

Materials:
Paper
Pencils/coloring material
Shapes poster or reference to shapes

Activity:
In small groups have students draw with you a mosquito. Start with the three body parts emphasizing shapes. *Lets draw a round head, an oval thorax, and a long skinny oval that points out for an abdomen. How many legs on a mosquito? 1, 2, 3 on this side (draw three stick legs) 1, 2, 3 on this side. How many all together? 6! What are we missing? Wings! Lets draw wings..What shape are they? Oval. How many wings? Draw oval wings on each side. Continue drawing antennae, and mouth (with*

Graph Different Insects found in water tank collection sample.

Materials:
Big white chart paper or graphing paper
Water tank filled with water samples collected
Colored pencils or markers

Activity:
Ask students, "What kind of insects have we identified in the water tank?" Make a list of names (simple drawings help students to read as well!)
"How many of each can we find in the tank?" Count how many and write down next to the name.
Make a bar graph with students to show how many insects are in the tank. Color each bar a different color. Make a title on the graph.

Mosquito Fact Sheet

Only female mosquitoes bite. Females need blood to make their eggs.

Mosquitoes don't have teeth but have 'teeth like mouth part' called a proboscis that is used to pierce the skin to draw blood.

A mosquito can draw up to three times its body weight in blood.

Mosquitoes spend up to their first 10 days in the water (from egg, to larvae, pupa and adult mosquito)

Mosquitoes hibernate like many other animals (bears, ground squirrels, brown bats, frogs) when temperatures in the fall drop down to below 50 degrees mosquitoes either lay their eggs and die (the eggs will keep unhatched until the weather warms up and then will hatch) or some mosquitoes will find a hole and rest until the weather warms up again.

Mosquitoes have six legs.

Mosquitoes can sense humans by their breath or their sweat. Both breath and sweat attract mosquitoes.

Mosquitoes are attracted to dark clothes.

When female mosquitoes bite they also inject their saliva or spit which many people are allergic to and causes the bump, itching and swelling on your skin after a bite.

Mosquitoes are considered the deadliest animal in the world because in many parts of the world mosquitoes carry diseases that can hurt people and make them very sick.

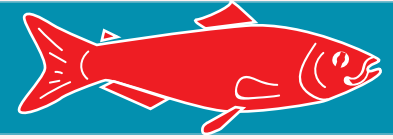
The main predators of mosquitoes are fish and dragonflies. Both do a good job killing mosquitoes!

Mosquitoes have been around as long as dinosaurs. The species is estimated to have been on earth for 210 million years! Although mosquitoes themselves do not typically have a very long life span. Most die after 2 months.

<https://www.westernexterator.com/blog/10-interesting-facts-mosquitoes/>

<https://www.megacatch.com/mosquito-faqs/mosquito-facts.html>

Activity



Engage: Whole Group Activity: Learning more about Mosquitoes

Gather students around a big table or place where they can all watch you make a mosquito. While you are making the mosquito tell students facts about the mosquito. You can write them on the board or have a paper next to you to read aloud to students.

First: Cut out the template for the body. Tell students, "Mosquitoes have three body parts because they are insects. They have a round head, a thorax (the middle part) and an abdomen or (end section)"

Attach the three pieces by stapling together.

"The head has eyes, a mouth and a pair of antennae. The eyes are compound eyes which means they have hundreds of eyes in each set. That's why it's so hard to catch a mosquito sometimes because they can see you from all directions!" Cut out eyes using bubble wrap or screen mesh.

"Female mosquitoes are the only ones who suck blood. They use a long straw-like sucker to pierce the skin and suck blood. Mosquitoes can suck over three times their body weight in blood. That's like one of you carrying three of your classmates! I'm going to make the mouth out of an old pen (or straw) and I'll attach it to the top of the mouth in between the eyes."

"The last thing we'll make on the head is the antennae. We can use pipe cleaners to make two antennae on each side of the head. Antennae are very important parts for mosquitoes because it's their antennae that help them to find other mosquitoes (males to find females) and it helps them to sense the world around them, sort of functioning like how we use our ears." Attach two pipe cleaner antennae to the head above the eyes.

"The thorax or middle part has three sets of legs on each side and a pair of wings. Let's count how many legs altogether if we have three legs on each side. 1,2,3,4,5,6! Mosquitoes are insects so they have 6 legs!" Staple and bend the legs onto the thorax.

"What shape are the wings of a mosquito? Are they round like the sun or oval like a leaf? Let's cut out some wings. They are translucent or you can see through them so I found some clear plastic to use for the wings. Where on the body are the wings? The head? The thorax or abdomen?"

Attach the wings to the thorax.

Read some more interesting facts about the mosquito to the students.

Before each student exits the door to go home or to recess have them give you a mosquito fact. If they are having a hard time recollecting have them fill in the blanks. "Mosquitoes have _____ legs."

Evaluation

Emerging:
Student cannot focus on activity.

Developing:
Student can not give facts about mosquitoes.

Proficient:
Student can name some parts of the mosquito and give a fact about mosquitoes.

Advanced:
Student can name parts of the mosquito and can give multiple facts about the insect.