LESSON 4: HOW MANY MOSQUITO LARVAE CAN A FISH EAT?

Food webs:

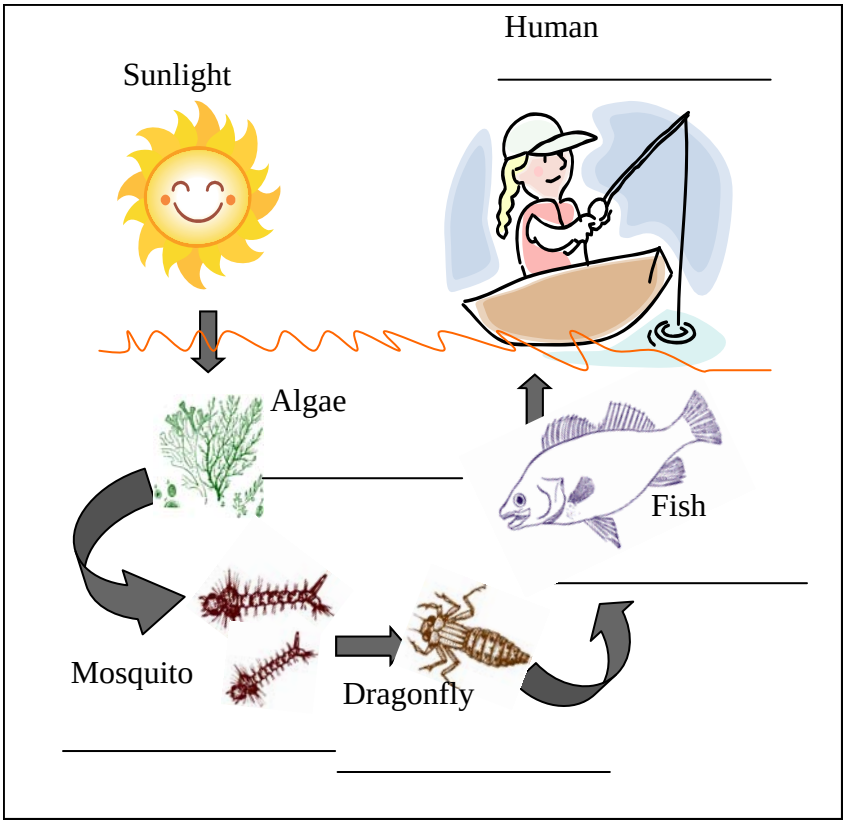
Every living thing needs food. Plants make their own food from sunlight, carbon dioxide, and water. Living things that make their own food are called "**producers**". Animals can not make their own food from sunlight, so they must eat other living things to survive, and are therefore called "**consumers**". Animals that eat plants are called "**Herbivores**" or "**primary consumers**" and those that eat other animals are called "**Carnivores**". If a carnivore eats an herbivore, it is a "**secondary consumer**". Occasionally animals eat both plants and animals, they are called "**Omnivores**".

TROPHIC LEVEL	MOSQUITO LARVAE	MOSQUITO ADULTS
Primary Producers	Algae	Plant Nectar
Primary Consumers	Mosquito larvae	Mosquito Adult
Secondary Consumers	Dragonfly nymph	Frog
Tertiary Consumers	Fish	Raccoon
Quaternary Consumers	Human	Bear

Mosquitoes are part of the food chain as larvae and adults. The larvae feed on algae, and detritus, and are therefore "**Herbivores**". Some mosquito larvae are **Carnivores**", because they eat other mosquito larvae.

As adults, mosquitoes feed on plant nectar for energy, and are therefore "**Herbivores**".

FILL IN THE TROPHIC LEVELS TO YOUR RIGHT.



HOW MANY MOSQUITO LARVAE CAN A MOSQUITO FISH EAT? Let's find out! In your classroom, you have a fish tank with a special fish called a "Mosquito fish". It gets it's name because it loves to eat mosquito larvae. Because of this, these fish are often added to ornamental ponds and rain barrels to control mosquitoes. Let's see if it works, by conducting this neat experiment.

Tools: Fish tank, mosquito fish, mosquito larvae

Experiment: When your teacher says go, add 10 mosquito larvae to the fish tank. When she says record, start counting the number of mosquito larvae left in the fish tank. You will count the number of larvae at 2 minutes, 4 minutes, and 6 minutes. What do you think will happen?

Record your data:

Number of larvae at 2 min:_____.
Number of larvae at 4 min:_____.
Number of larvae at 6 min:_____.

How do we know how many were eaten at 2, 4, and 6 min? Do the math.

Let's add this data to the graph.

What can we conclude from this experiment?