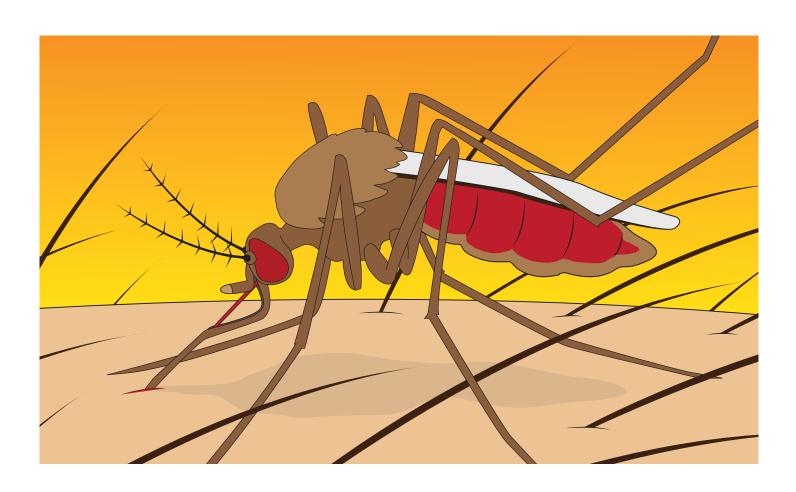
# Adaptations of Mosquitoes:

**Observation Journal** 





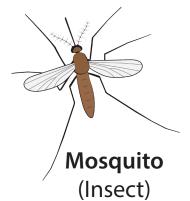
Name: \_\_\_\_\_

#### Instructions

- Complete the activities on each page. Your teacher has the answers to the questions if you get stuck.
- · Words printed in green are included in the glossary.

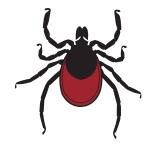
#### **Mosquitoes Are Vectors!**

- · Vectors are animals that can spread certain diseases or hurt people.
- Mosquitoes, yellowjackets, ticks and rodents are four common vectors.





Yellowjacket (Insect)



**Tick** (Arachnid)

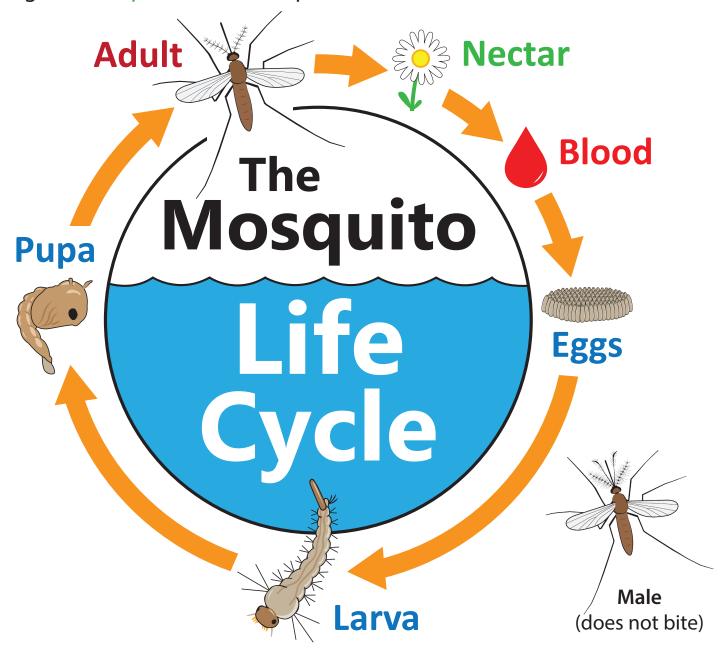


Rodent (Mammal)

1. Have you ever encountered a vector: Describe what happened.

#### **Mosquito Life Cycle**

Like most insects, mosquitoes have a four-stage life cycle and each life stage has adaptations that help it to survive.



2. List another insect that feeds on blood. Can you think of an adaptation that it might have to help it survive?

\_\_\_\_

# Complete this activity during the first week

3. Draw what you see in the mosq	uito cage in your classroom.
Date:	How many larvae?
How many pupae?	How many adults?

## Adaptations of mosquito eggs

The mosquitoes in your classroom hatched from a group of eggs called an egg raft.



4. How does an egg raft stay together?	Egg raft

#### Adaptations of mosquito larvae

Mosquito larvae have many adaptations that help them survive in the water. A few of these are printed in red.

Breathing

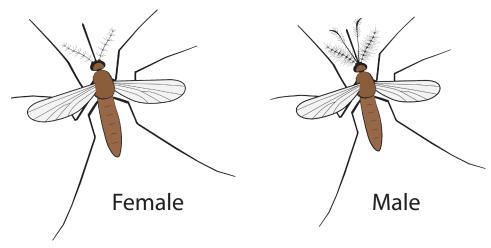
5. Choose an adaptation and describe	how it helps	tube
a mosquito larva to survive in an aqua	tic habitat.	
		1
		7
	_	$\times$
		Y 1
	Sensory hairs	
	Serisory Hairs	
	1 17	
	- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		/ /
	Mouth brushes \	Λ

Mosquito pupae have many adaptations that help them survive in the water. A few of these are printed in red.

6. Choose an adaptation and describe how it helps a mosquito pupa to survive in an aquatic habitat.	Breathing tubes
	Eyes Paddle

## Adaptations of adult mosquitoes

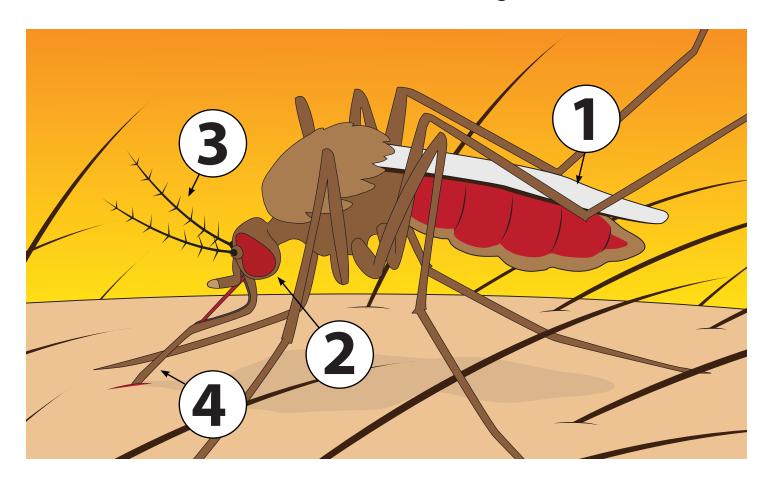
Male and female mosquitoes both have antennae, but their antennae look very different and are adapted in different ways



7. Circle the mosquito with antennae that are very sensitive to sound.

#### Adaptations of adult mosquitoes

 Adult female mosquitoes have adaptations that help them to find a host and take blood without the host noticing.



8. Draw a line from the numbered adaptation to the correct description of how it helps a mosquito survive.



Wings



Eyes



Antennae



**Proboscis** 

This adaptation allows mosquitoes to sense movement

This adaptation helps mosquitoes sense odors, heat, and carbon dioxide

This adaptation helps mosquitoes feed on liquids

This adaptation helps mosquitoes travel long distances to find a host

#### **Invent Your Own Insect!**

9. Imagine that you need to "invent" an insect. Fill in information about your insect and draw a picture of it below. Get creative!

Name of insect:	Habitat:
What does your insect eat?	
List the adaptations that helps your inse	
List the adaptations that helps your mise	ect survive.

## Draw your insect in its habitat in the space below

Make sure to label its adaptations that allow it to survive!

10. Draw what you see in the	e mosquito cage in your classroom.
	How many larvae?
How many pupae?	How many adults?

Complete this activity during the **second** week

# **Activity: Taking Action**

s on the lin	es below.			

## **Glossary**

Adaptation: a trait or characteristic that helps an individual to better

survive in its habitat

Habitat: a place where a plant or animal lives and grows

Host: an animal or plant from which a parasite gains nutrition

**Larva:** (plural = larvae) wingless, feeding stage of an insect

Parasite: an organism that lives on or in another organism (the host)

from which it obtains nourishment

**Predator:** an organism that preys upon other organisms

**Proboscis:** a flexible, elongated sucking mouthpart that is like a tube

Pupa: (plural = pupae) nonfeeding stage of an insect in between

larva and adult

**Vector:** an animal capable of transmitting disease to humans

#### Dear Parents,

Your child has been learning about mosquitoes for the past two weeks. This program teaches students to recognize all 4 stages of the mosquito life cycle, the places they grow, and the problems mosquitoes cause.

Unfortunately, mosquitoes can be more than just a nuisance. They are vectors, meaning that some mosquitoes have the ability to spread certain diseases such as West Nile virus. Please visit our website at <a href="https://www.msmosquito.org">www.msmosquito.org</a> to learn more. The website also includes information related to:

- Free services available to residents of Marin and Sonoma counties
- Information about other vectors (such as ticks, fleas, rats and yellowjackets)
- Information about vector-borne diseases (such as West Nile virus, Lyme disease, dog heartworm, and others)

Thank you,

Casey Richter
Education Specialist
Marin/Sonoma Mosquito & Vector Control District
caseyr@msmosquito.org



Marin/Sonoma Mosquito & Vector Control District call **707.285.2200** or visit us online at www.msmosquito.org



