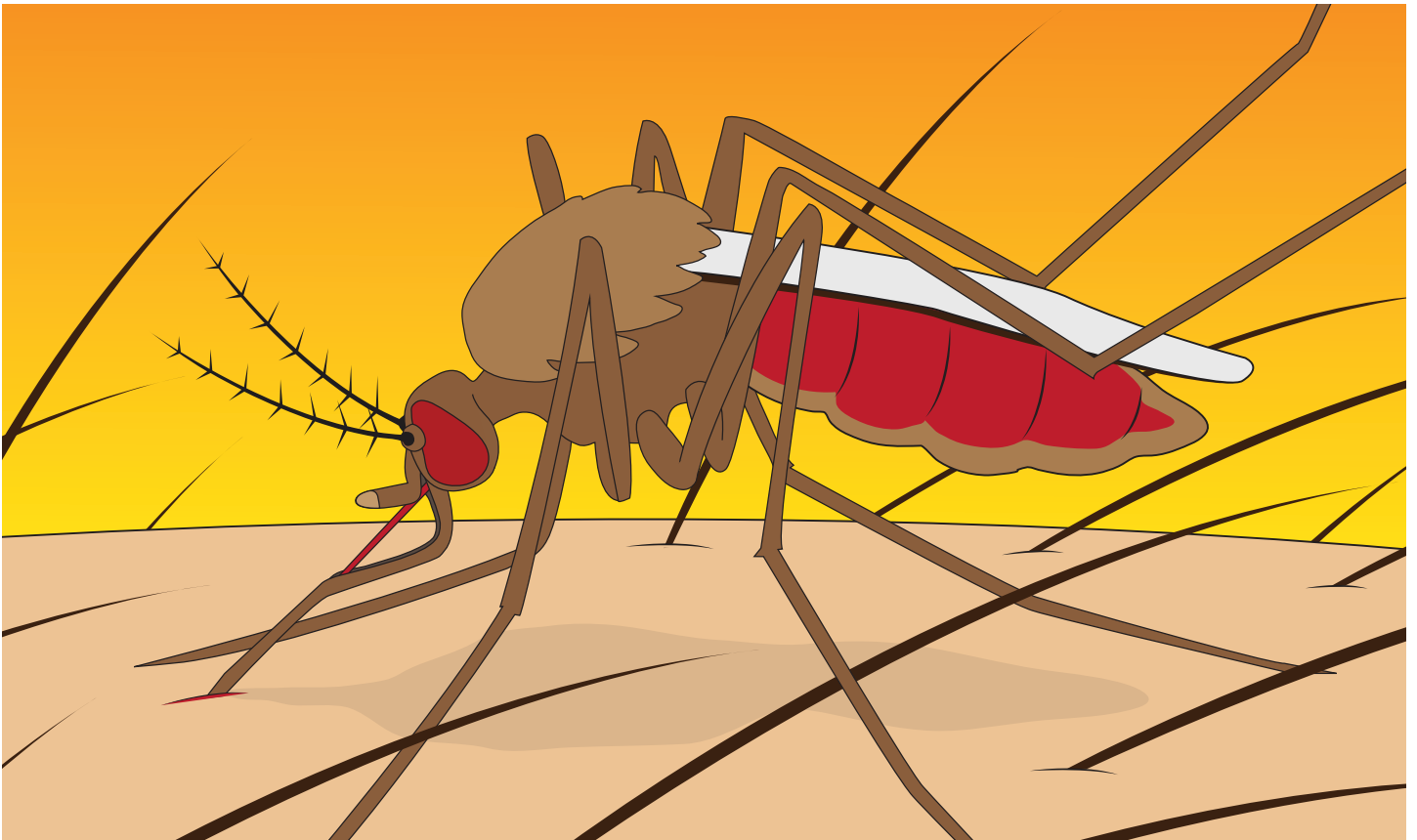


Adaptations of Mosquitoes:

Observation Journal



Name: _____

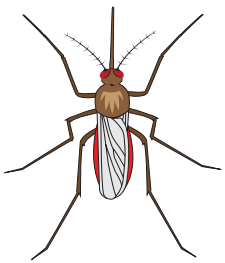


Instructions

- 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.



Mosquito
(Insect)



Yellowjacket
(Insect)



Tick
(Arachnid)

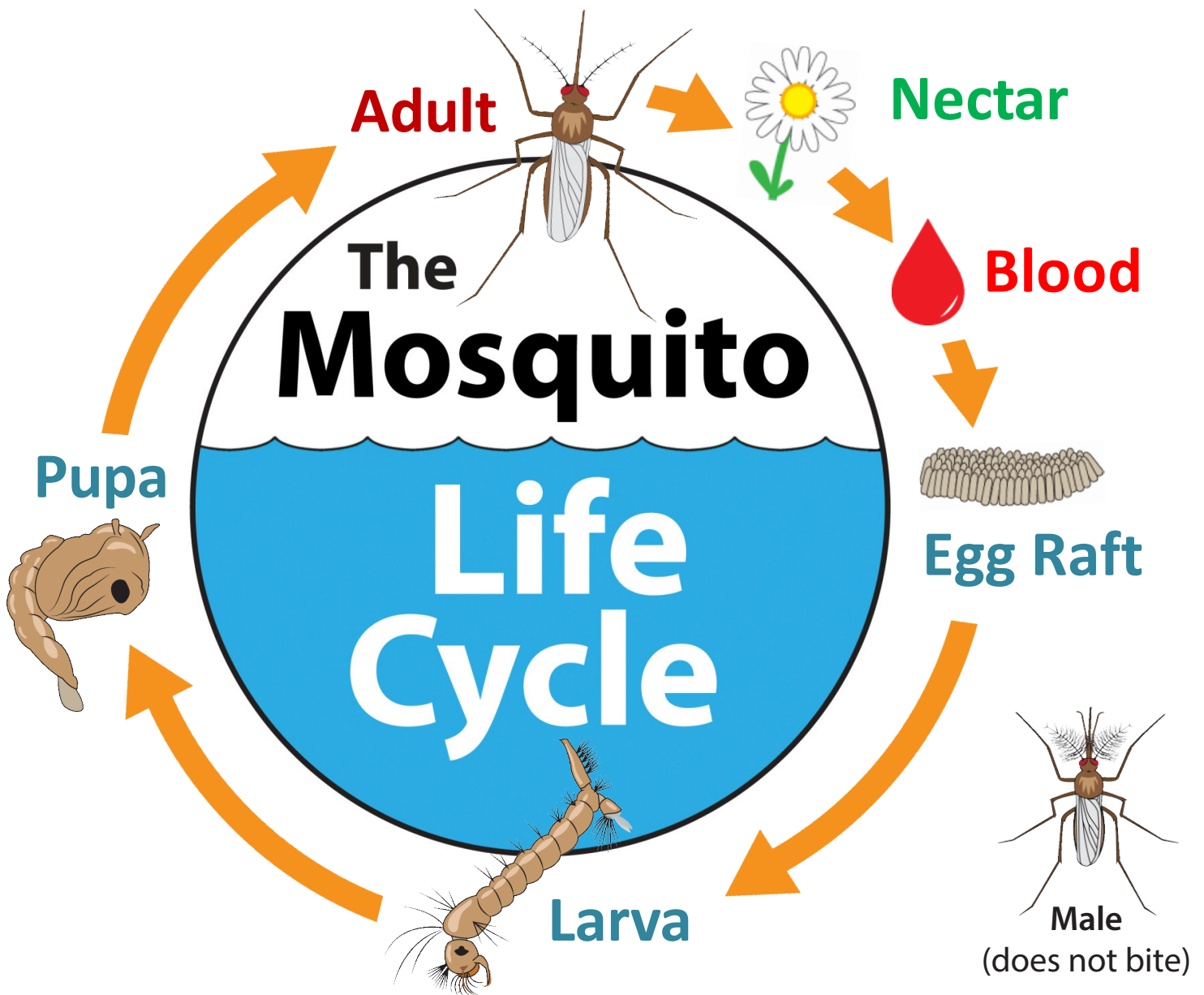


Rodent
(Mammal)

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



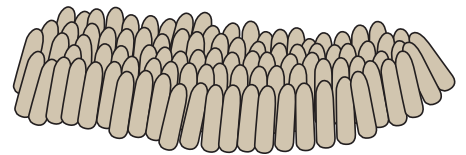
3. Draw what you see in the mosquito cage in your classroom.

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.

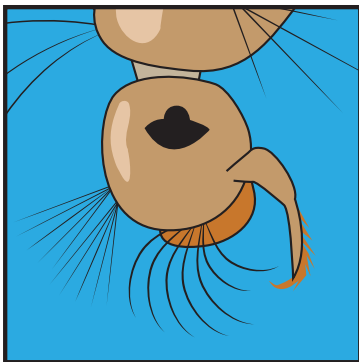


Egg raft

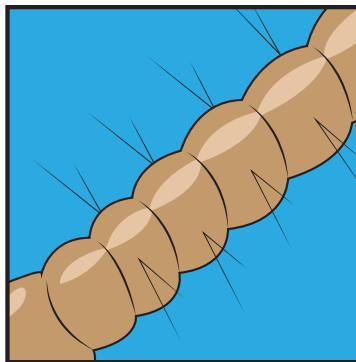
4. How does an egg raft stay together?

Adaptations of mosquito larvae

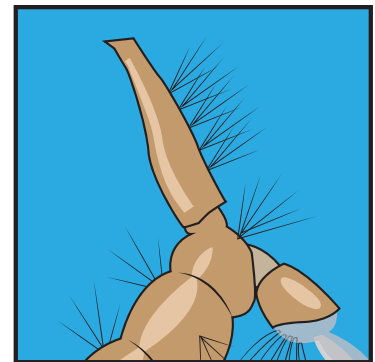
- Mosquito **larvae** have many **adaptations** for life underwater.



Mouth brushes



Sensory hairs

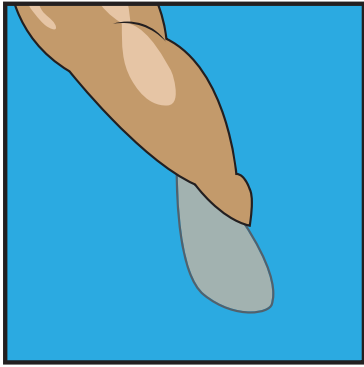


Breathing tube

5. Choose one adaptation and describe how it helps a mosquito larva to survive in an aquatic **habitat**.

Adaptations of mosquito pupae

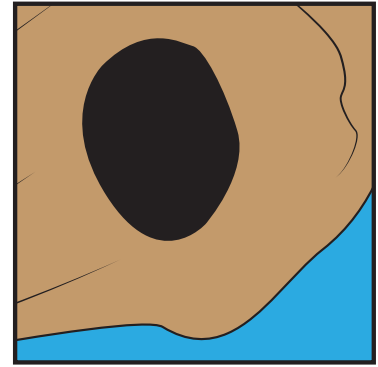
- Mosquito **pupae** have many adaptations for life underwater.



Paddles



Breathing tubes

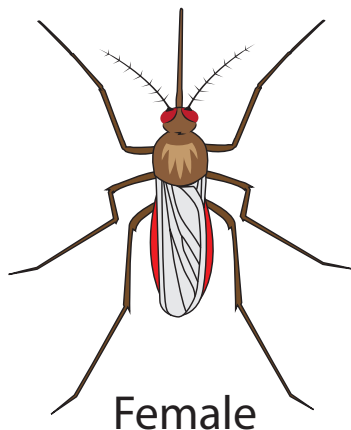


Eyes

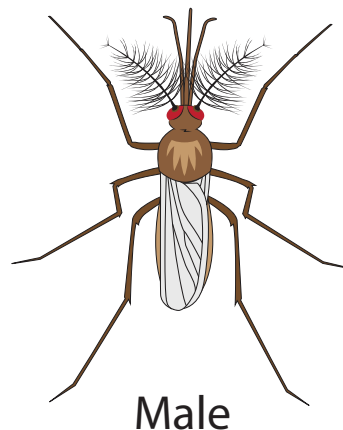
6. Choose one **adaptation** and describe how it helps a mosquito pupa survive in an aquatic habitat.
-
-

Adaptations of adult mosquitoes

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



Female

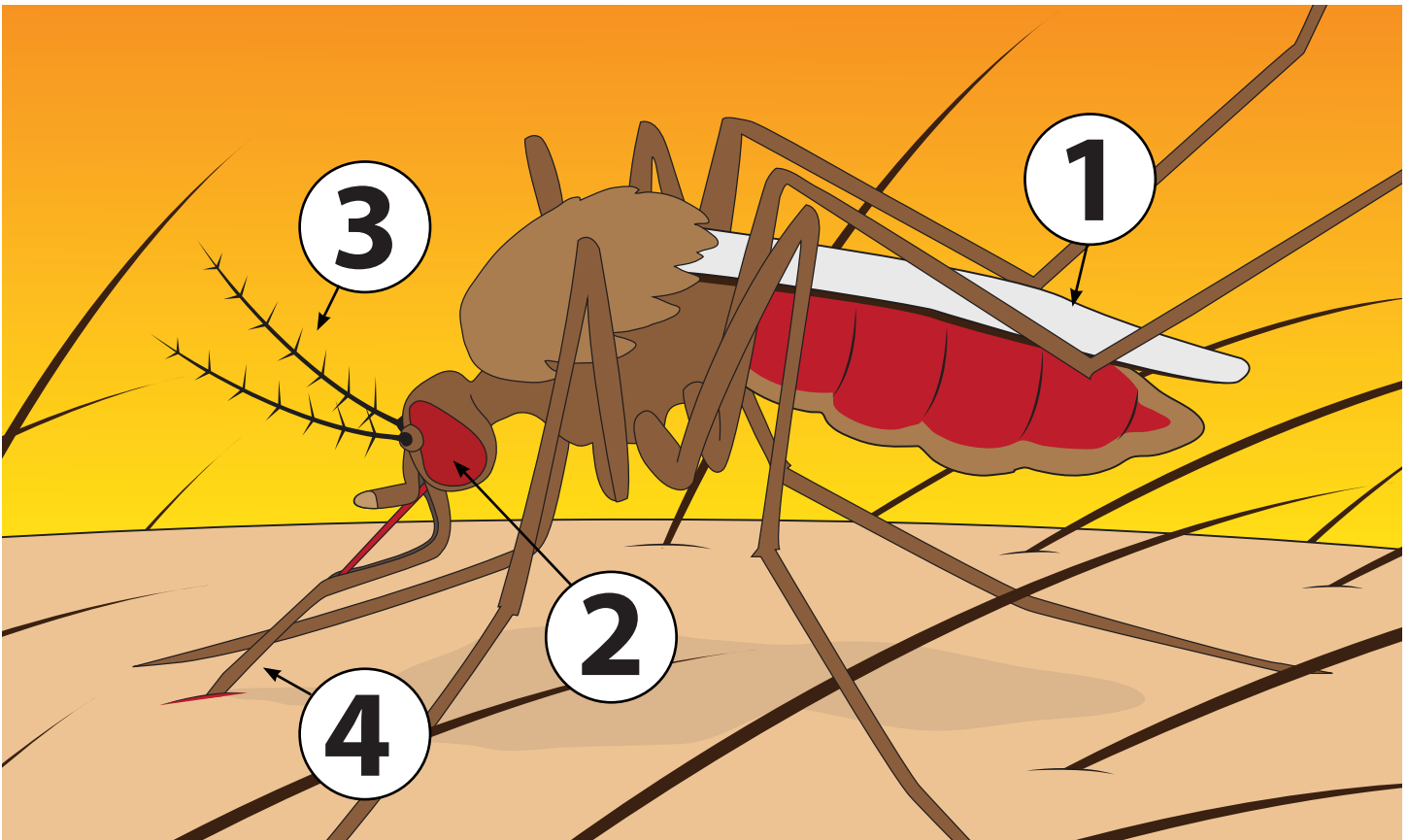


Male

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.

- | | | |
|----------|-----------|--|
| 1 | Wings | This adaptation allows mosquitoes to sense movement |
| 2 | Eyes | This adaptation helps mosquitoes sense odors, heat, and carbon dioxide |
| 3 | Antennae | This adaptation helps mosquitoes feed on liquids |
| 4 | Proboscis | 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:** _____

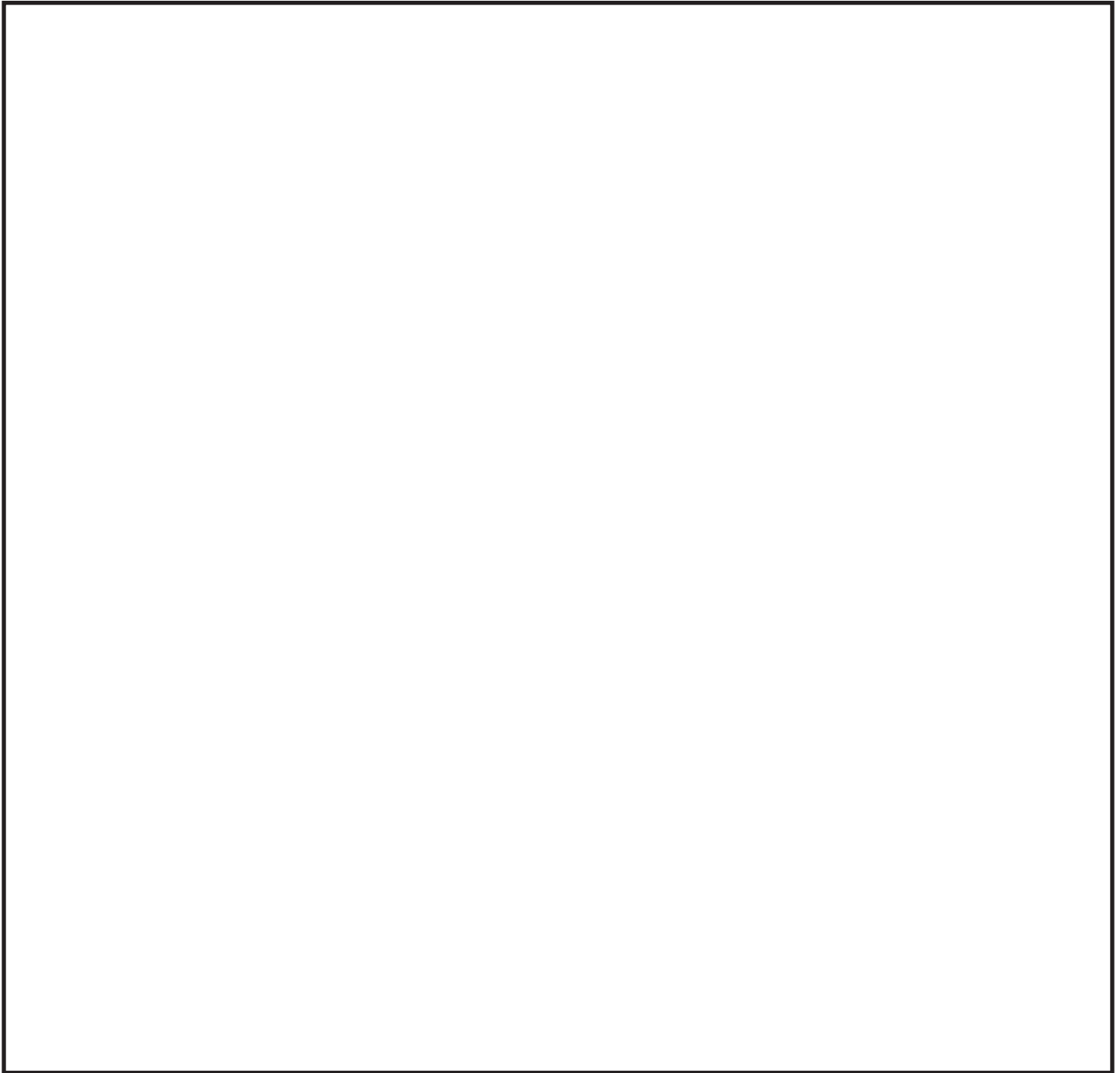
What does your insect eat? _____

List the **adaptations** that helps your insect survive:

Draw your insect in its habitat in the space below

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

Complete this activity during the second week



10. Draw what you see in the mosquito cage in your classroom.

Date: _____ How many **larvae**? _____

How many **pupae**? _____ How many adults? _____

Compare these observations to those on page 3.

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 www.ms mosquito.com 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,

Eric Engh
Education Program Specialist
Marin/Sonoma Mosquito & Vector Control District
erice@msmosquito.com



Marin/Sonoma Mosquito & Vector Control District
call **1.800.231.3236** or **707.285.2200**
or visit us online at www.ms mosquito.com



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