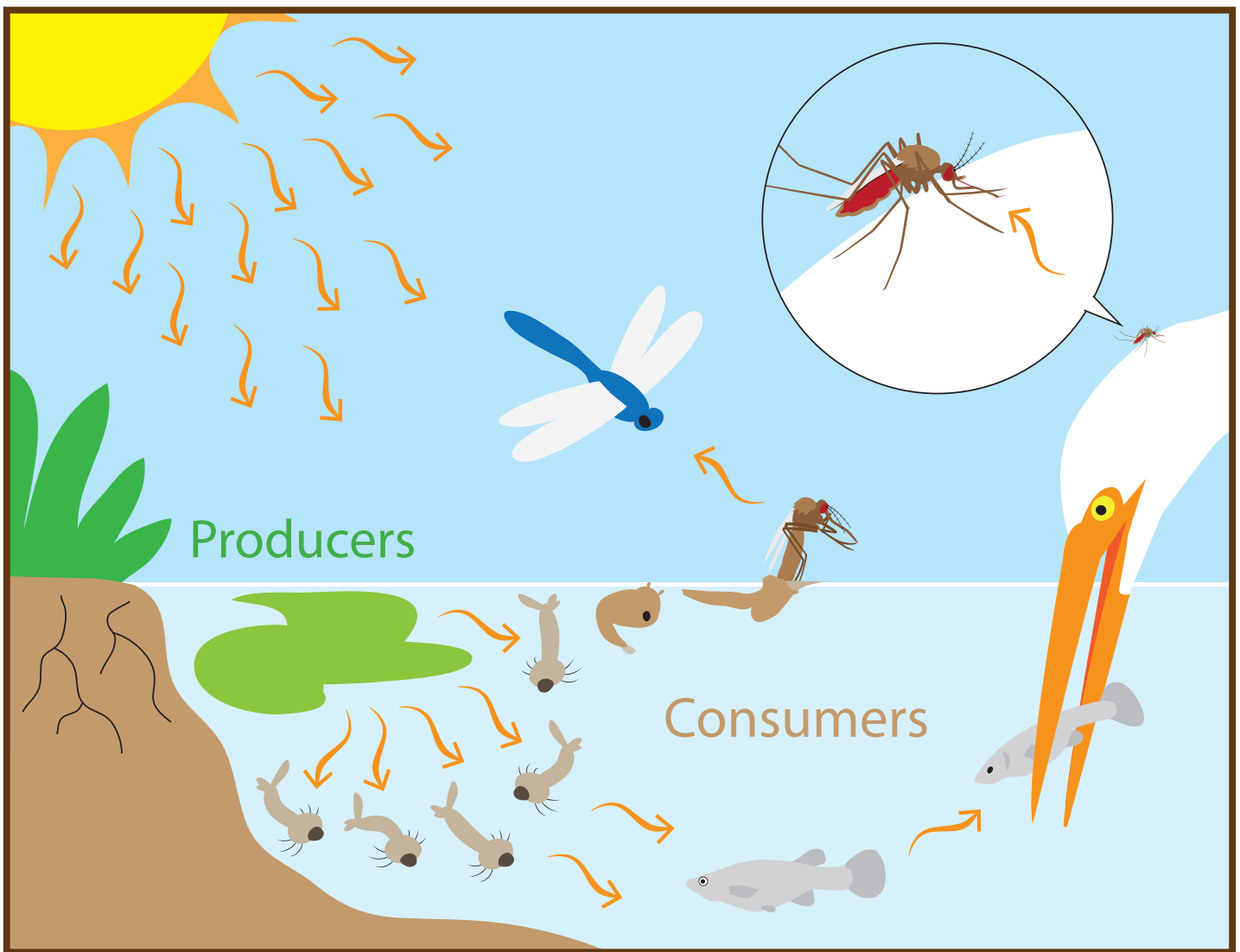


Ecology of Mosquitoes



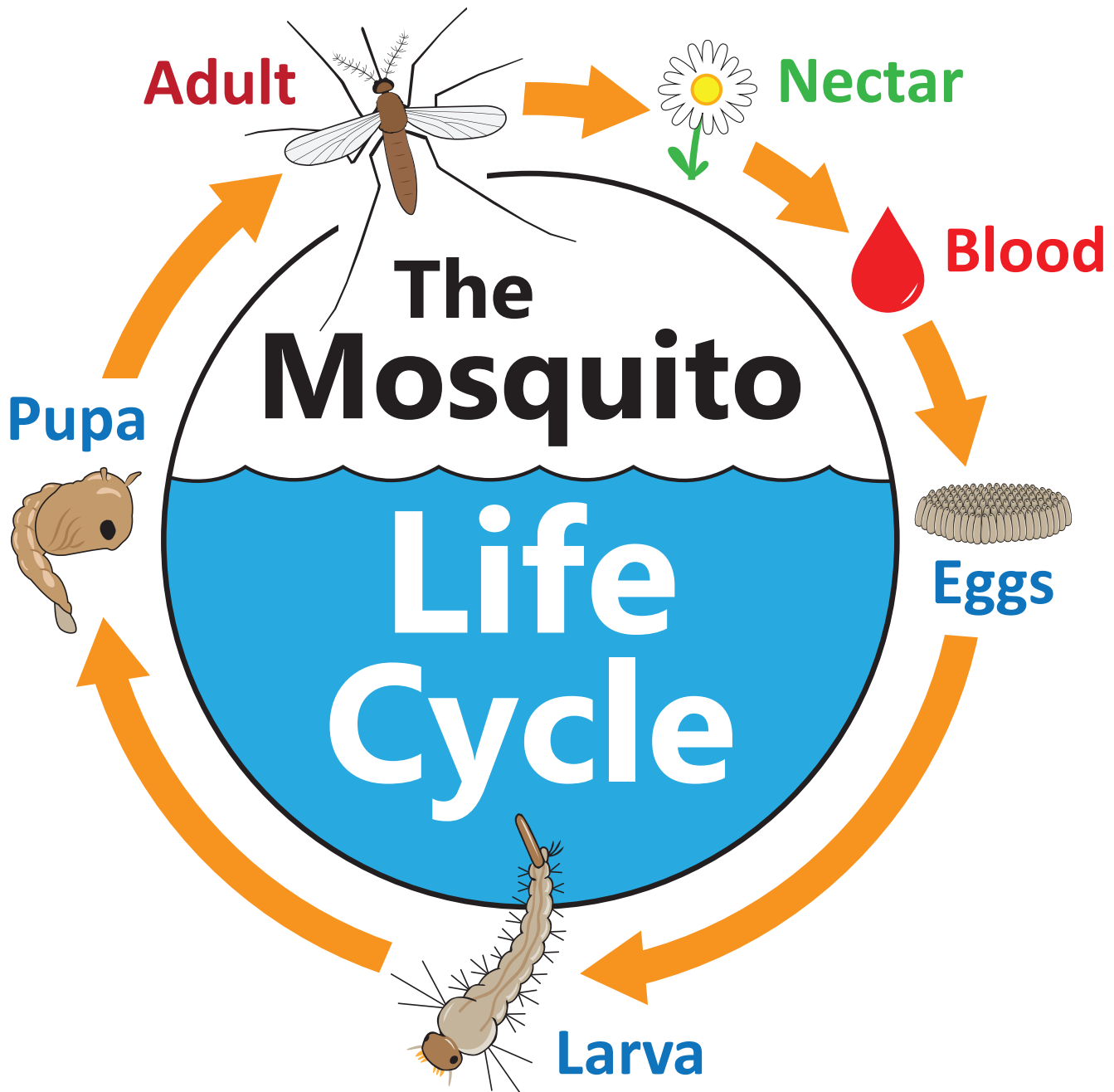
Activity Journal



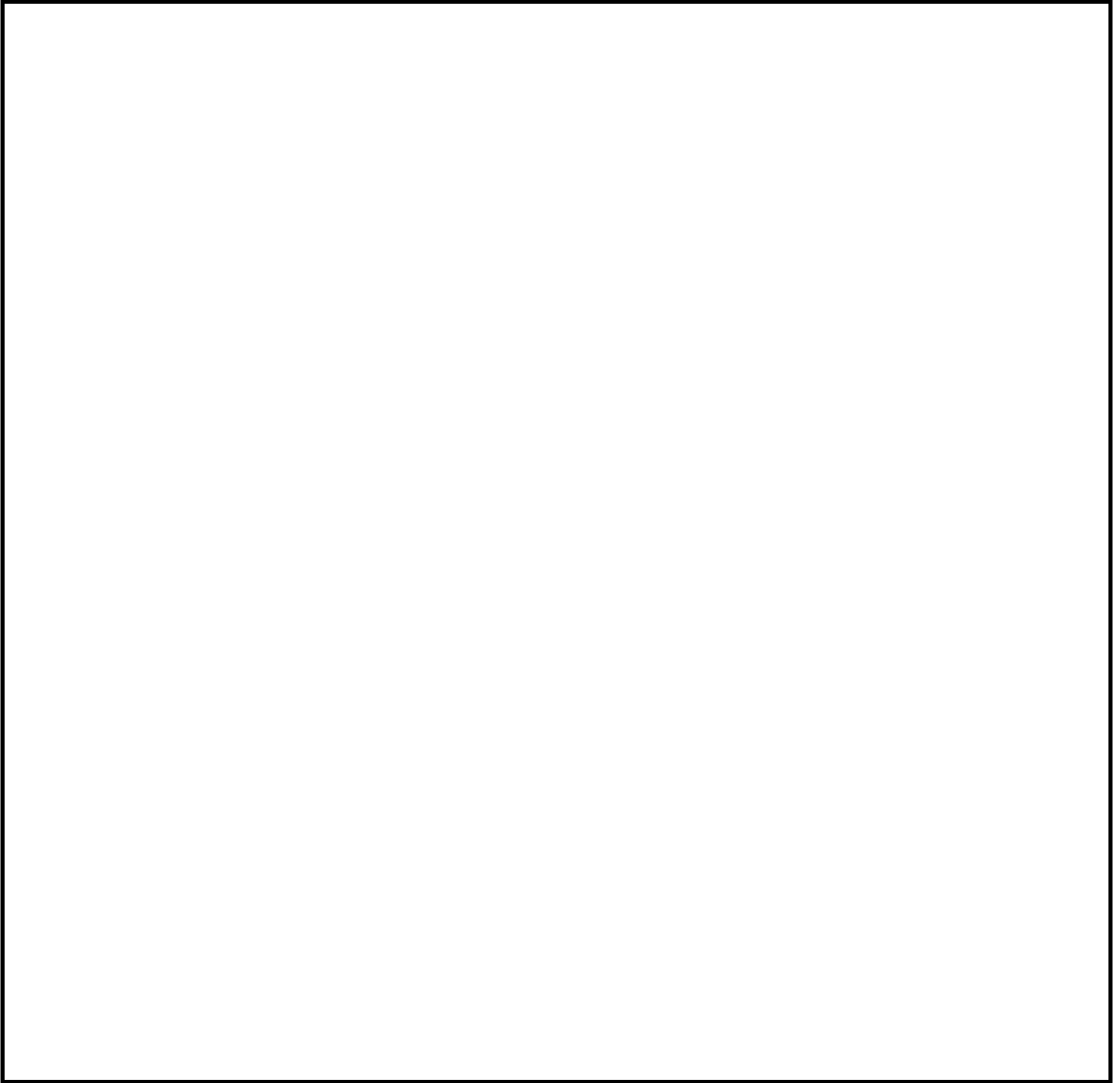
Name: _____

Instructions

- This journal is designed to be used with a mosquito life cycle kit.
 - The mosquitoes will remain in the class for two weeks and during this time students watch the mosquitoes grow and change.
 - Specific directions are provided for each activity.
 - Words printed in **red** are included in the glossary.
-



Complete this activity during the first week



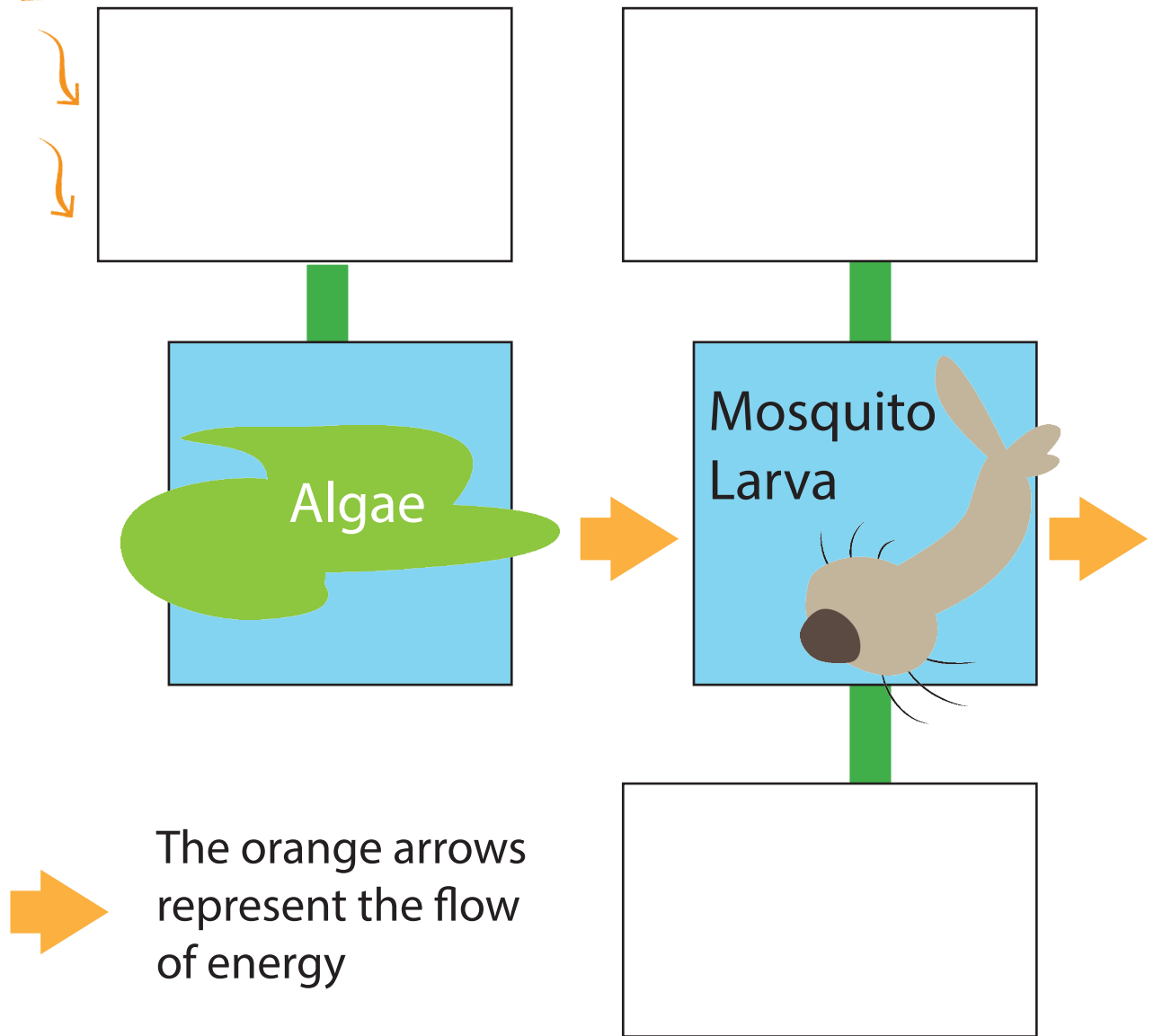
Draw what you see in the mosquito cage in your classroom.

Date: _____ How many larvae? _____

How many pupae? _____ How many adults? _____

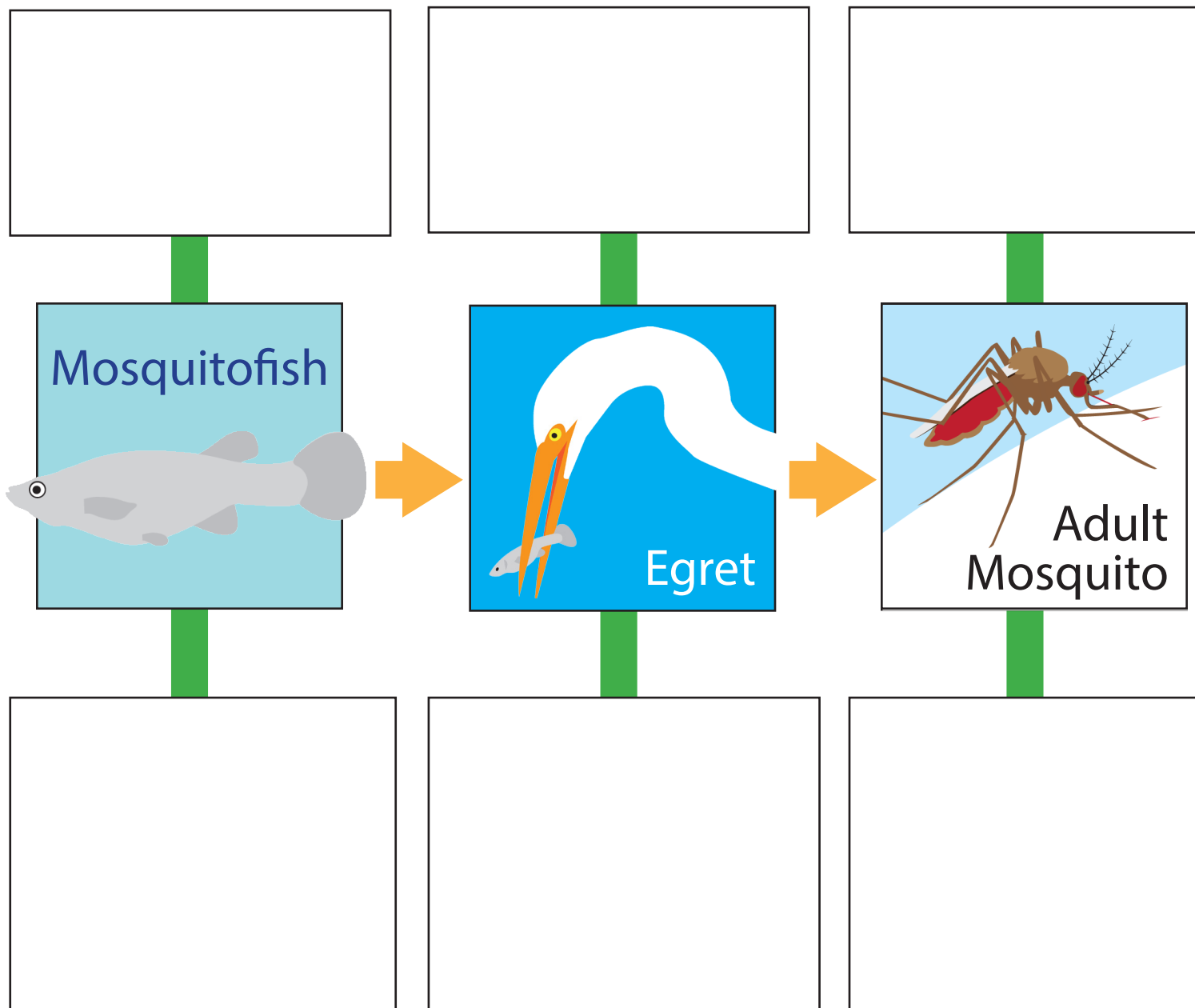
The Roles of

Step 1: In the boxes above each organism, write if it is a **producer** or a **consumer**.



Step 2: In the boxes below each organism, write if it is a **predator**, **prey**, **parasite** or **host** (some have more than one answer).

Organisms in Ecosystems



Word

Use the clues to fill in the blanks. The letters above the circled numbers will be used on the next page.

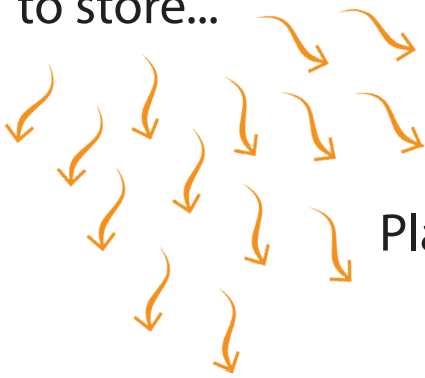


You can trace energy in **ecosystems** back to the...

___ u ___
⑤

Photosynthesis allows plants to store...

___ n ___ ___
④

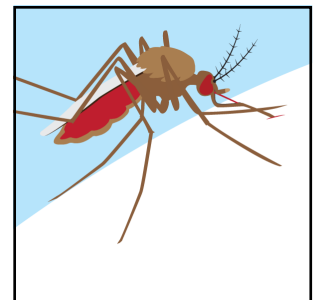


Plants and algae are **producers** and animals are...

___ n ___ ___
⑧ ⑥

Organisms that gain nutrition from a **host** are...

___ r ___ ___
② ③



Vectors are animals that can spread...

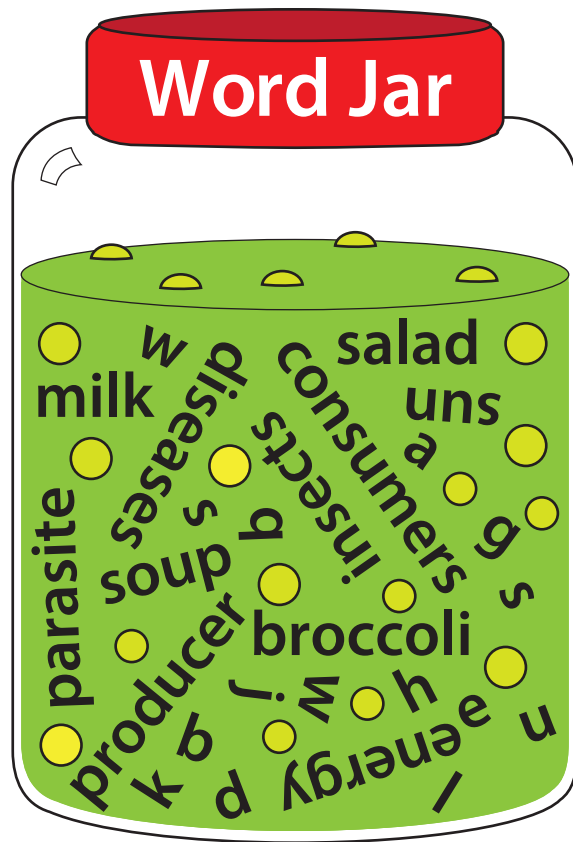
___ e ___ ___
⑦ ①

Puzzle

Use the letters above the circled numbers on the previous page to solve the puzzle below.

Hopefully you now realize that mosquitoes are

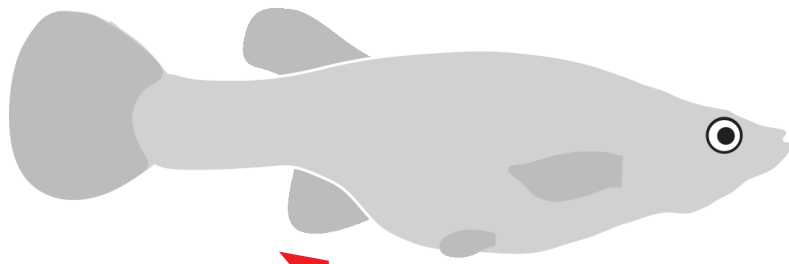
_____!
⑦ ⑥ ② ⑧ ④ ③ ① ⑤ ③



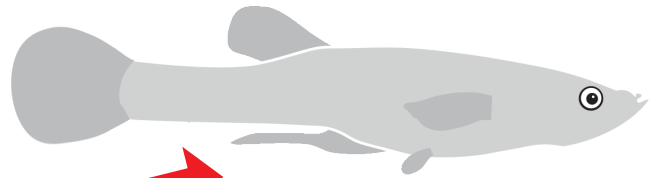
If you can't figure out an answer on page 5, you might find some useful (and not so useful) words hidden in this jar...

Mosquitofish

Look closely at the mosquitofish in the aquarium. You can tell male and female mosquitofish apart by the shape of their fins.

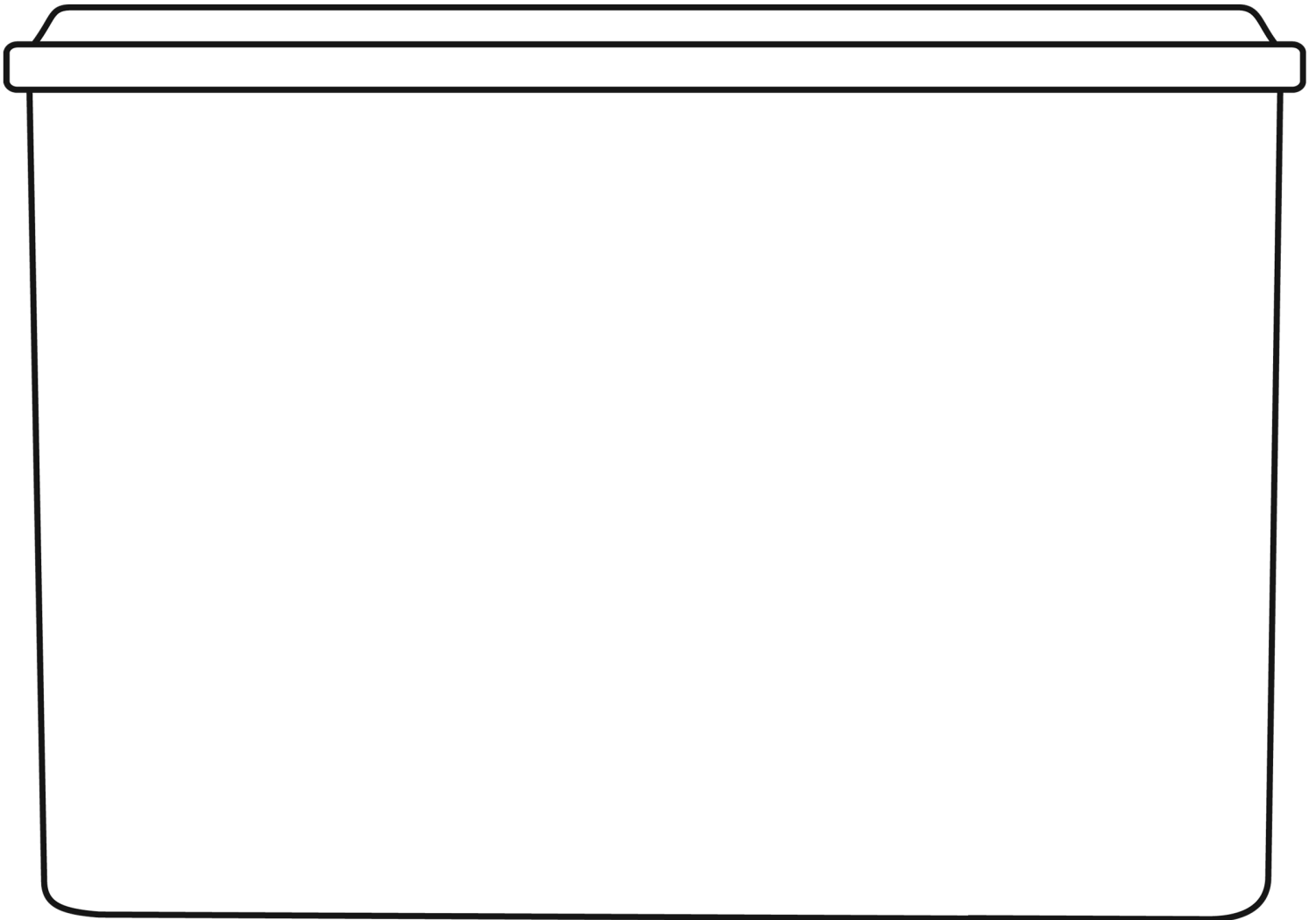


Female



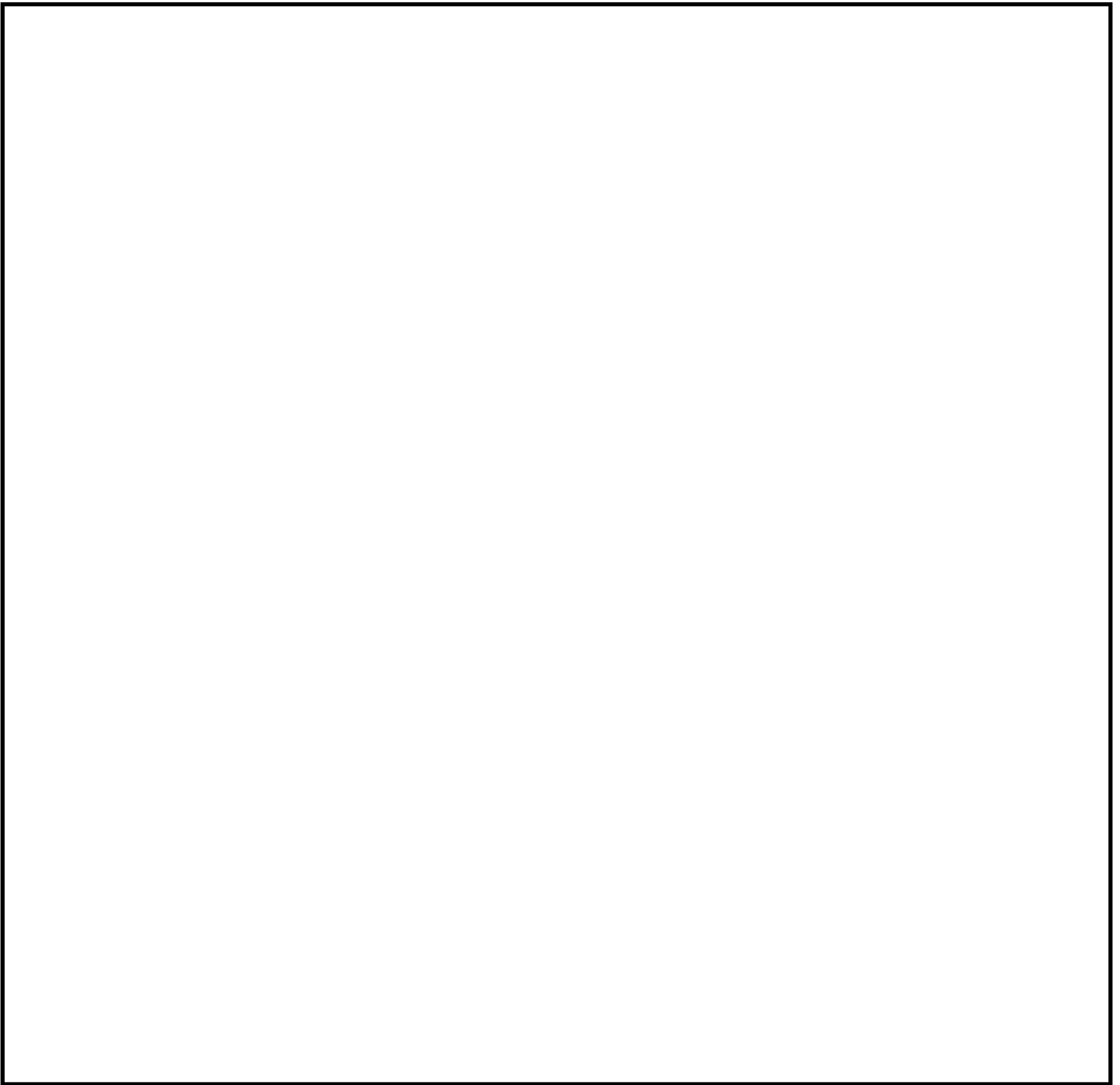
Male

Draw the mosquitofish in their classroom habitat.



7 How many males? _____ How many females? _____

Complete this activity during the second week



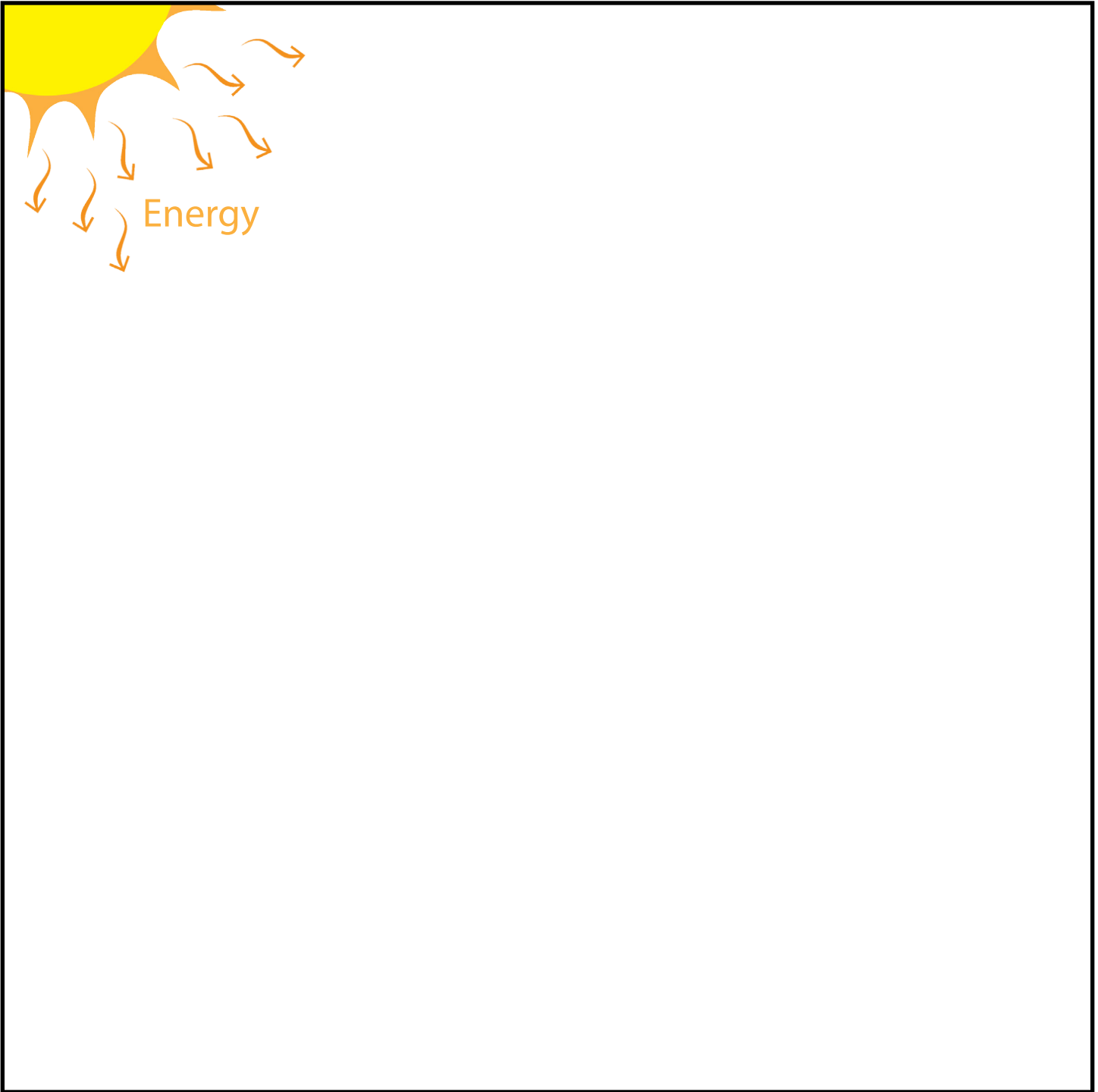
Draw what you see in the mosquito cage in your classroom.

Date: _____ How many larvae? _____

How many pupae? _____ How many adults? _____

Compare these observations to those on page 2.

Design Your Own Ecosystem



Imagine a habitat or **ecosystem** that you are familiar with. In the space above, draw an ecosystem that shows how energy starts with the sun and flows through organisms in the system. Label the names of the different plants and animals and their roles in this ecosystem (**producer**, **consumer**, **herbivore**, **predator**, etc.).

Glossary

Alga:	(plural - algae) chlorophyll-containing, mainly aquatic organism that differs from plants in several ways, including the absence of roots, leaves or stems
Consumer:	organisms in the food chain that consume other organisms
Energy:	the ability to do work. Energy exists in several forms such as heat from the sun, stored chemical energy, mechanical energy, etc. Organisms can change energy from one form to another but cannot create energy.
Ecosystem:	a system involving the interactions among organisms living together and the nonliving environment
Herbivore:	an animal that feeds on plants
Host:	an animal or plant from which a parasite gains nutrition
Photosynthesis:	process in which plants and algae trap energy from the sun and convert it into chemical energy. The energy is stored in plant tissues
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
Producer:	an organism that produces its own food through photosynthesis and provides food to other animals in a food chain
Tissue:	a group of similar cells (or products of cells) that form a structure with a function
Vector:	an animal capable of transmitting disease to humans

Dear Parents,

Your student has been learning about mosquitoes and mosquitofish for the past two weeks. This program aims to teach students useful information about the biology, ecology and control of mosquitoes. Students learn to identify potential mosquito habitats and are made aware of free services that are available to all residents of Marin and Sonoma counties.

Mosquitofish are an important component of our mosquito control program and are used in certain situations such as abandoned swimming pools, backyard (man-made) ponds, and water troughs. In these situations, mosquitofish can often effectively control mosquitoes without the use of chemical insecticides. The District provides mosquitofish free of charge to residents of Marin and Sonoma counties (during the warmer months). Please visit www.ms mosquito.org to learn about mosquitofish (including availability) and much more, including:

- Free services available to residents of Marin and Sonoma counties
- Information about 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.ms mosquito.org



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