



Barred owlet (infant)

Water, Wildlife and Wilderness
Field Studies Program
Life Cycles and Food Chains

at Circle B Bar Reserve



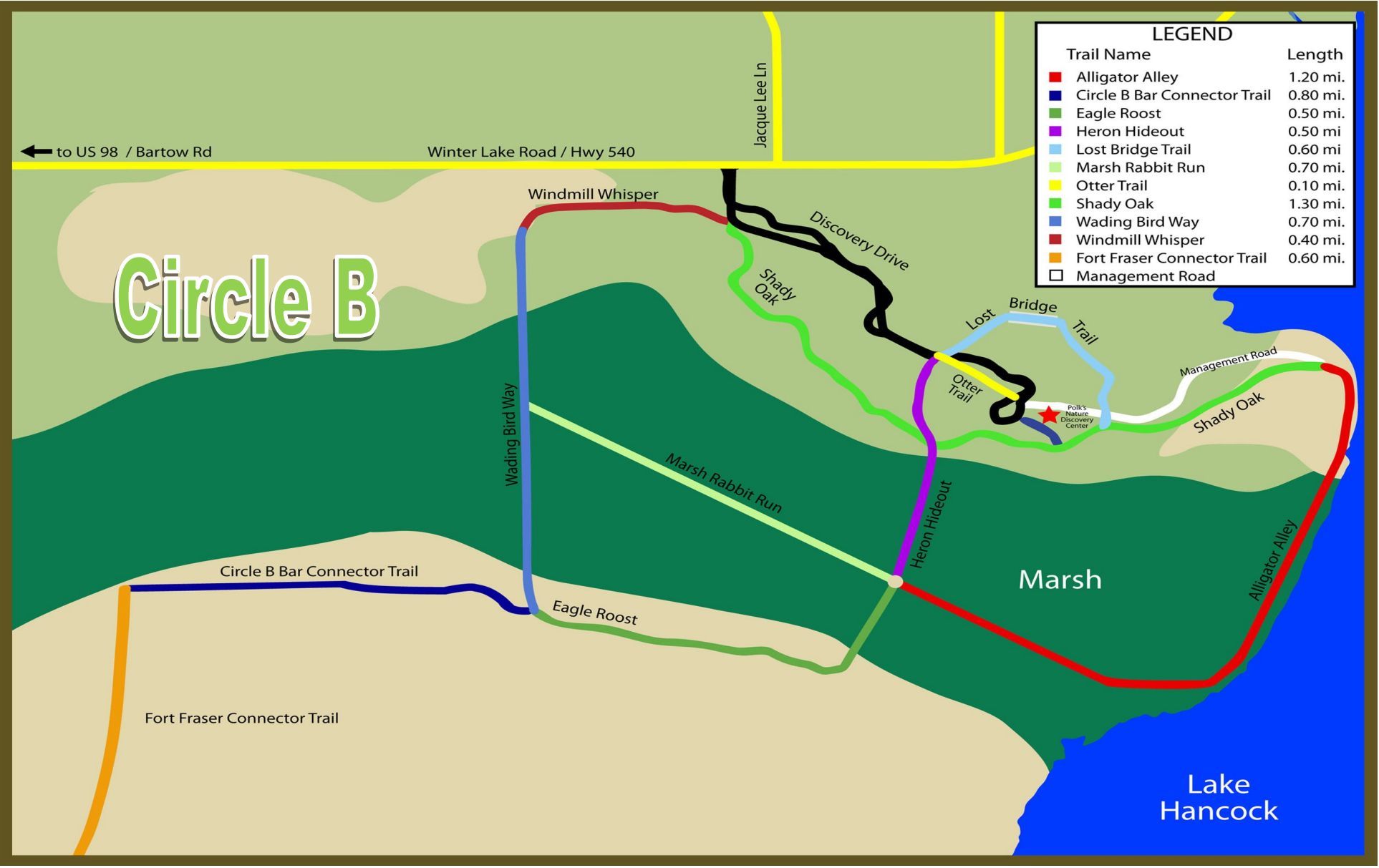
Mission

Polk's Nature Discovery Center will provide hands-on learning experiences in an outdoor setting that engage students in investigating the value of Polk County's natural resources. Through this exploration, students will discover the interconnection of water, wildlife and wilderness; understand their impact on the environment; and foster a sense of personal stewardship towards the environment.

Researcher _____

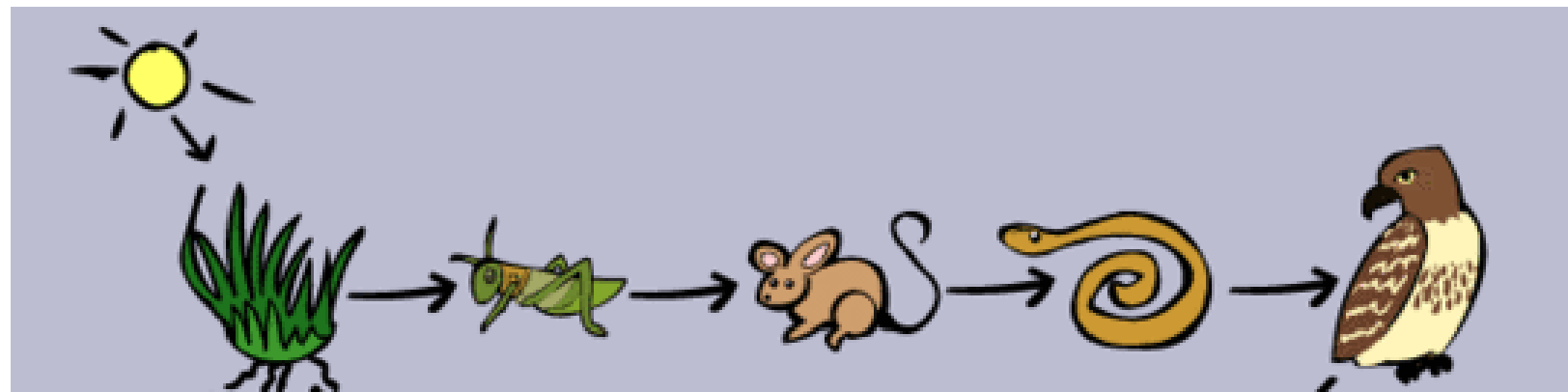
Date of Visit _____





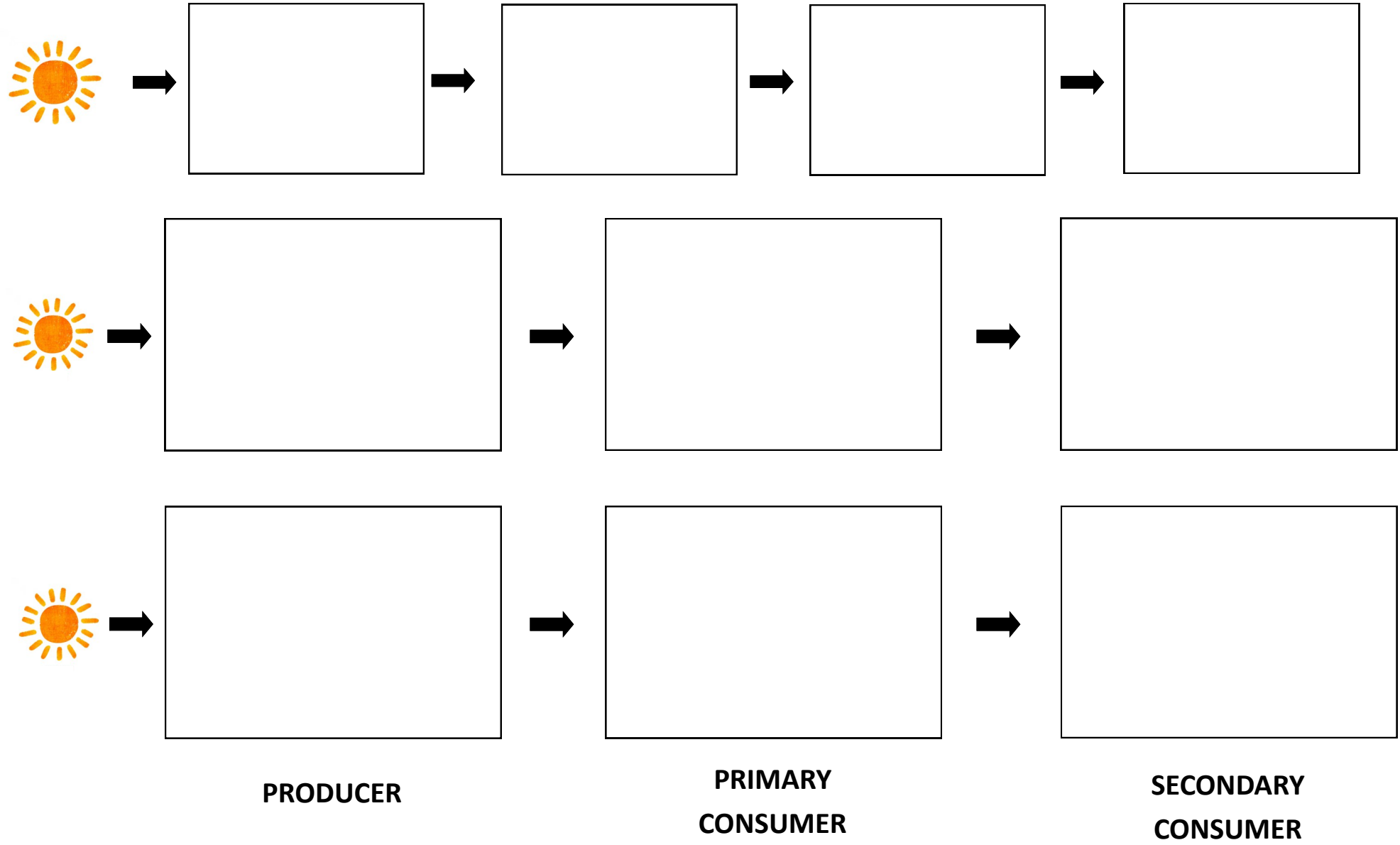
What is a food chain?

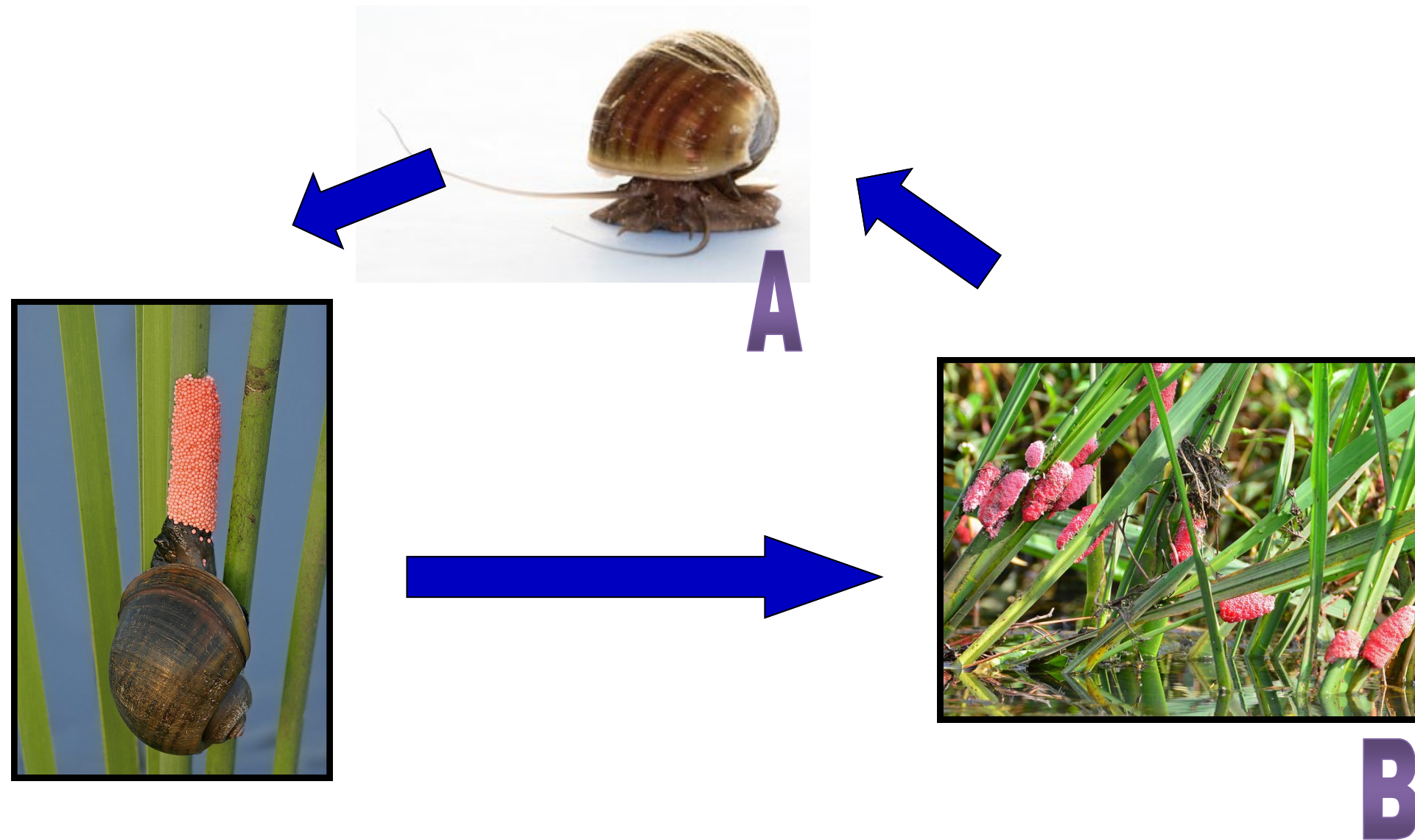
A food chain shows how each living thing gets food and how energy is passed from one living thing to another. Food chains begin with plant-life and end with animal life, all cycling back to decomposers. Some animals eat plants, some animals eat other animals, some animals eat plants and animals. Plants use energy from the Sun to make their own food.



Wetlands Food Chain

FOOD CHAIN ACTIVITY





Life Cycle of Living Things

The images to the left are of a female apple snail and what she has left behind after 3 days in our freshwater marsh. What are those small, spherical pink things clustered together? What evidence do you have to support your answer?

Which letter is the beginning life cycle of an apple snail?

Describe at least four physical characteristics of an apple snail.

Some living things go through physical form changes in their life cycle, called metamorphosis. Draw a line connecting each infant to its adult stage.

Infant



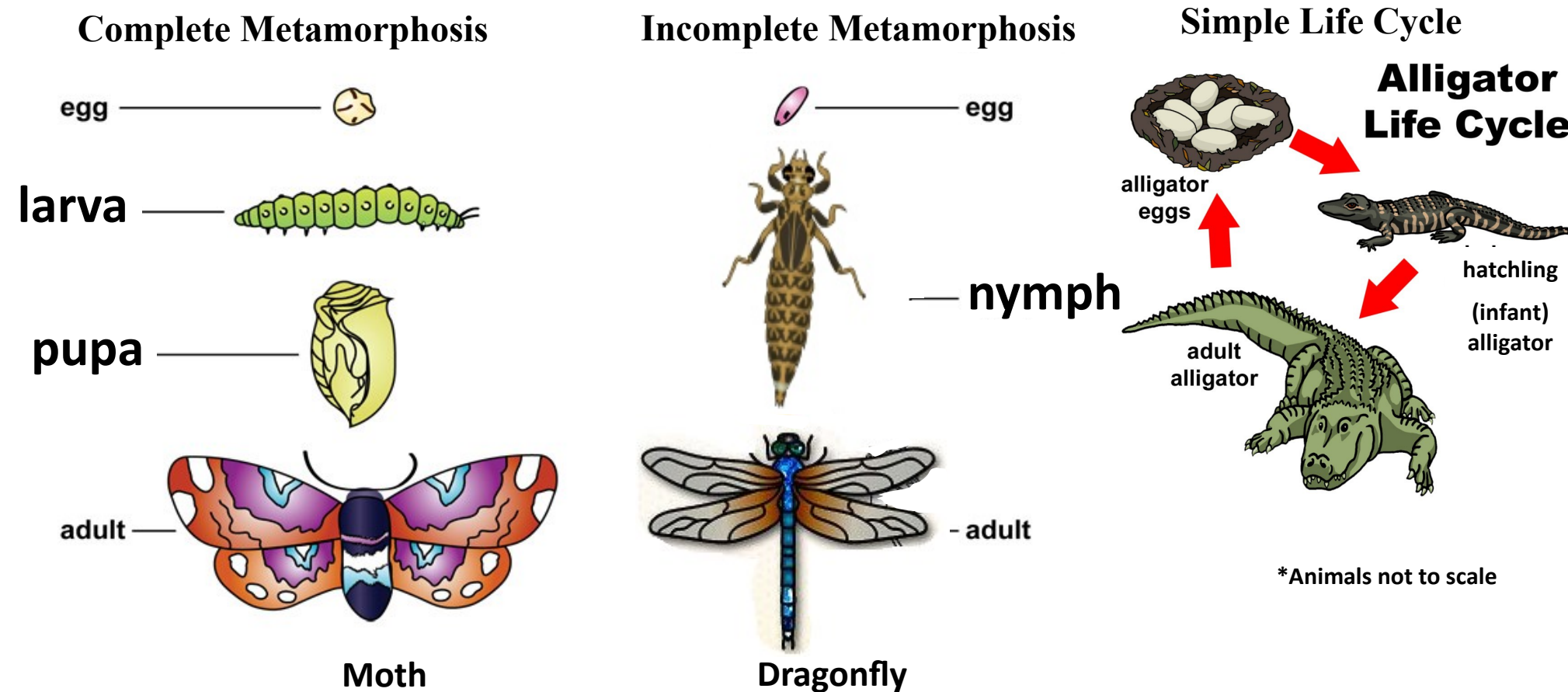
Adult



Life Cycles of Living Things

***Animals not to scale**

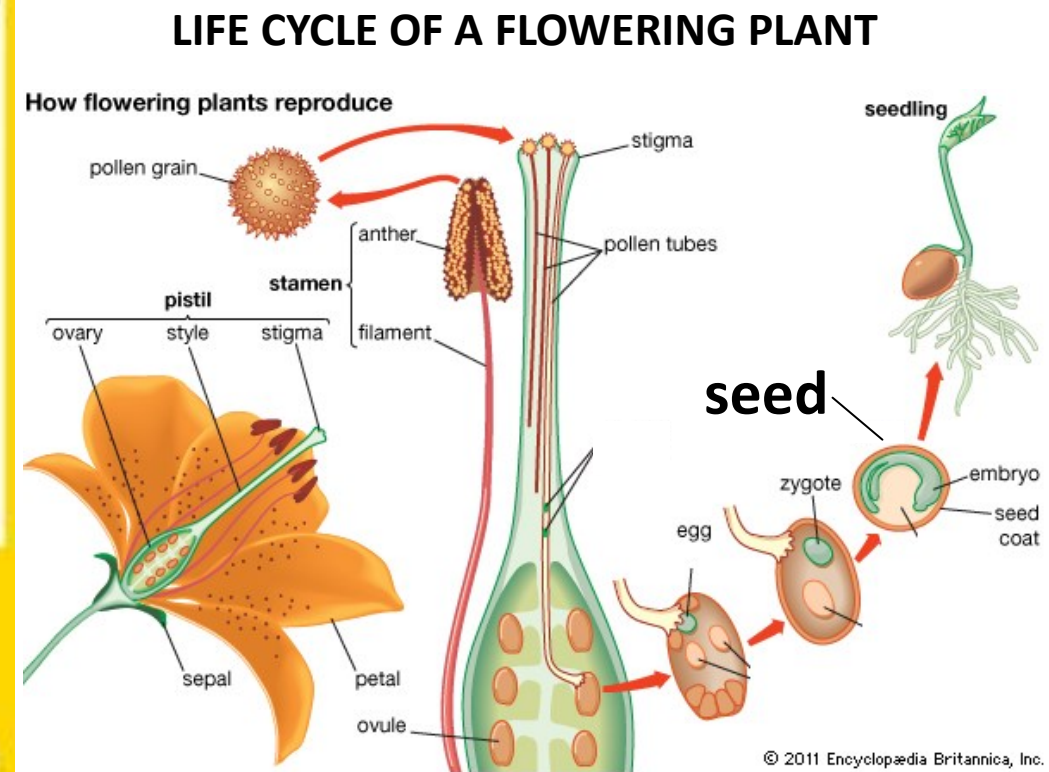
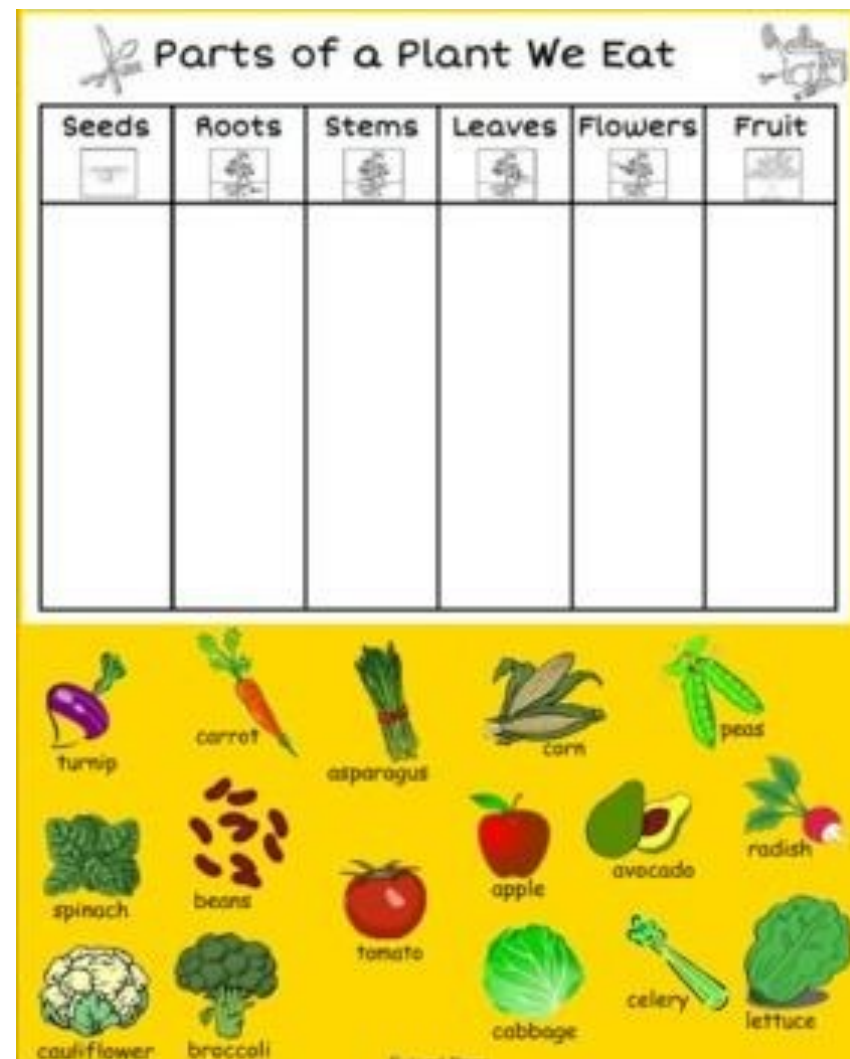
Life Cycle Changes in Animals



What are three differences between the stages of complete and incomplete metamorphosis?

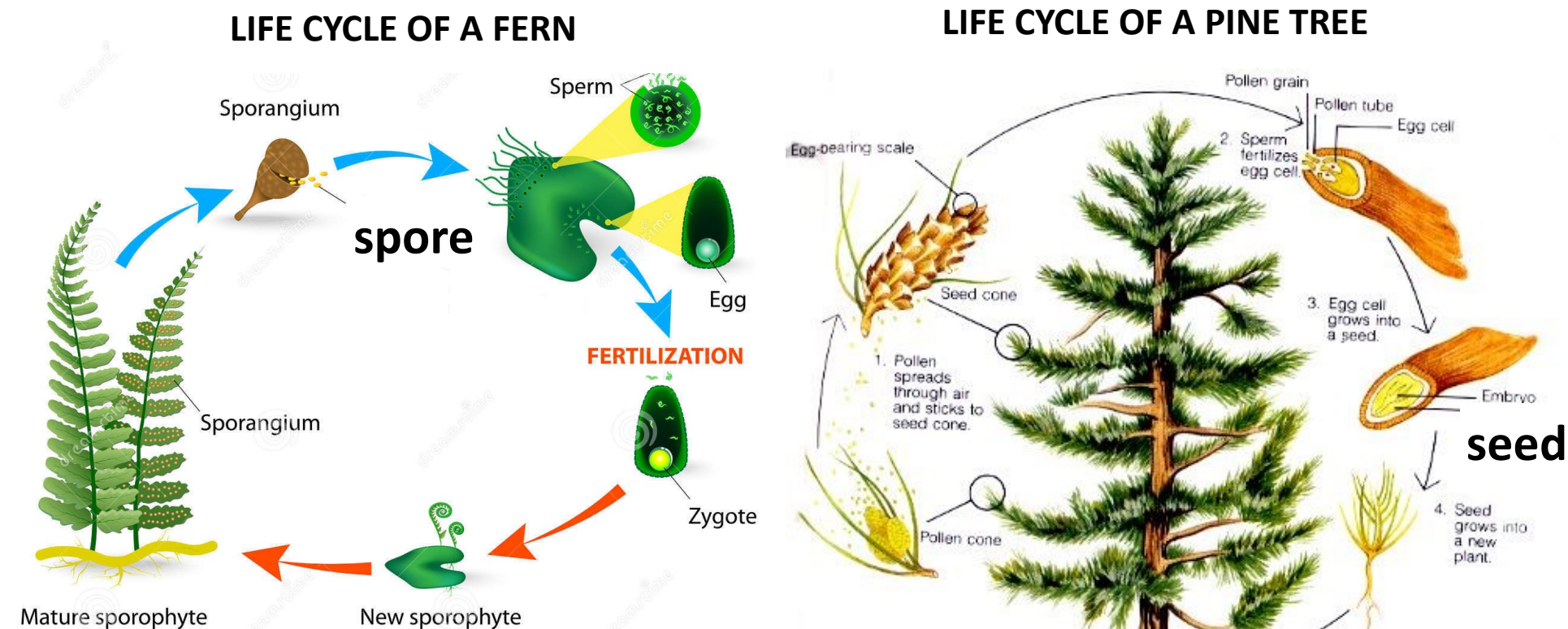
Flowering Plants

Flowering plant examples: _____



Non flowering Plants

Non-flowering plant examples: _____



What are the three differences between flowering and non flowering plants?

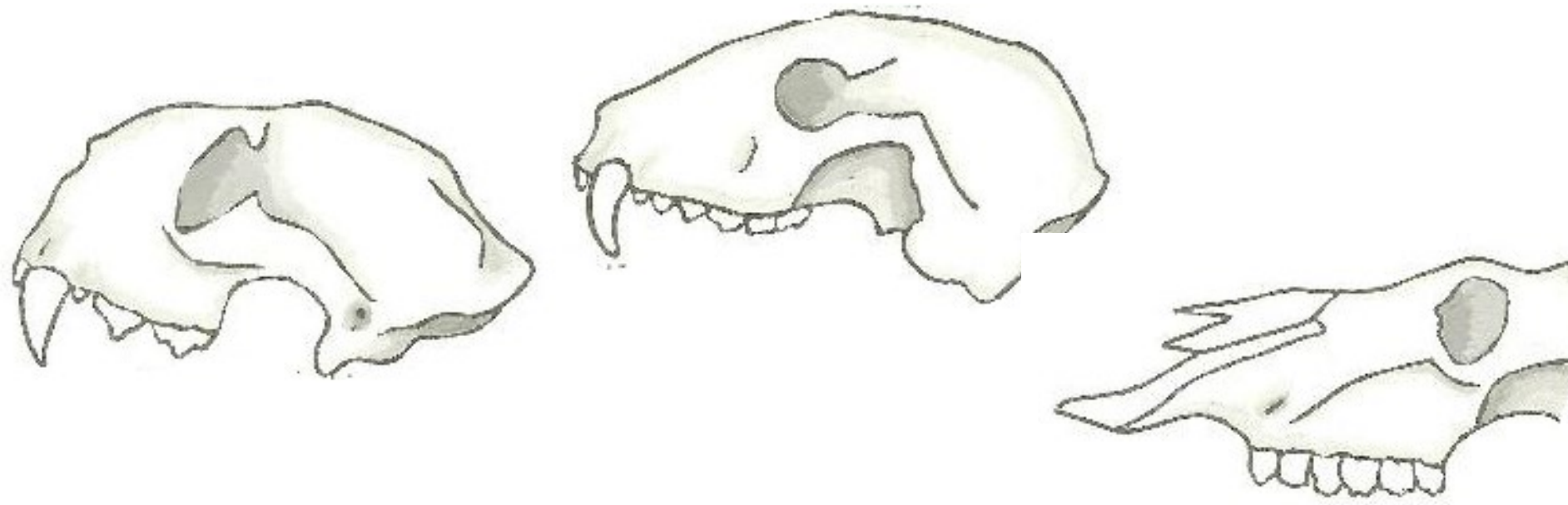
The Florida panther is an endangered species living primarily in and around the Everglades. Cows, raccoons, black bears and bobcats also live in Florida. The diet of these animals enables them to eat different things. A drawing of a Florida panther and a chart comparing the diets of these animals are shown below.



FLORIDA ANIMALS

Animal	Diet
Black bear	nuts, acorns, insects
Bobcat	mice, reptiles, birds
Cow	corn, grass, hay
Florida panther	deer, raccoons, armadillos
Raccoon	fruit, acorns, frogs, fish

Information about an animals teeth helps us understand their diet. Animals with mostly flat teeth has a main diet of plants. Animals with mostly sharp teeth have a main diet of meat. Animals with both flat and sharp teeth have a main diet of plants and animals. Using the Florida Animals diet chart, draw a line from the animal to the correct teeth.



Black bear

Bobcat

Cow

Florida panther

Raccoon

Consumer Diets

Create your own living thing and its life cycle

Draw the life cycle of your imaginary living thing.

Circle the ONE life cycle that it goes through.

Complete metamorphosis

incomplete metamorphosis

simple life cycle

flowering plant

non-flowering plant

Your living thing in the food chain.

Make your living thing a part of the freshwater food chain.



Explain where your living thing gets its energy from.

Explain where and how your living thing gets its food.

Raccoon's Energy

In one day, a raccoon consumed the following food items:



5 lizards



5 crickets, **2** centipedes, **1** grasshopper and **1** scorpion



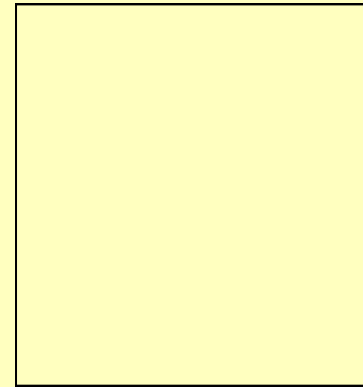
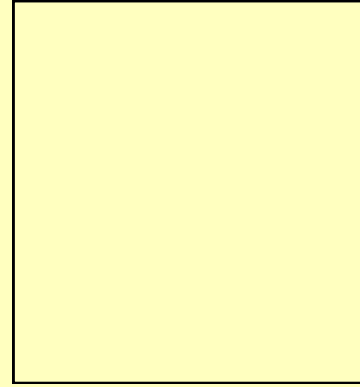
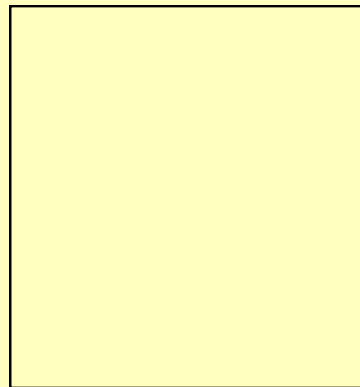
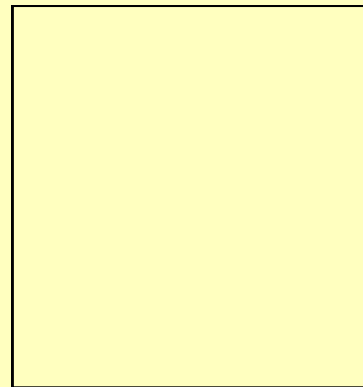
125 beauty berry seeds



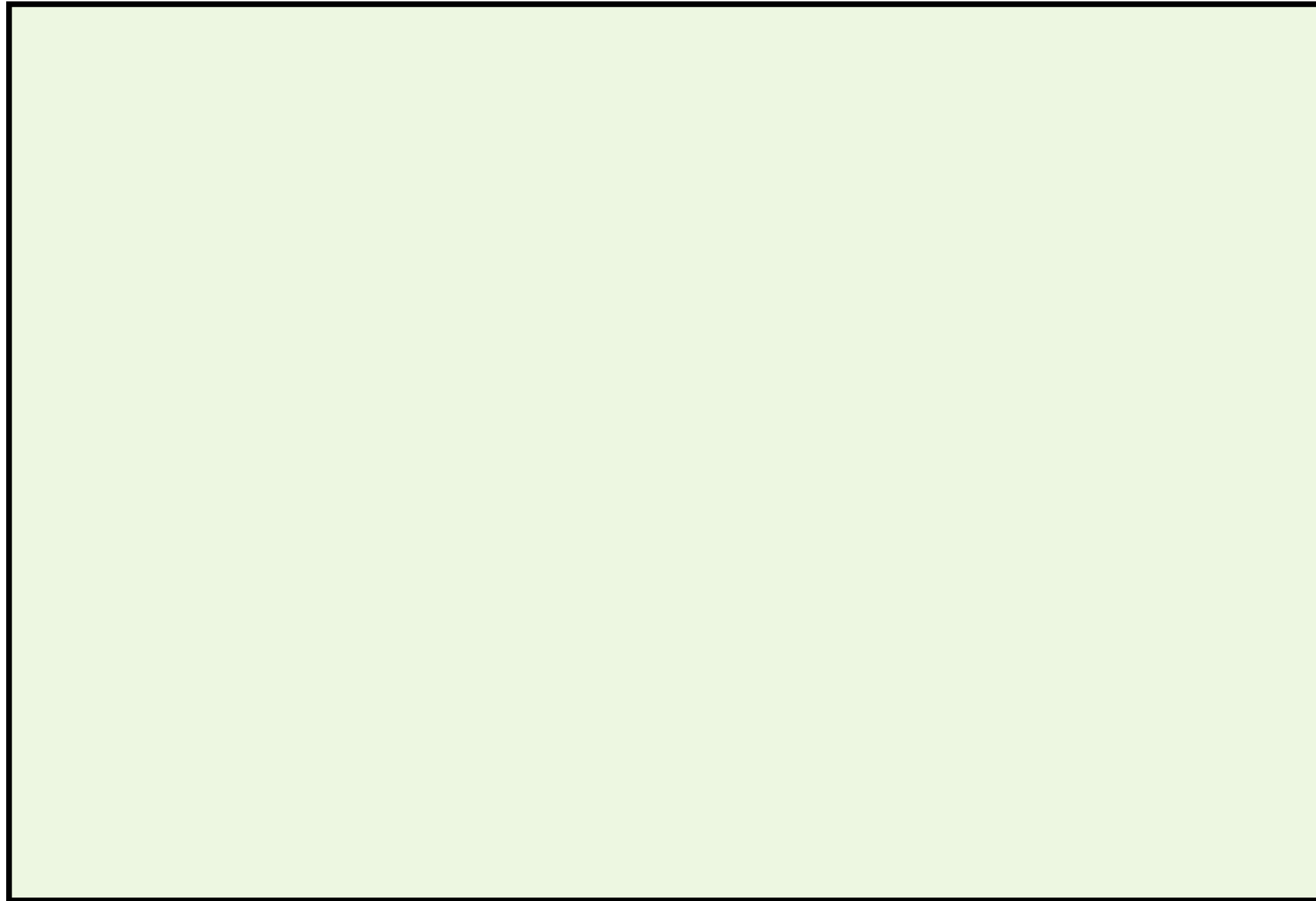
What type of consumer is a raccoon? A herbivore, omnivore or carnivore?

What evidence do you have?

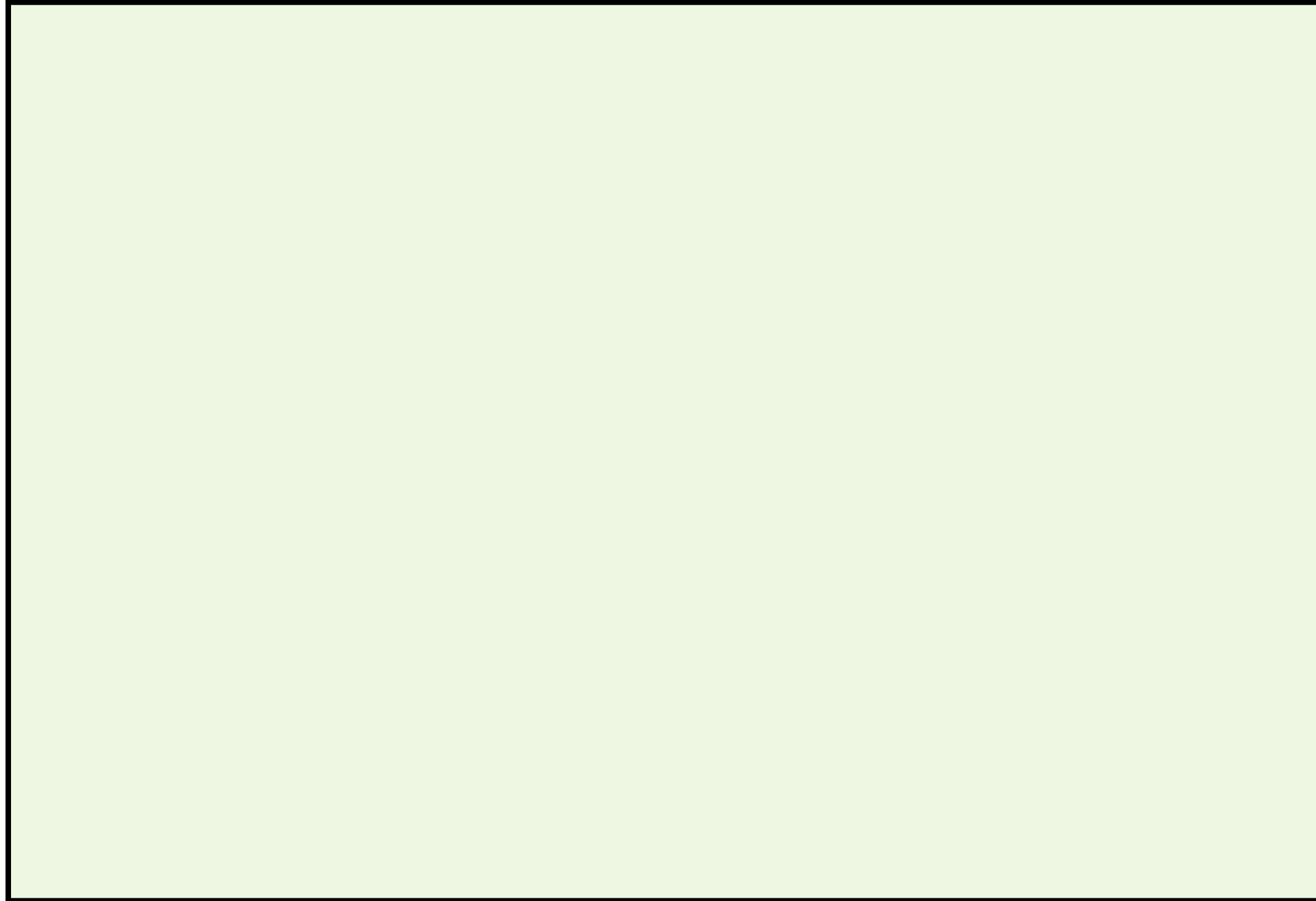
Create a food chain with the raccoon.



DRAW and LABEL some interactions while observing nature.



DRAW and LABEL or describe three impacts pollution has on freshwater habitats.





Green tree frog

Funding for this Field Studies Program is provided by:



Reference: Information and diagrams in this field notebook, were taken from the following sources and are used purely for environmental education.

www.swfwmd.state.fl.us

www.fws.gov

<http://pubs.usgs.gov>



Adult bobcat and kitten (infant)

