

ADAPTATION

1. What is an adaptation?

Find the skulls or skeletons listed below. Identify a major adaptation each animal has and how it helps the animal survive in a particular environment (Look at each animal carefully and be sure to read the exhibit labels).

Crocodile:

Chimpanzee:

Ram:

Zebra:

Bullfrog:

Kangaroo Rat:

2. Find the skeletons of a reptile (snake, lizard), a mammal (primates, cats), an amphibian (frog, salamander, etc.), and a fish. Name one way each skeleton is different from a human skeleton (if you need a reference for a human skeleton, look in the primate display case).

Mammal:

Reptile:

Amphibian:

Fish:

3. Find the Narwhal tooth. The Narwhal's tooth was highly prized by Europeans because they believed it was a unicorn horn. What would have happened to the species if this tooth was still valued so much?

BIRDS

1. **For birds, we use the term field marks to describe the color of a bird's feathers and the markings on their bodies. Describe some of the field marks on the owls in the display case.**

How do you think these colorings and patterns help the owls to hunt?

2. **Look at the various birds in the exhibit, and examine their feet. Then find the display case with bird beaks. Create your own bird either by drawing or describing. Be sure to include key features like the type of food it will eat, what its beak will look like, what its feet will look like, and where it will live.**

SMALL WORLDS

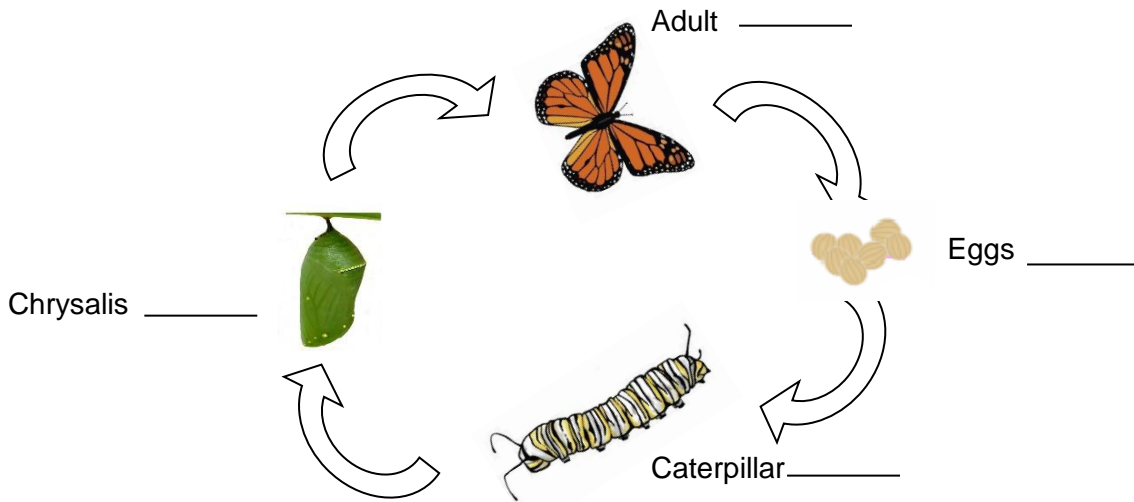
1. **Look at your veins under the vein viewer. Draw what they look like in the box below.**

How could this machine be used in a doctor's office?

2. **Draw a basic diagram of a plant cell. Identify which part of the cell is responsible for photosynthesis and be sure to label it on your drawing.**

2. What is metamorphosis?

Find a place in the exhibit that outlines the life stages of the Monarch Butterfly. Look at the diagram below and label the stages.



3. Look to the right of the insect area and find some fossil display cases.

What is a fossil?

What can it tell us?

MAMMALS OF THE MID-SOUTH

1. Look at the different animals in the various dioramas of the gallery. Use the chart below to identify four animals who are carnivores (meat-eaters), herbivores (plant-eaters), or omnivores (both meat and plant eaters.)

<u>Camivore</u>	<u>Herbivore</u>	<u>Omnivore</u>
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

2. Find the Eastern Mole display. The plaque tells you that an Eastern Mole can travel 30 centimeters per minute. How many centimeters can the Eastern Mole travel in 8 minutes?

Challenge Question: How many centimeters can an Eastern Mole travel in one hour?

3. Name 3 species that were eliminated from this area.

1.

2.

3.

What do you think are the reasons these animals were eliminated from this area?

GEOLOGY

1. Earth's continents rest on moving pieces of the surface called tectonic plates. The boundaries between these plates create mountains, volcanoes, and earthquakes when they collide or move apart. Find the map of tectonic plates and draw the outlines of each plate on this map, labeling each



plate with its name.

2. What are the two scales used to measure earthquakes?

Which scale are you most likely to use to describe an earthquake? Which scale are scientists more likely to use?

3. What other kinds of vibrations do seismographs record?

How do scientists tell the difference?

DINOSAURS AND FOSSILS

1. What are two ways wood can be preserved?

1.

2.

What kinds of things can petrified wood tell us?

2. Use the table below to write about three different periods in Earth's history.

Period	Date Range	Animals Present	Plants Present

If you did not know the date ranges or the orders of the periods, how would you be able to determine which period is the earliest?

3. Dinosaurs became extinct very quickly. Read what some scientists believe happened that caused this rapid extinction. Choose an argument that you think best describes what happened to the dinosaurs. Why did you choose that argument?