Evolutionary Ecology Chapters 14-16: Answer the following questions Name \_\_\_\_\_\_\_\_\_\_\_\_\_

Answer questions 1-4 without using the book. ( what you already know)

1. **How old is the EARTH?**
2. **How did the EARTH form?**
3. **How did the first living organisms get here? Explain**
4. **Are all organisms related? Explain**

Now from your book continue…..

What is a theory?

Pg 261- 263 What is the difference between biogenesis and spontaneous generation? Circle the one we now accept in the science world.

Draw an example from the book for biogenesis and spontaneous generation below:

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What is the earth’s estimated age? \_\_\_\_\_\_How do scientists date the earth?

Look at Fig 14-4 Do you agree or disagree with this picture of how the earth was formed? Why or why not?

What is the main difference between a prokaryote and a eukaryote? Which came first ?

Chapter 15

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What is a fossil?

List 4 ways fossil can be preserved?

Where are most fossils found?

Look at table 15-1 and answer the following questions:

How many millions of years ago did early horses arise?\_\_\_\_\_\_\_\_\_\_\_\_

What period was the first and last mass extinctions? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What era did the dinosaurs go extinct?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Read the section on Succession of Forms on page 281 about mass extinctions. What did scientist think caused most mass extinctions?

Read pages 284-285 about Charles Darwin and his voyage on the HMS Beagle.

When was he born \_\_\_\_\_\_ died\_\_\_\_\_\_\_\_ What country?\_\_\_\_\_\_\_\_\_\_\_

What was his job on the ship and what did he do during his five year voyage?

How many different species of finches did he collect?\_\_\_\_\_\_\_\_ After analyzing the data on the finches what ideas did he form about how different species could form?

Define following words

Natural Selection:

Survival of the fittest:

Descent with modification:

Fitness:

Population:

Adapt:

Acquired trait:

Scenario you are returning to the Galapagos Islands to do research on the animals that are extinct as well as those that currently live there. You must complete your research and report your findings:

Answer the following general questions about the Galapagos Islands:

Where are the Islands located?

How many Islands are located there?

Is there people on the Islands? Is so which ones?

How big are the Islands?

What kinds of animals are found there but no where else?

Pick one Island and answer the following questions:

Name of Island \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ How big:

How many bird species:

How many land animal species:

What is the climate like there:

What is the vegetation like:

Construct a 5 animal food chain that may exist on your island.

Construct a 10 animal food web that may exist on your Island:

Pick 1 Animal that is found on your Island and describe it by answering the following questions:

Common Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Genus and Species Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is its Class ( Mammal, bird, reptile etc) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is your animal a carnivore, omnivore or a herbivore?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is its main food sources \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What are its predators \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Does it migrate?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Where to ?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

List 3 adaptations it has in order to survive?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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What is the habitat that your animal lives in?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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What forms of protection does your animal use in order to survive?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Is there any variation within the specie of your animal? Explain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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How is the male different then the female? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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How does the male attract its mate?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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What are the interesting facts about your animal\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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What is the population size of your animal species on the Island? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Is your animal endangered or threatened?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Draw or print out a picture of your animal and its habitat.