**APES- Chapter #8 Guided Reading**

*Biogeography*

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Learning Objectives:**

* *How large scale global patterns and the environment affect biological diversity*
* *How climate, bedrock, soils and the geography of life are related to one another*
* *What biotic provinces and biomes are, and how they differ*
* *How plate tectonics affects biogeography*
* *What island biogeography is, and what it implies for the general geography of life, especially the geography of biological diversity*
* *What the major patterns in the distribution of biomes on Earth are and the major characteristics of each of the 17 biomes found on Earth*
* *How people affect the geography of life*
* *How the introduction of exotic species into new habitats typically affects the new habitat*

1: What are the problems of the ***Purple Loosestrife*** and *how do they demonstrate the characteristics of an invasive (exotic) species?*

2: Define **Biogeography:**

3: How are species *classified* in science? *What is this called?*

4: **Define Biome and DRAW** (label) the “biome relationship triangle on pg. 13”. *What does this diagram represent?*  **Explain.**

5: Compare and contrast the relationship between convergent and divergent evolution. Give examples.

***Read: “A Biogeographical Cross Section of North America on Pg. 143.***

6: What is the **most important aspect** of determining a biogeographical climate or biome?

7: How do islands contribute to evolution driven by **adaptive radiation**? *Explain*.

8: ***How many major biomes*** are located on Earth? ***List and summarize them below:***

9: What are the ***3 rules*** when moving species from a biome?

Read: “Escape of an Exotic Species on Pg. 157. Answer the following questions.

10: Suppose you were in charge of a program to control or eliminate this pest from the Mediterranean. *Would you try to eliminate Caulerpa completely or just reduce its abundance?*

11: **Develop a plan for the control** of this algae, based on material in this and previous chapters. *What kinds of biogeographic exploration might help you develop a plan to control this species?*

12: If nothing is done, what would be a likely long term outcome? **Explain.**

**Study Questions Pg. 159**

1: What is a geological barrier, and *why is this concept important in the geography of living things?*

2: From the perspective of biogeography, *why do people attach so much importance to the conservation of tropical rain forests?*