**Chapter 12 Study Guide Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. What are the 3 domains of life?
2. Who was Linnaeus?
3. List the taxonomic system beginning with domain and ending with species.
4. The two part Latin name includes the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. How do you correctly write a two part scientific name?
6. Why were the prokaryotes recently divided into 2 separate domains?
7. In the phylogenetic tree in Figure 12.4, bonobos are most closely related to \_\_\_\_\_\_\_\_\_\_\_\_.
8. You can’t always assume that organisms that look alike are closely related. Give an example.
9. Give an example of homologous structures. These structures indicate that these organisms **share/do not share** (chose one) a common ancestor.
10. Give an example of analogous structures. These structures indicate that these organisms **share/do not share** (chose one) a common ancestor.
11. Do you understand the basics of how to read a phylogenetic tree? A cladogram?
12. What kind of molecular measures are used in molecular systematics to identify phylogenetic relationships?
13. Cladistics only uses \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make cladograms.
14. List an application of phylogenetics (what can phylogeny be used for)?
15. Be familiar with the vocabulary in the chapter. You can use the last slide in the PPT as a guide.