

Chapter 17 Classification Study Guide

1. What did Carolus Linnaeus develop?
2. What is taxonomy?
3. What is a taxon? Give an example.
4. What is binomial nomenclature?
6. Scientific names are made of the _____ and _____.
7. What language are scientific names written in?
8. Why are scientific names used instead of common names?
9. Which of the following scientific names is written correctly?
 - a. Tyto alba
 - b. tyto alba
 - c. *Tyto alba*
 - d. *Tyto Alba*
10. Linnean classification system has _____ levels.
11. The levels of the classification system are: (from broadest to most specific)
12. Define species and give an example.
13. What are the limitations using the Linnean classification system?

What type of characteristics did he use to classify organisms?

What type of characteristics did he **NOT** use to classify organisms but are considered the most accurate and used today?
14. What is a dichotomous key?
15. What are you finding when you use a dichotomous key?
16. What is cladistics?
17. What are cladograms?
18. What is a clade on a cladogram and where are clades found?

19. What is a derived character on a cladogram and where are they found?
20. What is an outgroup on a cladogram?
21. What is a better way to tell if organisms are related rather than physical similarities?
22. What are the 3 Domains?
23. List the 6 kingdoms?
24. What scientist studied the rRNA of bacteria?
25. List the kingdom that includes organisms that can be unicellular, colonial, or multicellular.
26. List the kingdom that is the most diverse.
27. List the kingdom that includes organisms with cell walls made of chitin.
28. What are all the kingdoms found in domain Eukarya?
29. List the kingdom that includes single-celled eukaryotic organisms.
30. List the kingdom that includes organisms that have eukaryotic cells that have a cell wall made of cellulose.
31. List the kingdom that includes organisms that move using a pseudopod.
32. List the kingdoms that include organisms with prokaryotic cells.
33. List the kingdom that includes organisms that are heterotrophic decomposers.
34. List the kingdom that includes organisms that are autotrophs that perform photosynthesis to get nutrients.
35. List the kingdom that includes organisms with cell walls made of peptidoglycan.
36. List the kingdom that includes organisms that can move freely from place to place.
37. List the kingdom that includes organisms that are capable of living in extreme environments.
38. What Domain and Kingdom are humans classified in?