Marine Biology Chapter 5 Study Guide

“Microbial World”

Dr. Steve W. Altstiel

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Answer the following questions in the space provided.*

1. Define a virus.
2. List and define the three types of notable viruses discussed during class.
3. List three characteristics of Archean and Bacterial Cells.
4. List two extreme environments where Archean prokaryotes can be found.
5. What is one of the most important jobs of bacteria in the marine environment?
6. List the three types of metabollic diversity within prokaryotes and define each.
7. What is the shell of a diatom called? Of what is the shell made?
8. Some diatoms produce a toxin that can be harmful to other organisms that may eat them. What is the name of the toxin?
9. How do diatoms mainly reprodeuce? Explain!
10. How does locomotion occur in dinoflagellates?
11. What role do zooxanthellae play in a marine environment?
12. What are “blooms” and why are they harmful?
13. What are “red tides,” what causes them, and why are they harmful?
14. Of what are the shells of foraminiferans made?
15. Of what are the shells of radiolarians made?
16. Of what are the shells of ciliates made?
17. What is the name of the shell of a cilliate?
18. How are fungi similar to bacteria?
19. What role does a capsid play in the survival of a virus?
20. List five organisms that viruses can infect in a marine community.
21. Tolerance is a characteristic of archaea prokaryotes that assists in their survival. What three conditions are archaea prokaryotes able to tolaerate?
22. What are four shapes that bacteria may have?
23. What are stromalites?
24. What give diatoms their yellow-brown color?
25. Approximately how many diatoms are marine?
26. How do dinoflagellates reproduce?
27. Protists which contains a star-shaped intenal skeleton of silica and two flagella of varying lengths describes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
28. Protists which have ornate shells of calcium carbinate describes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
29. How do foraminiferans capture their food?
30. How do radiolarians capture their food?
31. How do ciliates move?
32. How are lichens formed?
33. Are viruses living organisms? Explain!
34. There is a group of photosynthetic bacteria called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
35. Are diatoms autotrophs or heterotrophs? Explain!
36. Are dinoflagellates autotrophs or heterotrophs? Explain!
37. True or false? Most of the 1500 species of fungi are terestrial.
38. Of all the microbes discussed in this chapter, which are multicellular?
39. What is the most important primary producer on earth?
40. Which type of protists have some species that lack chlorophyll and live as parasites?