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

Unit 2 Study Guide- Marine Ecology and Relationships

*Complete the following on a separate sheet of paper (due Monday 10/16) Test: 10/18*

1. Who created the traditional classification system, what year?
2. What is the science of classification called?
3. What are the 7 levels of classification in order from largest to smallest?
4. Identify the 7 levels a classification of an Atlantic bottlenose dolphin
5. What two levels of classification are used in the scientific name of an organism?
6. What are some criteria for the scientific names? (ex: capitalized letters?)
7. Identify the genus and species of the organism *Carcharhinus melanopterus*.
8. What organizational tool can be used to allow us to group and identify organisms based on similar traits?
9. What are the 6 organizational levels of ecology in order from smallest to largest? What is included in each level?
10. What is biodiversity?
11. Compare biotic factors to abiotic factors.
12. What does a populations carrying capacity refer to?
13. What is one technique scientists use to safely sample a population in a location? How does this method compare to an accurate count of the population?
14. Population Sampling is usually more effective when the population has an *uniform dispersion* pattern. How might this experiment be different if theseagrass has *Clumped dispersion?*
15. What are the 3 types of relationships between organisms? Explain how the relationship functions and provide an example of each.
16. How do intraspecific and interspecific competition contrast?
17. What is a keystone species and why are they important to an ecosystem?
18. What are the 3 types of symbiosis and how do they differ from one another? Provide one example of each.
19. Explain how autotrophs and heterotrophs function and why both are needed in an ecosystem (think about what they need to breathe)
20. What is the difference between a food chain and a food web? Draw/ provide examples of each
21. List and compare the 5 types of consumers.
22. What can happen if you remove the producer or the autotroph from an ecosystem? How about a primary consumer? What about the apex predator (top of the food chain?)
23. How are people part of an ecosystem? How do they impact it?
24. Compare phytoplankton to zooplankton.
25. Compare diatoms to dinoflagellates.