Chapter 9 Study Guide
Read chapter 9 for an overview of marine ecology.

Vocabulary: Type definitions or make diagrams so these terms make sense to you.
1. Habitat
2. Ecology
3. Biotic
4. Abiotic
5. Ecological niche
6. Predator
7. Prey
8. DDT
9. Consumer
10. Herbivore
11. Carnivore
12. Omnivore
13. Decomposer
14. Food chain
15. Food web
16. Symbiosis
17. Mutualism
18. Commensalism
19. Parasitism
20. Cleaning associations
21. Symbiont
22. Host
23. Phytoplankton
24. Zooplankton
25. Biological Diversity
26. Trophic Level
27. Detritivore
28. Detritus
29. Benthic
30. Pelagic
31. Plankton
32. Nekton
33. DOM
34. Pyramid of Energy
35. Pyramid of Numbers
36. Exponential Population Growth
37. Competitive Exclusion
38. Bioaccumulation/biomagnification
39. Interspecific Competition
40. Intraspecific competition

Review Questions: Type explanations or draw diagrams to answer the following.
1. Graph a population explosion (exponential growth curve) and describe:
   a. Conditions under which that kind of a growth curve would be observed in Dinoflagellates.
   b. At least 5 factors which would tend to limit Population explosion (exponential growth).
   c. Describe how resources, carrying capacity and limiting resource fit into population growth.

2. Sketch and describe the concept of trophic levels in a community.

3. Sketch a marine food web using organisms from the video about the Sea of Cortez.
   a. Include producers, several levels of consumers, detritivores and decomposers. Arrows show the direction in which energy flows.

4. See fig 9.18. Sketch three major groups of marine organisms classified by lifestyle.

5. Read pg. 214 "Biodiversity: All Creatures Great and Small"
   Discuss: What is meant by the term "biodiversity"?
   Why we should consider the non-glamorous species?
   List and describe at least 3 reasons for preserving biodiversity.
   What kinds of programs can we sponsor to maintain biodiversity?