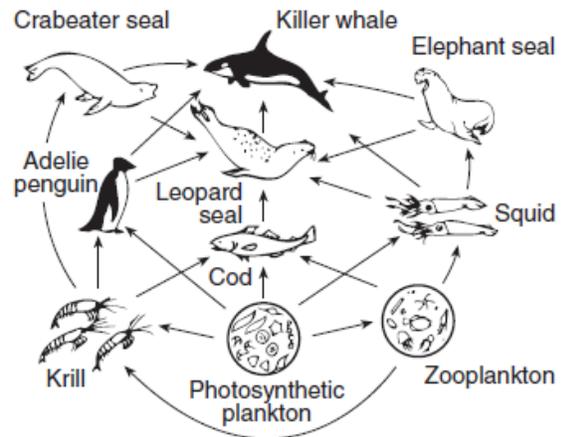


## Ecology Test Review

1. Draw a diagram of a marine **food chain** and label the different energy levels.

2. Identify the organisms that occupy the different trophic levels in the food web.

Producers	
1 <sup>st</sup> Level Consumers	
2 <sup>nd</sup> Level Consumers	
3 <sup>rd</sup> Level Consumers	
Herbivores	
Carnivores	
Omnivores	



3. Give two example of predation in the food web above.

Predator \_\_\_\_\_ Prey \_\_\_\_\_

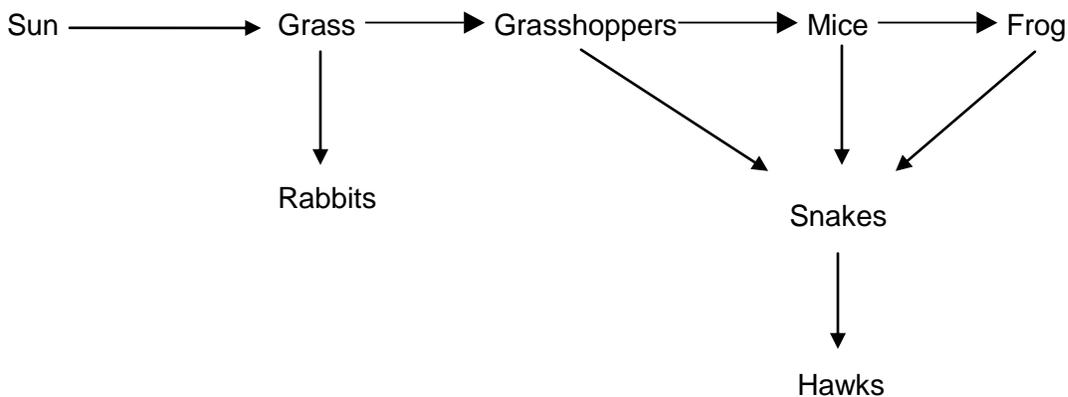
Predator \_\_\_\_\_ Prey \_\_\_\_\_

4. Give two examples of competition in the food web above.

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5. What role do producers play in the ecosystem?
6. Why is decomposition important for the health of an ecosystem?
7. What are biotic factors? Give an example.
8. What are abiotic factors? Give an example.
9. Give an example of organisms competing for abiotic factors.
10. Explain limiting factors. What are some examples of limiting factors?
11. Explain carrying capacity.
12. Describe the relationship between most predator and prey populations.
13. In what way do producers and consumers depend on one another?
14. Explain resource partitioning.



16. List the **second-level consumer(s)** in the food web above:

17. List the **third-level consumer(s)** in the food web above:

18. If all the grasshoppers were removed from the food web above, \_\_\_\_\_ and \_\_\_\_\_ will **increase**, and \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ will **decrease**.

19. If all the hawks are removed from the food web above, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ will **increase**, and \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ will **decrease**.

**Symbiosis**

20. Define and give an example of each type of symbiotic relationship listed below:

Relationship	Definition	Example	Effect
Commensalism			t ____
Mutualism			t ____
Parasitism			t ____

## Natural Selection

21. Who was Charles Darwin?

22. What is natural selection?

23. Define and give an example of the three factors that Darwin identified that affect natural selection:

<b>Factor</b>	<b>Definition</b>	<b>Example</b>
Overproduction		
Competition		
Variation		

24. How does the environment “select” organisms?

25. How are the finch beaks on the Galapagos islands an example of an adaptation?

26. How do organisms “get” adaptations?

27. How do new species form?

## **Oceans**

28. How are humans dependent on the oceans?

29. What are some positive impacts humans can have on oceans?

30. What are some negative impacts humans can have on oceans?

31. What are some critical issues facing the oceans?

32. What are some affects that solid waste can have on ocean organisms?

33. How does runoff affect coral reef systems?

34. What are some ways you can help protect the oceans?