**Ecology Book Assignment (Pages 14 –24)**

1. Define the following terms

* Ecology
* Ecosystems
* Abiotic Factors
* Biotic Factors

2. What are the levels of ecological organization? Describe from the smallest to the largest.

3. Explain the difference in a producer and a consumer.

4. How are food chains and food webs the same? How are they different?

5. Make a food chain with 4 levels.

6. Using the food web to the right, construct two food chains.

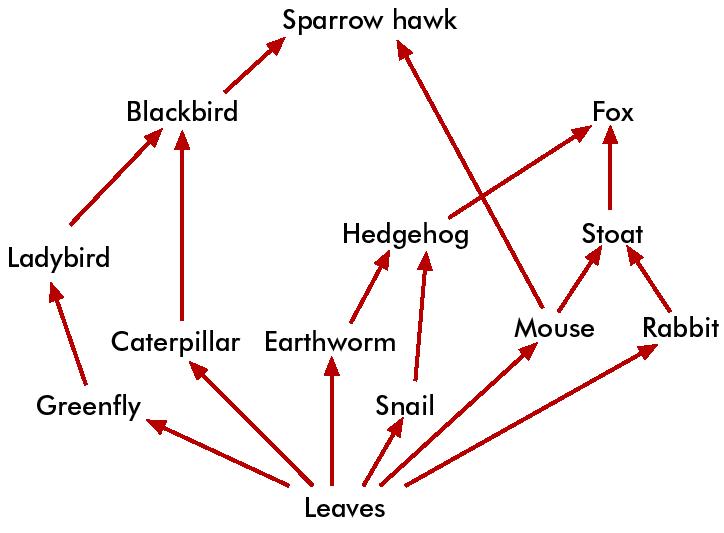
7. What is the producer for this food web?

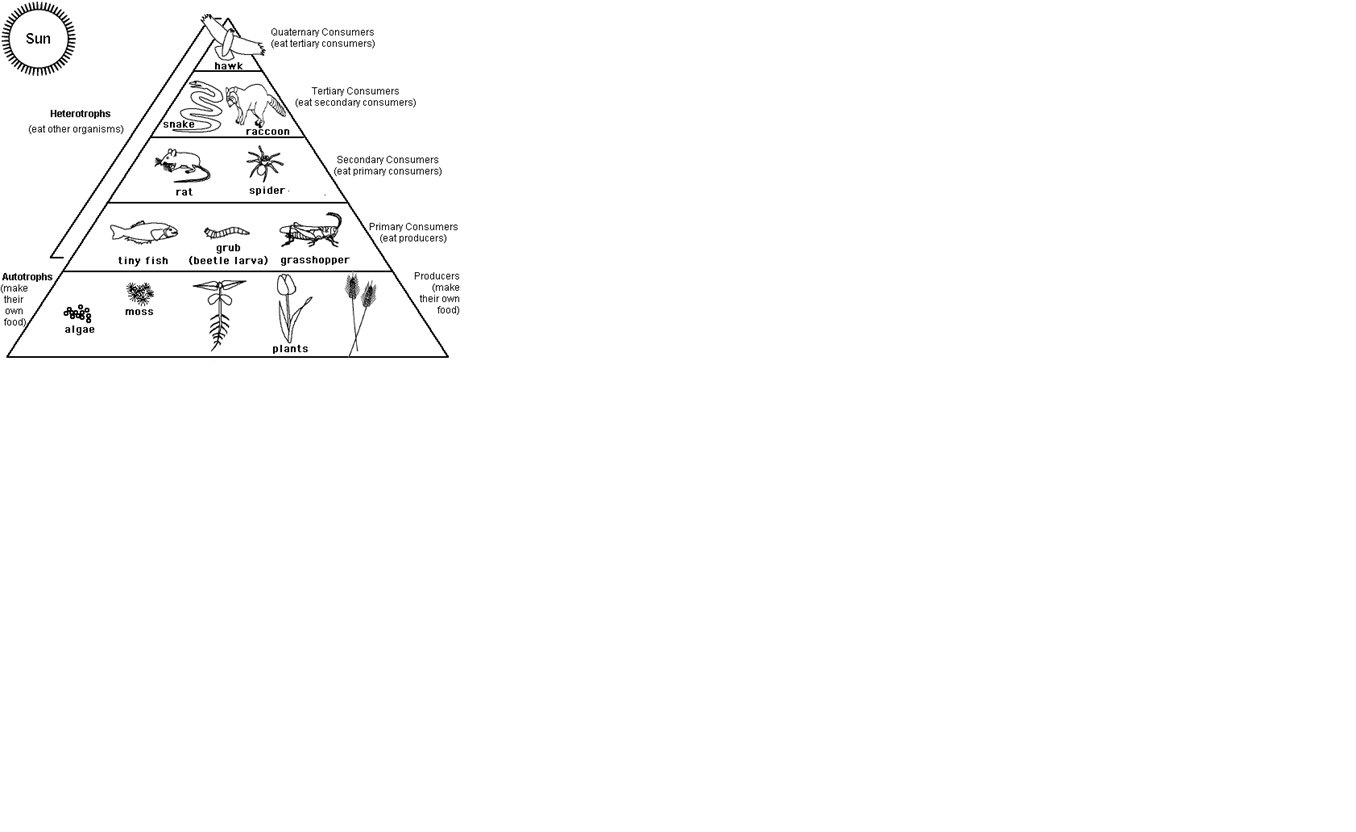
8. Name 3 consumers in the food web.

9. How much energy is transferred from one level to the next in an energy pyramid?

10. When energy is transferred, there is also a loss of energy. What form of energy is lost?

11. If it took the same amount of energy to chase a mouse as it did to chase a rat, which do you think a cat would choose to chase? Why?





**ENERGY PYRAMID**

1. There are more \_\_\_\_\_\_\_\_\_\_\_\_ than there are primary consumers.

2. Organisms that eat other organisms are \_\_\_\_\_\_\_\_\_\_\_\_.

3. Organisms that make their own food are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. Grass is considered a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

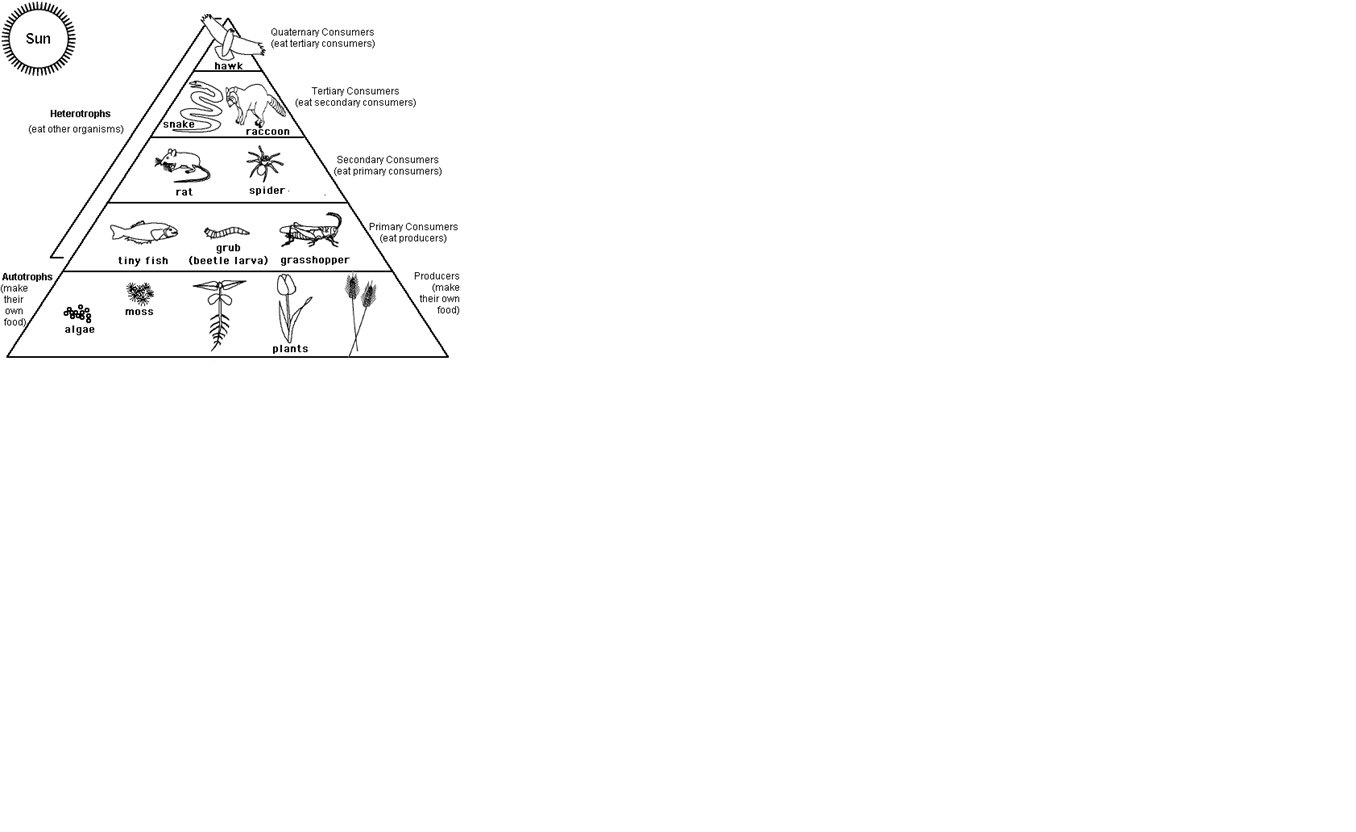
5. Zebras (grass-eaters) are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. Lions (zebra eaters) are a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

7. If there is **12,345 kcal** of energy available to the producers, how much will be available to the primary consumers?

How much will be available to the secondary consumers?

How about the tertiary consumers?



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