

Name: _____

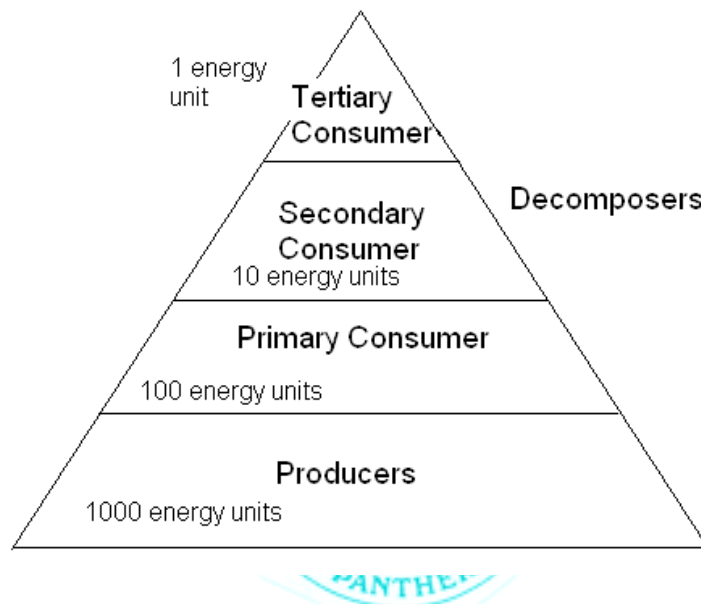
Date: _____

Period: _____

Ecology: Energy Flow

Fill in the blank

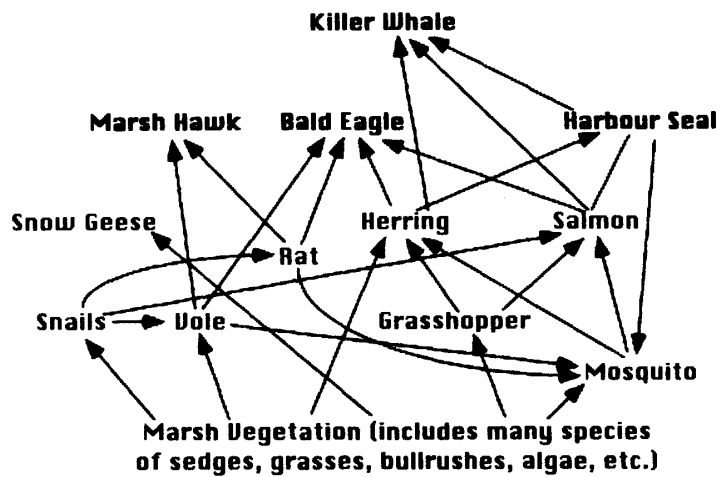
Organisms in an ecosystem are tied together by the flow of matter and _____ from one organism to another. The major source of energy for most ecosystems comes from the _____. The process of _____ traps light energy, so living organisms can use it. Plants are considered _____ since they carry out the process of photosynthesis. Since they make their own food they are also considered _____. Organisms called _____ eat the producers. All of these organisms are considered _____ since they cannot produce their own food. Organisms living off of dead and decaying material are called _____.



Answer the following questions based on the above energy pyramid

1. Why is only part of the chemical energy produced by plants available for use by herbivores?
2. About _____% of the total energy from one trophic level to another is transferred in a typical ecosystem.
3. How is energy lost as it moves up the energy pyramid?
4. Explain the 10 percent rule. Why is it important in ecosystems?
5. Which level of the pyramid contains the most abundant amount of stored biomass? The least?
6. Why is eating meat an inefficient way to obtain the energy originally captured by plants?

Energy Flow (part 2)



Answer the following questions based on the above food web

1. What are the top carnivores in this food web?
2. What are the producers in this food web?
3. If the rat population were removed, what organism(s) would lose a food source?
4. How many organisms depend on the salmon as a food supply?
5. List the primary consumers:
6. List the secondary consumers:

