Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period: \_\_\_\_\_ Alpha #: \_\_\_\_\_  
**Food Chains/Webs and Pyramids Review**

**Matching:**

1. \_\_\_\_\_\_Ultimate source of energy for all ecosystems   
    A. Metabolism and Heat
2. \_\_\_\_\_\_Amount of energy that is transferred to each B. Biomass  
    trophic level in a food chain C. Heterotroph  
    D. Photosynthesis
3. \_\_\_\_\_\_Amount of energy that is lost at every trophic E. Autotroph

level of a food chain F. Cellular Respiration  
 G. 10%

1. \_\_\_\_\_\_The physical body of an organism – its weight H. 90%  
    I. Assimilation
2. \_\_\_\_\_\_Process that converts solar energy to chemical J. Sun

energy (glucose)

1. \_\_\_\_\_\_How the energy in biomass travels up the   
    food chain
2. \_\_\_\_\_\_Process that breaks down biomass for energy
3. \_\_\_\_\_\_How the energy in biomass is used at each   
    trophic level
4. \_\_\_\_\_\_Organisms that produce their own energy
5. \_\_\_\_\_\_Organisms that eat other organisms for energy

**Create a food web using the information given:**

1. In a mountain meadow, bighorn sheep graze on grass. Mice nibble on the grass and eat the seed pods from the cushion pinks (a type of flower). Snakes prey on the mice and small birds when they can get them. Hawks swoop down to catch the mice, birds and rabbits. The rabbits eat the grass and seed pods of the cushion pinks too. Weasels much on the seed pods of the cushion pinks, eat an occasional mouse, and keep on the lookout for hawks that find them tasty.

1. Draw two food chains from the food web you just created with at least four trophic levels. Label the feeding (trophic levels), the producer(s) and the consumer(s). Then identify the consumers as herbivores, omnivores, or carnivores.

**Given the food chain**:

100,000 grass plants 5,000 mice 100 snakes 1 hawk.

1. Create a pyramid of numbers:
2. If the biomass of the grass is 5000lbs, create a pyramid of biomass for this food chain:
3. If there are 300,000 calories in the biomass of the 100 snakes create a pyramid of biomass for this food chain:
4. If a mouse weighs 2 lbs, how many mice are needed to feed the 100 snakes in this food chain?
5. If the hawk could eat only mice how many lbs of mice would it need?