Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period: \_\_\_\_\_\_ Alpha#: \_\_\_\_\_\_

Food Web #1:


1. **\_\_\_\_\_\_Hawks are either:**
2. Producer B. primary consumer C. secondary consumer D. tertiary consumer
3. **\_\_\_\_\_\_How much biomass will a hawk assimilate from a rabbit if a rabbit has a biomass of 45lbs.**
4. 450lbs B. 4500lbs C. 4.5lbs D. .45lbs
5. **\_\_\_\_\_\_What organisms are on trophic level three?**
	1. Mountain lion B. snake C. deer D. hawk
6. **\_\_\_\_\_\_ By what process do producers make their biomass (glucose) from solar energy?**
	1. Cellular respiration C. photosynthesis
	2. Assimilation D. Biomass
7. **\_\_\_\_\_\_Which of the following is a top predator?**
	1. Rabbit B. hawk C. cricket D. grass
8. **\_\_\_\_\_\_ If a tree contained 1,000,000 cal of biomass then how many calories would be passed up to the
 mountain lion from a tree?**
	1. 100,000 B. 10 C. 10,000 D. 100
9. **\_\_\_\_\_\_ How much energy is passed on to the next level in a food chain?**
	1. 5% B. 10% C. 50% D. 100%
10. **\_\_\_\_\_\_Which organism is NOT a secondary consumer in one of the food chains above?**
	1. Snake B. hawk C. mouse D. cricket
11. **\_\_\_\_\_\_ What kind of consumer is a hawk?**
	1. Carnivore B. omnivore C. herbivore D. producer
12. **\_\_\_\_\_\_ What trophic level is the mountain lion on?**
	1. 1 B. 2 C. 3 D. 4
13. **\_\_\_\_\_\_ If a mountain lion needs 1500lbs of deer biomass per year, how much tree biomass does the
 deer need ?**
	1. 150 B. 300 C. 1.5 D. 15000
14. **\_\_\_\_\_\_ Trees, grasses, and shrubs are**
	1. Producers B. heterotrophs C. autotrophs D. A and C
15. **\_\_\_\_\_\_ How does biomass travel up the food chain or through a food web?**
	1. Cellular respiration C. photosynthesis
	2. Assimilation D. Biomass
16. **\_\_\_\_\_\_ What happens to the 90% of the energy that is not passed up a food chain?**
	1. It is used for metabolism or lost as heat C. It is stored as biomass for the next level
	2. It is passed down the food chain D. It is used for photosynthesis

**In the food chain: grain mice raccoon wolf**

1. If there are 25,000 lbs of grain, draw a pyramid of biomass for the food chain
2. Using the pyramid of biomass above:
	1. If raccoons weigh 50lbs how many are there in this food chain? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. If the raccoons could not eat any mice how many lbs of grain \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	would they need in one year?
3. If there are 50,000 calories at trophic level 2, draw a pyramid of energy for the food chain above