**Study Checklist**

**Biology Test 1: Ecology – Std 1/Obj 1**

* Be able to describe the flow of energy in an ecosystem. Which direction does it go, from where to where? What are the trophic levels?
* What is the original source of energy for all living things on this planet, even producers?
* Know where each organism is placed in a food chain. If given a food chain example, can you place each organism in its proper place?
* Why does energy decrease with each subsequent level in an energy pyramid? Where did the energy go?
* How much energy is retained and passed on in each level of an energy pyramid? How much is lost?
* If you are given the amount of kcals in the producer of an energy pyramid, can you calculate the kcals in subsequent levels?
* In which level of the energy pyramid would you find the most organisms? As you move up the energy pyramid, what happens to the number of organisms?
* What are some strategies that animals use to conserve energy and why do they need to conserve energy?
* Define energy balance.
* How can you know if an animal’s energy income and energy expenditure are balanced? How do you know when they are out of balance?
* What are some differences between United States’ food production and less-developed countries’ food production?
* What are some reasons for the amount of CO2 that the United States emits, as it pertains to food production?
* What is a producer? A primary consumer? A secondary consumer? A tertiary consumer? A quaternary consumer? A decomposer?
* What is the difference between a food chain and a food web?
* What is a “factory farm”? Do we have many of these in the United States? Why?