**What is in an Ecosystem?**

**Remember the triangle we drew to help remember how the parts of an ecosystem build on each other!**

* **Individual** – one plant or animal
  + Example – one blueberry bush
* **Population** – All the individuals of the same kind living in the same ecosystem
  + Example – a group of blueberry bushes
* **Community** – All the populations of organisms living together in an environment
* **Ecosystem** – a community and its physical environment together (all the living and nonliving things)
  + Includes people, plants, and animals (living things) and rocks, soil, air, water (nonliving things)
  + Ecosystems can be small or large
  + Ecosystems have a climate – the average weather (temperature and rainfall) over many years

**Roles in an Ecosystem**

* **Producer** – a living thing, such as a plant, that can make its own food
* **Consumer** – a living thing that can’t make its own food and must eat other living things
* **Herbivore** – an animal that eats only plants, or producers
* **Carnivore** – an animal that eats only other animals
* **Omnivores** – an animal that eats both plants and other animals
* **Decomposers** – a living thing that feeds on the wastes of plants and animals, break down wastes into nutrients

**Flow of Energy in an Ecosystem**

* **Food chain** – a series of organisms that depend on one another for food
* **Food web** – a group of food chains that overlap
  + Food chains/food webs show the movement of food energy through living things
  + The arrows point in the direction that the energy moves!
  + Every food chain starts with producers (who get their energy from the sun!)
  + **You must understand how removing one species from a food chain could affect the rest of the food chain**
* **Prey** – consumers that are eaten by predators
* **Predator** – consumer that eats its prey

**Adaptations for Survival**

* In order to survive, animals must meet their basic needs of food, water, air, and shelter
* **Adaptation** – a body part or behavior that helps an organism survive
* Adaptations can be **physical** (something to do with the animal’s body, such as **camouflage**), or **behavioral** (an **instinct** that helps the animal meet its needs, **hibernation**, or **migration**)
* **Camouflage** – a color or shape that helps an animal hide
* **You must be able to identify how different examples of adaptations help that animal survive**
* If animals cannot survive in an environment, they are in danger of becoming **extinct**