Energy and Ecosystems Study Guide: *Parent & Teacher Copy* Test: October 25

- **Ecosystem:** Includes all the organisms in an area and the environments in which they live
- **Food Web:** Shows the relationships among different food chains
- **Herbivore:** An animal that eats plants or other producers.
- **Decomposer:** A consumer that gets its food energy by breaking down the remains of dead organisms.
- **Food Chain:** The transfer of food energy between organisms
- **Omnivore:** Animals that eat plants and other animals.
- **Carnivore:** An animal that mainly eats other animals.
- **Producer:** Plants make their own food.
- **Consumer:** Animals that eat plants or other animals

Plant Structures:

- **Roots** have two main functions: they anchor plants, and they take in water and nutrients. The roots of some plants, such as carrots as store food.
- **Stems** support a plant and enable its leaves to reach the sunlight. Stems also carry water and food to the leaves.
- **Leaves** have one main function, to make food for the plant
- Both roots and stems have tubes running through them. **Xylem** carries water and nutrients from the soil to the leaves. **Phloem** carries food from the leaves to other parts of the plant.

Photosynthesis:

What is photosynthesis? A process in which sunlight and carbon dioxide is converted into energy for the plant and oxygen.

What is the function of chloroplasts? Photosynthesis takes place in the chloroplasts.

What is the function of chlorophyll? Chlorophyll absorbs sunlight.

1. Sunlight provides energy for plants to make food.
2. Plants take in carbon dioxide from the air.
3. Chlorophyll absorbs energy from sunlight, which causes water and carbon dioxide to combine and form sugar (food for the plants).
4. The leaves release oxygen through their stomata.
5. Food made by the plant is stored in the plant's leaves, stems, seeds, and in some plants-roots.