



Green Machines Vocabulary

Bud- A compact underdeveloped leaf, branch, or flower.

Carbon Compounds – A chemical compound that contains carbon; plants can make these as a product of photosynthesis.

Cellulose – An insoluble carbohydrate that plants use to build their cell wall.

Cell wall – The semi-rigid case that surrounds a plant cell.

Chlorophyll – The main pigment that collects the energy of sunlight in green plants.

Chloroplasts – An organelle inside the plant cell that contains *chlorophyll* and captures energy from the sun.

Compound Leaf – A single leaf growing from an axillary bud that is divided into smaller segments called leaflets.

Conifer- Cone-bearing plants that usually have simple, needle-like leaves.

Cuticle – A waxy layer covering the *epidermis* of some leaves.

Deciduous- Plants that have leaves which fall off during a certain season or stage of growth.

Detritus- The material produced by the breakdown or decay of a plant litter and other substances.

Dichotomous key- A method way of identifying organisms based on the answers to a series of statements; each statement involving two alternate choices.

Endemic - A native species or population that is restricted to a specific area or region.

Epidermis – The outer layer of cells in a leaf that primarily serve for protection.

Epiphyte (air plant) - A plant that grows on another plant. Epiphytes do not usually harm the plant they are living on (example: some bromeliads or orchids).

Exotic species - A plant or animal that has been introduced by humans into an area outside of its natural habitat.

Fire-tolerance- The ability of some plant species to survive after being burned. These plants may actually rely on fire to survive.

Food web- A way of thinking about the connections among organisms based on what they eat and are eaten by; a series of interconnected food chains.

Herbarium – A plant library; a place where preserved plant specimens are deposited.

Herbivore – Animals that eat only plants.

Invasive species - Species that are not native, but survive, grow, reproduce and thrive in the area of native organisms, often pushing the natives out of their habitat.

Leaf veins - The vascular bundles (*xylem* and *phloem*) found in a leaf.

Limestone - Limestone is formed when small grains of calcium carbonate are joined together.

Oolitic limestone- An even-textured variety of limestone.

Limestone pinnacles- A peak of limestone emerging aboveground.

Mesophyll – The cells inside a leaf between the *epidermal* layers that carry out *photosynthesis*.

Node –An area of attachment in the stem of a plant, especially those joints where leaves or buds begin to grow; the part of a stem where leaves are attached.

Phloem – A tissue that carries the products of photosynthesis throughout a plant.

Photosynthesis – The process in plants that uses light energy, enzymes, minerals and chlorophyll to make food.

Salt-tolerance- The ability of certain plants to grow in salty areas.

Seedling- Any young plant emerging from a seed.

Simple leaf- A single leaf with one undivided leaf blade growing from an axillary bud.

Stoma – (plural Stomata) A microscopic opening on the surface of a leaf that allows gasses to pass in and out of a leaf and lets water vapor escape. Each stoma are flanked by a pair of guard cells which can open and close.

Transpiration – The loss of water vapor from a plant through evaporation via the stomata.

Understory - The lowest layer of plants growing under the canopy. This layer is made up of mostly young trees and shrubs, ferns, flowers, mosses etc.

Vascular System – A system that carries water and nutrients to all the tissues and cells in a plant.

Xylem – The tissue that carries water and minerals from roots to leaves.