Plant Vocabulary
population

- A group of organisms of the same kind that live in the same place
- Example: the number of red oaks in a location, the number of dogwoods in a location

a population of 4 red oaks
community

All of the populations that live together in the same place; all of the living things in an area

Example: all the red oaks, white oaks, dogwoods, squirrels, deer, and cardinals that live in one forest ecosystem
niche

- An organism's role in an ecosystem

Example: An oak tree provides a place for birds and small mammals to live. Its acorns provide food for the animals such as squirrels. Squirrels will disperse the acorns, which helps the new oaks grow.
ecosystem

All the living and nonliving things in an area

http://www.kidsgeo.com/geography-for-kids/0164-ecosystems.php
Interdependent

Living things in an ecosystem system *depend* on each other to live. This is interdependence.

Example: Squirrels depend on the trees in an area for shelter and food. The squirrels help the trees by dispersing the seeds, which helps new trees to grow.
Basic Plant Parts

- **Roots**: hold the plant in place and absorb water and other nutrients from the soil.
- **Stem**: is the transport system of the plant. Water, food and nutrients are transported to the different parts of the plant through the stem.
- **Leaves**: the kitchen of the plant! This is where the plant produces its own food from the sun’s energy.
- **Flower**: becomes the fruit, and is where the seeds are produced and protected.

[Diagram of a plant with labeled parts: roots, stem, leaves, flower]

Learningtogrow.org
producer

- A living thing which produces its own food
- Plants produce their own food through the process of photosynthesis. Chlorophyll in the leaf of the plant captures the sun’s energy. The plant takes in carbon dioxide (which animals exhale when they breathe), and water through its root system. The water, carbon dioxide and energy from the sun combine to produce food for the plant. Oxygen is produced and released through this process, which animals need to breathe. This is another example of interdependence!
**Plant Reproductive Parts**

- **Petal**: Protects fruit and attracts pollinators.
- **Stigma**: Where pollen is collected.
- **Filament**: Holds up the anther.
- **Anther**: Where pollen is produced.
- **Style**: Tube where pollen falls down into the ovary.
- **Ovary**: Contains the egg cells (ovules) which become seeds when pollinated. Ovary becomes the fruit.
- **Sepal**: Protects the developing flower and fruit.
- **Stem**: Holds up the flower and is the transport system for food, water and nutrients to the plant parts.
deciduous

- A tree with leaves
- Deciduous trees lose their leaves in fall and go dormant.
dormant

- A period of time where deciduous (leafy) trees are alive, but not actively growing
- Deciduous trees lose their leaves in Fall and go dormant in Winter.

1939 World’s Fair Collection, Library of Virginia
Evergreen

Evergreen trees do not go dormant in winter. They are green throughout the year.
endemic

- Only found in one area
- Example: Peter’s Mountain Mallow (*Iliamna corei sherff*) is endemic to Peter’s Mountain in Giles County, Va. It is found nowhere else!

http://www.ditc-eef.org/endangered_species/plants/peters_mountain_mallow/
herbarium

- A collection of preserved plant specimens
- An image of John Clayton’s catnip specimen accessed from London’s Museum of Natural History’s Herbarium
dichotomous key

A key to identifying plants where there is a series of two characteristics about a plant. As you choose the one closest to the plant you are identifying, you are led to two more characteristics, finally narrowing down to the plant’s identity.
leaf arrangement

- **Alternate**
  - Illustration of alternate leaf arrangement.
  - Source: butler.edu

- **Opposite**
  - Illustration of opposite leaf arrangement.
  - Source: butler.edu

- **Whorled**
  - Illustration of whorled leaf arrangement.
  - Source: lifeofplant.blogspot.com

Nourse Sketchbook from the The Highlands, 1841-1846, Library of Virginia Special Collections
Leaf Type

- A simple leaf is not divided into separate leaflets.
- A compound leaf is divided into 2 or more leaflets.
In a **palmate leaf**, the veins go outward from the main vein *like fingers in the palm of the hand*.

In a **pinnate leaf**, there is one main vein, *which goes all the way through the leaf*, with smaller veins coming off of it.

Nourse Sketchbook from the The Highlands, 1841-1846, Library of Virginia Special Collections
**Lobed and Unlobed Leaves**

- **Lobed leaves** have lobes, or extensions coming off of them.

- **Unlobed leaves** have no lobes, or extensions coming from their edges.

Nourse Sketchbook from the The Highlands, 1841-1846, Library of Virginia Special Collections
Teeth

The edges of leaves may have teeth. The teeth may be serrated, or even rounded. Not all leaves have teeth. Some may be smooth along the leaf’s edges.