

# 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



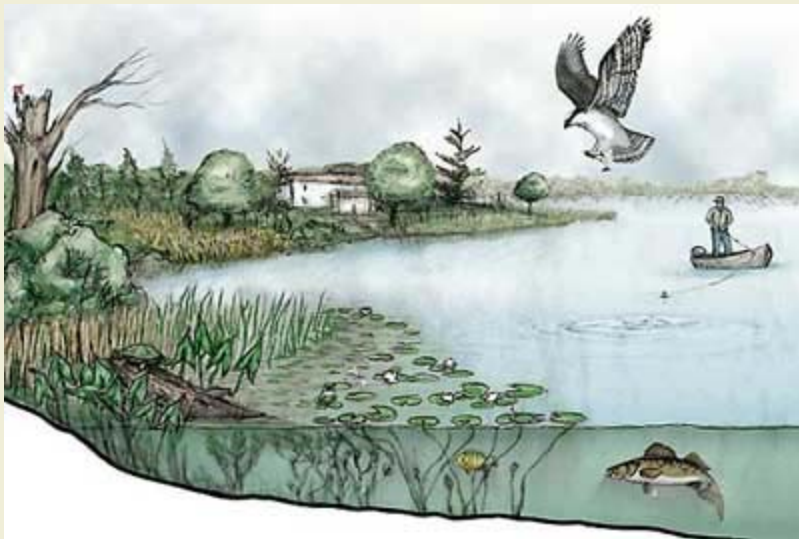
# niche

- An organisms 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>



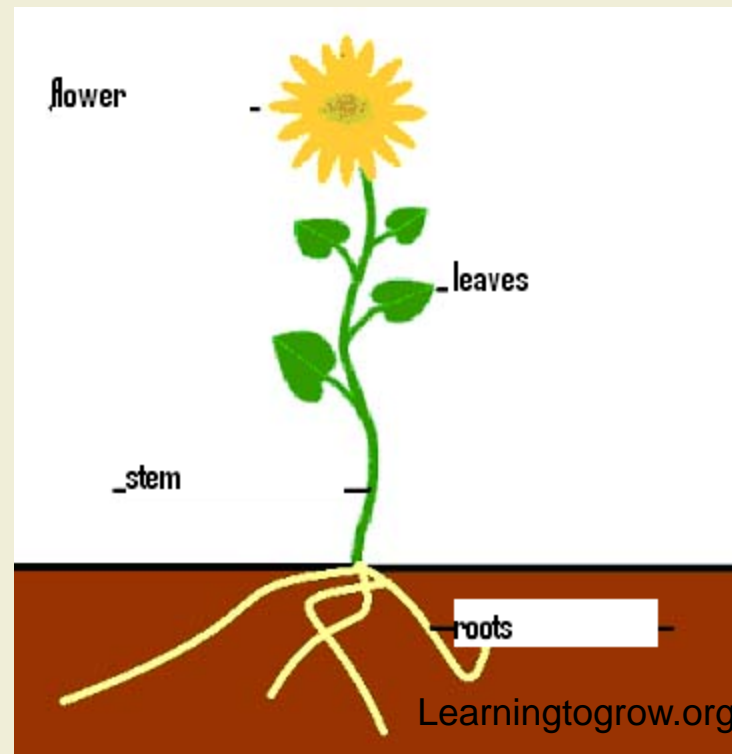
# Interdependent

- 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

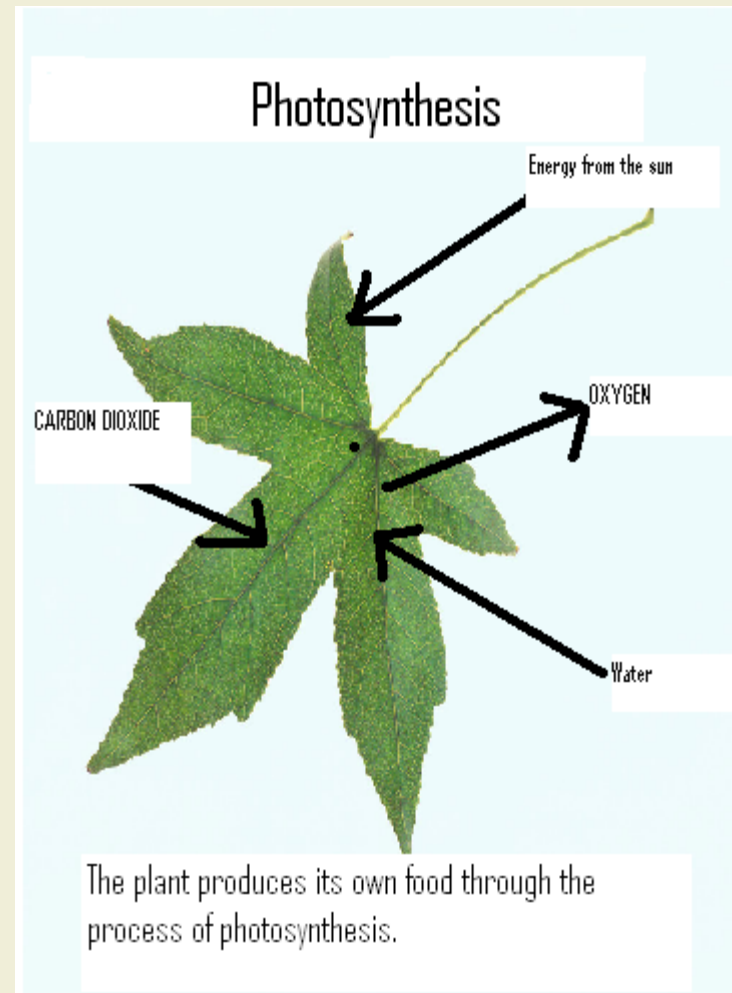
- Roots: hold the plant in place and absorb water and other nutrients from the soil
- Stem: is the transport system of the plant. Water, food and nutrients are transported to the different parts of the plant through the stem.
- Leaves: the kitchen of the plant! This is where the plant produces its own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





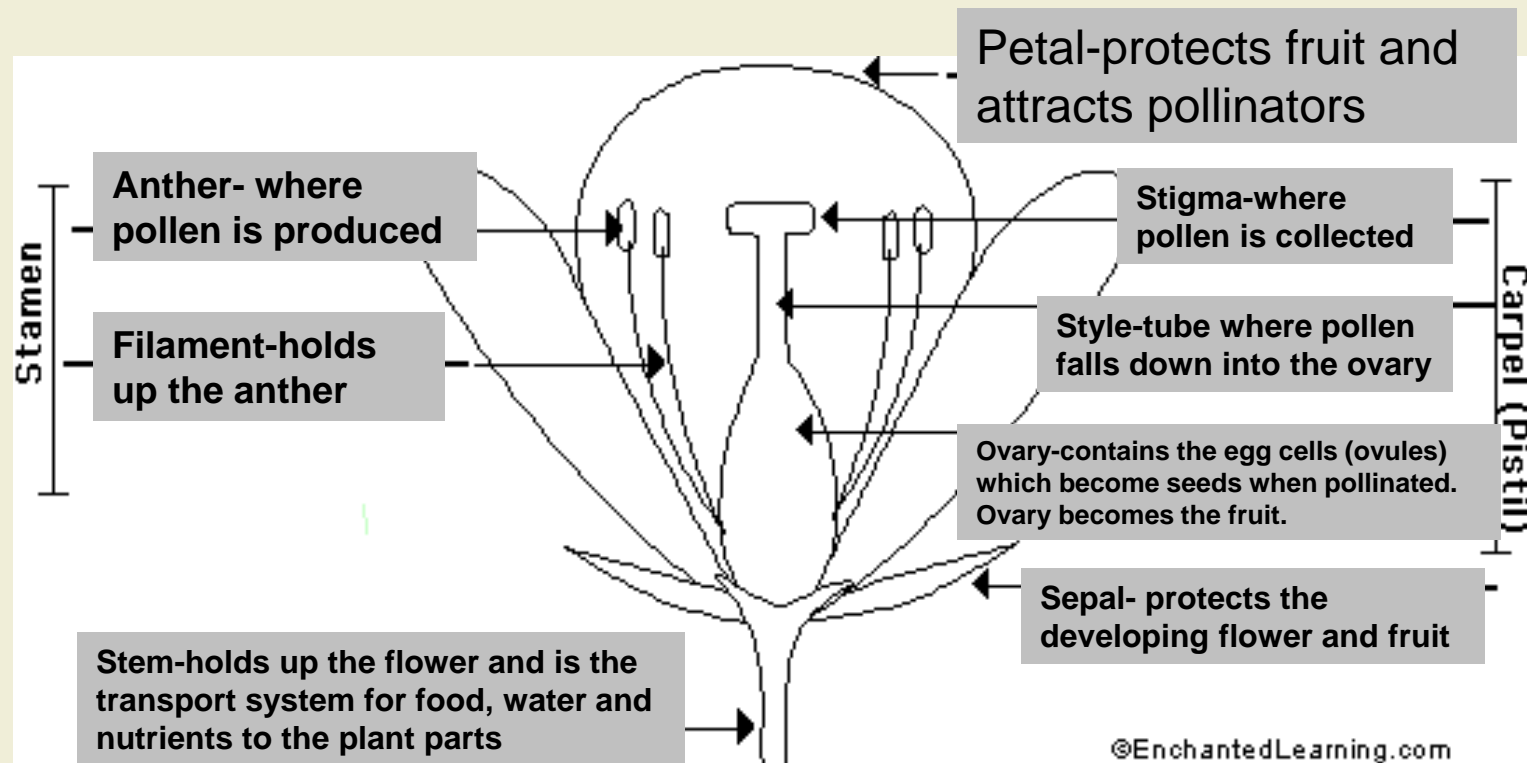
# producer

- **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



# deciduous

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



1939 World's Fair Collection, Library of Virginia



# 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.



Library of Virginia Special Collections Prints & Photographs, Mann, Harry C., 1866-1926



# 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 no where else!



[http://www.ditc-eef.org/endangered\\_species/plants/peters\\_mountain\\_mallow/](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

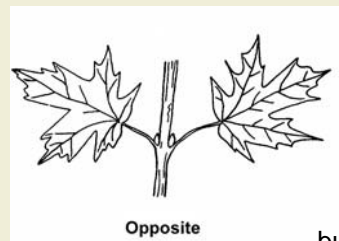
## Alternate



butler.edu



## Opposite



butler.edu



## Whorled



lifeofplant.blogspot.com

Whorled

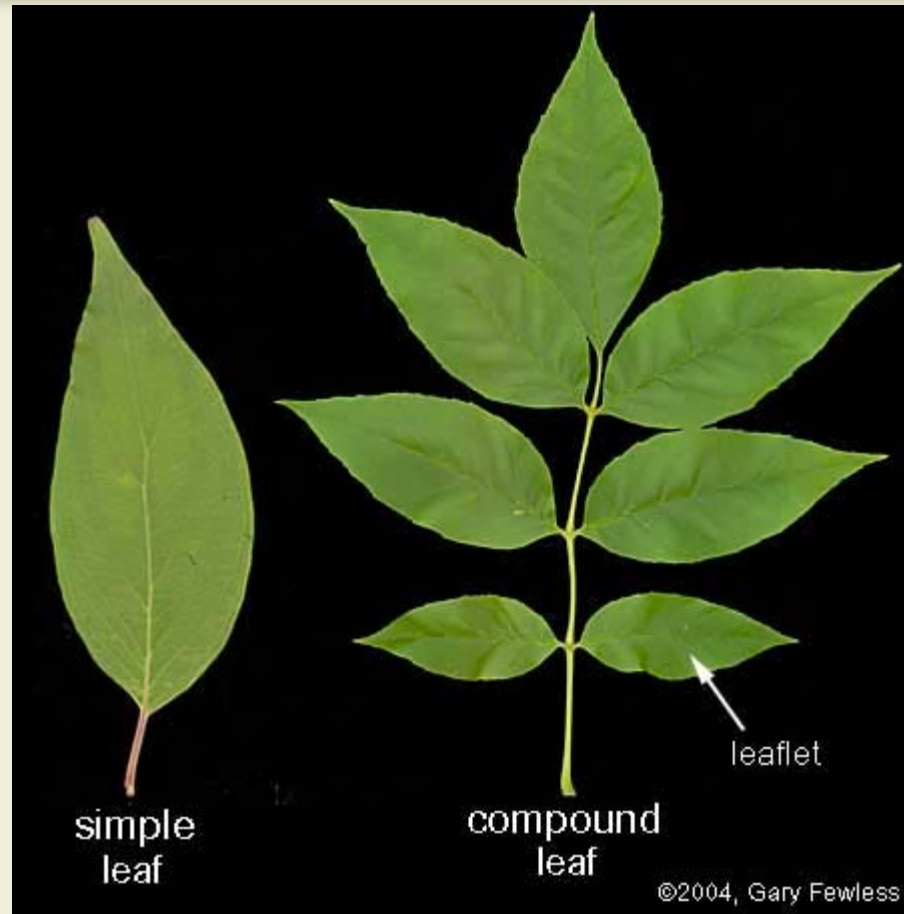


Nourse Sketchbook from the The Highlands,  
1841-1846, Library of Virginia Special Collections



# Leaf Type

- A simple leaf is not divided into separate leaflets.
- A compound leaf is divided into 2 or more leaflets.



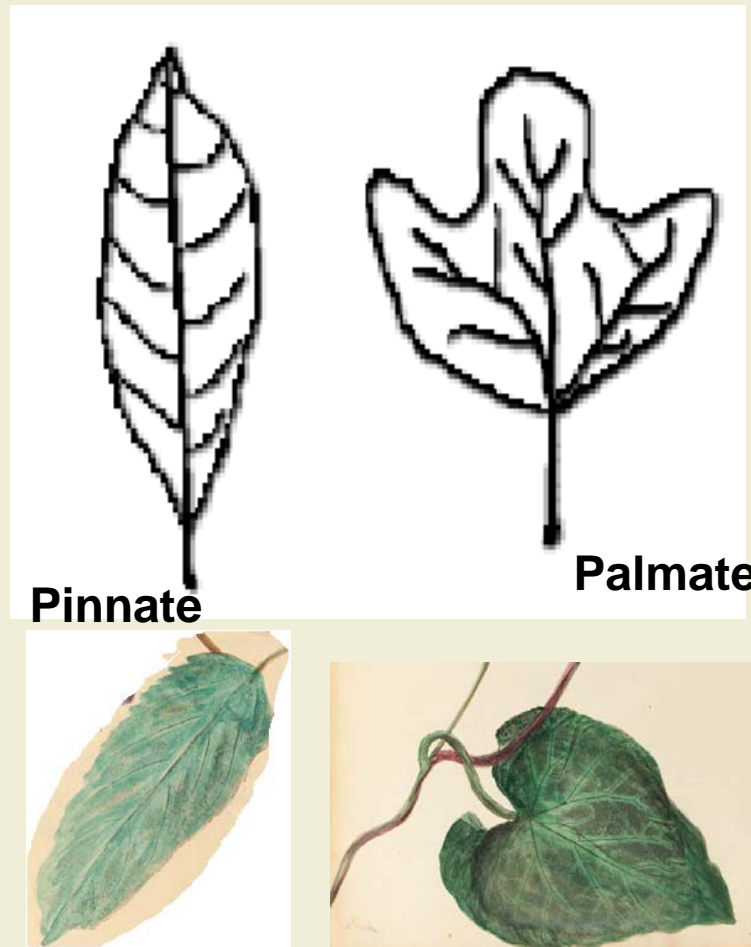
Nourse Sketchbook from the The Highlands,  
1841-1846, Library of Virginia Special Collections





# Palmate and Pinnate


- 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.



**Lobed Leaf**



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




**Unlobed leaf**



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.



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

