

# Ames Public Library @HOME Activities

## Plants!

People need plants. Plants provide us with food, medicine, and fuel. Plants are also fun to grow. Plants come in many different shapes from mighty oak trees to delicate orchids. Plants make food from sunlight, carbon dioxide, and water. During the process, they release oxygen into the atmosphere. People need oxygen to breathe.

See a related video on the Library's YouTube Channel at <http://bit.ly/APLvideos>.

## Books and Media:

Title	Author / Performer	Call Number
<i>Plant Cycle</i>	Bell, Samantha	J 581 BEL
<i>Plantology</i>	Ross, Michael Elsohn	J 581 ROS
<i>Plant</i>	Star, Fleur	J 581 STA
<i>The Magic School Bus Plants Seeds</i>	Scholastic	J 581.467
<i>Plants Feed Me</i>	Rockwell, Lizzy	J 581.6 ROC
<i>People Need Plants</i>	Wade, Mary Dodson	J 581.6 WAD
<i>Bill Nye the Science Guy (DVD)</i>	Nye, Bill	J 580 (DVD)
<i>Seeds and Plants</i>		J 581.4 (DVD)

## Websites:

URL	Notes
<a href="https://www.youtube.com/watch?v=tkFPyue5X3Q">https://www.youtube.com/watch?v=tkFPyue5X3Q</a>	<i>A SciShow Kids video</i>

## Vocabulary

Root system – The root system helps anchor the plant to the ground and keep it steady. A plant uses its roots to draw up water and nutrients from the soil.

Shoot system – A shoot system is the whole of a stem, together with all the parts that are attached to it, such as a leaf or flower.

Chlorophyll – A green pigment present in all green plants responsible for the absorption of light to provide energy for photosynthesis.

Photosynthesis – The process by which the leaves of a plant collect energy from the sun and make food for the plant.

Pollination and pollinators – Pollination is the transfer of the pollen grains from the male anther of a flower to the female stigma. Pollinators are birds and insects that transfer pollen from one plant to another.

## Parts of a Plant

Most land plants have six basic parts: **roots, stems, leaves, flowers, fruits, and seeds.**

**Roots** help anchor the plant in the soil and to absorb nutrients and water.

**Stems** support the upper part of the plant and act as a transport system for nutrients, water, sugar, and starches.

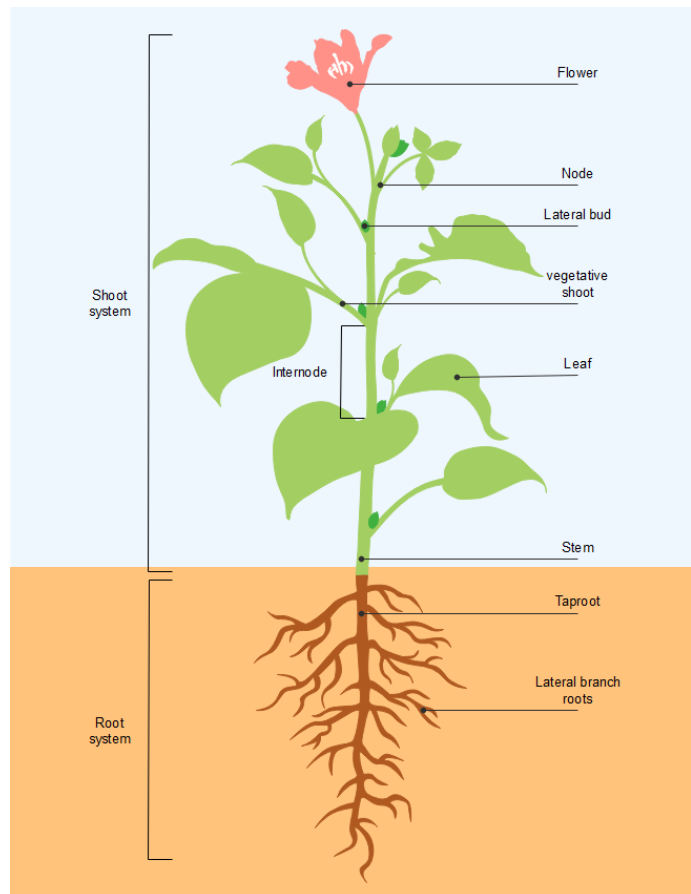
**Leaves** are part of the plant where photosynthesis occurs- where food for the plant is made. The green substance, chlorophyll, captures light energy and uses it to convert water and carbon dioxide into plant food and oxygen.

**Flowers** are the reproductive part of the plant and often have showy petals to attract pollinators.

**Fruits** are the fleshy substance that surrounds the seed.

**Seeds** contains the plant material that can develop into another plant. A seed contains everything that a plant has – leaves, stem, roots plus enough food and nutrients, for the time the plant is inside the seed.

(Source: learnaboutag.com)



# Plant a Seed Take-Home Kit

*The kit contains:*

- Seeds
- Soil
- Ice-cream cone

Fill the ice-cream cone with the dirt provided. Using your fingers make a small depression in the middle of the dirt. Place your seed in it and cover it up. You can now plant the entire ice-cream cone in the ground in your garden, or in a pot. Water it well on a regular basis. Remember, plants need sunlight and water to thrive. The ice-cream cone will breakdown and provide food for the emerging plant.

Enjoy watching your plant grow and bloom!