

# Classification of Plants



# Plant Classification

Plants are divided into two groups:

vascular



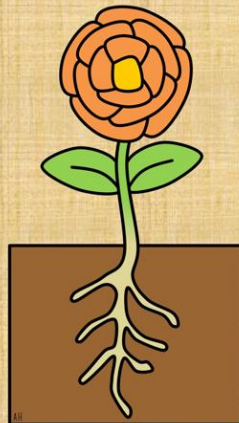
non-vascular



## Plant Structure

- Vascular plants have 3 main parts: roots, stems, and leaves

- **Roots:** take in water and nutrients from the soil
- **Stem's Tubes:** move water and nutrients from the roots to the leaves
- **Leaves:** capture the energy of the sunlight and use it to make food for the plant



## Nonvascular (lower plants)

- Plants that do not have tubes
  - These plants soak up water and food from the soil, like sponges.
  - Live in damp and shady environments.
  - Nonvascular plants do NOT have roots.
  - These plants are much smaller because they have to be touching the soil.

Moss



## Another Way to Group Plants

- You can also group plants by the way they reproduce (produce new plants)
- Plants reproduce by:
  1. Producing seeds
  2. Producing cones
  3. Producing spores



## Flowering Plants: Angiosperms

- Flowering plants who have their seeds enclosed are called angiosperms.
  - Flowering plants have pollen.
  - Pollen is a special dust that helps plants reproduce.



## Deciduous Trees

These trees lose their leaves in winter.  
They are angiosperms.



## Non-Flowering Plants: Gymnosperms

- Non-flowering plants that do not produce fruits or flowers are called gymnosperms.
  - The seeds are exposed.
  - The cones contain pollen, which animals and the wind spread from cone to cone.
  - The trees' seeds form into cones.



## Coniferous Plants

- Coniferous Plants:  
These trees keep their leaves in winter.
  - They are gymnosperms.



# More To Know

## Vascular Plants (higher plants)

- Vascular means “having tubes”
  - Have tubes that carry water from their roots to leaves and flowers.
  - When the weather is dry, plants use up the water in their tubes.
  - Then, their stems get limp and the plants wilt.
  - They can grow tall because they have tubes to hold them up.



## Producing Spores

- Some plants do NOT produce flowers, pollen, seeds, or cones.
  - Instead, they produce spores
  - A tiny cell that can grow into a plant.
- Spores drop off the plant into the soil, and then a new plant grows.
  - Non-vascular plants like algae and moss reproduce through spores.



# Activity

Once you are done reading  
draw and color the  
different types of plants.  
Make sure to title it with  
the correct classification.



Use this resource to help you.  
Share with your teacher when  
done.