

An Overview of Plants

What You'll Learn:

Identify characteristics common to all plants.

Explain which plant adaptations make it possible for plants to survive on land.

Compare and contrast vascular and nonvascular plants.

What is a Plant?

***Important food source to consumers.**



Plant Characteristics

***Most have roots or root like system.**

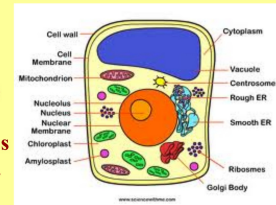


***All plants need water, and are adapted to nearly every environment.**

Plant Cells

***Eukaryotic cells with a cell wall for support and structure.**

***Cells contain chlorophyll inside of chloroplasts used in the process of photosynthesis.**



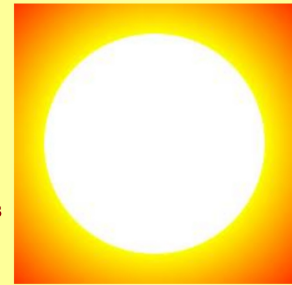
Origin and Evolution of Plants

***Plants are believed to have evolved from green algae.**



Life on Land

***More sunlight and CO₂ are available on land.**



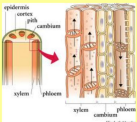
***Most of Earth's O₂ is produced by plants.**

Adaptations to Land

***Cuticle slows water loss.**



***Cellulose provides support and structure.**



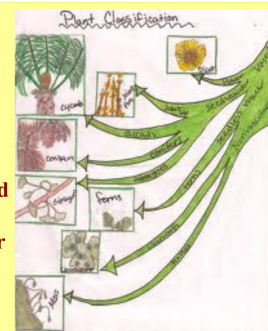
***Structures that distribute water and nutrients**



***Water resistant seeds and spores.**

Classification of Plants

***Plants are divided into two main divisions: Vascular and Nonvascular.**



Naming Plants

***Early classification divided plants into three groups: trees, shrubs, and herbs.**

***Linnaeus developed a classification system using many characteristics and binomial nomenclature**