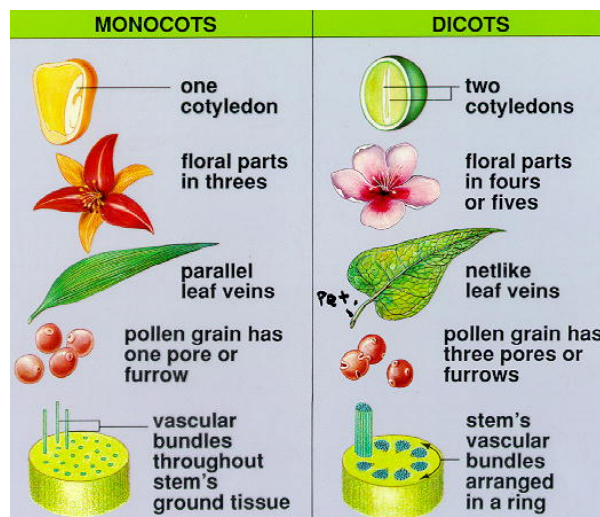


Dicot Plants

Introduction: In this lab you will become familiar with the vascular plants, dicot plants in particular. These plants have a well developed vascular system and other more complex processes than do the so called lower plants. Angiosperms or flowering plants are divided into Monocot and Dicot plants. The cot in Dicot refers to cotyledons or "seed leaves" There are characteristics that separate these two groups (see table 1)

	Monocots	Dicots
Floral Arrangement	3's	4's and 5's
Leaf Venation	Parallel	Net
Vascular bundles	Scattered	Ring
Habit	Herbaceous	Herbaceous + Woody
Roots	Fibrous	Taproot
Growth	Primary only	Primary and Secondary
Examples:	Grass, Palm, Orchid	Oaks, Roses, Sunflowers

Table: 1



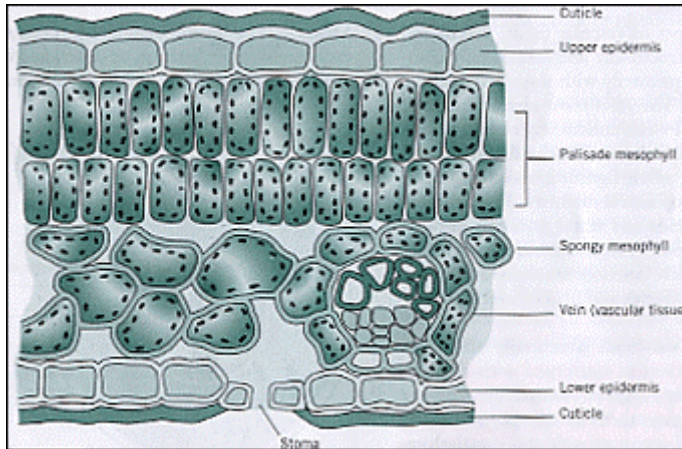
Materials:

Dicot whole plant

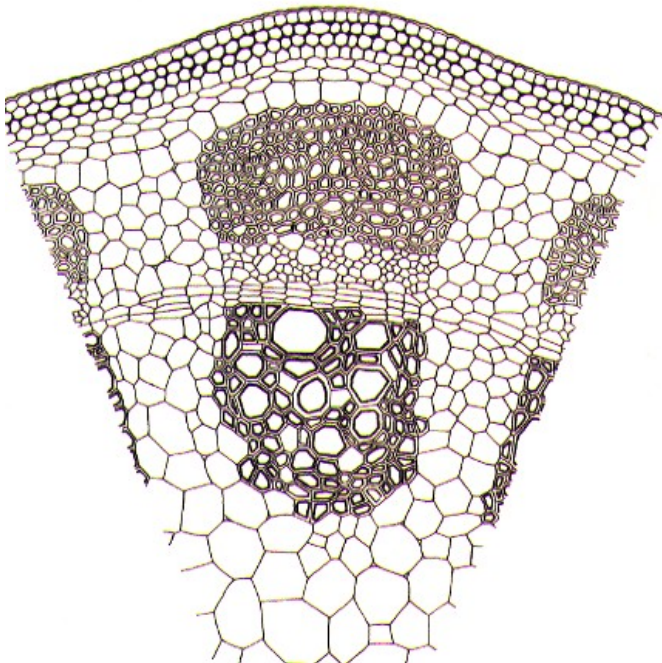
Dicot flowers

Slides:

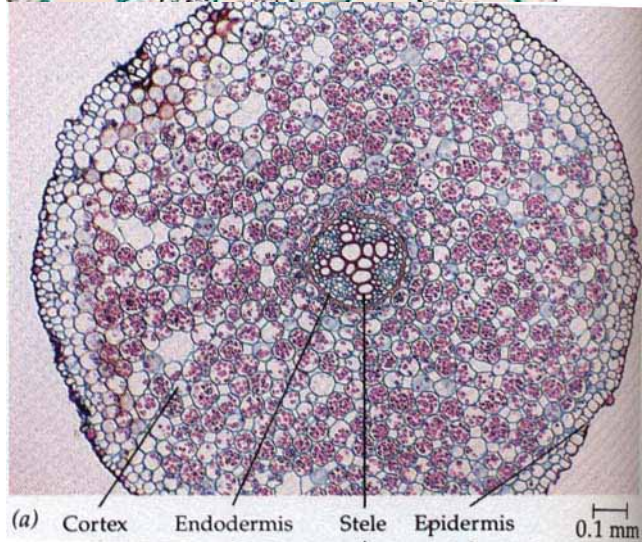
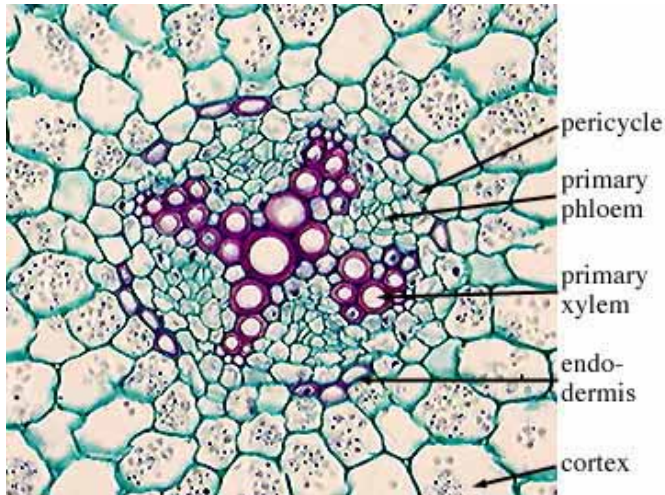
- Dicot Leaf cross section



- Dicot Stem cross section



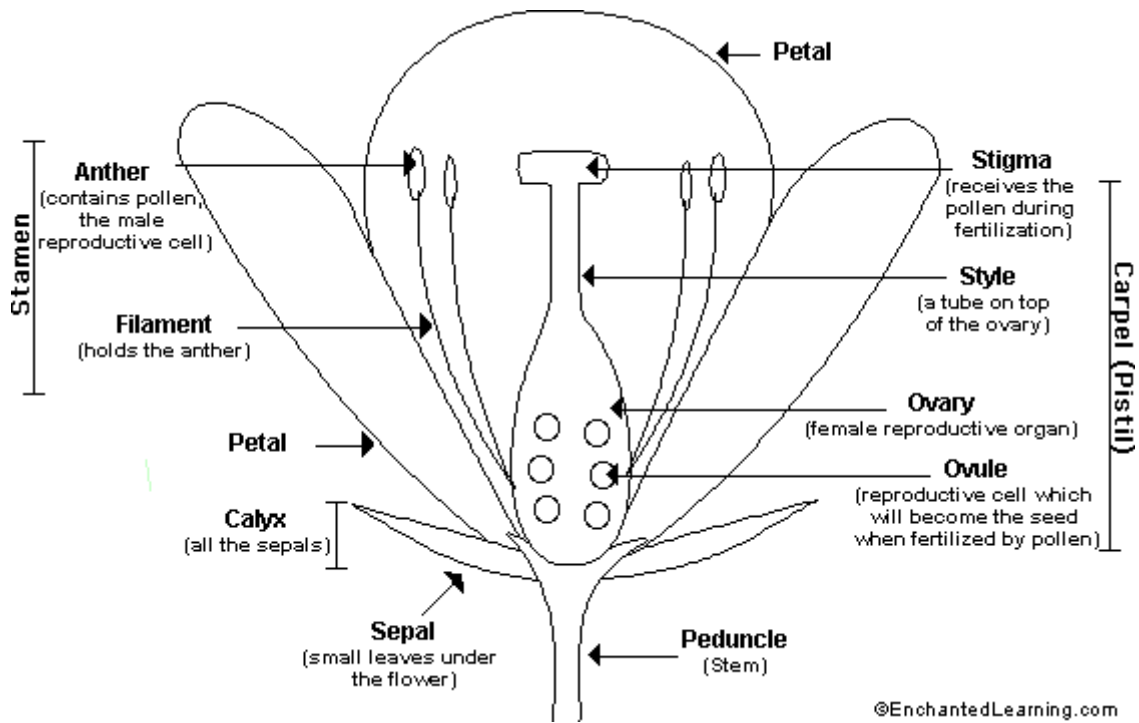
- Dicot Root cross section



Procedures:

Flower Anatomy

- Obtain a flower and either a magnifying glass or dissecting microscope and dissect the flower. Draw what you observe and label all structures.



Histology of Dicot Plants

- Dicot Stem Cross sections and draw one of each. A wedge shaped section is sufficient for each.
- Dicot Leaves cross sections and draw each. A wedge shaped section is sufficient for each.
- Dicot Root cross sections and draw each. A wedge shaped section is sufficient for each.

Seed Germination

- Take a dicot seed and soak it in 10% bleach for 10 seconds. Rinse in water for 20 seconds.
- Place it onto a Petri dish that has some damp paper towel in it.
- Place it in the dark overnight.
- Sketch the results after two days.