

# *LEAVES*

Headings

Vocabulary

Important Info

# Leaves

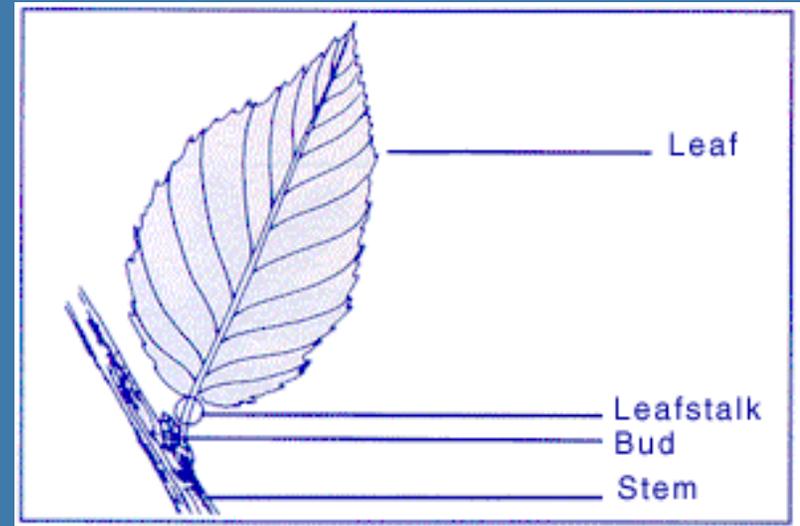
## 1. Function:

a. Site of photosynthesis

## 2. Types:

a. **Simple**-single blade

b. **Compound**- leaf is made up of several parts

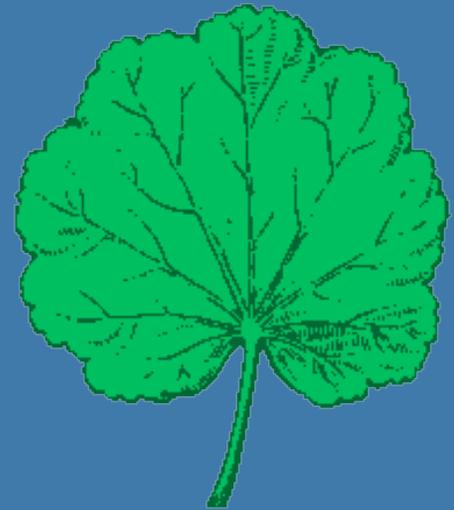


# 3. Veination

a. **Pinnate Leaves**- have central vein, all others rise from it



b. **Palmate veins**- veins arise from central spot, usually have 5 main veins



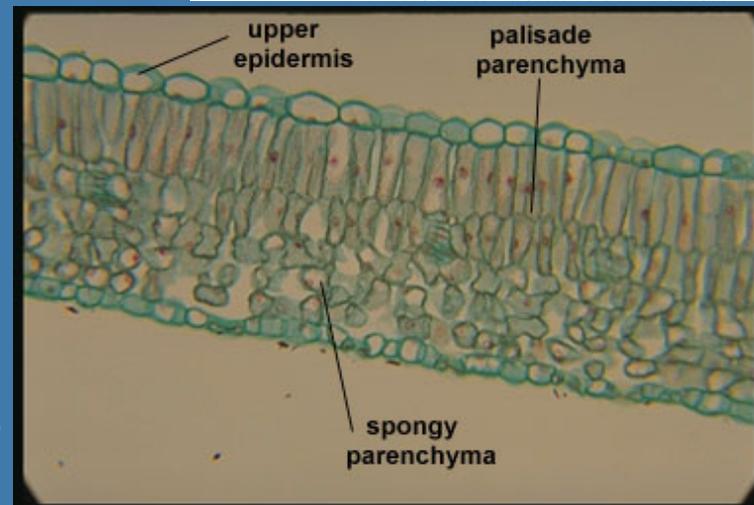
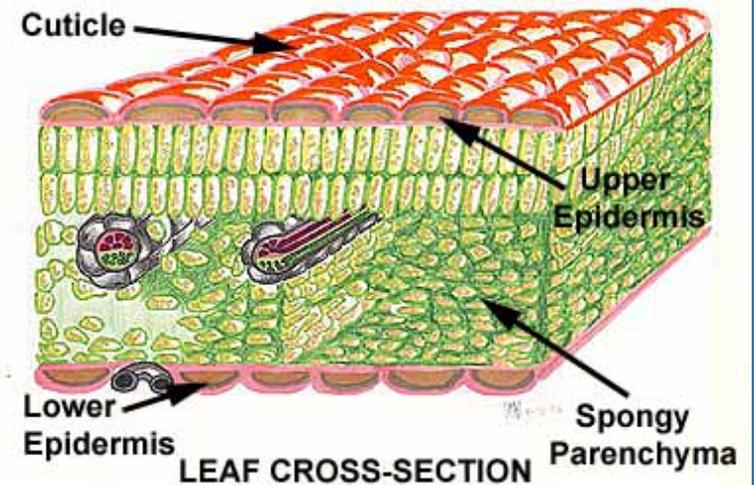
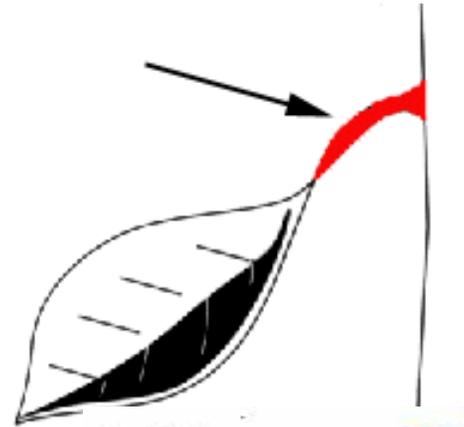
c. **Parallel veins**- veins all run in parallel lines down length of leaf



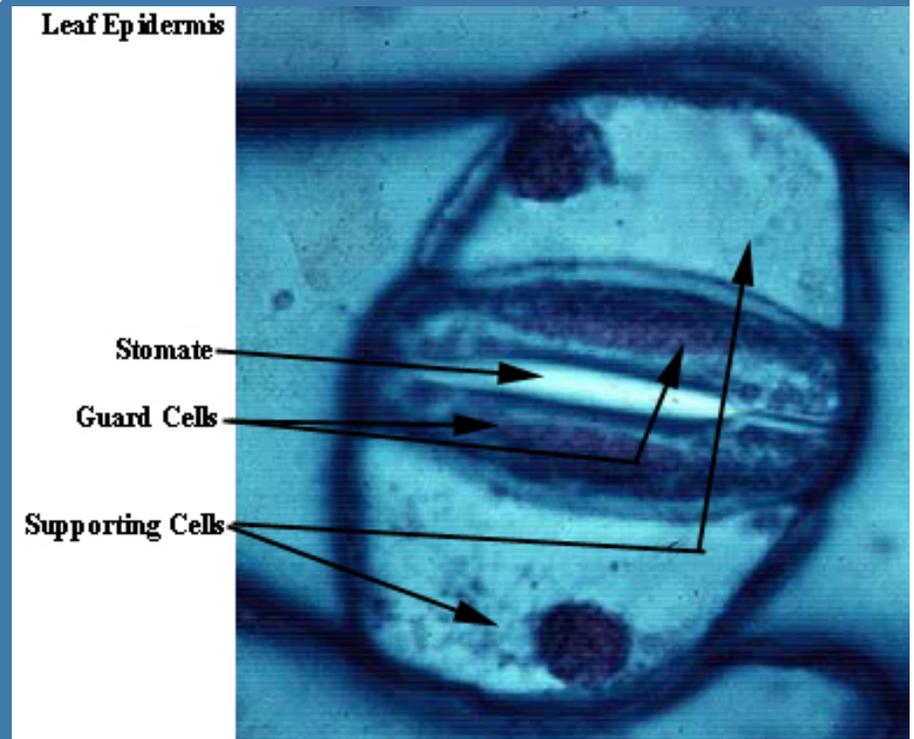
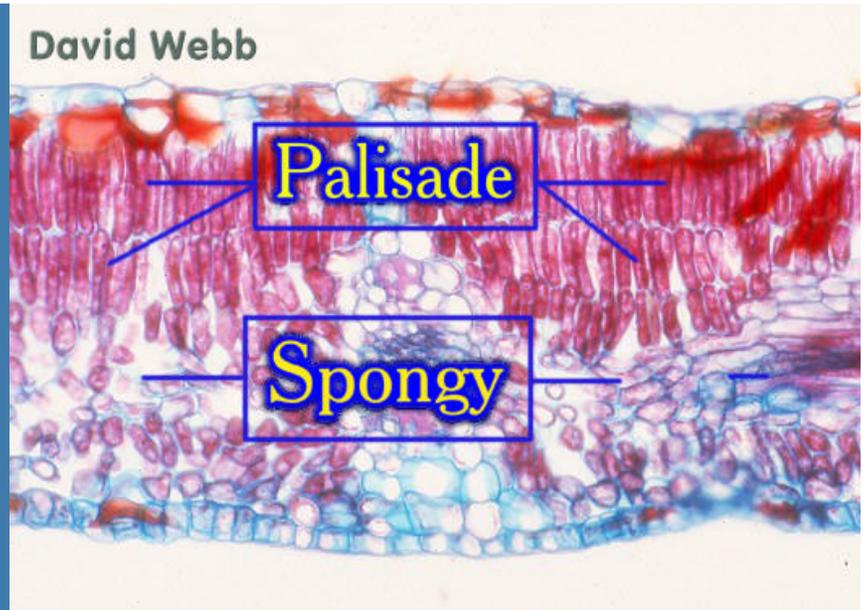


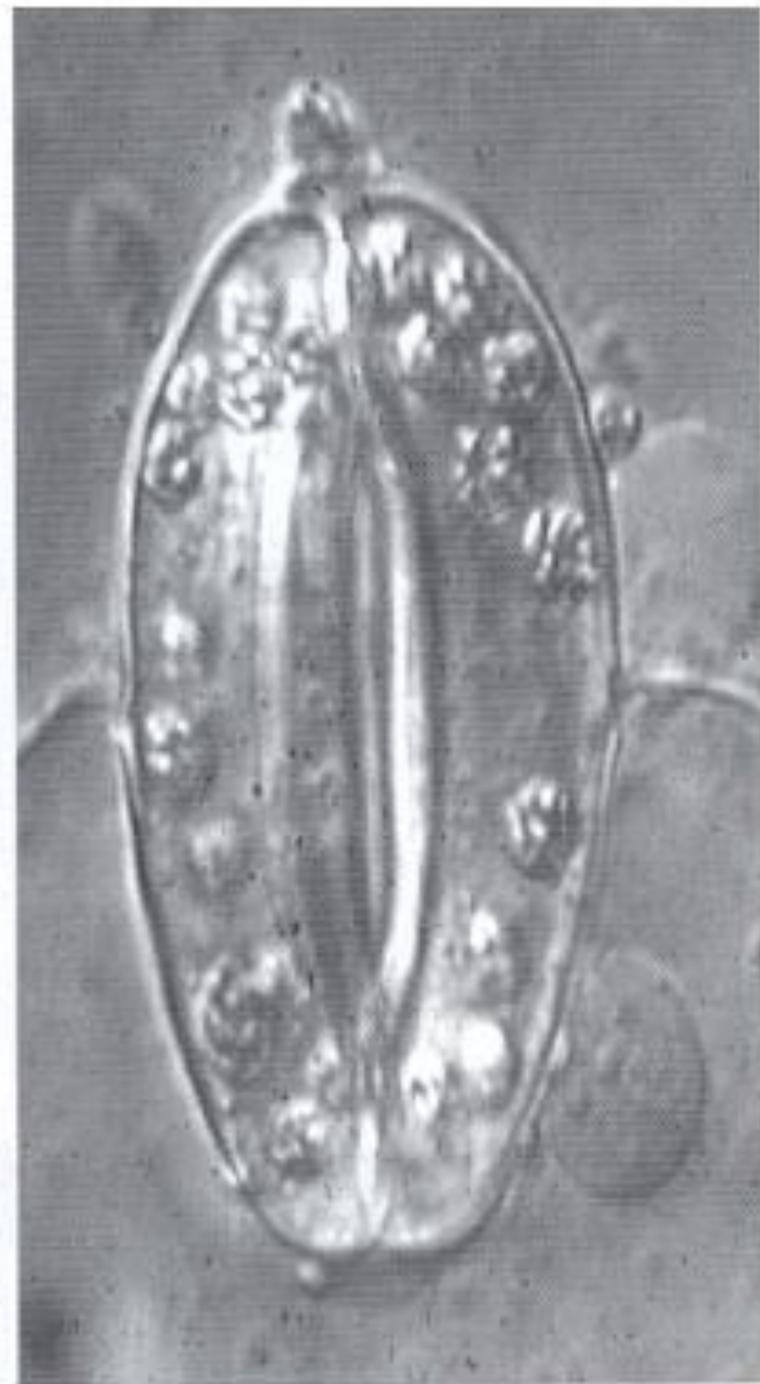
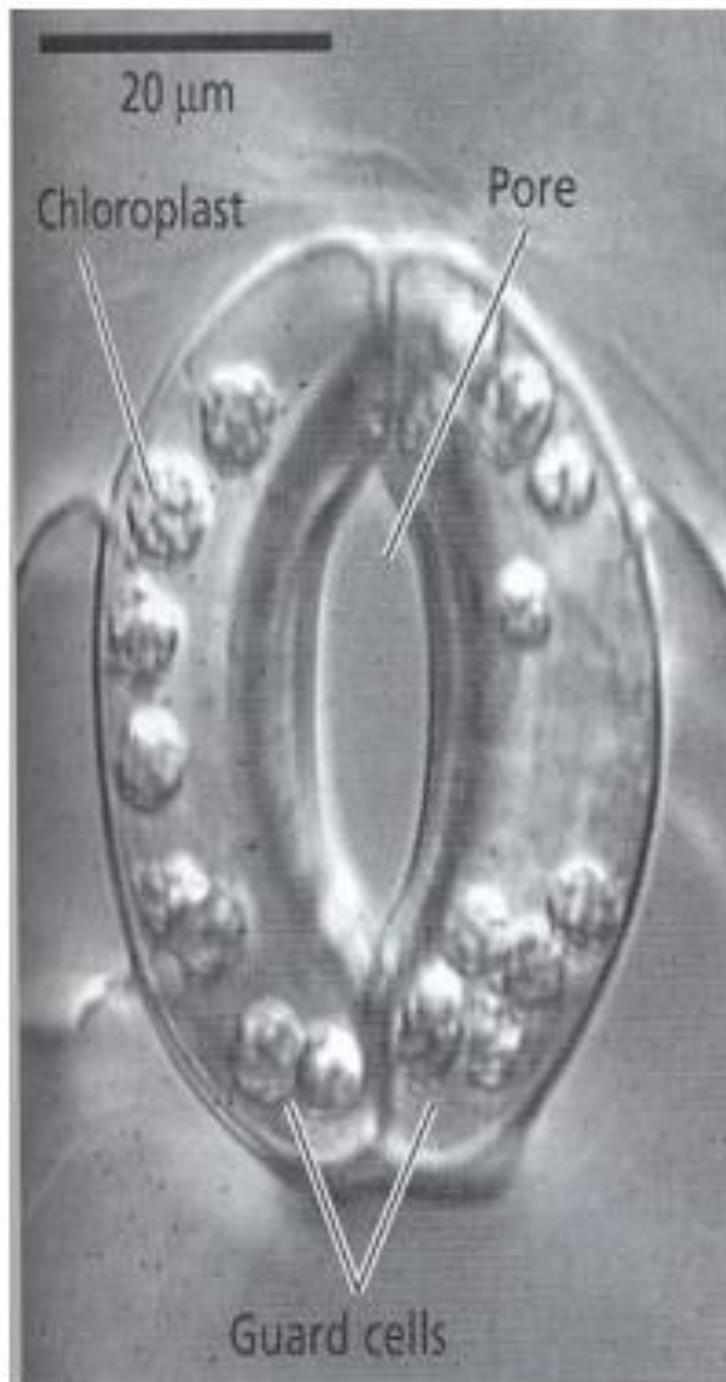
## 5. Structures:

- **Petiole** - stalk joining leaf blade to the stem
- **Cuticle** -waxy covering to protect from water loss
- **Palisade layer**- column shaped cells containing chloroplasts, site of most photosynthesis



- **Spongy Mesophyll** - loosely packed w/ air spaces allowing gases to circulate
- **Stomata** - openings in leaf for gas exchange
- **Guard cells** - cells which control size of the stomata





## 6. Leaf adaptations

A. **Spines**- cactus spines protect the plant from predators & water loss



B. **Tendrils**- leaflets are modified for climbing



C. **Thick leaves** - modified for water storage



D. **Pitcher Type Leaves** - modified for catching insects

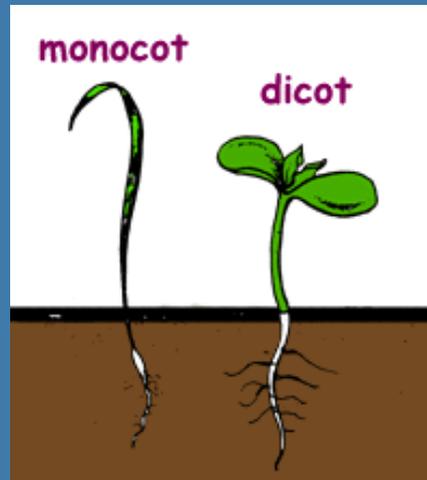


# 7. MONOCOTS & DICOTS

**Monocots** - flower parts in multiples of three

**Dicots** - 4 or 5 flower parts,  
or multiples of 4 or 5

- Classification by # of seed leaves (**cotyledons**):
- Seeds sprout 1 leaf - Monocot,
- Seeds sprout 2 leaves - Dicot



# Quick Quiz

1. A \_\_\_\_\_ leaf has veins that run in parallel lines

A. root hair

B. parallel veins

C. root

D. palmate vein

2. Protects from water loss

A. petiole

B. cuticle

C. palisade layer

D. spongy mesophyll

3. Site of most photosynthesis

A. petiole

B. cuticle

C. palisade layer

D. spongy mesophyll

4 Identify the type of plant adaptation

A. Spine

B. tendril

C. thick leaves

D. pitcher type



## 5. Identify this part of the leaf

- A. Petiole
- B. Spongy Mesophyll
- C. Cuticle
- D. Lower epidermis

