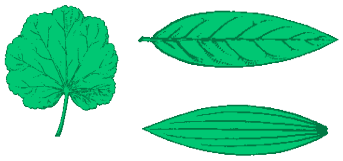
3+ QUESTIONS:
Level 5

Develop a way to remember the following leaves



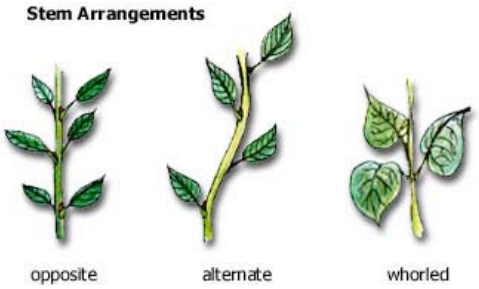
Leaves

1. Function:
- a. Site of photosynthesis

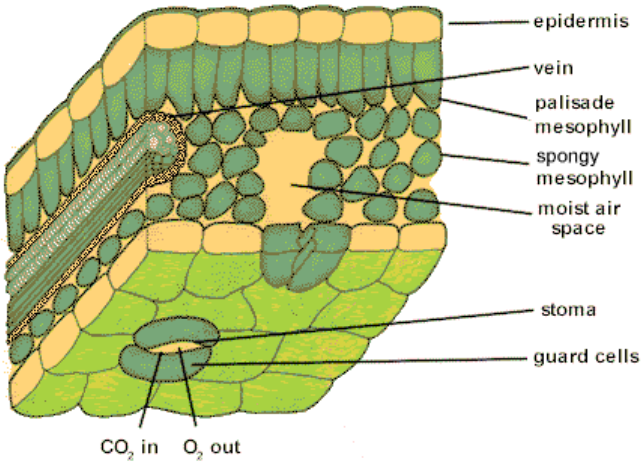
2. Types:
- a. Simple-single blade
- b. Compound- leaf is made up of several parts

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

4. Arrangement
- a. Whirled - leaves whirl around stem
- b. Alternate- leaves alternate on stem from one side to another
- c. Opposite- leaves are directly opposite each other

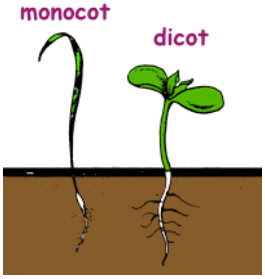


5. Structures
- a. Petiole - stalk joining leaf blade to the stem
- b. Cuticle -waxy covering to protect from water loss
- c. Palisade layer- column shaped cells containing chloroplasts, site of most photosynthesis
- d. Spongy Mesophyll - loosely packed w/ air spaces allowing gases to circulate
- e. Stomata - openings in leaf for gas exchange
- f. 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 and Dicots
- Monocots – flower parts in multiples of 3
- 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



3-4 Sentence Summary: