Botany B – Unit 1 – Plant Tissue

Meristematic Tissues

- _____ – the growth regions where _____ actively _____
  - _____ – Known as "_____" growth. Tips of roots & shoots, increase in _____
  - _____ – _____ growth. Tissues that increase _____ of roots & stems

Lateral Meristems

- _____ –
  - _____ – growth rings
  - _____ – Bark & cork; provides _____, _____, & _____
  - _____ Conducting Tissue
    - _____ – Water up
    - _____ – Food away

Tissues produced by _____

- _____ cells – The most abundant of all cell types, found in almost all major parts of plants
  - Thin, pliable _____ can be up to _____
  - _____ cells with numerous _____ are called _____
    - Function in _____
  - _____ cells without _____ function mainly in food & water _____
  - _____ cells play a vital role in _____
- _____ cells – _____ generally _____ than _____ cells.
  - Provide flexible _____ for both _____ & _____ organs (leaves, flower parts, etc...)
  - Generally occur just below the _____
  - Celery "_____" are an example of _____
- _____ cells – Thick, tough, _____
  - Strengthened by "_____"
  - Most _____ cells are _____ at maturity, function in _____ and _____
  - "_____" are related cells – _____ cells found throughout all plant tissues; sometimes called "_____"

Complex Tissue – Epidermis

- _____ – _____ layer of _____ in all young plants
  - Usually _____ thick
  - Most _____ cells secrete a _____ substance called "_____"
  - A layer of _____ is called the "_____"
    - Prevents _____ loss – "_____"
    - Exceptionally resistant to _____
  - _____ – small "_____" in the _____
    - _____ – regulate _____ rate
- _____ – specialized _____ cells
  - _____ to reduce _____ loss
  - _____ – oils, fragrance, enzymes
  - _____ – acids (nettles)
  - _____ – stimulate reaction in _____ plants (fly trap)
- _____ – Formed when outer _____ produces enough _____ to split _____
  - Secretes "_____"
    - _____ substance which blocks _____ & _____ movement
    - Makes cork cells _____; protects _____ & other tissue below bark

Other Complex Tissues

- _____ – Dead _____ cells in _____ tissue
  - Aid in _____ conduction/transport
  - Provide _____
- _____ cells – _____ transport in _____ tissue
  - Translocation of _____ through "_____"

Secretory Tissues

- _____ cells "_____"
  - _____ (we talked about these 3 slides ago)
  - _____ – nectar
  - _____ – water
  - _____ – contains oils, resins
  - _____ – latex rubbers, alkaloids