Unit 9 – Plants Study Guide

* Key Vocabulary:
  + Plasmodesmata, Pores, Tight Junctions, Gap Junctions, Desmosomes, cyanobacteria, myoblasta, tuber, rhizome, terminal shoots/roots, meristematic cells, cambium, annuals, biennials, perennials, deciduous, axillary bud, root hairs, dormancy, vascular bundle
* Differences between plant cells and animal cells
* What are the apical meristems of plants? What occurs here?
* Know the parts, be able to label, and know the differences between the parts of the leaf, root, stem, seed, and flower
* Be able to identify the differences between angiosperms and gymnosperms
* Purpose, use, and characteristics of the Vascular tissues: xylem and phloem
  + Include the component cells of each
    - Sieve cells/plates
    - Tracheids
    - Vessel members
    - Companion cells
* How does water, ions, sugars move through the plant
  + Absorption, transpiration, cohesion-tension, capillary action, osmosis, pressure, evaporation, apoplast, symplast
* Where are sugars/nutrients produced and then stored in plants
  + Source vs sink
* Know the role of translocation in the plant
* Differences in leaf structure and overall characteristics of monocots vs. dicots
* Fertilization of egg (number of nuclei involved in each portion of the seed)
  + Post fertilization what happens to the ovary
* What would affect the transpiration rates in a plant and how would these conditions affect the rates
* When would stomata be open vs closed and why
* Primary vs secondary growth
  + Annual rings
* What is vascular cambium
* What does each of the plant hormones/chemicals create as a reaction/result in the plant
* What are each of the tropisms and what do they do?
* Short day vs long day plants
* How does the plant protect itself?



