1. Know the steps of the Scientific Method as presented in class.
2. What 4 methods have been used to understand plants?
3. What 3 particles make up an atom?
4. What bond results from sharing electrons?
5. What bond results from transferring electrons from one atom to the other, forming ions?
6. What is an endergonic reaction? What is an exergonic reaction?
7. Be able to ID the organelles of a cell on a drawing:
   1. Nucleus
   2. Cell wall
   3. Cell membrane
   4. E.R. (rough and smooth)
   5. Chloroplast
   6. central vacuole
8. Know the function of all the organelles discussed in class.
   1. Be sure to distinguish the **different** **plastids**
      1. Chloroplasts
      2. Chromoplasts
      3. amyloplasts
9. Know the stages of the cell cycle in order ( G1, S, G2, M)
   1. What is the longest part
   2. When do genes replicate
   3. When are chemicals produced that are needed for division
   4. Which is the phase of dormancy
10. Know the phases of Mitosis and what occurs in each
    1. Prophase
    2. Metaphase
    3. Anaphase
    4. Telophase
    5. Cytokinesis
11. Know the 3 types of simple tissue and the characteristics for each
    1. Parenchyma
    2. Collenchymas
    3. Sclerenchyma
12. Know different complex tissues and their function:
    1. Epidermis
    2. Mesophyll
    3. Vascular tissue
13. Identify the areas of primary growth:
    1. Apical meristem
    2. Zone of elongation
    3. Zone of differentiation
14. Understand the difference in the 2 major root systems and who can have which:
    1. Fibrous
    2. Tap
15. Describe various specialized roots and what they are used for:
    1. Prop roots
    2. Aerial roots
    3. Haustoria
    4. Tubers
    5. Rhizomes
16. Identify parts of external stems:
    1. Buds (terminal and axillary)
    2. Nodes (and internodes)
17. Distinguish between monocots and dicots with respect to tissue arrangement in the stem.
18. Identify various tissues within the stems of monocots and dicots.