**Questions to answer:**

1. Why is the cell theory signficant (don’t just state the tenets, explain what it means and why it is a theory)?
2. How does the ratio of a cell’s surface area to volume place upward and downward limits on cell size?
3. How do organelles allow for increased complexity in cells?
4. Draw an label a typical eukaryotic cell.  Briefly state the structure and function of the following organelles:
5. Nucleus
6. Ribosomes (free and bound)
7. Endoplasmic reticulum (rough and smooth)
8. Golgi Apparatus
9. Vessicles
10. Explain how each of the organelles above functions in the endomembrane system.

**Things you should make sure you understand:**

(feel free to ask questions about them in class)

* How advances in microscopy led to advances in cytology.
* The benefits and disadvantages of light microscopy and electron microscopy.
* How the information system of cells (DNA->RNA -> Protein) allows for cells to accomplish all physiological processes