## Chapter 8 Test: What to Know

Test Part 1:

• Location, name & function of organelles & nuclear structures

Test Part 2:

- Hooke & Van Leeuwenhoek
- Cell theory
  - 3 principles
  - What it applies to
  - Prokaryote & eukaryote differences/similarities
- Cell organelles
  - Compare/contrast plant vs animal cells
- Movement across membrane
  - Solutes and solvents be clear
  - Diffusion
    - Definition
    - How and why it occurs
  - o Osmosis
    - Definition
    - Hypo-, hyper- and isotonic dynamics
    - Be able to apply concept in hypothetical situations
  - o Facilitated diffusion
    - Definition
    - Structures involved
  - Active transport
    - Definition
  - Structures involved
- Energy requirements of each 4 types of movement
- Cell specialization/levels of organization in multicellular organisms
- Microscope magnification
  - Light microscope
    - Maximum magnification possible
  - Electron Microscope
    - Scale at which objects are magnified