

**START PREPARING FOR THIS EXAM TODAY! DO NOT WAIT UNTIL THE NIGHT BEFORE THE EXAM (OR EVEN 2 TO 3 NIGHTS BEFORE THE EXAM) START NOW!!!!**

Be able to identify various types of specimens that would be best viewed under a light microscope (pg. 109).

Similarities/differences between prokaryotic and eukaryotic cells (pgs. 112-113).

The differences (in terms of organelles) between plant and animal cells (pgs. 114-115)

Be able to identify cell types that would have a high proportion of bound ribosomes (pgs. 117-118).

Functions/locations of the following organelles:

Cytoplasm (pg. 112)

Nucleolus (pg. 117)

Ribosomes (pgs. 117-118)

Endoplasmic reticulum (pgs. 118-119)

Golgi (pgs. 119-121)

Lysosomes (pgs. 121-122)

Tonoplast (pg. 123)

Peroxisomes (pg. 125)

Cytoskeleton (pgs. 126-127)

Centrioles (pg. 128)

Basal bodies (pg. 128-130)

ECM – extracellular matrix (pg. 133)

In a plant cell, know the

Site of transport of materials in and out of the cell (pg. 113)

Site of glucose synthesis (pgs. 124-125)

Site of modification and packaging of proteins and lipids (pgs. 119-121)

Site of conversion of chemical energy into ATP (pgs. 123-124)

Organelle that evolved from a photoautotrophic prokaryote (pgs. 549-550)

Know the various components of the plasma membrane (pg. 113; 141-144)

Know the definition of and understand the relationship between simple diffusion (pg. 145) and facilitated diffusion (pg. 147-148)

Know what osmosis is and how the terms hypertonic, hypotonic, and isotonic relate to one another (pgs. 146-147)

Understand what the terms ‘turgid’ and ‘flaccid’ mean (pg. 147)

**From your AP lab:**

Understand the principles of osmosis, diffusion and dialysis (movement through a semi-permeable membrane).

Understand what water potential is and how it is affected.

**Free Response:**

Osmosis – diffusion – dialysis

Relationship between structure and function of various organelles and how they work together in cellular processes

**THE EXAM IS SCHEDULED FOR WEDNESDAY, OCTOBER 12TH.**

***After-school review  
sessions for this  
exam:  
October 5th  
October 6th***