## **AP Biology** Summer Assignment

Due to the nature of the course and the amount of content that must be covered all AP biology students must complete a summer assignment prior to the first day of school. This year the summer assignment will be to outline chapters 1 through 5 out of your text book (Campbell and Resse). Since it is impossible for you to get a textbook during the summer I have scanned those chapters and placed them in the Summer Assignment Google Classroom. To join the Google Classroom use the join code gx4aw3b. Outlines can be done in a spiral notebook or typed.

In addition to the outlines students should take notes on the following power points. Water, Chapter 2 Chemistry, Bushman Macromolecules, Lipids and Proteins, Summer Nucleic Acids, Enzymes, Types of cells, The Cytoskeleton, Organelles and Cell boundaries

While this sounds like a lot of work please remember that chapter outlines should include all bold words, summaries of figures and tables, plus any information you feel will be valuable in your studying on the material. In addition I teach a summer course that covers some of the power points.

Students should be prepared for a test on the material covered in the summer assignment on the first week of school.

In addition an function should be assigned to the following organelles:

Peripheral protein Integral protein Transmembrane protein Phospholipid bilayer Fluid mosaic model Channel protein Aquaporins Cholesterol's role in the membrane Glycocalyx Nuclear membrane Chromatin

Chromosome Nucleosome

Nucleoli

Rough endoplasmic reticulum Smooth endoplasmic reticulum

Centrioles Peroxisome Golgi apparatus Vesicle

Cytoskeleton

Lysosome

9+2 microtubule arrangement

9+0 microtubule arrangement