

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 2 through 5 out of your text book (Campbell and Resse). All outlines should be done in a spiral notebook. A sample is provided on the back of this handout order to show the level of detail that is necessary for full credit to be awarded. **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:

- Plasma Membrane
- Peripheral protein
- Integral protein
- Transmembrane protein
- Phospholipid bilayer
- Fluid mosaic model
- Channel protein
- Porins
- Aquaporins
- Cholesterol's role in the membrane
- Glycocalyx
- Nucleus
- Nuclear membrane
- Chromatin
- Chromosome
- Nucleosome
- Nucleoli
- Ribosome
- Rough endoplasmic reticulum
- Smooth endoplasmic reticulum
- Centrioles
- Mitochondria
- Peroxisome
- Golgi apparatus
- Vesicle
- Cytoskeleton
- Lysosome
- Cilia
- Flagella

Sample Summer Assignment

Chapter 2

Section 2.1

matter - anything that takes up space

Summary of fig 2.2

- Shows how sodium & chlorine combine to form salt

- Compound - a substance consisting of two or more different elements in a fixed ratio

Summary of fig 2.3

a) shows that nitrogen is a necessary element for corn growth

b) In humans goiters are caused by a deficiency of iodine

Summary of Table 2.1

- This table shows the naturally occurring elements in humans. Carbon was the most, Magnesium was