**AP Biology**

**Unit 2 – The Cell**

**Test Topics**

* Prokaryotic vs. eukaryotic cells
* Why are cells small?
* Organelles – function and structure
* Where is DNA found?
* Plant vs. animal cells
* Endosymbiosis theory
* Endomembrane system
* Structure of the cell membrane – components and functions
* Fluid mosaic model
* Membrane responses to cold
* What does amphipathic mean?
* How do different types of molecules get through the cell membrane?
* Passive transport vs. active transport and types of each
* Types of bulk transport
* Specific types of transport – sodium/potassium pump and cotransporters
* Isotonic/hypotonic/hypertonic and effect on cells – difference in plants and animals
* How does water get through the cell membrane
* Water potential – factors that change movement of water
* Lab concepts – diffusion/osmosis