**Questions to answer:**

1. Why will it make me cringe if you ever say that cells “make” energy?
2. How is the structure of a lysosome related to its function?
3. Explain one normal function of lysosomes in a multicellular organism and one abnormal function.
4. Explain the functions of vacuoles and explain how they differ between plant cells and animal cells.
5. Draw a mitochondria.  Label the matrix, cristae, inner membrane, outer membrane and intermembrane space.
6. Draw a chloroplast.  Label the stroma, thylakoids, grana, outer membrane, inner membrane, and where chlorophyll can be found.

**Things you should make sure you understand:**

(feel free to ask questions about them in class)

* Why cells require energy, and how they acquire it.
* The different roles of glucose and ATP in cellular systems.
* Why mitochondria and chloroplasts are separate from the endomembrane system, and are considered “semi-autonomous” organelles.
* The relationship between the processes that occur in the mitochondria and the processes that occur in the chloroplast.