NAME _____
DATE_____CLASS_____

MAKING AND RELEASING ENERGY QUESTIONS

At the bottom and the back of this page answer the following questions thoroughly with your group members. If you need to use a separate sheet of paper, be sure to staple it to this one. You must cite your source for each answer by giving the title of the text and the page number, the lecture title and date, or the html page.

1. Why are leaves green?
2. Summarize where in the cell each reaction in photosynthesis and cellular respiration takes place. What are the beginning and end products?
3. What is the role of glycolysis and aerobic respiration in relation to the presence and absence of oxygen? Which process is older evolutionarily?
4. Compare ATP production for glycolysis and the Krebs cycle under anaerobic and aerobic conditions.
5. Describe alcohol and lactic acid fermentation. Make a list of when, where and in what organisms it occurs.
6. Define pigments. Are chlorophylls (green pigments) the only kind that exist?
7. Summarize how a proton gradient can be used to make ATP. Where do proton gradients exist in a cell and how do they function?
8. List the differences in how sugar or glucose is produced in the 3 photosynthetic pathways in plants, i.e. C3, C4 and CAM.