Introduction to Cellular Respiration

**Cellular Respiration**: a complex \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that breaks down \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in

order to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**How ATP Works**

ATP = A \_\_\_\_\_\_\_\_\_\_ T\_\_\_\_\_ P\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ADP = A\_\_\_\_\_\_\_\_\_\_\_\_\_ D\_\_\_ P\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Illustrate the process of ATP being used to release energy:

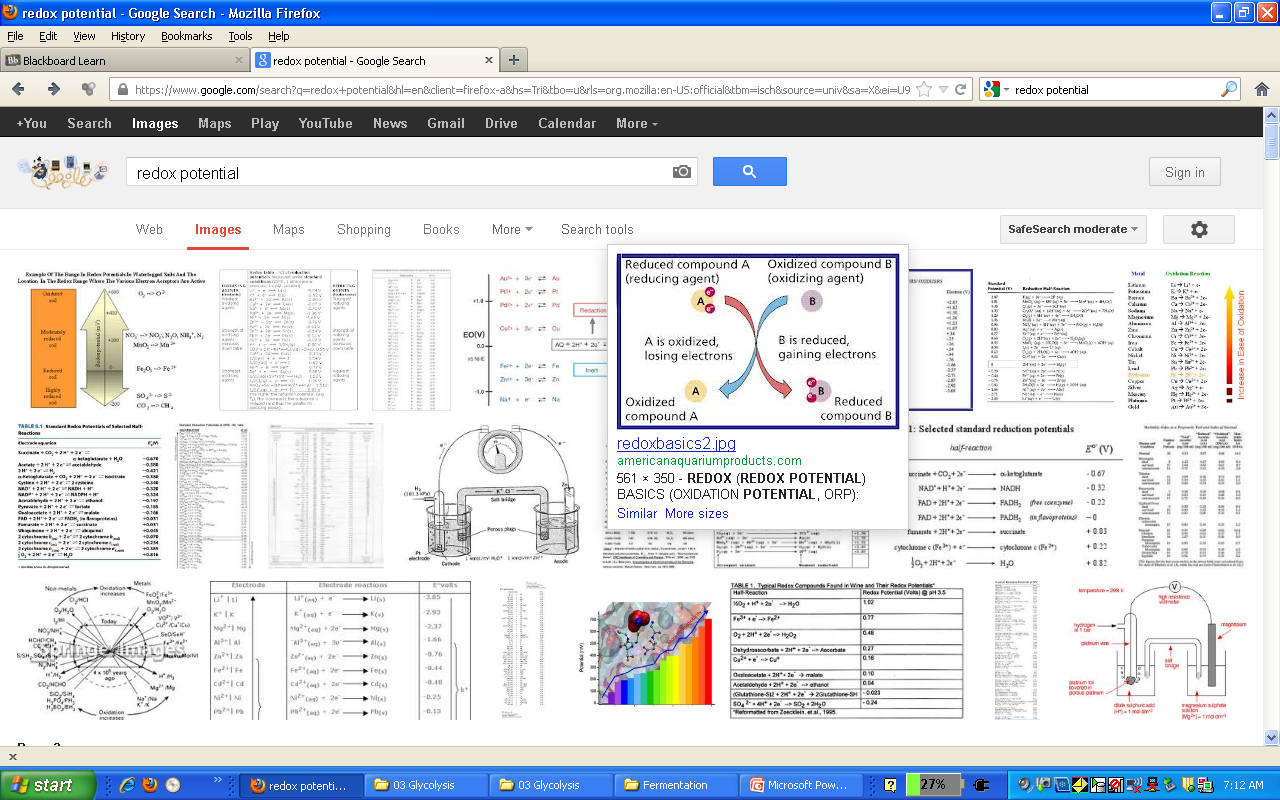
Releases Energy

Requires Energy

**Areobic Respiration** is respiration that requires \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **anaerobic respiration** does not.

Cellular Respiration of all kinds is a type of reaction where food molecules are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Redox Reactions:



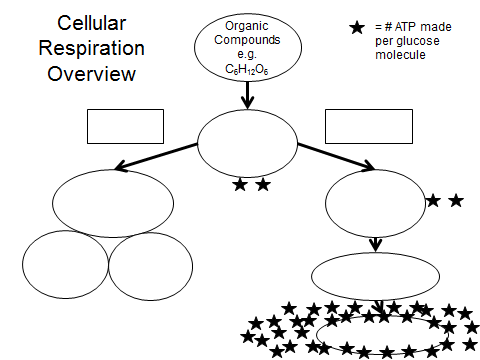
LEO the lion says GER:

The L\_\_\_\_\_ of E\_\_\_\_\_\_\_\_\_\_ is O\_\_\_\_\_\_\_\_\_\_\_\_\_, the G\_\_\_\_\_\_\_\_ of E\_\_\_\_\_\_\_\_\_\_\_\_\_ is R\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

REDOX and Carbon

Adding oxygen to carbon is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of carbon, and releases energy.

Adding hydrogen to carbon is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of carbon, and requires energy.



2.5 Billion years ago…. What happened?

Why is aerobic respiration so important? What did it allow to happen?