

## **Biology 112, Energy Test Review**

### **20-30 Multiple Choice from the following topics**

Autotroph/Heterotroph-distinguish between them and know examples

Structure of ATP, where the greatest amount of energy is stored

Function of chlorophyll and its role in absorbing sunlight

Products of the light dependent reaction, oxygen gas, ATP and NADPH+H

Carbon dioxide as fuel for photosynthesis

Stages of aerobic cellular respiration, glycolysis-Kreb's Cycle-Electron Transport Chain

Glucose as fuel for glycolysis

Lactic acid fermentation

Aerobic respiration takes place in the presence of oxygen-Anaerobic respiration takes place in the absence of oxygen

Net production of ATP during cellular respiration is 36 ATP

Chloroplasts-Photosynthesis, Mitochondria-Cellular Respiration

### **Short Answer**

Write the balanced chemical equations for photosynthesis and cellular respiration

Oxidation-reduction reactions

With the aid of a diagram explain the difference between exergonic and endergonic reactions

Difference between aerobic and anaerobic respiration

Glycolysis knowledge, know the diagram

Human energy requirement and the need for aerobic respiration

Two laws of thermodynamics

Explain in detail the light dependent reaction and the carbon fixation phase