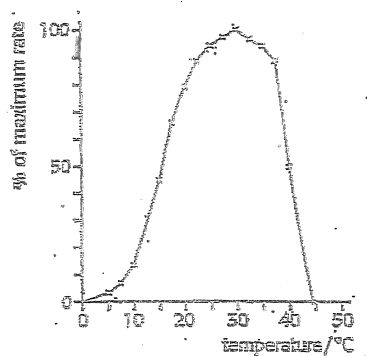


IB Biology
Photosynthesis, Respiration, and
Energy Relationships

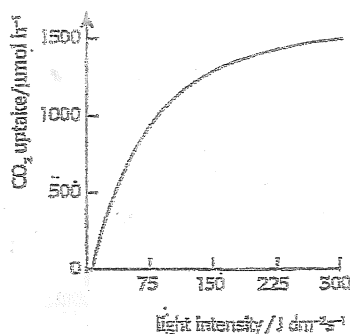
Name _____
Period _____ Date _____

1. Outline the effects of temperature, light intensity, and carbon dioxide concentration on the rate of photosynthesis using the graphs below:

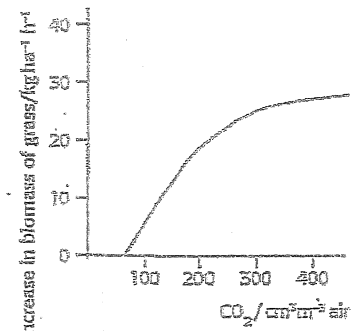
Rate of
Photosynthesis



Temperature



Light Intensity



CO₂ Concentration

Temperature:

Light Intensity:

CO₂ Concentration:

2. Predict the results of an experiment that measured the rate of photosynthesis for plants under four different conditions: white light, blue light, green light, and red light.

3. Explain the shape of the pyramid of energy.

4. Fill in the blanks: _____ enters and leaves an ecosystem, but _____ must be recycled.

5. How does combustion of fossil fuels affect the carbon cycle? What if rates of deforestation continue to rise as well? (See Campbell text page 1232 for an overview of the carbon cycle.)

6. What are the roles of saprotrophic bacteria and fungi in an ecosystem?