

Name _____

AP BIOLOGY EXAM EIGHT

FREE RESPONSE QUESTION

The rate of photosynthesis may vary with changes that occur in environmental temperature, wavelength of light, and light intensity. Using a photosynthetic organism of your choice, choose only ONE of the three variables (temperature, wavelength of light, or light intensity) and for this variable

- **design** a scientific experiment to determine the effect of the variable on the rate of photosynthesis for the organism;
- **explain** how you would measure the rate of photosynthesis in your experiment;
- **describe** the results you would expect. **Explain** why you would expect these results.