

# Waves and the Electromagnetic Spectrum

Name \_\_\_\_\_

Class \_\_\_\_\_ Date \_\_\_\_\_

1. (a) In describing waves \_\_\_\_\_ refers to the number of waves that pass a point per unit of time. What is its symbol? \_\_\_\_\_

(b) The distance between similar points in a set of waves (from crest to crest or trough to trough) is \_\_\_\_\_

What is its symbol? \_\_\_\_\_

2. What is meant by the *amplitude* of a wave? \_\_\_\_\_

3. What are two characteristics of light waves? \_\_\_\_\_

4. What is a *continuous spectrum*? \_\_\_\_\_

5. Name five regions of the electromagnetic spectrum and arrange them in order of their increasing energy.

## Critical Thinking

6. What is the relationship between wavelength and frequency for an electromagnetic wave? \_\_\_\_\_

7. Using the method of concept mapping described at the front of your textbook, draw a concept map for the term *light*. Use the back of this worksheet for your concept map.