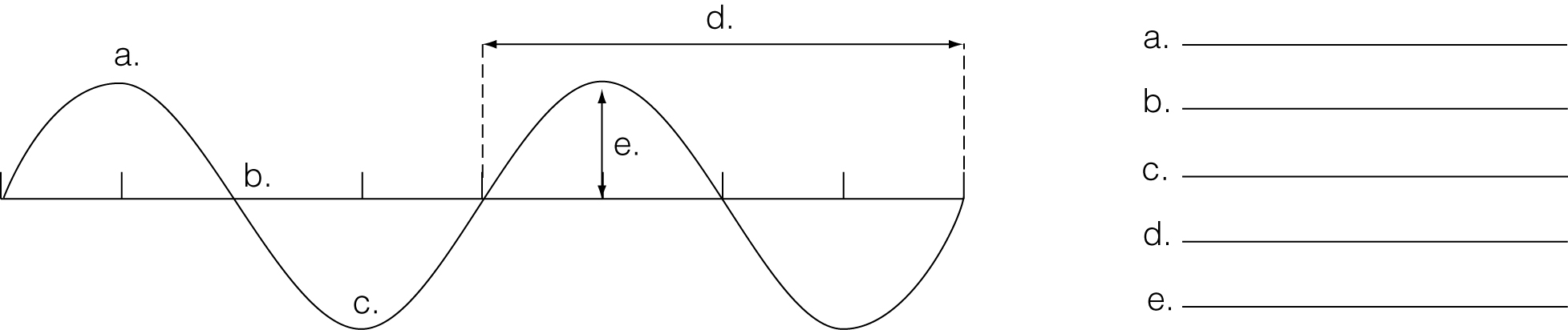
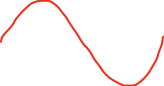
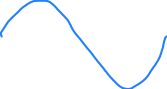
Riding the Waves

**INSTRUCTIONS**

Complete the exercises on this page. You may refer to pages 135 and 136 of BC Science 8 if you need to review.

1. In the diagram below, fill in the labels on the right side of the picture. Choose words from this list: trough, amplitude, crest, wavelength, rest position.





2. How many wavelengths are shown in the above diagram?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



3. The number of cycles per second is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, which is measured in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Hz).



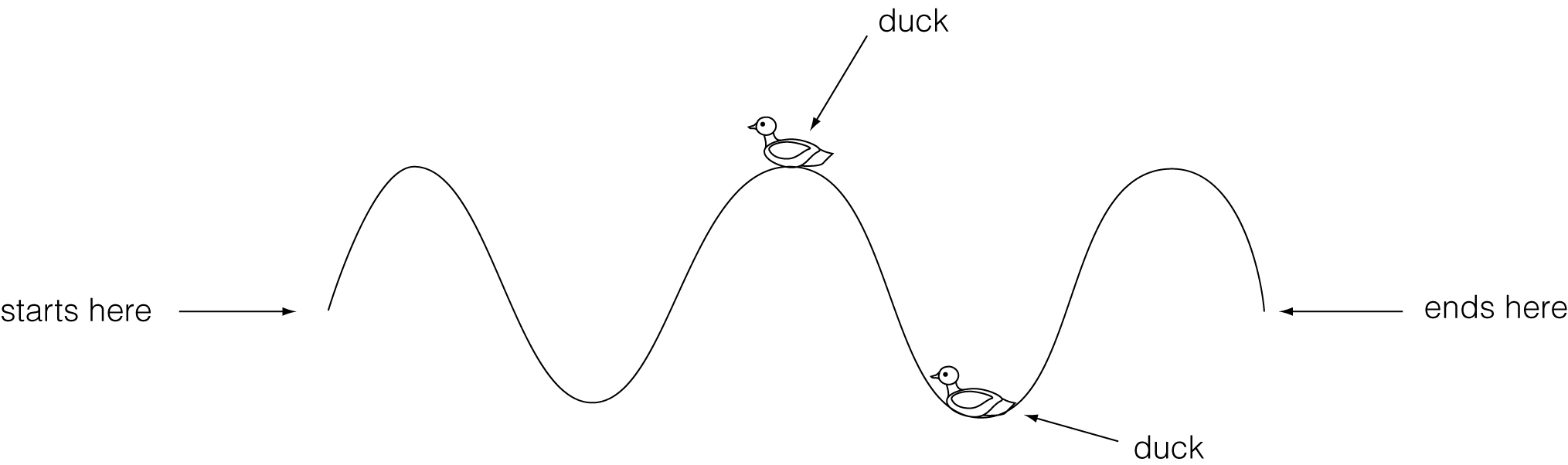
4. Calculate the frequency of a wave that goes up and down 8 times in 4 seconds.

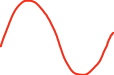
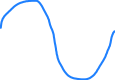
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



5. In the diagram below, how many wavelengths apart are the two ducks? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



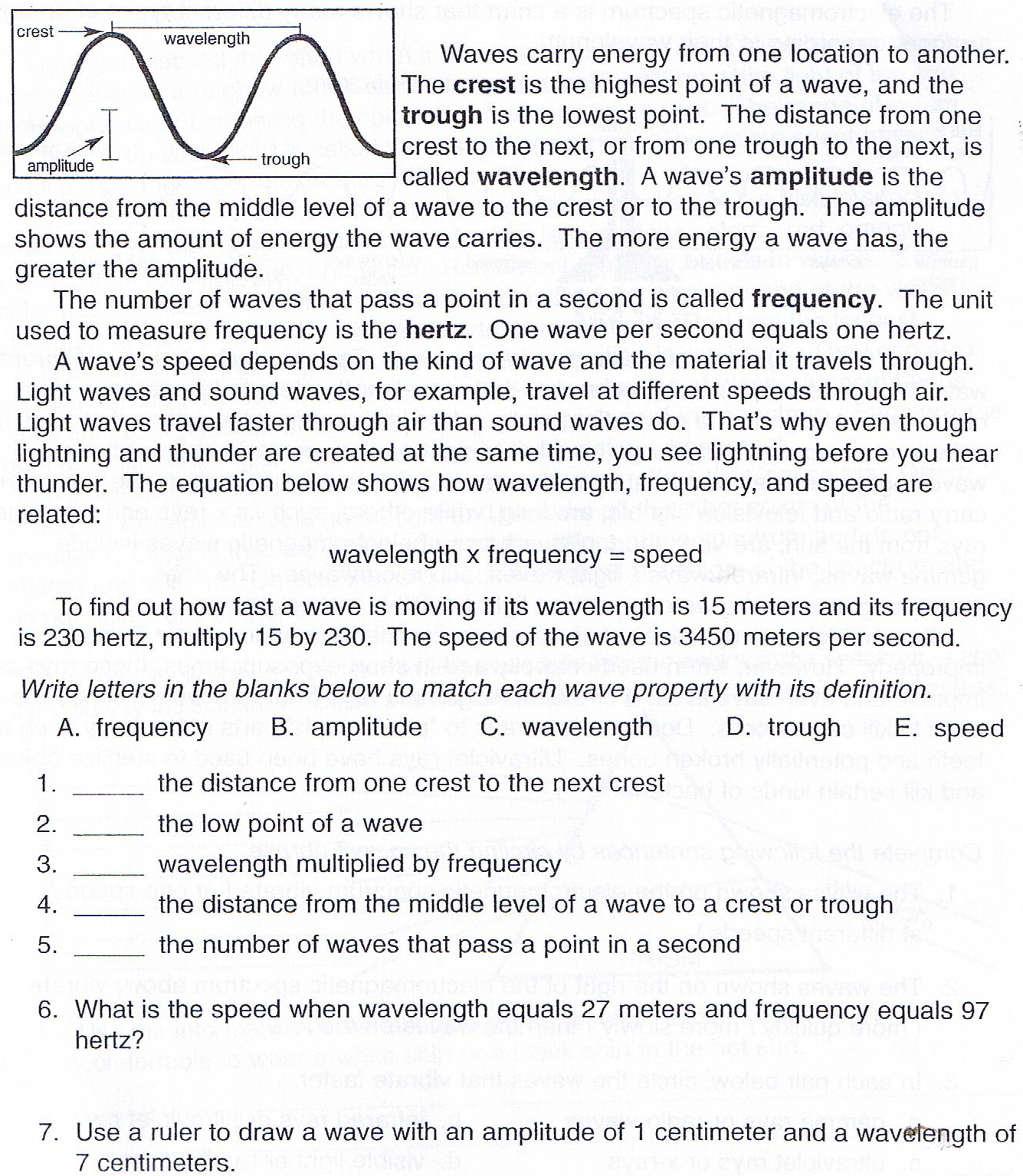




6. In the above diagram, how many wavelengths are shown? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

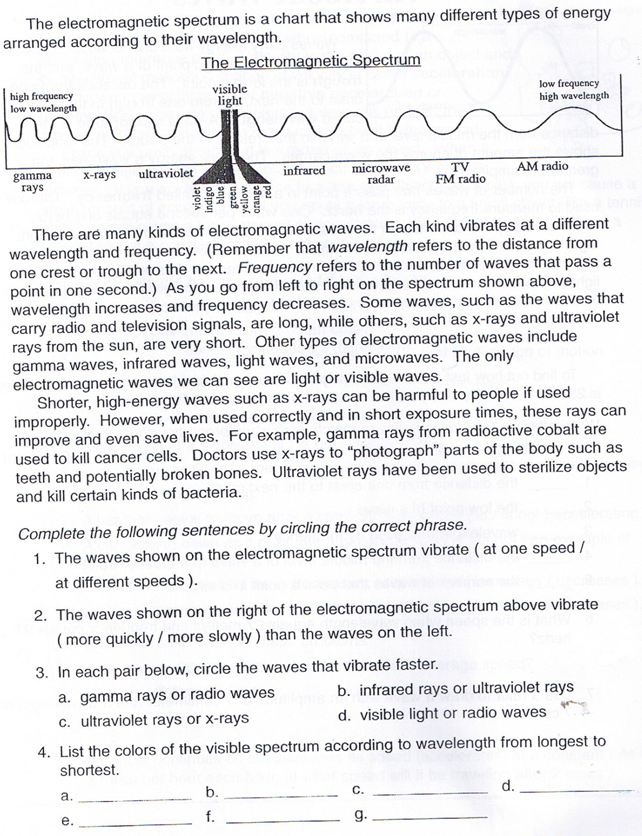


ALL ABOUT WAVES





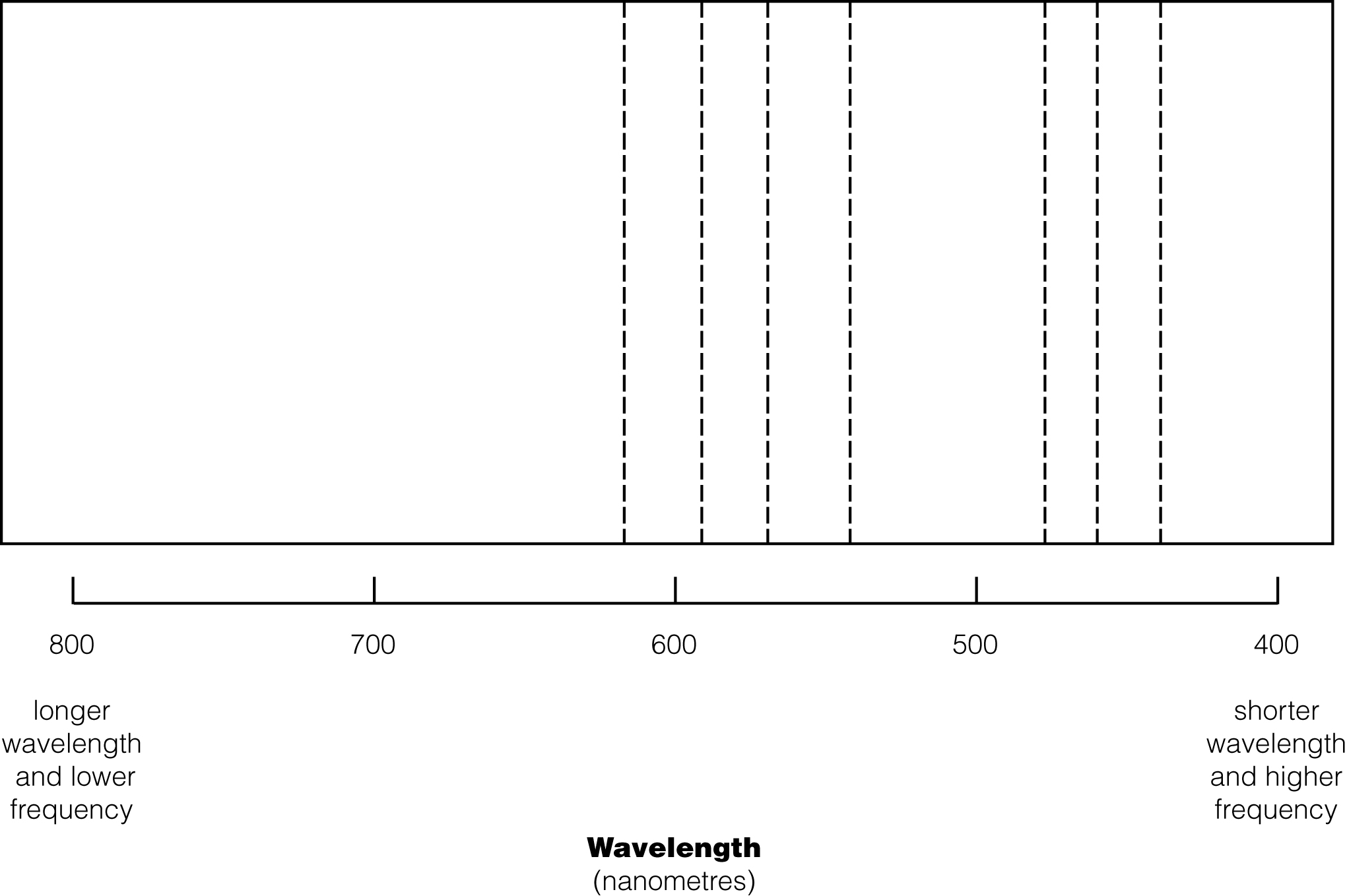
An Energy Chart



ROY G BIV

**INSTRUCTIONS**

Determine the wavelengths of the colours of the spectrum. Fill in the colors of the spectrum in the diagram below. For help, refer to the chart on **page 146 of BC Science 8.**



Answer Key

Riding the wave:

1. (a) crest (b) rest position (c) trough (d) wavelength (e)amplitude

2. Two wavelengths are shown.

3. Frequency; hertz

4. 8 cycles in 4 seconds makes a frequency of 2 Hz.

5. Ducks are half a wavelength apart.

6. Two and a half wavelengths are shown.

All about Waves

1. C

2. D

3. E

4. A

5. B

6. 27 x 97= 2619hz

7.

Energy Chart

1. Different speeds
2. More slowly
3. a. gamma

b. UV

c. x-ray

d. visible light

1. red, orange, yellow, green, blue, indigo, violet

Roy G BIV

Answers should reflect **Figure 4.12 on page 146** of the student book.