Name:_____ Blk:___Date:_____

4.2 Properties of Visible Light

Read pgs 144-149 to complete the following:

1. The ______ depicts light travelling as a wave.

2. ______ is a type of wave that travels through empty space and transfers energy from one place to another.

3. A wave that you see is called ______.

4. Refraction is defined as _____

5. Explain why we see a rainbow emerge from a prism

6. In a rainbow we see a range of colours that decrease in wavelength and increase in frequency. These coulours in order are:

- a. Which colour has the longest wavelength?
- b. Which colour has the shortest wavelength?
- c. Which colour has the highest frequency?
- d. Which colour has the lowest frequency?

7. Use Newton's experiment to explain that light itself contains colour.

8. Reflection is defined as _____

9. Why does a green shirt appear to be green?

10. Why does your blue coat look black when you are in a dark movie theatre?

Fill in the colours of the VISIBLE SPECTRUM on the diagram below:

