Name: _____ Date: _____

Waves Unit Review

1. What do waves transfer? _____
2. Draw a wave and label the parts: crest, trough, wavelength, and amplitude. (Note: you will need to be able to graph a wave when given measurements.)

3. What is the relationship between a wave's wavelength and its frequency?

4. Circle the wave that has more energy:
   a. Smaller Amplitude vs. Larger Amplitude
   b. Shorter Wavelength vs. Longer Wavelength
   c. High Frequency vs. Low Frequency
5. When a wave hits a surface and bounces back it is called _____.
6. When a wave goes through an object it is called _____.
7. What is the difference between reflection and absorption, provide an example.

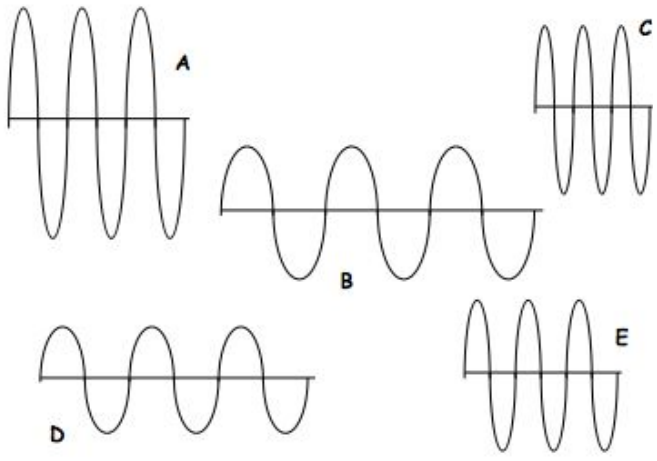
8. Why does a red shirt appear red to a normal human eye?

9. Why does a white shirt appear white to a normal human eye?

10. What is the electromagnetic spectrum?

11. List the following waves in order from longest wavelength to shortest wavelength: ultraviolet rays, yellow light, radio waves, infrared, blue light, and x-rays.

12. Which wave below has:
    a. The highest frequency? _____
    b. The shortest wavelength? _____
    c. The largest amplitude? _____
    d. The longest wavelength? _____
    e. The most energy? _____



Directions: On the grid below draw the waves (on the same x-axis) with the following measurements. <u>Label the parts and include the measurements.</u>

13. Which wave has the highest frequency? Using 2-3 sentences, explain your reasoning._____

_____

_____

_____

_____

wave #	crest	trough	wavelength
1	3 cm	3 cm	4 cm
2	1 cm	1cm	2 cm

1 CM Graphing Grid