Chapter 24 Review Sheet
Physical Science: Energy

Name_____

1. Define the following terms:
    a. Acoustics

    b. Trough

    c. Crest

    d. Wavelength

    e. Amplitude

    f. Wave speed

    g. Frequency

    h. Period

    i. Pitch

    j. Harmonic motion

    k. Cycle

    l. Wave

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m. Transverse wave

n. Longitudinal wave

2. How are frequency and period related?

3. What is the unit of frequency?

4. If a wave has a frequency of 2 Hz, what is its period?

5. If a wave has a period of 0.5 seconds, what is its frequency?

6. If a pendulum swings back and forth one time every 1.6 seconds, what is its period?

7. If an electric tooth brush vibrates 65 times each second, what is the frequency?

8. What is the unit for measuring the strength or intensity of a sound?

9. What property of a sound wave is related to its pitch?

10. What property of a sound wave is related to its loudness?

11. What causes a pendulum to swing back and forth?

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12. In the lab "Harmonic Motion," which variable affected the period of the pendulum the most?

13. What symbol do we use to indicate wavelength?

14. What kind of wave is a sound wave?

15. What kind of wave is a microwave?

16. What kind of wave is a water wave?

17. What kind of wave is an X-ray?

18. What is the formula relating wave speed, wavelength and frequency?

19. Draw a transverse wave and label the following parts: crest, trough, wavelength, frequency

20. Draw of longitudinal wave and label the following parts: wavelength, compression, rarefaction

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21. Do waves carry matter from place to place? If not, what DO waves carry from place to place?

22. If a wave has a frequency of 400 Hz and a wavelength of 1.5 m, what is the speed of this wave? (show your work, don't forget sig digs!)

23. If a wave has a wavelength of 0.05 m and is traveling at 70 m/s, what is the frequency of the wave? (show your work, don't forget sig digs!)

24. If a wave has a frequency of 500 Hz and is traveling at 1200 m/s, what is the wavelength of the wave? (show your work, don't forget sig digs!)