Waves Webquest

Go to this website <http://gpb.pbslearningmedia.org/asset/lsps07_int_waves/?utm_source=teachersdomain_redirect/asset/lsps07_int_waves/utm_medium=teachersdomain/asset/lsps07_int_waves/utm_campaign=td_redirects>

1. What is a wave?
2. Give 2 examples of energy that moves as a wave.
3. Which states of matter can waves move energy through?

Go to this website <http://www.acs.psu.edu/drussell/Demos/waves/wavemotion.html>

1. What is a mechanical wave?
2. How does a transverse wave move?
3. How does a longitudinal wave move?
4. Draw a picture of a compressional wave.
5. Draw a picture of a transverse wave.

Go to this website.

<http://zonalandeducation.com/mstm/physics/waves/partsOfAWave/waveParts.htm>

1. Sketch a transverse wave. Label the crest, trough, amplitude, wavelength and rest position.
2. Define these terms:
3. Amplitude
4. Wavelength
5. Trough
6. Crest
7. frequency
8. Which metric units are used to measure frequency of a wave?
9. On the bottom animation, change the frequency. How does the wavelength change if you increase frequency? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_How does the wavelength change if you decrease frequency?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Go to this website.

<http://www.physicsclassroom.com/class/waves/Lesson-2/The-Wave-Equation>

1. What is the equation to find wave speed?
2. Use this equation to solve the following problems.
3. An oceanwave’s length is 25 m and it has a frequency of 3 Hz. What is the **speed** of the wave?
4. A radio wave is 3000 m long and has a frequency of 100.8 Hz. What is the **speed** of the wave?
5. A soundwave has length of 400 m and a frequency of 8 Hz, what is its **speed** of the wave?