Name _____ Date _____ Hour ____

Waves and Energy Assessment – Study Guide
Study Guide Due October 7
Assessment Date October 9

1. Students should know the definitions of the following terms:

   a. **Vibration** _____

   b. **Sound wave** _____

   c. **Seismic wave** _____

   d. Wave
   e. Energy
   f. Wavelength
   g. Amplitude
   h. Frequency
   i. Crest
   j. Trough
   k. Medium
   l. Disturbance
   m. Force
   n. Mechanical wave
   o. Transverse wave
   p. Longitudinal wave

2. Students should be able to describe examples of transverse and longitudinal waves.

3. Students should be able to identify examples of transverse and longitudinal waves.

4. Students should be able to identify the direction of the disturbance and the direction of the wave (energy) for both transverse waves and longitudinal waves.

5. Students should understand the relationship between frequency and wavelength of waves.

6. **Students should understand why sound is an example of mechanical (longitudinal) waves.**

_____

_____

_____

_____

7. Students should understand how frequency/wavelength of a sound wave is related to the pitch (high,low) of the sound.

8. Students should be able to compare the way sound travels through solids, liquids and gases.

9. Students should be able to compare the way sound travels through hot and cold substances.

10. Students should be able to explain how earthquakes, water, and sound transfer energy through waves.

11. Students should know what type of wave P-waves are and what type of wave S-waves are.