**Waves Scavenger Hunt**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Core: \_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Directions:** Use the textbook (from page C9-C99) and the PowerPoint (posted on my website- jgeorge3.weebly.com) to answer the following questions.

1. Draw and label: transverse wave, crest, trough, amplitude, wave height, one cycle (period), wavelength, longitudinal wave, rarefaction, compression
2. Explain how the direction of energy and matter are similar or different for a longitudinal wave and a transverse wave.
3. Give two examples of longitudinal waves:
4. Give two examples of transverse waves:
5. What is a medium? Which type of wave needs it to travel?
6. How do you measure the amplitude of a longitudinal wave?
7. For wave refraction to take place, a wave must do what?
8. What is the difference between positive and negative interference?
9. Which wave has the higher volume? Higher pitch? Write the “rule” for each.
10. As sound waves travel, what happens to their intensity?
11. In what state of matter do sound waves travel the fastest?
12. What does the frequency of a sound wave determine?
13. Can sound travel through space (a vacuum)?
14. What is amplification?