Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sound WebQuest

Go to this website: <http://www.philtulga.com/MSSActivities.html>

1. What is the unit for volume or loudness: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ How is it abbreviated: \_\_\_\_\_\_\_\_

1. According to this website, how fast can sound travel? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Will sound travel faster at 58°C or 88°C? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Explain why this happens? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Based on what you learned from question #3, answer the following questions about the speed of sound by circling the medium in which you think sound would travel faster through:

a. Water ***or*** air b. solid ***or***  air c. water ***or*** solid

d. Explain why you think these are going to move faster? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Go to number 5 on the website titled Waves: read it and click on the hyperlink **Thunderstorm Stopwatch** activity.
   1. If it takes 10 seconds for it to thunder after it lightning strikes how far is the storm? \_\_\_\_\_\_\_\_\_\_\_\_\_\_

* 1. If it takes 20 seconds how far is the storm? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Objects which vibrate faster produce a higher \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and objects which vibrate more slowly

produce a lower \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. If you make a musical instrument shorter, will it have a higher ***or*** lower frequency?

1. Draw a tuning fork in the space below. Then draw a diagram similar to the one on the website that’s shows how many waves will pass in 1 second if it has a frequency of 10 Hz