Internet Wave Activity

**Go to file 🡪 Open with Google docs 🡪 then file, make a copy**

Make a copy of this document and save it as **Hour – Last name – Waves Introduction** and share it with me.

As we move into our next unit on waves let’s begin by seeing how we interact with waves on a daily basis. Use the links below to answer the following questions.

NOTE: Many of these sites contain a great deal of material. Thus, you should skim each site to become familiar with its content.

**Please change the colors of your answer so that they stick out clearly from the questions!**

**Site #1 Radio Fundamentals** [**http://www.netwalk.com/~fsv/homepage2.htm**](http://www.netwalk.com/~fsv/homepage2.htm)

1. What is the frequency of your radio station?
2. From how far away can you typically receive a radio station?
3. Why can't you typically receive them from farther away?
4. This site classifies the radio waves used for communication. In what division is your radio station?
5. In what division are cellular phones?

**Site #2 Speed of Sound** [**http://library.thinkquest.org/19537/Physics4.html**](http://library.thinkquest.org/19537/Physics4.html)

1. How fast can sound travel?
2. Does sound travel faster through solids, liquids or gases? WHY?

1. Does temperature effect the speed of sound?

**Site #3: Blue Skies** [**http://www.sciencemadesimple.com/sky\_blue.html**](http://www.sciencemadesimple.com/sky_blue.html)

1. Why is the sky blue?
2. If you were on the moon would the sun look "yellow'"?
3. Why are sunsets red and orange?

**Site #4: Waves in Buildings** [**http://www.buildingvibration.com/**](http://www.buildingvibration.com/)

1. List three sources of waves or vibrations in buildings?
2. Why is it important to eliminate unwanted vibrations in buildings?
3. How can these vibrations be eliminated?

**Site #5: Echolocation**

[**http://www.teachengineering.com/view\_lesson.php?url=http://www.teachengineering.com/collection/duk\_/lessons/duk\_bycatchunit\_musc\_less2/duk\_bycatchunit\_musc\_less2.xml**](http://www.teachengineering.com/view_lesson.php?url=http://www.teachengineering.com/collection/duk_/lessons/duk_bycatchunit_musc_less2/duk_bycatchunit_musc_less2.xml)

1. What is Echolocation?

1. For the Bottlenose Dolphin, what is a typical frequency of a signal wave?

1. Why do you think these animals need echolocation?

1. How detailed is the information obtained with this non-visual system?

**Site #6: Singing in the Shower** [**http://arts.ucsc.edu/EMS/Music/tech\_background/TE-01/teces\_01.html**](http://arts.ucsc.edu/EMS/Music/tech_background/TE-01/teces_01.html)

1. What is Reinforcement?
2. What is Interference?

1. How does these concepts relate to singing in the shower?