

Waves Web Quest

Directions: Go to the following websites and answer the following questions.

1. Go to: [Sound Waves - Succeed in Physical Science: School for Champions](#)

- A) What are sound waves?**

- B) What do sound waves move or travel through?**

- C) Sound waves are created by _____?**

- D) What are the characteristics of sound?**

- E) Describe the Frequency of sound?**

2. Go to: [http://en.wikipedia.org/wiki/Ocean surface wave](http://en.wikipedia.org/wiki/Ocean_surface_wave)

- A) Where do surface waves occur?**

- B) Surface waves are also referred to as _____ waves.**

- C) What causes a surface wave?**

- D) When does a surface wave reach land?**

- E) What is the size ranges of surface waves?**

3. Go to: <http://www.proprofs.com/quiz-school/quizshow.php?title=mechanical-waves&q=1>

- A) Take the quiz, and see how smart you are. Check out the animations!**

- B) Mechanical wave's require _____.**

- C) What is an example of a mechanical wave?**

- D) A mechanical wave transmits energy through a vacuum. True or False?**

- E) What is the #1 difference between mechanical and electromagnetic waves?**

4. Go to: http://en.wikipedia.org/wiki/Transverse_wave

- A) What is the definition of a transverse wave?**
- B) What are some properties of transverse waves?**
- C) What are some examples of transverse waves?**
- D) Draw a picture of a transverse wave.**
- E) What direction does a transverse move?**

5. Go to: <http://www.physicsclassroom.com/mmedia/waves/lw.cfm>

- A) Longitudinal waves are a type of wave motion for _____ waves.**
- B) What is one difference you see between the picture of a longitudinal and transverse wave?**
- C) What is an example of a longitudinal wave?**
- D) The longitudinal wave moves in a _____ direction.**
- E) What's one thing you notice from the picture of the wave?**

6. Go to <http://sunshine.chpc.utah.edu/>

- A) Seismic waves are divided into what two types?**
- B) What are seismic waves used for?**
- C) What is a seismic wave?**
- D) How or where do seismic waves travel?**

7. Go to: <http://www.weather.gov/om/brochures/tsunami.htm>

- A) What is a tsunami wave?**

- B) What can cause a tsunami wave?**

- C) What is the range of length and width of tsunami wave?**

- D) True or false. A tsunami wave can be seen from the air. _____.**

- E) What is the range of speed tsunamis consist of?**

8. Go to:

http://www.windows.ucar.edu/tour/link=/physical_science/magnetism/em_radio_waves.html

- A) What is a radio wave?**

- B) A radio wave wavelength is shorter than visible light. True or False.**

- C) Why do we use radio waves?**

- D) What is an example of a radio wave?**

- E) What are various frequencies of radio waves used for?**

9. Go to: <http://science.hq.nasa.gov/kids/imagers/ems/visible.html>

- A) Visible light waves are a type of what other wave?**

- B) What does color have to do with light waves?**

- C) How do we see using visible light waves?**

- D) What do visible light waves show us?**

- E) From the colors, do they all have the same wavelength?**

10. Go to: <http://science.hq.nasa.gov/kids/imagers/ems/waves2.html>

- A) What can make electromagnetic waves?**
- B) When are electromagnetic waves formed?**
- C) Who studied how electromagnetic waves are formed?**
- D) From the animation describe or draw how electromagnetic waves look?**
- E) From an electromagnetic wave the electric and magnetic field is what direction toward each other? _____**

11. Go to: <http://www.co.pasquotank.nc.us/departments/911/webpage/heatwaves.htm>

- A) What is a heat wave?**
- B) When and how do heat waves form?**
- C) Why can heat waves be dangerous?**
- D) What are some tips to do or go during a time of heat waves?**
- E) Have heat waves ever affected the world in a way? Explain.**

12. Go to: <http://science.hq.nasa.gov/kids/imagers/ems/infrared.html>

- A) What are Infrared waves?**
- B) Infrared light waves are the closest or farthest in wavelength to visible light?**
- C) How do we experience infrared radiation?**
- D) Infrared waves are a type of electromagnetic wave or a transverse waves?**
- E) Explain what infrared exactly show us.**