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?

   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?

   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?
   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](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](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.

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.

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