**Wave Basics**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Use the PhET sim “Wave on a String” for questions 1-4. <http://PhET.colorado.edu>

Play around and get familiar with the sim first.

1. Do you know what type of wave is being shown by this sim – transverse or longitudinal? (you do not have to be correct, I’d like to know if you’re familiar with these types of waves)
2. What direction does the string move?
3. What direction does the wave move?
4. The speed of the wave is how fast it travels from the oscillator to the clamp/window. Does the speed vary depending on Amplitude, frequency, damping or tension? If so, how does it change with each?

Watch the video on “Types of Seismic Waves”: <http://www.iris.edu/hq/programs/education_and_outreach/videos#M>

1. What are the three different types of waves mentioned?
2. What is different about each?
3. When the class did “the wave” (Transverse wave),
   1. what direction did you move?
   2. What direction did the wave move?
4. How about when you made the compression wave (standing in a line and pushing).
   1. which direction did you move?
   2. Which direction did the wave move?