**STATION 7: DON’T STAND FOR THIS**

Use the wiggler and string device on your table to answer the following questions. The reading on the timer is the *frequency in hertz.*

1. ) Name the type of wave generated on this device.\_\_\_standing\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. ) Which harmonic is shown? \_\_\_\_5th\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. )What is the wavelength of the waves (wave pattern) being generated? (you can use the meter stick to help you)

2/5 of a meter or 20 cm.

4.) At about what frequency would you expect to find the fundamental?

\_\_\_\_\_\_\_\_\_\_\_\_*Explain how you found this. (to be determined at meet—around 11 hz)*

5.) How many nodes are in the wave pattern shown?\_\_\_7\_\_\_\_\_\_\_

6.) What type of interference is occurring at the nodes?\_\_\_destructive\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7) How **many** wavelengths are shown in the wave pattern on the string?\_\_\_\_\_\_2.5\_\_\_\_\_

8) What are the “bumps” on the wave pattern called? \_\_\_antinodes\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9.) What would the wavelength of the fundamental wave pattern be for this string, on this device?\_\_\_\_\_\_\_\_2 meters or 200 cm\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

10.) Which way is the energy traveling in this system?