**Waves Lab Names**

You will need your Chromebook to read the directions on the website. Work in your quadpods, and submit a group lab.

**A. Tension and velocity (Small spring, any open area/Chromebook)**

**Which is faster? (The high tension or the low)**

**B. Wavelength and frequency (Mondo spring in the front of the room/Chromebook)**

**What is the relationship between frequency and wavelength?**

**C. Wavelength and Wavespeed (Chromebook at your desk)**

**What is the relationship between wavespeed and wavelength? (As you increase wavespeed, what happens to the wavelength)**

**D. Reflections (Chromebook at your desk)**

**What happens to the pulses as the reflect off the Fixed ends? (Do they reflect upright or inverted?)**

**What happens to the pulses as the reflect off the loose (Free) end? (Do they reflect upright or inverted?)**

**E. Types of waves (Small Slinky - empty table, or floor)**

**In your own words, write a definition of a longitudinal wave, and a transverse wave**

**F. Superposition (In the hall with a long slinky)**

 **- We certify that we completed the two tasks in the hall with the slinky and the cups**

**In your own words, write a definition of the principle of superposition.**

**G. Standing waves**

**Draw the first three modes of**

|  |  |  |
| --- | --- | --- |
| **Both ends fixed:** | **One End Fixed:** | **Both Ends Free:** |
| **8Antinodes** | **8Antinodes** | **8Antinodes** |
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