**Slinky Lab**

Purpose:

* Students will learn about longitudinal wave and transverse wave by distressing the slinky in specific types of ways. For longitudinal waves, the slinky will be straight and allow to pull the spring in one direction to see the wave go across the slinky. For transverse waves, the slinky will be placed in a zigzag like position and the students will observe how the wave will be affected while attempting to get the wave across to the other side.

Materials:

1. Slinky
2. Meter stick
3. Pencil

Procedures:

1. On a smooth surface, stretch the slinky out between you and your partner, to a length of about four meters. Be careful not to stretch the slinky too far.
2. Send a single wave to your partner by pushing the slinky back and forth.
3. Observe what happens to the wave when it reaches your partner’s end.  Observe the reflected wave.
4. Move one end of the slinky back and forth on the floor repeatedly in a up and down motion. Observe what happens.

