

Name: _____ Date: _____ Class: _____

Student Worksheet

Slinky vs. Snaky: Which Spring is Dominant?

Safety

Wear goggles to protect your eyes from the springs.

Rule: The spring(s) must always stay on the ground.

Materials

- Snaky[®]
- key rings
- Slinky[®]
- box

Procedure

1. Go to a clear area. Lab partners grab each end of the Snaky[®] and stretch it out along the ground.
2. Put the small box about 8 inches from the spring somewhere along the side of the spring (just outside of the normal path of the spring).
3. Sharply jerk the spring from the left to the right and back to the center (*transverse motion*). The box is there so that you can hit it with the spring. The 3rd person should notice the wave and write down any questions that come up.
4. You will do the same thing with the Slinky[®]. You will rotate so that everyone has a chance to play with the spring. The recorder should continually record the results while the others are



experimenting the springs.

5. Connect the springs together with the key ring. You will need to thread each spring through another a few times.
6. Which spring will push the other around?
7. Move the box farther away from the spring and determine what is needed to hit the empty box.
8. Play with the springs and record results. You will present these and your ideas to the class.



Challenge #1

What do you need to do to hit a box with the spring(s)?

Challenge #2

Move the box about a foot away. What do you need to do to hit a box with the spring(s)?

Challenge #3

Play with the distance between the box and the spring. Do you notice any relationships?