

NNIN Nanotechnology Education

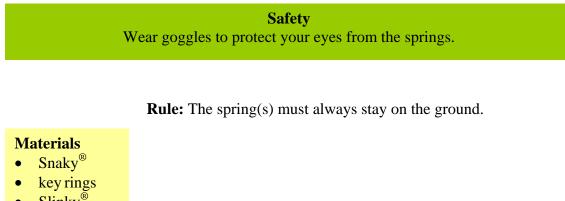
Name:

Date:

Class:

Student Worksheet

Slinky vs. Snaky: Which Spring is Dominant?



- Slinky[®]
- box

Procedure

- 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







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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?