

1. In the Honors Physics folder, on the desktop, open the folder "spring force." In this folder open the file "springForce." This will open a local browser page with a java simulation that we are going to use for this lab.
2. We are going to use this simulation to add masses to the end of a spring and observe how it stretches. It is also possible to use this simulation to observe the oscillation of a spring but we are not going to use it for this today.
3. Read the directions on the page of how you add and remove masses from the end of the spring.

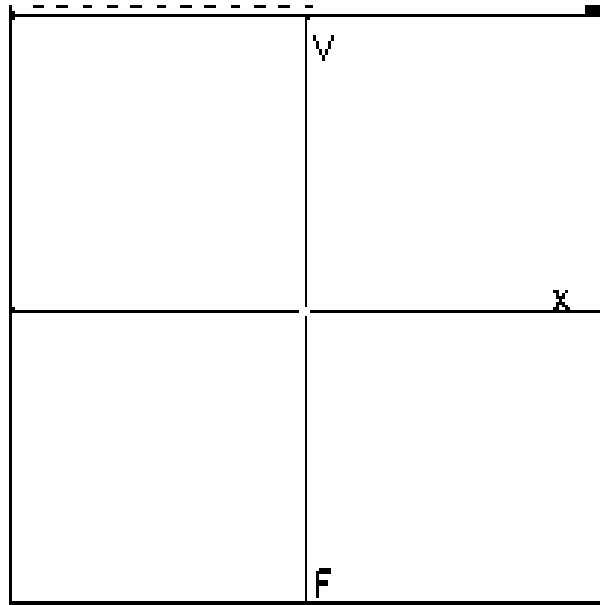
How is changing the amount of mass attached to the end of the spring going to change the force on the spring?

4. Add masses to the end of the spring, **one at a time**, and notice where the yellow dot is on the graph. Keep adding masses until you have used all possible.

As the force on the spring increased what did you notice about the displacement of the spring?

What relationship do you observe between the force on the spring and its displacement?

5. Copy down your graph here.



6. Now reduce the number of masses on the spring. Pull the masses down and release.

What do you notice about the force verse displacement graph now?

Does this fit with what you observed before?

What is the relationship between force on a spring and the displacement of the spring?
