Non-obvious controls:
- The zero position for Potential Energy is just below the "table top" where the masses sit. The draggable dotted line is just something handy.
- All the springs have the same characteristics by default. The stiffness of spring number three can be varied. Put the slider in the middle to reset.
- To reset the energy graph, take the mass off the spring. If it is hard to release a mass, slow it down by adjusting time or a slider.
- Most things on the screen are draggable: the ruler, the dotted line, and masses.
- There is a zoom feature for all Flash simulations. Right click on the sim and select **Zoom in.** This can be helpful when you are using a projector or writing a lesson where you want a screen shot.

Important modeling notes / simplifications:
- Keep the masses in the window for thorough energy analysis because the PE for the graph is calculated as an absolute value.
- The KE will not be calculated if you are moving the cylinder with the mouse

Insights into student use / thinking:
- You may want the students to start with "No Friction" .

Suggestions for sim use:
- For tips on using PhET sims with your students see: **Guidelines for Inquiry Contributions** and **Using PhET Sims**
- The simulations have been used successfully with homework, lectures, in-class activities, or lab activities. Use them for introduction to concepts, learning new concepts, reinforcement of concepts, as visual aids for interactive demonstrations, or with in-class clicker questions. To read more, see **Teaching Physics using PhET Simulations**
- For activities and lesson plans written by the PhET team and other teachers, see: **Teacher Ideas & Activities**