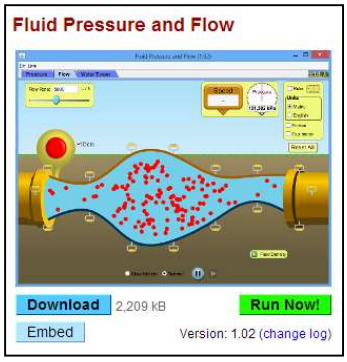
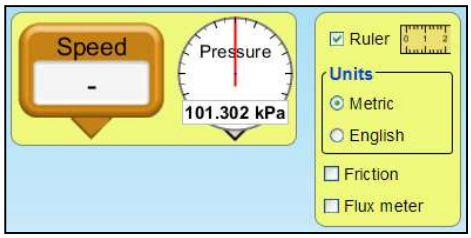


Part 2 – Motion of Fluids

http://phet.colorado.edu/en/simulation/fluid-pressure-and-flow

1. Enter the link above into the address bar. When the web page opens click "Run Now!"
2. Above the spigot there is a sliding tab. Move the tab to the right to fill the tank up completely with water.
3. In the top right corner of the window you can click and drag a pressure gauge to any location on the screen. The bottom of the gauge is the point where pressure is measured.
4. Measure and record the pressure of the water at the surface, in the middle, and at the bottom of the tank of water.

5. Write a statement about the relationship between pressure and depth in a liquid.



6. Click the "Flow" tab at the top of the window. In the top right corner there are pressure and speed gauges that can be dragged to any location on the screen. Clicking the check box next to "Ruler" in the yellow box at the top right of the screen will cause a ruler to appear.
7. Measure and record the diameter of the pipe as well as the pressure and speed of the water flowing through the pipe.

8. The handles on various parts of the pipe can be clicked and dragged to change the diameter of the pipe at each location. Manipulate the pipe diameter at different locations so that one part has a very narrow diameter and the other part has a wide diameter.
9. Measure and record the diameter, speed, and pressure at a point where the pipe is very narrow and at a point where the pipe is very wide.

10. Write a statement about the relationship between the diameter of a pipe and the speed of the fluid flowing through it.

11. Write a statement about the relationship between the speed and pressure of a fluid in motion.