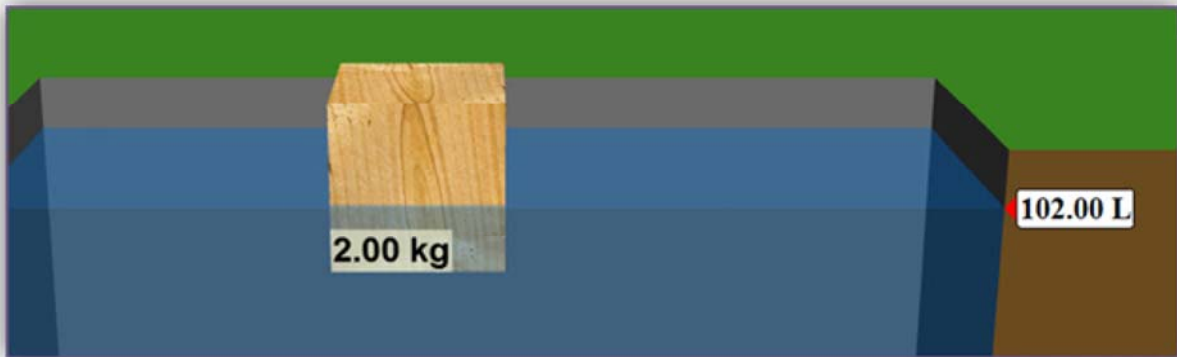


[PDF File](#)



FLUIDS: UNDER PRESSURE AND DENSITY LABS

Unit Overview

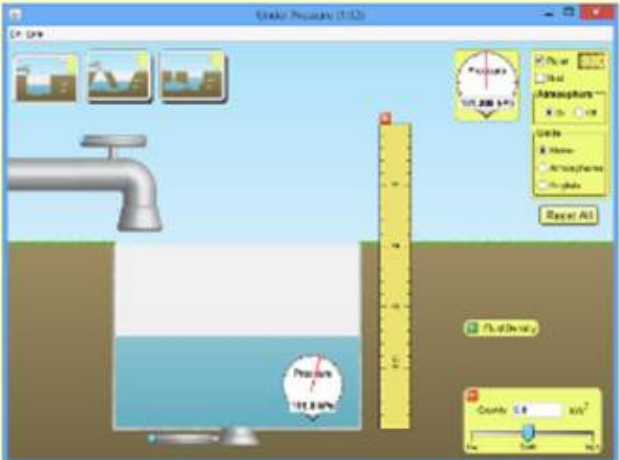
In the last unit, Unit 21, we learned a lot about fluids. There were four main concepts that we learned; density, pressure, buoyancy, and how fluid flows. In this two-part unit we will explore density and pressure by manipulating a simulation. The goal of this unit is to determine how atmospheric pressure affects pressure readings in a tank of liquid. To establish a mathematical relationship that allows one to determine the pressure in a liquid. And to describe the changes which occur in a liquid when pressure is applied to a liquid.

Part I: Under Pressure Lab

<http://phet.colorado.edu/en/simulation/under-pressure>

This is a screen shot of the simulation:

Under Pressure



Download 2,255 kB **Run Now!**

Run in HTML5
works in browsers/tablets

Embed Version: 1.02 ([change log](#))

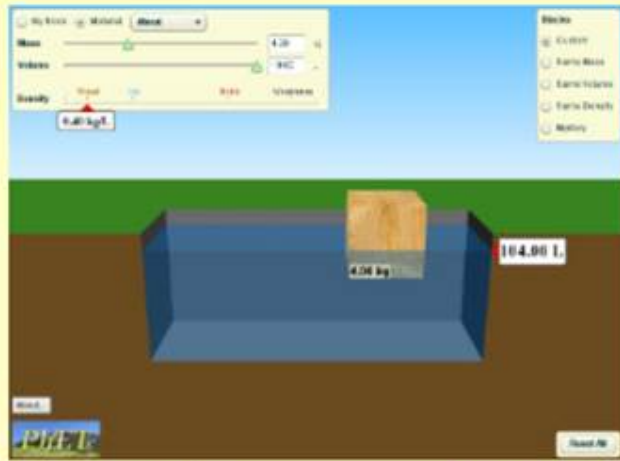
When you see this screen, click on “Run Now!”

Part II Density Lab

<http://phet.colorado.edu/en/simulation/density>

This is a screen shot of the simulation:

Density



Download 1,090 kB **Run Now!**

Embed Version: 1.05 ([change log](#))

When you see this screen, click on “Run Now!”

You can download the lab to your desktop. It is wise to house all of the simulations in a folder so you can refer back to them when needed.

Download the printable worksheet below, you will use this to record all of your lab information. You will attach your worksheet to question #6 in the question section.

[Under Pressure and Density Lab Activity Sheet](#)

A Look Ahead

In this unit we explored two of the four major concepts learned during our unit on fluids. The next unit is another laboratory exercise to explore the other two major concepts; buoyancy and fluid motion, all based on the content learned during unit 21. You will manipulate two different simulations to carry out procedures or design your own lab experiment using inquiry techniques.



Below are additional educational resources and activities for this unit.

[Unit 22 Resource 1](#)

[Unit 22 Resource 2](#)