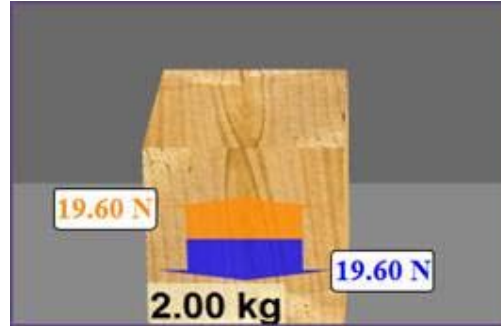


[PDF File](#)



BUOYANCY AND FLOW

Unit Overview

This unit is designed in two parts. In Part I, you will manipulate a simulation to explore properties of buoyancy. In Part II you will explore factors that affect the velocity of a fluid. These are two very important concepts to understand when dealing with fluids. In the last unit we looked at density and pressure, this unit is basically an extension of the last two units.

Part I: Archimedes Principle

Go to: <http://phet.colorado.edu/en/simulation/buoyancy>

This is a screen shot of the simulation:



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

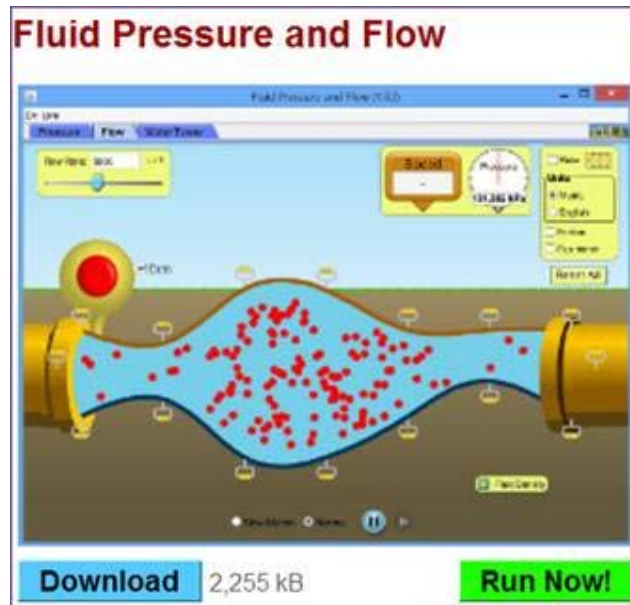
Part II: Static Fluid Pressure and Fluid Flow

Objectives:

- Apply the concept of static fluid pressure to real world problems

- Investigate concepts of fluid flow

This is a screen shot of the simulation:



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 your lab information. There are two parts to the worksheet. You will attach your worksheet to question #1 in the question section.

[Buoyancy/Fluid Pressure and Flow Lab Activity Sheet](#)

A Look Ahead

Earlier in this course we learned about energy, specifically mechanical energy. In the upcoming units we will be discussing other forms of energy such as light, sound and electrical energy. It is important to learn how these different forms of energy move and transfer. They move as a wave. So in the next unit we will be exploring different types of waves, how they move and how to use them to calculate frequency, period and wave speed.



Below are additional educational resources and activities for this unit.

[Unit 23 Resource 1](#)

[Unit 23 Resource 2](#)