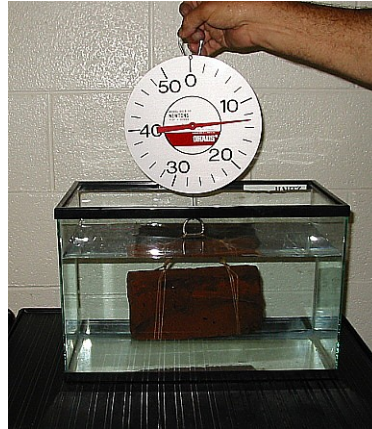


## The Buoyant Force



**Purpose:** Demonstrates Archimedes Principle.

This demo hammers home the idea of the buoyant force in a simple, visual manner: you compare the weight of a brick in and out of water.

**Note:** The brick is convenient since you can measure the volume easily in real time.

Weight in air	24 N
Weight submerged	<u>13 N</u>
Difference	11 N

Volume	1150 cc
(20.5 x 5.75 x 9.75) cc	

Expected Difference:	
1.15 kg x 9.8 m/s <sup>2</sup> =	11.3 N

Not bad for a lecture demo!  
(The brick's actual weight is 24.57 N.)

**Extra Equipment:** None

**Location:** Shelf D6