



## Concept:

Demonstrates how the fluid surrounding an object exerts a buoyant force on the object, decreasing its weight, by first weighing an object in air, then in water.

## Procedure:

1. Assemble the tripod, Al rod, scale, and rod clamps (see picture).
2. Stack the two lab jacks and put the glass beaker on top.
3. Add 500 – 600 ml of water. Do not put more water, or it will spill when the block will be submerged.
4. Hang the acrylic block on the scale and note its mass.
5. Using the two lab jacks, start raising the beaker with water until the block is fully submerged.
6. Note the submerged block weight.

## Equipment:

- Heavy ringstand
- (2) 1" Rod clamp
- 24" Aluminum rod
- (2) Lab jack
- 2,000-ml Glass beaker
- 22-N. Scale
- 1.45 kg Acrylic block
- Jug of water

## Notes and Extras: