



Concept:

Demonstrates Bernoulli's Principle which states that, "For an ideal fluid (low speed air is a good approximation), with no work being performed on the fluid, an increase in velocity occurs simultaneously with decrease in pressure or a change in the fluid's gravitational potential energy.." ¹

Procedure:

1. Assemble the tripod, three-finger clamp, and rod clamp (see picture).
2. Mount one end of the air hose to the air supply. Plug the air supply into outlet.
3. Mount the other end into the three-finger clamp (see picture).
4. Turn on the power supply and set the air output to 1-2 cfm.
5. Take the beach ball and carefully position it into the air stream. The ball will float as seen in the picture.
6. Tilt the air hose at an angle (picture 2). If you exceed a specific angle the ball will fall.

Equipment:

- Air supply with air hose
- Short, heavy tripod
- Three-finger clamp
- 1" rod clamp
- Beach ball

Notes and Extras:

- [Demo Video Link](#)
- ¹ [Bernoulli's Principle on Wikipedia](#)