

## COIN IN THE GLASS

### Concepts Illustrated:

- (1) The Bernoulli Effect
- (1) Bernoulli Lift

**Time Requirements:** 5 minutes

**Grade Level of Audience:** This qualitative demonstration is suitable for students at all age levels.

### **I. Materials and Equipment Utilized**

1. A nickel or dime
2. A drinking glass or wine glass

### **II. Description of Set-up and/or Construction of Apparatus**

1. Set the drinking glass or wine glass on edge.
2. Place the coin on the table about an inch in front of the drinking glass.



### **III. Details of Student Implementation**

1. Challenge a student to get the coin in the glass without physically touching the coin or glass (either directly or indirectly using another solid object)



2. The general idea being demonstrated is that the faster air moves across a surface, the lower the pressure exerted by the air. The moving column of air represents a column of lower pressure relative to the static air mass surrounding the moving air. In this case, the moving air will be over the top of the coin while the static air mass is beneath the coin. The result? The coin will lift up into the air and land in the glass cup, much to the amazement of both young and old students.
3. There are no safety or clean up issues with this interactive demonstration.