**Flipper**

**Purpose**
To demonstrate Bernoulli’s principle.

**Material**
Penny

**Procedure**
1. Place the coin next to the edge of a table.
2. Squat down next to the table’s edge so that your mouth is in line with the coin.
3. Pucker your lips and hold them as close to the coin as possible without touching it.
4. Blow as hard as possible across the top of the coin. If the coin does not lift and flip in the air, move your head slightly up or down. Then repeat this step. The air must move across the top of the coin.

**Results**
The coin lifts and flips in the air.

**Why?** Before blowing across the coin, the air pressure above and below the coin is the same, thus the downward pressure of air on the top of the coin is equal to the upward pressure of air on the bottom of the coin. As air increases in speed, it exerts less pressure on the material that it flows across. This is known as Bernoulli’s principle. The air moving across the top of the coin produces a low-pressure area above the coin as compared to the pressure of the air beneath the coin. This difference in pressure lifts the coin, and since the pressure on the upper surface is not the same over the entire surface, the coin tends to flip over.