

# Bernoulli

## What Do I Need?

- Hair dryer
- Ping pong ball
- Roll of almost gone toilet paper
- Empty toilet paper tube
- Balloon
- Stick
- Optional-leaf blower



## What Do I Do?

- Put the hair dryer on cool and point it at the ceiling.
- Put the ball in the air flow.
- Observe what happens
- Experiment with floating other objects in the air
- Can you float more than one thing?
- Can you float the balloon with the ping pong ball?
- How do you think it will change if we use the leaf blower?

## What's Going On?

The air flows around the outside of the ball. If it is in the right position the air will flow evenly around all sides of the ball. Gravity pushes the ball down and air pressure pushes it up. If all of the forces are balanced the ball will stay in mid-air. The Bernoulli principle When the air increases its speed as it moves around the ball, the air pressure around the ball also drops.

