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Bernoulli Principle

Bernoulli's Principle, or Bernoulli's equation, states that slow-moving liquids and gases exert more pressure than fast-moving liquids and gases, including airflow. One example of Bernoulli's principle is the airplane. The airplane wing's shape creates differences in air pressure, as air flows over it. Air flowing over the top of the wing flows faster and creates higher pressure than the air below the wing. The difference in air pressure creates lift, which keeps the plane in the air.

Option A:

Try this experiment.

You need a water hose hooked to running water.

1. Turn on the water. Let it run.
 2. Next, bend the hose in half.
 3. Notice the water pressure build up and the water flow.
 4. Release the bend and turn the water off.
- Explain the cause-and-effect relationship of the hose bending and the water flow.

Cause (why)	Effect (what happened)

Option B:

Try this experiment.

Materials: Empty water bottle, a rock that can fit in the bottle, but will not fall out, a cup of water * An adult will need you to cut the neck of the water bottle off.

Directions: First, pour the cup of water into the empty bottle. Then, place the rock in the bottle. Next, attempt to pour out the water. Notice how the rock blocks the flow.

- Explain the cause-and-effect relationship of the rock and the water flow.

Cause (why)	Effect (what happened)