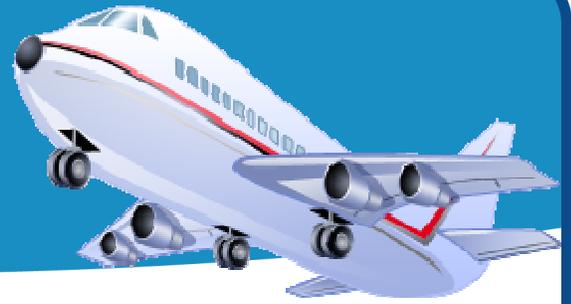


Lift Off



Two activities that may boggle the mind
but expand your knowledge of Bernoulli's Principle.

With

Ages: 6-12 years old

Time: 45-60 minutes

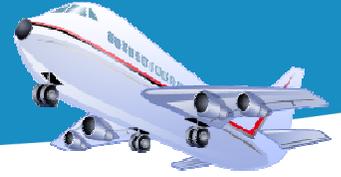
Materials Needed:

Flexi-Straws, ping pong balls, balloons, string, tape, ruler, MS Word, paper and pencil

Instructions:

1. Split participants into small groups of two or three.
2. Explain to groups that they will be conducting two experiments to explore what is called Bernoulli's principle (as the velocity of air increases, its pressure decreases). For each experiment, they must make a prediction, perform a test (or multiple tests) and then record the results.
3. Experiment one: Blow up two balloons and squirt a little water into them. Tie each balloon to a 12" piece of string. Tape the balloons to the side of a table so they are at the same length and about 3-4 inches apart. Try different ways to blow the balloons together without blowing on them directly. Record what happens when you blow in different ways.

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4. Experiment two: Bend a flexi-straw so it makes an L-shape. Hold the straw in your mouth with the bottom of the L facing up. Hold a ping-pong ball over the straw and blow into the straw. Can you keep the ping-pong ball afloat? Can you tilt the straw and still keep the ball in the air? Record what happens.

5. Have teams enter their results into MS Word (tables work well), print and share them with the larger group. If possible, post the results of the experiment on a bulletin board.

Youth Development

Ideas:

If desired, have teams use digital cameras to record pictures of what happens in the experiment. Have groups label the forces in play in the experiment (lift, thrust, drag, gravity).

Submitted By:

Angie Finnell