The Moving Cans

The Action

Two empty pop cans are placed upright, separated by a short distance on a bed of drinking straws. When air is blown between the two cans with a straw, the two cans will come together.

Grade Level

Grade 7 - Force and Motion

Materials

- 10-15 plastic drinking straws
- 2 empty aluminum drink cans

Instructions

- Lay about 10-15 straws about 1-2 cm apart on a smooth table top. Place two empty aluminum drink cans upright on the bed of straws.
- With another straw, strongly blow air between the two cans. The cans should move together.

Safety

No safety concerns.

Hints

The air must be blown directly between the cans and requires fairly strong blowing through the straw.

Science Principle

This activity demonstrates one aspect of Bernoulli's Principle. Moving air has a lower pressure than stationary pressure. This difference creates an imbalance of pressure on the cans; the pressure on the outside is higher than in between. This difference causes the cans to move toward the area of lower pressure.