

Come Together

1. **Find** small diameter, round straws such as cocktail straws or coffee stirrers.
2. **Lay** down a bed of 20-30 straws.
3. **Place** two empty soda cans a short distance (5 cm) apart on top of the straws.
4. **Hold** a larger straw between the two cans and blow. What do you notice?

Under Pressure

The **Bernoulli Principle**, developed by 18th century Swiss mathematician Daniel Bernoulli, states that the faster air flows over the surface of something, the less the air pushes on that surface and so, the lower the air pressure.



Grasping at Straws

According to **Bernoulli's principle**, areas of high **velocity** have lower **pressure**. The moving air between the cans has a lower pressure than stationary air on the outside of the cans, creating an imbalance of pressure. This causes the cans to move toward the area of lower pressure. The higher pressure air outside of the cans pushes them together.

NAVY NOTES

In October 2016, the USS Montgomery collided with a tugboat that was pushing the ship further from a quay wall. Winds which were over 30 nautical miles per hour caused the collision. Fast wind moving between the two boats caused low pressure. The two ships moved toward the area of low pressure and collided.

