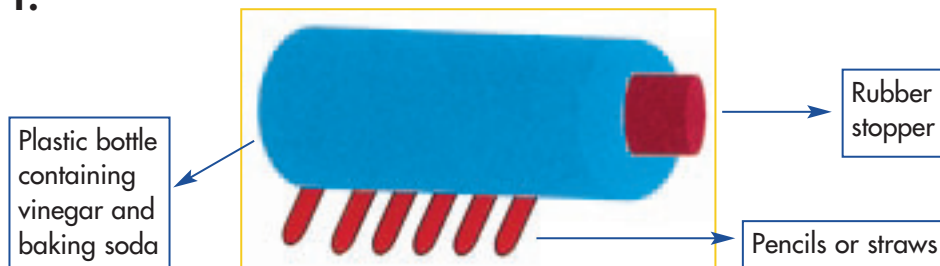


Newton's third law

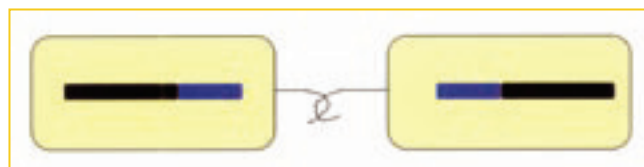
For every action there is an equal and opposite reaction

1.



Place a teaspoon full of baking soda and 10mls of vinegar inside the plastic bottle. Quickly replace the rubber stopper. After a few seconds the build up of pressure from the carbon dioxide causes the stopper to fly off in one direction while the bottle shoots back in the opposite direction. By placing the bottle on rollers such as pencils the effect is enhanced.

2.



By using two spring balances Newton's third law may also be simply demonstrated. Pulling on the spring balances should lead to the same reading on each one.