



# Warm Friction Balloon

## You will need:

A balloon

A cool area

## Steps:

- 1** Feel the temperature of the balloon by touching it or placing it on your cheeks.
- 2** Stretch a balloon back and forth by pulling on each end. Stretch it about 20 times or more.
- 3** Feel the temperature of the balloon again and see if you notice a change. If not, keep stretching the balloon until you notice a difference in temperature.

## Explanation:

The stretching makes the molecules inside the balloon move and crash into each other. As the molecules in the balloon bump into each other they spin off faster and faster. This means that each molecule will take up more space due to its movement so the material will expand. The molecules will move about more and get hotter as you stretch the balloon. All this friction produces heat. It is like rubbing your hands together to make them warm.

