

Zedua Experiments

Title: Warm Air Needs More Room

As its temperature rises, air starts to act a little differently. Find out what happens to a balloon when the air inside it heats up with this fun science experiment for kids.

Materials Required:

Empty bottle

Balloon

Pot of hot water (not boiling)

Procedure:

1. Stretch the balloon over the mouth of the empty bottle.
2. Put the bottle in the pot of hot water, let it stand for a few minutes and watch what happens.

What's happening?

As the air inside the balloon heats up it starts to expand. The molecules begin to move faster and further apart from each other. This is what makes the balloon stretch. There is still the same amount of air inside the balloon and bottle, it has just expanded as it heats up.

Warm air therefore takes up more space than the same amount of cold air, it also weighs less than cold air occupying the same space. You might have seen this principle in action if you've flown in or watched a hot air balloon.



Source: learning kids

www.zedua.com