

## Eggsperiment

### Objectives

By the end of this lesson the student will:

- have investigated changes in air pressure.

### Background

As air was heated, it began to expand. Some of the air escaped causing the egg to wobble. When the flames went out, the air began to cool and contract. The egg sealed the bottle. Air pressure inside the bottle dropped below that of the air outside the bottle. The greater air pressure on the outside pushed the egg into the bottle, equalising the air pressure inside the bottle.

### Resources and actions

Teachers will need to ensure that this activity is only done as a demonstration activity.

The lighting of the match should be done by the teacher.

Print off the student's worksheet and photocopy one for each student:  
[http://www.bom.gov.au/lam/Students\\_Teachers/Worksheet12.shtml](http://www.bom.gov.au/lam/Students_Teachers/Worksheet12.shtml)

Ask the students to carry out the activity from the worksheet then go over their results at the end of the class.

### Questions and solutions

1. Why did the egg drop into the bottle?

The greater air pressure on the outside pushed the egg into the bottle, equalising the air pressure inside the bottle.

2. Why did blowing into the bottle remove the egg?

Blowing into the bottle increased the air pressure inside the bottle. This pushed the egg out of the bottle, equalising the air pressure inside the bottle.

### Time

60 minutes

### Assessment

Q1 & 2