

- 1 Draw a line to match up the words with the correct description.

Element

Set group of two or more atoms joined together.

Compound

The simplest particles of matter, which we think of as being like a tiny ball.

Atom

Simplest type of substance. Contains only one kind of atom.

Molecule

Contains different kinds of atoms jumbled up but not joined together.

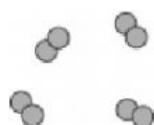
Mixture of elements

Contains two or more kinds of atoms (elements) joined together.

- 2 Tick *one* box to say if each the following substances are elements or compounds.

	Element	Compound
nitrogen	<input type="checkbox"/>	<input type="checkbox"/>
argon	<input type="checkbox"/>	<input type="checkbox"/>
oxygen	<input type="checkbox"/>	<input type="checkbox"/>
carbon dioxide	<input type="checkbox"/>	<input type="checkbox"/>

- 3 Write the word 'atoms' or 'molecules' below the correct diagrams.



Aim

To find out if the volume of available air affects the time a candle will burn under a beaker.

Introduction

Candles use the oxygen in air when they burn and will go out when the oxygen is used up.

Prediction

1 What do you think will happen?

Method

Apparatus

- tea light/candle
- different sized beakers: 200 cm³, 300 cm³, 400 cm³, 500 cm³
- heat-resistant mat
- stop clock
- lighter



Take care to keep flammable materials away from flames.
Wear eye protection.

- Place a tea light/candle on a heat-resistant mat.
- Light the candle and immediately, but carefully, place a beaker over it.
- Time how long it takes for the candle to go out.
- Record the volume of the beaker and the time for flame to go out.
- Repeat steps A to D, changing the size of the beaker used.



Recording your results

Record your results in the table below.

Volume of beaker (cm ³)	Time to go out (s)