

# Unit 1 Introducing Chemistry

## What is chemistry?

Chemistry is the study of different substances, their structures and the interactions between them.

## Why study chemistry?









Chemistry plays an essential role in our daily lives. You can find the results of chemistry everywhere.

## Laboratory safety

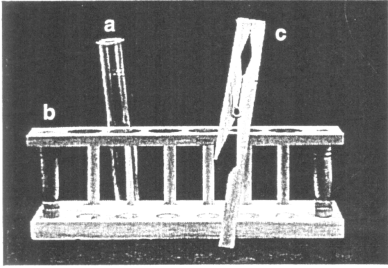
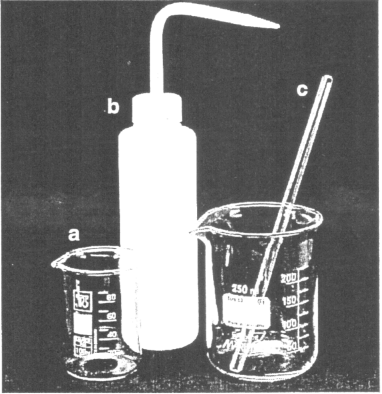
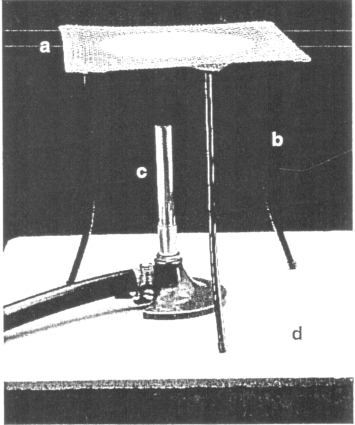
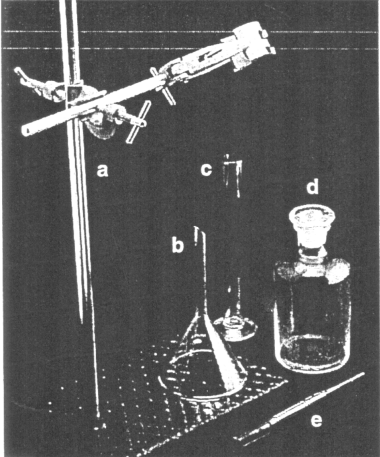
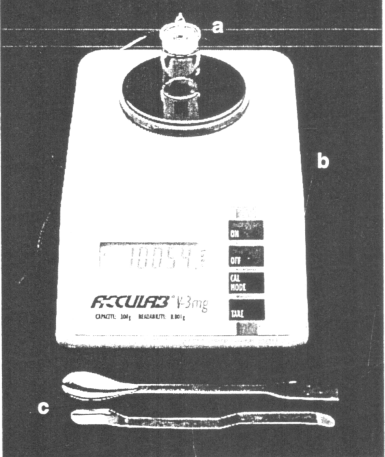
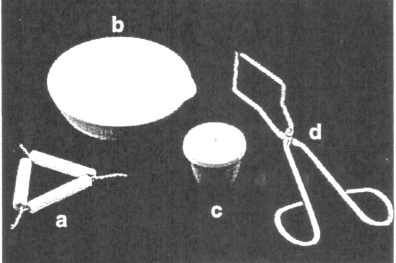
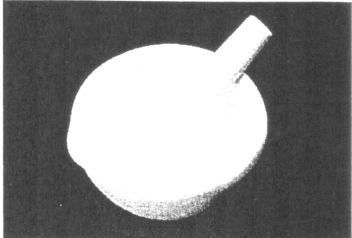
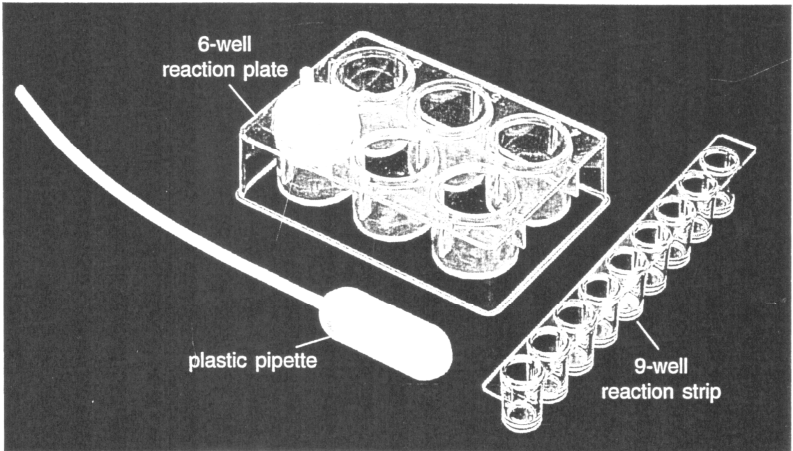
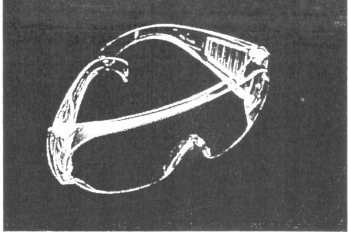
		Yes or No
1.	Enter the laboratory in the absence of your teacher.	N
2.	Run or play in the laboratory.	N
3.	Remove something from the laboratory without asking the teacher.	N
4.	Touch chemicals with bare hands.	N
5.	Leave experiments unattended.	N
6.	Smell gases directly.	N
7.	Taste chemicals in the laboratory.	N
8.	Eat or drink in the laboratory.	N
9.	Pour chemicals into the sink directly.	N
10.	Wear loose clothing in the laboratory.	N
11.	Tie up your long hair when doing experiments.	Y
12.	Follow the instructions given by your teacher.	Y
13.	Wear safety glasses when doing experiments.	Y
14.	Keep flammable chemicals away from the naked flame.	Y
15.	Pour chemicals in the waste bottle.	Y
16..	Use a spatula to transfer solid chemicals.	Y
17.	Keep the chemical in a test tube below one third when heating it.	Y
18.	Point the mouth of test tube to nobody when you are heating it.	Y
19.	Wave the gas towards your nose when you detect it in a test tube.	Y
20.	Use the minimum amount when using concentrated acids and alkalis.	Y
21.	Turn off the Bunsen burner when it is not in use.	Y
22.	Report all accidents or breakages to you teacher.	Y
23.	Wash with plenty of water when chemicals got split on you.	Y
24.	Wash your hands thoroughly after experiments.	Y

## Hazard warning labels

There are eight common hazard warning labels in chemistry. They are used for labelling dangerous chemicals. Apart from that, some household products such as bathroom cleaner, drain cleaner and chlorine bleach are hazardous too.

							
<b>Explosive</b>	<b>Flammable</b>	<b>Toxic</b>	<b>Carcinogenic</b>	<b>Oxidizing</b>	<b>Corrosive</b>	<b>Harmful</b>	<b>Irritant</b>

## Common apparatus in the laboratory

		
<p>(a) Test tube (b) Test tube rack (c) Test tube holder</p>	<p>(a) Beaker (b) Wash bottle (c) glass rod</p>	<p>(a) Wire gauze (b) Tripod (c) Bunsen Burner (d) Fireproof mat</p>
		
<p>(a) Stand and clamp (b) Filter funnel (c) Measuring cylinder (d) Reagent bottle (e) Dropper</p>	<p>(a) Weighing bottle (b) Electronic balance (c) Spatula</p>	<p>(a) Pipe clay triangle (b) Evaporating Dish (c) Crucible with lids (d) Crucible tongs</p>
		
<p>Mortar and pestle</p>	<p>Micro-scale apparatus</p>	
		
<p>Safety glasses</p>		