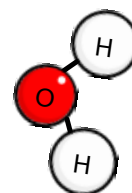
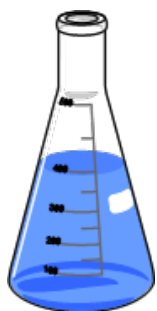


## Unit 2 - Chemistry Introduction to Matter



Safety Section 1.1 pages 14, 15

### Warm-up Question



Give examples of what could happen if you did not practice safety in a science lab.

eye injuries. Corrosive.  
Cuts Swallow  
Burns

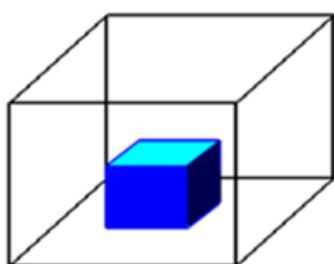
## Matter and Change

- **Matter** is anything that takes up space and has a mass. → weight.
- Everything is made of matter (water, food, computers, animals, plants, rocks, etc.)

## Properties of Matter

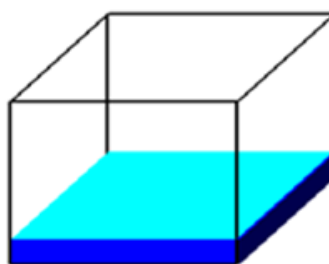
Matter can come in different forms:

- Solid
- Liquid
- Gas



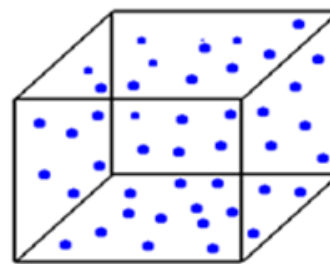
**Solid**

Holds Shape  
Fixed Volume



**Liquid**

Shape of Container  
~~Free Surface~~  
Fixed Volume



**Gas**

Shape of Container  
Volume of Container

## **Chemicals and Safety**

- These three forms of matter can be both helpful and harmful.
- e.g. carbon dioxide is harmless, but carbon monoxide is poisonous.
- Can you think of some helpful chemicals? Harmful chemicals ?



## Hazardous Product Symbols



- Canada uses two standard sets of symbols to identify hazardous materials.
- The <sup>1)</sup>**Hazardous Household Product Symbols (HHPS)** were developed for common products used around the home.
- A combination of a picture and outline shape shows what the danger is and to what degree it is dangerous.

## Hazardous Household Product Symbols

### Table 1 p. 14

	poisonous	flammable	explosive	corrosive
<b>danger</b>				
<b>warning</b>				
<b>caution</b>				

burns  
the skin.

Did you know that the warning symbols are based on shape? **The more corners a symbol has, the greater the risk.** Read the label to find out how to use the product safely and what precautions to take.

- The **Workplace Hazardous Materials Information System (WHMIS)** was developed for products found in work places or **science laboratories**.
- Many workers must undergo WHMIS training every year.

## Table 2 p. 14



Crash Course:

## Lab Techniques & Safety

 <https://www.youtube.com/watch?v=VRWRmIEHr3A>



- In groups of 3 - 4, answer questions **#4 (a - j) on p. 15** a piece of looseleaf paper.
- Discuss the question as a group, and then write down your conclusions.
- If your group doesn't agree on a safety rule, make note of this in your answers.

## Attachments

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safety symbols assignment.doc