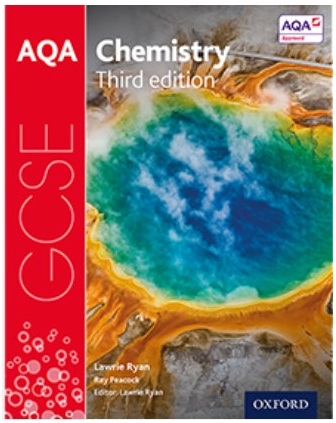
Extended Homework Task – Chemistry C1 and C2

Aiming for Grade 4

Name ……

Please hand in a completed printed version at the end of the topic



The online text book access to support this homework can be accessed through your Kerboodle account at www.kerboodle.com.

The username is your first initial and sir name (no gap).

If you have not accessed the book before the password will be the same as your username. If you have logged on before you will have changed the password to your own choice.

Click onto the science 9-1 tile and then onto the digital book.

Resources to support this homework can be found in the online student book

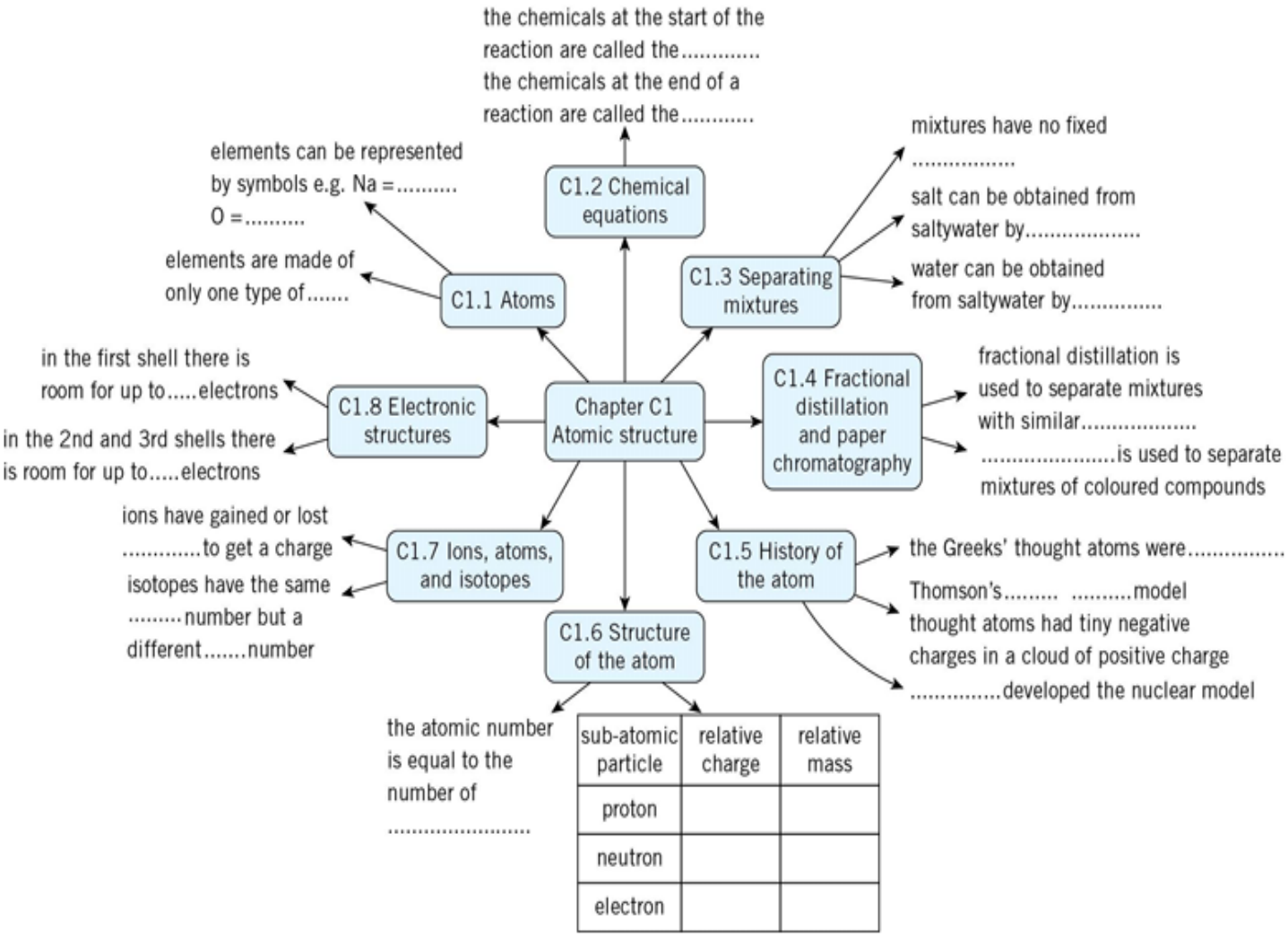
- **Atomic structure pages 4 to 21.**
- **The periodic table pages 22 to 35.**

C1 Atomic structure

The spider diagram on the following page shows the main ideas in this chapter in quite a lot of detail. The spider diagram is split into eight sections – one for each of the double page spreads in your student book.

Copy or complete the diagram to show the key information from this chapter. Spaces have been left for you to add the missing words.

Try to include some pictures and different colours in your spider diagram. Think about how the key ideas link together and try adding some arrows to link the topics together.



C2 The periodic table

Below is a set of revision cards showing the main ideas in this chapter. There is one card for each of the double page spreads in your student book. Complete each card by adding the missing words to show the key information from this chapter.

Try and include some of your own information to each card. Add pictures and use different colours to make the cards more interesting.

C2.1 Development of the periodic table	C2.2 Electronic structures and the periodic table
Mendeleev placed the known _____ into a table. He left ___ for elements that hadn't been discovered and made detailed _____ about them. Mendeleev swapped the order of some elements so that elements with similar properties were in the same _____.	In the modern periodic table the elements are arranged in order of increasing _____ _____. Metals are found in the middle and on the ___ of the periodic table. Non-metals are found on the ____ of the periodic table. The number of ____ in the outer shell of an atom shows the _____ of the periodic table an element belongs to.
C2.3 Group 1 – the alkali metals	**C2.4 Group 7 – the halogens**
Lithium, _____, sodium, ____, and potassium, _____, belong to Group 1. Group 1 metals are also known as the ___ _____. The reactivity of Group 1 metals ____ down the group. Group metals react with water to make a metal hydroxide and _____	Fluorine, ____, chlorine, ____, bromine, ____, and iodine, _____, belong to Group 7. Group 7 is also known as the _____. Group 7 elements get _____ reactive down the group. Halogens undergo displacement reactions: Chlorine + potassium bromide → _____ + _____ _____
C2.5 Explaining trends	**C2.6 The transition elements**
Group ___ metals get more reactive down the group. Group ___ non-metals get less reactive down the group.	The transition metals or _____ _____ have typical metal properties. They also: • Form _____ compounds • Are good _____ • Form ____ which have different charges e.g., Fe^{2+} and Fe^{3+}

Building key skills

There are skills that you will need to build up to help you access the information in these units.
To help you with these skills you can access myMaths programs or other maths resources.

C2 MyMaths: The periodic table

If your school has MyMaths, try looking at these activities that will support you in understanding the maths that is relevant to this chapter:

Using standard form with very small numbers

Using standard form with very large numbers

Dividing by 10 and 100

Decimal place value

Introduction to ratios