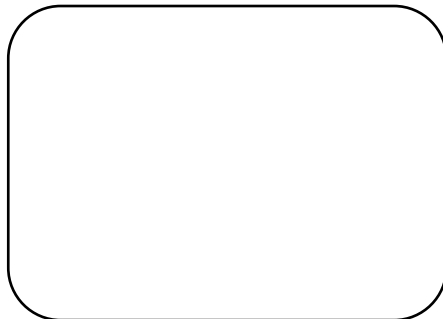


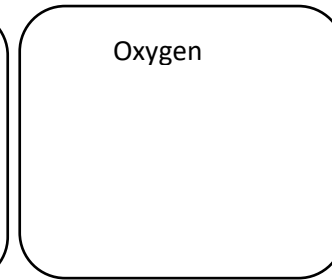
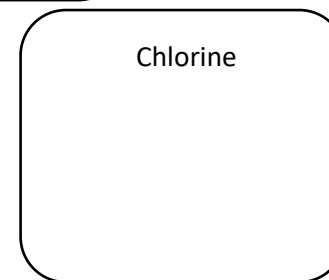
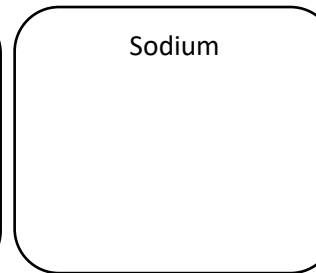
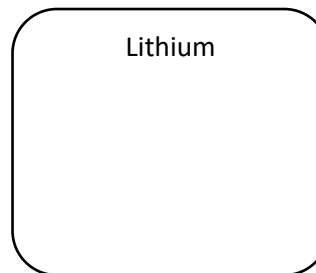
Complete the table to show the properties of each sub atomic particle

Particle	Relative Charge	Relative Mass
Proton		
Neutron		
Electron		

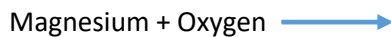
In the space below draw an atom and label it with the keywords



Draw the electron structure for the following elements.



Complete these word equations. For each reaction write a balanced symbol equation underneath



Define the term isotope

.....  
 .....

Define these keywords

Keyword	Definition
Element	
Compound	
Mixture	

Describe JJ Thomson's theory of the atom.

.....  
 .....

Describe Rutherford's Gold leaf experiment.

.....  
 .....

State the observations Rutherford saw in his Gold leaf experiment and the conclusions he made.

.....  
 .....

## Atomic Structure and Periodic Table

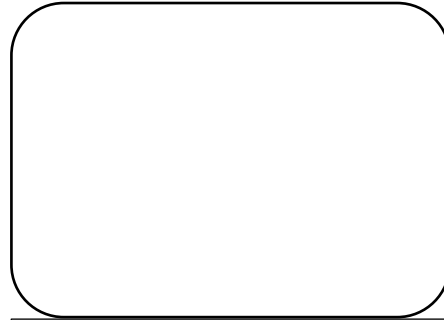
Describe each separating technique and give an example of where each can be used.

Separating Technique	Description	Example
Filtrating		
Evaporation		
Distillation		
Chromatography		

Complete the table to show the difference between metals and non-metals

Property	Metals	Non Metals
Conduction of Heat/Electricity		
Ability to bend (Malleable or not)		
Appearance		
Sound when hit		
Density		
Magnetism		

In the space below draw an atom and label it with the keywords



## Atomic Structure and Periodic Table

Why are Group 0 atoms unreactive?

.....  
 .....  
 .....

Complete the table to show the properties of the Halogens (Group 7)

	Fluorine	Chlorine	Bromine	Iodine
Electron Structure				
State at room temperature				
Key information about the halogens				
Reactivity				
Products when reacted with metals				

Complete the table to show the properties of the Alkali Metals (Group 1)

	Lithium	Sodium	Potassium
Electronic Structure			
Melting point/ °C			
Flame Test Colour			
Reaction with water			
Products of reaction with water			

Draw a timeline to describe how the periodic table was developed through time. Include the scientists and their theories.