

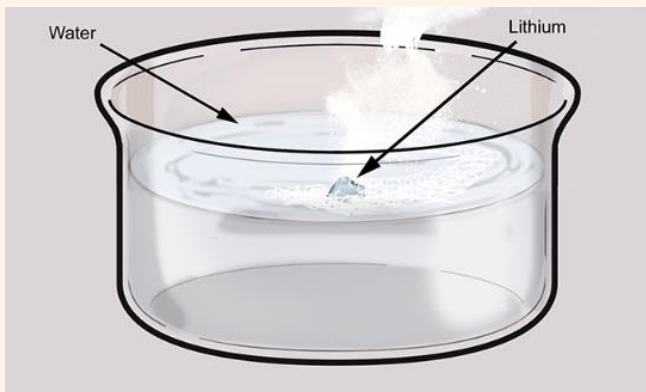
C1 – The Periodic Table

Key words		Key diagram	
Periods	Rows across the table	<p>The Periodic Table of the Elements</p> <p>An element is a substance made up of <u>THE SAME</u> type of <u>ATOMS</u>.</p> <p>How elements are arranged →</p> <p>Atomic Number → Melting Point →</p> <p>Symbol ← Short version of name ←</p> <p>Element's name → Name ←</p> <p>Atomic Mass ← Mass of element ←</p> <p>Columns in the Periodic Table are called GROUPS</p> <p>Rows in the Periodic Table are called PERIODS</p> <p>Elements are arranged in order of ATOMIC NUMBER</p>	
Groups	Columns down the table		
Metalloid	Shared metal and non metal properties		
Ductile	Can be stretched into wires		
Malleable	Can be shaped with a hammer		
Sonorous	Makes a ringing sound when hit		
Reactivity	How strongly an element reacts		
Conductor	Can transfer heat and electricity		
Insulator	Cannot transfer heat and electricity		
Mendeleev	First scientist to produce the periodic table		

Key knowledge
Non metals are found on the right of the table
Group 1 metals are very reactive. They get more reactive as you go DOWN the group
Group 1 metal are called the ALKALI METALS
Group 1 metals react with water to form a METAL HYDROXIDE and HYDROGEN
Group 7 elements are reactive non metals. They get more reactive as you UP the group
Group 7 metals are called the HALOGENS
Group 0 gases are unreactive (INERT)
Group 0 elements are called the NOBLE GASES

Required practical – Group 1 metals in water

Group 1 metals when added to water act vigorously
 They turn the water alkaline
 They fizz (effervesce) producing hydrogen gas
 They get more reactive down the group



Key process – Predicting Patterns

You can predict **PATTERNS** in how the element behaves from the position of the element in the periodic table

Metals vs. Nonmetals: Physical Properties

<ul style="list-style-type: none"> • Lustrous • Good conductors • High melting point • High density • Malleable • Ductile (can be drawn into wires) • Usually solid at room temperature • Opaque as a thin sheet • Sonorous 	<ul style="list-style-type: none"> • Dull • Poor conductors • Nonductile • Brittle • May be solids, liquids or gases at room temperature • Transparent as a thin sheet • Not sonorous
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