

THOUGHT BOARD

Look at the **thought board** – what can you say about the pictures?

Can you fit any of the words to the pictures or the definitions?

Are there any pictures you recognise?

Discuss your thoughts with the person next to you

Atom?



**The smallest
particle of a
chemical
element that
can exist**

**A substance made
from only one type
of atom. It cannot
be broken down by
chemical
reactions.**



Element?

Symbols

Element	Symbol
Carbon	
Hydrogen	
Fluorine	
Calcium	
Nitrogen	
Neon	
Helium	
Sodium	
Potassium	
Chlorine	
Magnesium	

Peer Mark

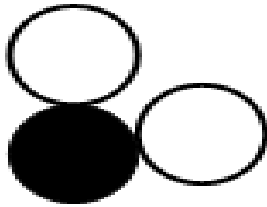
Recognising elements

Which ones are elements? How do you know?

A



B



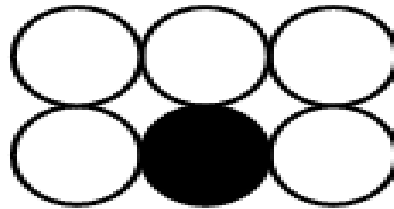
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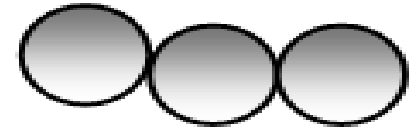
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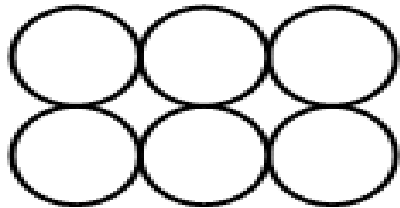
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G



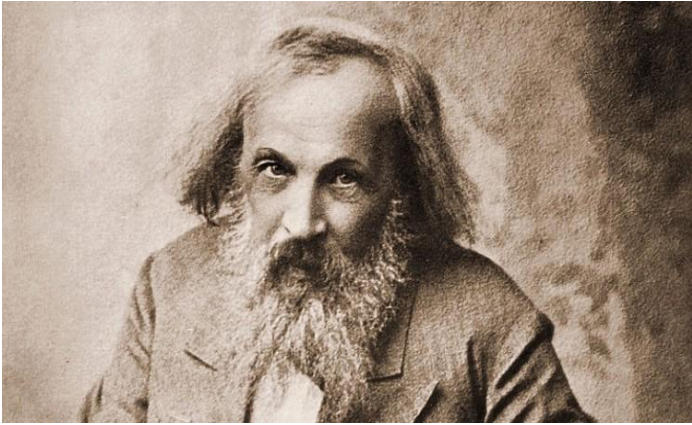
H



I



Compare elements and suggest similarities of elements in groups within the periodic table



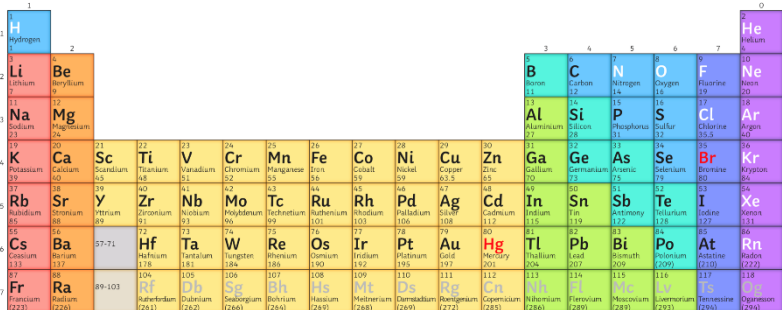
Russian scientist, Mendeleev, put the elements into groups that have similar reactions.

Elements with similar properties are placed in the same group.

For example, **Group 1** contains the alkali metals, which all react quickly with water.

Group 0 elements are all very unreactive.

These chemical properties are called 'characteristics'.



1	2	3	4	5	6	7	0										
1 H Hydrogen							10 He Helium										
2 Li Lithium	4 Be Beryllium						18 Ne Neon										
3 Na Sodium	12 Mg Magnesium						19 Ar Argon										
4 K Potassium	20 Ca Calcium	21 Sc Scandium	22 Ti Titanium	23 V Vanadium	24 Cr Chromium	25 Mn Manganese	26 Fe Iron	27 Co Cobalt	28 Ni Nickel	29 Cu Copper	30 Zn Zinc	31 Ga Gallium	32 Ge Germanium	33 As Arsenic	34 Se Selenium	35 Br Bromine	36 Kr Krypton
5 Rb Rubidium	38 Sr Strontium	39 Y Yttrium	40 Zr Zirconium	41 Nb Niobium	42 Mo Molybdenum	43 Tc Technetium	44 Ru Ruthenium	45 Rh Rhodium	46 Pd Palladium	47 Ag Silver	48 Cd Cadmium	49 In Indium	50 Sn Tin	51 Sb Antimony	52 Te Tellurium	53 I Iodine	54 Xe Xenon
6 Cs Cesium	56 Ba Barium	57-71 La Lanthanum	72 Hf Hafnium	73 Ta Tantalum	74 W Tungsten	75 Re Rhenium	76 Os Osmium	77 Ir Iridium	78 Pt Platinum	79 Au Gold	80 Hg Mercury	81 Tl Thallium	82 Pb Lead	83 Bi Bismuth	84 Po Polonium	85 At Astatine	86 Rn Radon
7 Fr Francium	88 Ra Radium	89-103 Ac Actinium	104 Rf Rutherfordium	105 Db Dubnium	106 Sg Seaborgium	107 Bh Bohrium	108 Hs Hassium	109 Mt Meitnerium	110 Ds Darmstadtium	111 Rg Roentgenium	112 Cn Copernicium	113 Nh Nihonium	114 Fl Flerovium	115 Mc Moscovium	116 Lv Livermorium	117 Ts Tennessine	118 Og Oganesson

Where would these elements go on the periodic table?



sodium



sulphur



zinc



carbon



bromine



copper

How is copper like the others? Where should it go in the table?