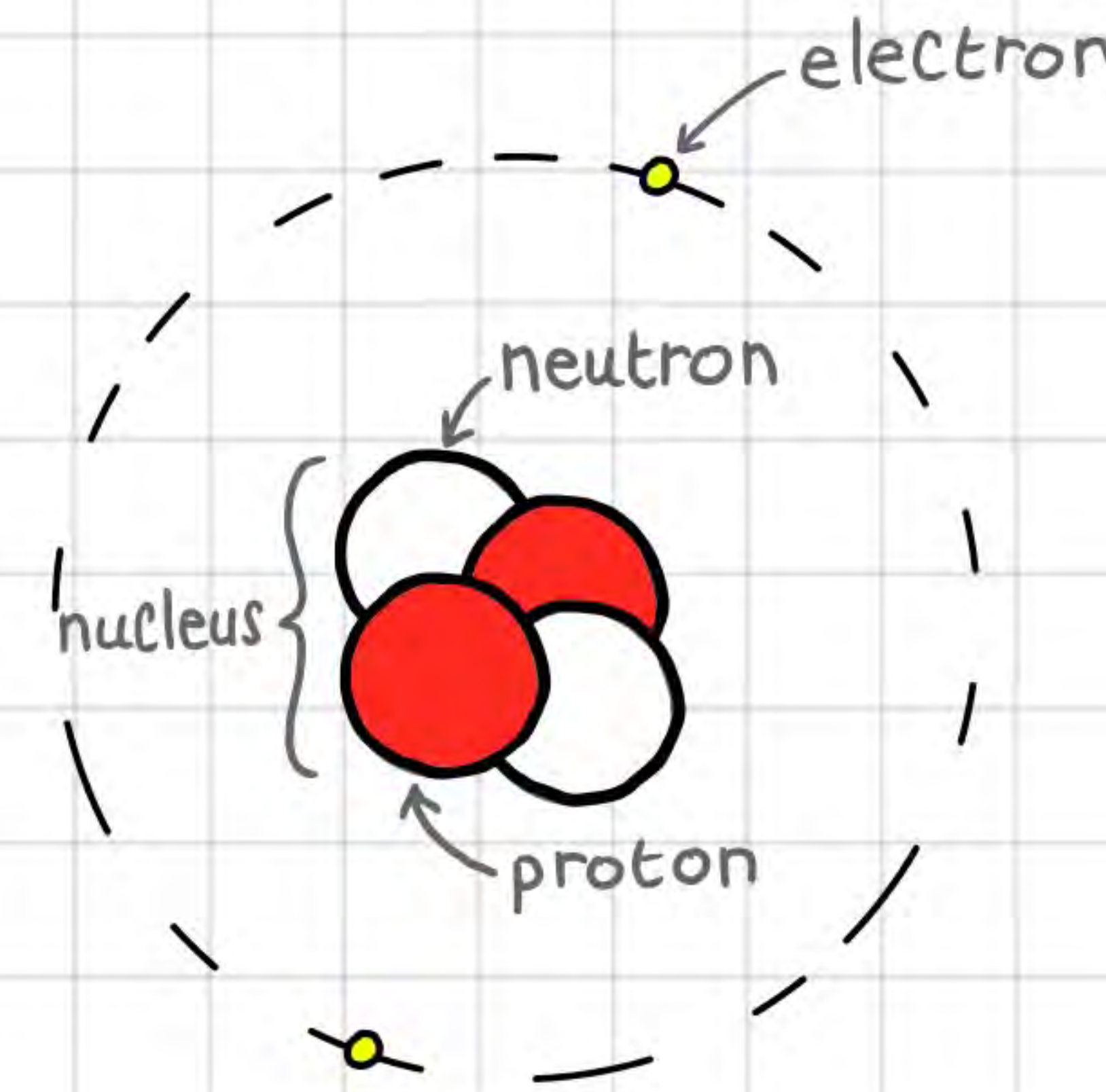


Group 1	Group 2	Transition metals										Group 3	Group 4	Group 5	Group 6	Group 7	Group 0			
Alkali metals																			Halogens	Noble gases
Period 1	1 H 1 Hydrogen																		4 He 2 Helium	
Period 2	7 Li 3 Lithium	9 Be 4 Beryllium											11 B 5 Boron	12 C 6 Carbon	14 N 7 Nitrogen	16 O 8 Oxygen	19 F 9 Fluorine	20 Ne 10 Neon		
Period 3	23 Na 11 Sodium	24 Mg 12 Magnesium											27 Al 13 Aluminium	28 Si 14 Silicon	31 P 15 Phosphorus	32 S 16 Sulfur	35.5 Cl 17 Chlorine	40 Ar 18 Argon		
Period 4	39 K 19 Potassium	40 Ca 20 Calcium	45 Sc Scandium	48 Ti Titanium	51 V Vanadium	52 Cr Chromium	55 Mn Manganese	56 Fe Iron	59 Co Cobalt	59 Ni Nickel	63.5 Cu Copper	65 Zn Zinc	70 Ga 31 Gallium	73 Ge 32 Germanium	75 As 33 Arsenic	79 Se 34 Selenium	80 Br 35 Bromine	84 Kr 36 Krypton		
Period 5	85 Rb 37 Rubidium	88 Sr 38 Strontium	89 Y Yttrium	91 Zr Zirconium	93 Nb Niobium	96 Mo Molybdenum	98 Tc Technetium	101 Ru Ruthenium	103 Rh Rhodium	106 Pd Palladium	108 Ag Silver	112 Cd Cadmium	115 In 49 Indium	119 Sn 50 Tin	122 Sb 51 Antimony	128 Te 52 Tellurium	127 I 53 Iodine	131 Xe 54 Xenon		
Period 6	133 Cs 55 Caesium	137 Ba 56 Barium	139 La Lanthanum	178 Hf Hafnium	181 Ta Tantalum	184 W Tungsten	186 Re Rhenium	190 Os Osmium	192 Ir Iridium	195 Pt Platinum	197 Au Gold	201 Hg Mercury	204 Tl 81 Thallium	207 Pb 82 Lead	209 Bi 83 Bismuth	209 Po 84 Polonium	210 At 85 Astatine	222 Rn 86 Radon		
Period 7	223 Fr 87 Francium	226 Ra 88 Radium	227 Ac Actinium	261 Rf Rutherfordium	262 Db Dubnium	266 Sg Seaborgium	264 Bh Bohrium	277 Hs Hassium	268 Mt Meitnerium	271 Ds Darmstadtium	272 Rg Roentgenium	285 Cn Copernicium	286 Nh 113 Nihonium	289 Fl 114 Flerovium	289 Mc 115 Moscovium	293 Lv 116 Livermorium	294 Ts 117 Tennessine	294 Og 118 Oganesson		



# The hand drawn periodic table of the elements

## Mendeleev's periodic table

notice anything missing?

known elements (blue) undiscovered (yellow)

H																			
Li	Be																		
Na	Mg																		
K	Ca																		
Rb	Sr																		
Cs	Ba																		

Mendeleev took the 50 known elements and placed them mainly in the order of atomic mass. He also placed them according to properties. His real genius was to realise some elements were undiscovered. Mendeleev left gaps where existing elements did not fit the pattern.

## metals and non-metals

metal (blue) non-metal (green)

H																			
Li	Be																		
Na	Mg																		
K	Ca																		
Rb	Sr																		
Cs	Ba																		
Fr	Ra																		

The periodic table divided into metals and non-metals. Some of the non-metals on the border display metallic properties. For example silicon and carbon both conduct electricity.

## Solids, liquids and gases

Solid (blue) liquid (green) gas (yellow)

H																			
Li	Be																		
Na	Mg																		
K	Ca																		
Rb	Sr																		
Cs	Ba																		
Fr	Ra																		

Most elements are solid at room temperature. A few elements on the right hand side are gases at room temperature. Group 7 is unique in having all three states represented. The two elements that are liquid are Hg (mercury) and Br (bromine).