

Sec1 Sci C7p WS Sorting the elements

The Periodic Table of the Elements

Group																					
I	II											III	IV	V	VI	VII	0				
										1 H Hydrogen 1											4 He Helium 2
7 Li Lithium 3	9 Be Beryllium 4											11 B Boron 5	12 C Carbon 6	14 N Nitrogen 7	16 O Oxygen 8	19 F Fluorine 9	20 Ne Neon 10				
23 Na Sodium 11	24 Mg Magnesium 12											27 Al Aluminium 13	28 Si Silicon 14	31 P Phosphorus 15	32 S Sulfur 16	35.5 Cl Chlorine 17	40 Ar Argon 18				
39 K Potassium 19	40 Ca Calcium 20	45 Sc Scandium 21	48 Ti Titanium 22	51 V Vanadium 23	52 Cr Chromium 24	55 Mn Manganese 25	56 Fe Iron 26	59 Co Cobalt 27	59 Ni Nickel 28	64 Cu Copper 29	65 Zn Zinc 30	70 Ga Gallium 31	73 Ge Germanium 32	75 As Arsenic 33	79 Se Selenium 34	80 Br Bromine 35	84 Kr Krypton 36				
85 Rb Rubidium 37	88 Sr Strontium 38	89 Y Yttrium 39	91 Zr Zirconium 40	93 Nb Niobium 41	96 Mo Molybdenum 42	98 Tc Technetium 43	101 Ru Ruthenium 44	103 Rh Rhodium 45	106 Pd Palladium 46	108 Ag Silver 47	112 Cd Cadmium 48	115 In Indium 49	119 Sn Tin 50	122 Sb Antimony 51	128 Te Tellurium 52	127 I Iodine 53	131 Xe Xenon 54				
133 Cs Caesium 55	137 Ba Barium 56	139 La Lanthanum 57	178 Hf Hafnium 72	181 Ta Tantalum 73	184 W Tungsten 74	186 Re Rhenium 75	190 Os Osmium 76	192 Ir Iridium 77	195 Pt Platinum 78	197 Au Gold 79	201 Hg Mercury 80	204 Tl Thallium 81	207 Pb Lead 82	209 Bi Bismuth 83	209 Po Polonium 84	210 At Astatine 85	210 Rn Radon 86				
87 Fr Francium	226 Ra Radium	227 Ac Actinium																			
*58-71 Lanthanoid series 190-103 Actinoid series																					
140 Ce Cerium 58	141 Pr Praseodymium 59	144 Nd Neodymium 60	147 Pm Promethium 61	150 Sm Samarium 62	152 Eu Europium 63	157 Gd Gadolinium 64	159 Tb Terbium 65	162 Dy Dysprosium 66	165 Ho Holmium 67	167 Er Erbium 68	169 Tm Thulium 69	173 Yb Ytterbium 70	175 Lu Lutetium 71								
232 Th Thorium 90	234 Pa Protactinium 91	238 U Uranium 92	238 Np Neptunium 93	244 Pu Plutonium 94	247 Am Americium 95	251 Cm Curium 96	257 Bk Berkelium 97	261 Cf Californium 98	265 Es Einsteinium 99	267 Fm Fermium 100	271 Md Mendelevium 101	277 No Nobelium 102	289 Lr Lawrencium 103								

Key

a	a = relative atomic mass
X	x = atomic symbol
b	b = proton (atomic) number

- Colour in your copy of the Periodic Table to show the metals. Show this colour in a key.
- Choose a different colour. Colour in the squares that contain non-metals. Add the colour to your key.
- There are only two elements in the Periodic Table that are liquids. One is a metal, and one is a non-metal. Pick another colour, and outline the squares with these two elements in. Add this outline colour to your key.
- Find the elements that are gases. How many gases are there in the table? _____ Pick another colour and outline all the squares of elements that are gases. Add this colour to your key.
- What state are all the rest of the elements in? _____
 - How many elements are there in this state? _____
- Use your copy of the Periodic Table to look up the elements represented by each of these symbols. Write each symbol into the table below in the correct box.

Fe Al S Hg O Cu Zn N C He Ag Br Cl Au H Mg

	Metal	Non-metal
solid		
liquid		
gas		

Extension: Are there any other elements? Are there any other states of matter?



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