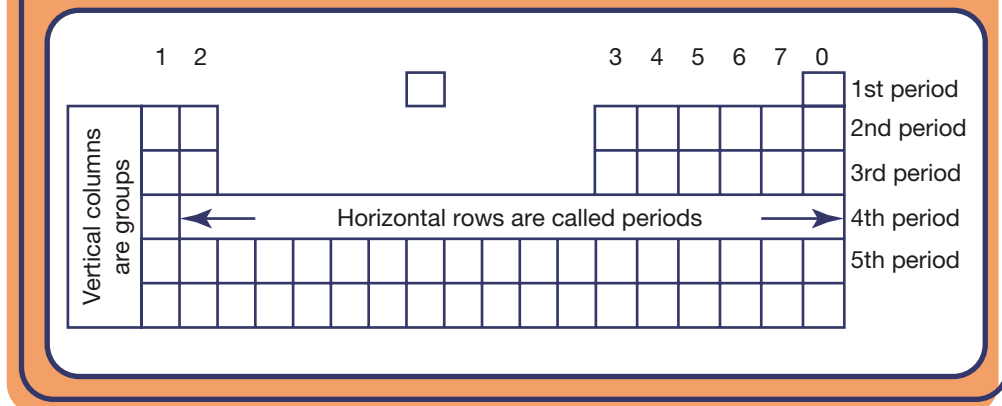




# SNAP!



# NAIL!



- Once you have located an element in the periodic table you will probably need to select information about the element.
- Remember, the top number above the symbol is the relative atomic mass and the number below the symbol is the atomic number.
- The first row of elements consists of hydrogen and helium. These are easily missed because the hydrogen is placed on its own because it does not fit into a particular group.
- The groups you should concentrate on are the ones featured in this book. These are group 1 – the alkali metals, group 7 – the halogens and group 0 – the noble gases.

The Periodic table of the elements

1	2											3	4	5	6	7	8										
(1) 6.9 Li lithium 3	(2) 9.0 Be beryllium 4	<table border="1"> <tr> <td colspan="2">Key</td> </tr> <tr> <td>relative atomic mass</td> <td>symbol</td> </tr> <tr> <td>name</td> <td>atomic (proton) number</td> </tr> </table>										Key		relative atomic mass	symbol	name	atomic (proton) number	(13) 10.8 B boron 5	(14) 12.0 C carbon 6	(15) 14.0 N nitrogen 7	(16) 16.0 O oxygen 8	(17) 18.9 F fluorine 9	(18) 20.1 Ne neon 10				
Key																											
relative atomic mass	symbol																										
name	atomic (proton) number																										
23.0 Na sodium 11	24.3 Mg magnesium 12	(3) 44.9 Ca calcium 20	(4) 47.9 Sc scandium 21	(5) 50.9 Ti titanium 22	(6) 51.9 V vanadium 23	(7) 54.9 Cr chromium 24	(8) 55.8 Mn manganese 25	(9) 58.9 Fe iron 26	(10) 58.9 Co cobalt 27	(11) 58.9 Ni nickel 28	(12) 63.5 Cu copper 29	26.9 Al aluminium 13	28.1 Si silicon 14	30.9 P phosphorus 15	32.0 S sulfur 16	35.4 Cl chlorine 17	39.9 Ar argon 18										
39.1 K potassium 19	39.1 Ca calcium 20	87.6 Sr strontium 38	88.9 Y yttrium 39	87.6 Zr zirconium 40	87.6 Nb niobium 41	87.6 Mo molybdenum 42	87.6 Tc technetium 43	87.6 Ru ruthenium 44	87.6 Rh rhodium 45	87.6 Pd palladium 46	87.6 Ag silver 47	87.6 Cd cadmium 48	87.6 In indium 49	87.6 Sn tin 50	87.6 Sb antimony 51	87.6 Te tellurium 52	87.6 I iodine 53	87.6 Xe xenon 54									
132.9 Cs caesium 55	137.3 Ba barium 56	137.3 La* lanthanum 57	137.3 Ce* cerium 58	137.3 Pr* praseodymium 59	137.3 Nd* neodymium 60	137.3 Pm* promethium 61	137.3 Sm* samarium 62	137.3 Eu* europium 63	137.3 Gd* gadolinium 64	137.3 Tb* terbium 65	137.3 Dy* dysprosium 66	137.3 Ho* holmium 67	137.3 Er* erbium 68	137.3 Tm* thulium 69	137.3 Yb* ytterbium 70	137.3 Lu* lutetium 71	126.9 Po polonium 84	126.9 At astatine 85	131.2 Rn radon 86								
[223] Fr francium 87	[226] Ra radium 88	[227] Ac* actinium 89	[261] Rf* rutherfordium 104	[262] Db* dubnium 105	[266] Sg* seaborgium 106	[264] Bh* bohrium 107	[277] Hs* hassium 108	[268] Mt* meitnerium 109	[271] Ds* darmstadtium 110	[272] Rg* roentgenium 111	Elements with atomic numbers 112–118 have been reported but not fully authenticated																
140.1 Ce cerium 58	140.9 Pr praseodymium 59	144.2 Nd neodymium 60	[145] Pm promethium 61	150.3 Sm samarium 62	151.9 Eu europium 63	157.2 Gd gadolinium 64	158.9 Tb terbium 65	162.5 Dy dysprosium 66	164.9 Ho holmium 67	167.2 Er erbium 68	168.9 Tm thulium 69	173 Yb ytterbium 70	174.9 Lu lutetium 71	268 Th thorium 90	268 Pa protactinium 91	268 U uranium 92	268 Np neptunium 93	268 Pu plutonium 94	268 Am americium 95	268 Cm curium 96	268 Bk berkelium 97	268 Cf californium 98	268 Es einsteinium 99	268 Fm fermium 100	268 Md mendelevium 101	268 No nobelium 102	268 Lr lawrencium 103

# CHECK IT!



- What are the names given to vertical columns and horizontal rows in the periodic table?
- Name the element that is in group 3 and period 3 of the periodic table.
- Why did Mendeleev leave spaces in his version of the periodic table?
- Look at the pairs of elements potassium and argon and tellurium and iodine. Use these examples to explain why we do not arrange the elements in order of their atomic mass.