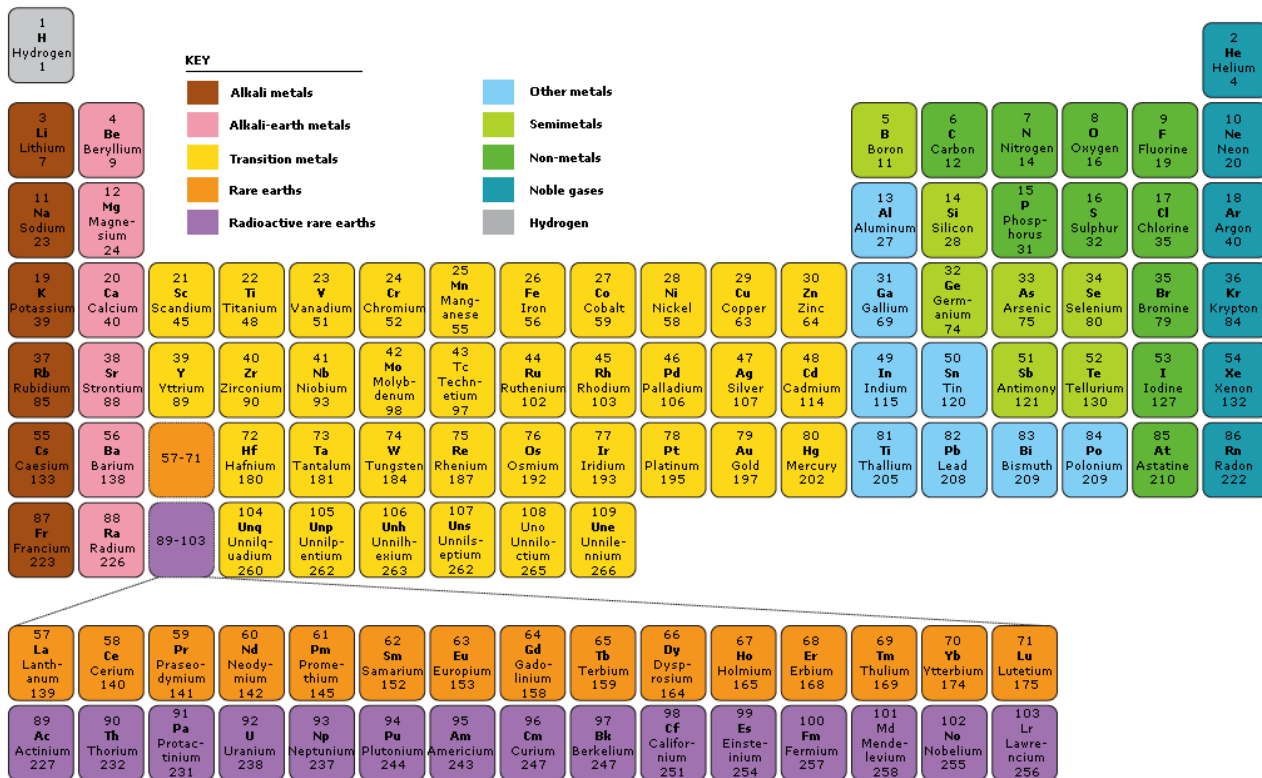


# Atomic Structure

Name .....

Symbol	Atomic Number	Mass Number	Protons	Neutrons	Electrons
H					
He					
B					
O					
F					
Li <sup>+</sup>					
Br <sup>-</sup>					
Mg <sup>2+</sup>					
S <sup>2-</sup>					
C		12			
C		14			
Cl		35			
Cl		37			

# Simple Periodic Table



57 La Lanthanum 139	58 Ce Cerium 140	59 Pr Praseodymium 141	60 Nd Neodymium 142	61 Pm Promethium 145	62 Sm Samarium 152	63 Eu Europium 153	64 Gd Gadolinium 158	65 Tb Terbium 159	66 Dy Dysprosium 164	67 Ho Holmium 165	68 Er Erbium 168	69 Tm Thulium 169	70 Yb Ytterbium 174	71 Lu Lutetium 175
89 Ac Actinium 227	90 Th Thorium 232	91 Pa Protactinium 231	92 U Uranium 238	93 Np Neptunium 237	94 Pu Plutonium 244	95 Am Americium 243	96 Cm Curium 247	97 Bk Berkelium 247	98 Cf Californium 251	99 Es Einsteinium 254	100 Fm Fermium 257	101 Md Mendelevium 258	102 No Nobelium 255	103 Lr Lawrencium 256

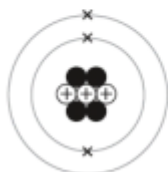
# Isotopes

H

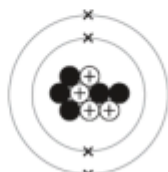
1 a Copy and complete the table using the information in the diagram below.

Atom	Number of protons	Number of neutrons	Number of electrons
A			
B			

atom A



atom B



b What is the difference between these two atoms?

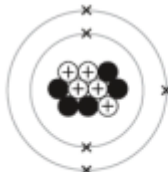
c How do you know that the diagram shows two different elements?

d Given that the symbol for atom A is Li, and the symbol for atom B is Be, write the symbols in the form  ${}^m_pX$ .

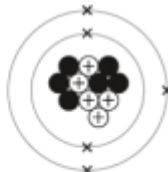
2 a Copy and complete the table using the information in the diagram below.

Atom	Number of protons	Number of neutrons	Number of electrons
C			
D			

atom C



atom D



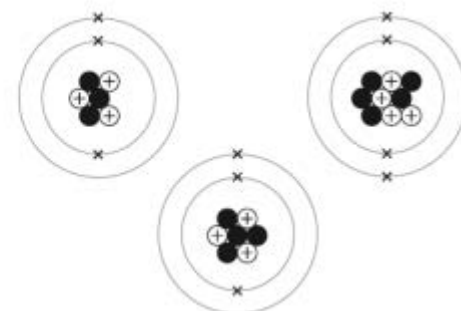
b What is different between these two atoms?

c How do you know that the diagram shows the same element?

d Given that the symbol for both atoms is B, write the symbols in the form  ${}^m_pX$ .

3 The diagram below shows several atoms.

a How many elements are shown? Write the chemical symbol for each of them.



b Write each atom in the form  ${}^m_pX$ .

c Which atom has more than one isotope shown?