

Name:

Valency and formulae

It is not possible to work out the formulae of compounds by guesswork. The concept of valency can help us to deduce the formulae of some compounds, which in turn helps us to write equations for reactions.

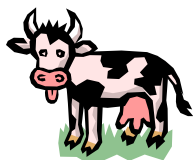
Complete the table using the one on page 181 of your text book.

Valency			
1	2	3	4
Na	Mg	aluminium	C
potassium	calcium	Fe	silicon
hydrogen	Cu	N	
F fluorine	Zn		
Cl	iron (II)		
bromine	oxygen		
I	S		

What do you notice about iron in the above table?

The formulae of most compounds can be worked out using the cross-over method.

Methane is compound of carbon and hydrogen. It can be found coming out of cows. Use the cross-over method to work out the formula of methane below.



The maximum valency an atom of an element can have is 4. There is a trend in the valencies of elements in the periodic table. Complete the table below.

Group	1		3	4		6	
Valency		2			3		1