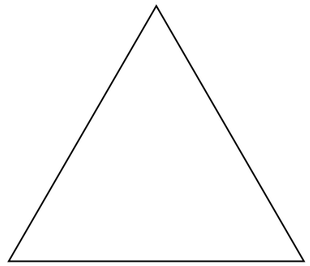
Higher

Number of moles = $\frac{\text{mass (g)}}{\text{Relative mass (Ar or Mr)}}$



Mass =

Concentration = $\frac{\text{mass x 1000}}{\text{Volume in cm}^3}$

Mass =

Volume =

What is the relative atomic mass

Na

Cl

H

O

C

S

Ca

N

Al

What is the relative formula mass?

CH_4

NH_3

$CaCl_2$

H_2SO_4

Al_2O_3

$Ca(OH)_2$

$Al_2(SO_4)_3$

What is the mass of 1 mole of …

MgO =

HCl =

10-1 Quantitative chemistry

Balance

$H_2 + Cl_2 \rightarrow HCl$

$Mg + O_2 \rightarrow MgO$

$CH_4 + O_2 \rightarrow CO_2 + H_2O$

$C_2H_6 + O_2 \rightarrow CO_2 + H_2O$

Calculate the number of moles in

a. 40g of calcium

b. 46g of sodium

c. 14g of silicon

d. 53g of palladium

e. 216g of silver

f. 46g of tungsten

Calculate the mass of the following

a. 0.5 moles of magnesium

b. 2 moles of iron

c. 4 moles of chlorine

d. 1 mole of xenon

e. 3 moles of zirconium

f. 0.25 moles of mercury

ow much carbon dioxide will be produced if 6 g of carbon is burnt in oxygen?

E.g. 1	C	+	O_2	→	CO_2
mass					
RFM					
moles					

2. What mass of calcium oxide can be produced from 550 g of calcium carbonate?

Q2.	$CaCO_3$	→	CaO	+	CO_2
mass					
RFM					
moles					