OCR (B) Chemistry A-Level

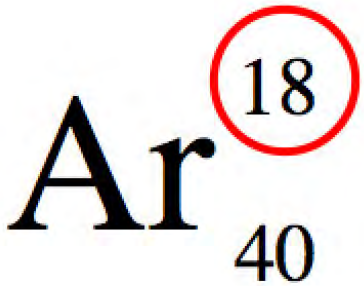
EL1 - Formulae, Equations and Amount of Substance

Flashcards

What is atomic number?

What is atomic number?

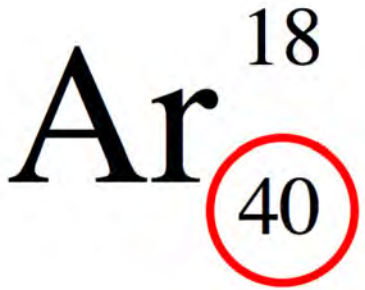
The number of protons present in the nucleus of an atom.



What is mass number?

What is mass number?

The total number of nucleons (protons and neutrons) present in the nucleus of an atom.



What is relative atomic mass?

What is relative atomic mass?

Relative atomic mass is the mean weighted mass of an atom of an element compared with 1/12th the mass of an atom of carbon-12.

What is relative molecular mass?

What is relative molecular mass?

Relative molecular mass is the mean weighted mass of a molecule compared with 1/12th the mass of an atom of carbon-12.

What is relative formula mass?

What is relative formula mass?

Relative atomic mass is the sum of the mean weighted masses of all atoms in the formula of a compound compared with 1/12th the mass of an atom of carbon-12.

What is relative isotopic mass?

What is relative isotopic mass?

Relative isotopic mass is the mass of an atom isotope compared with 1/12th the mass of an atom of carbon-12.

What is the mole?

What is the mole?

A mole = the amount of substance containing as many particles as there are atoms in 12g of carbon-12.

1 mole = 6.02×10^{23} items = Avogadro constant

What is an ionic equation?

What is an ionic equation?

An ionic equation is an equation in which only the non-spectating ions are shown.

How is percentage yield calculated?

How is percentage yield calculated?

$$percentage\ yield = \frac{actual\ yield}{expected\ yield} \times 100$$

How is percentage composition by mass calculated?

How is percentage composition by mass calculated?

$$percentage\ composition = \frac{mass\ of\ desired\ substance}{mass\ of\ mixture} \times 100$$

How is a standard solution prepared from a concentrated solution?

How is a standard solution prepared from a concentrated solution?

1. A certain volume of the concentrated solution is added to a volumetric flask in order to get the desired final volume.
2. Distilled water is added to the volumetric flask up to the line on its neck.