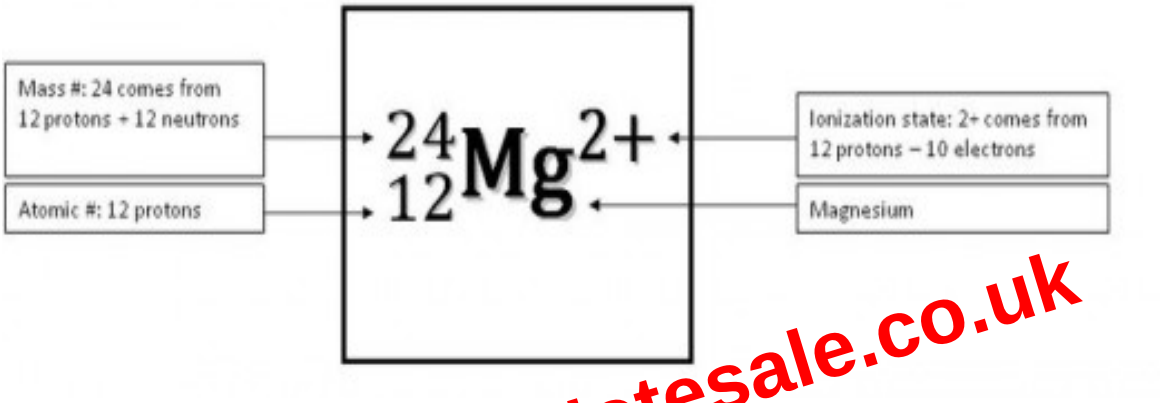
How to Write Elements Using Proper Chemical Notation

An atom is the smallest unit quantity of an element that is capable of existence.






In this example, the number 24 is used to show the mass number of the atom, this being the total number of neutrons and protons considered to be present in the nucleus. The number 12 is used to denote the atomic number, but this is generally left empty because the atomic symbol implies the atomic number. The atomic number 12 comes from 12 protons+12 neutrons. The number 2+ indicates the charge number, which may be positive or negative.

Definitions

**Isotope:** Each of two or more forms of the same element that contain equal number of protons but different numbers of neutrons in their nuclei. This results in a different atomic mass but the same chemical properties.

**Unstable Atom:** When an atom is unstable, it becomes radioactive. These are called radionuclides. An unstable nucleus will continually vibrate, contort and attempt to reach stability by: ejecting neutrons/protons, converting one to the other with the ejection of beta particle, the release of additional energy by photon/gamma ray.

**pH Scale:** potential for hydrogen. If the pH is below 7 it is acidic and if it is above 7 it is basic. A compound with a pH of 7 is neutral. One movement down the pH scale means the concentration has gone up by 10x (hydrogen ions).