A Brief History of Elements

Since ‘pre-historic times’ people have known about ELEMENTS, even if they didn’t know about “elements”. Substances such as GOLD, SILVER, SULFUR, and COPPER have been found and used in their ‘natural’ state.

Some elements such as IRON and MERCURY have been removed from the minerals that they are found in for thousands of years.

In the late 1600’s, scientists (alchemists) discovered what an ELEMNET is – a pure substance made up of only one type of atom. It took until the mid 1900’s before all (most) of the elements were discovered and categorized.

The desire to learn about ELEMENTS and CHEMISTRY was driven by the desire to turn common stuff like LEAD into valuable stuff (GOLD). Glassmakers discovered that you could change the look and the properties of glass by adding other chemicals to it.

In about 1660, a scientist by the name of Boyle proposed that scientists should use a system of study called the ‘SCIENTIFIC METHOD’ to study chemicals so that scientists could begin to categorize ‘stuff’ by PROPERTIES, and so that scientists could figure out what the parts were to each type of stuff they were studying. This was the real beginning of CHEMISTRY.

Boyle also showed that MATTER is made up of PARTICLES that were extremely small. He also connected particles with ELEMENTS, COMPOUNDS and CHEMICAL REACTIONS.

A French scientist (Lavoisier) proved that ‘burning’ was a chemical reaction that used Oxygen.

In 1860, two scientists (Robert BUNSEN and Gustav KIRCHHOFF) discovered that you could identify elements by the colours they gave off when they are heated. This is the study of SPECTROSCOPY.

In the late 1800’s scientists discovered that you could group elements by their properties – the Periodic Table of the Elements was created.

The discovery of electrons and radioactivity in the late 1800’s lead to the discovery of sub-atomic particles and to the knowledge of the behaviour of electrons in atoms.

So much more….