Foxford Learning Plan

KS4

Chemistry

Chemical Analysis

Key Vocabulary

Chromatogram	A graph that shows the result of separating the components of a mixture by chromatography.
Chromatography	A technique used to separate mixtures due to the distribution of the substances between the stationary and mobile phase. It can give information to help identify substances.
Flame emission spectroscopy	An instrumental method used to analyse metal ions in solutions.
Flame test	Qualitative test used to identify metal ions (cations). Carried out by inserting a nichrome wire loop with the unknown compound on into a flame and observing the colour.
Formulation	A mixture that has been designed as a useful product. They are made by mixing the components in carefully measured quantities to ensure that the product has the required properties
Impure substance	A substance made up of two or more elements or compounds that are not bonded together Chemically.
Litmus paper	Paper stained with litmus which can be used to indicate the acidity or alkalinity of a substance. Used in the test for chlorine.
Mobile Phase	Where the molecules can move during chromatography. It is always a liquid or gas
Precipitation	The creation of a solid from a solution
Pure substance	In chemistry a pure substance is a single element or compound, not mixed with any other substance.
RF value	The ratio of the distance moved by a compound to the distance moved by the solvent.
Stationary phase	Where the molecules are stationary during chromatography. It is a solid or a liquid supported on a solid.

Key Skills

Over the course of the topic, I will be able to: -

Practical – Be able to use different practical methods to asses the purity of substances.

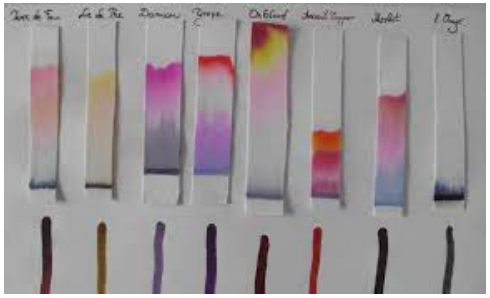
Practical – Be able to use different practical methods to asses what different substances are made from.

Be able to interpret data and graphs

Be able to explain using models and diagrams what is meant by purity.

Be able to describe trends from data.





I will Understand

How to work out whether a substance is pure or impure.

What a formulation is.

How different methods can be used to identify different the purity of different substances.

How to read and use chromatograms