Acids and Alkalis Year 7

End point 3 and 4 : Understand that mixing an acid and an alkali will produce a neutral solution

Acids and Bases Neutralize Each Other

- General formula for acid base reaction

Acid + Base → H_2O + Salt

HCl + NaOH → H_2O + NaCl

- Salt means any ionic compound formed from an acid/base reaction

NOT JUST NaCl !!

Sodium chloride is produced by the reaction between hydrochloric acid and sodium hydroxide.

hydrochloric acid + sodium hydroxide → sodium chloride + water

Which acid and which alkali would be needed to make the salt potassium chloride?

hydrochloric acid + potassium hydroxide → potassium chloride + water

Acids and Alkalis

Acids are a group of chemicals that contain a H^+ ion example's of which are vinegar, Hydrochloric acid and Sulphuric acid.

Alkalis are a group of chemicals that contain the OH^- ion and have a soapy feel. An example is Sodium Hydroxide. In solid form they are called bases and in solution alkalis.

An acid and alkali can neutralise each other to make a neutral substance.

End point 3 and 4: Be able to name simple salts

Review: Naming Salts

The first part of the salt come from the **metal**.
The second part of the salt comes from the **acid**.

Acid	Salt Formed
hydrochloric acid	- chloride
sulphuric acid	- sulphate
nitric acid	- nitrate

Magnesium + Hydrochloric Acid → Magnesium Chloride + Hydrogen

Indicators

End point 1 and 2: Identification of an acid or alkali using the pH scale

Indicators are chemicals that show us whether a substance is an acid or an alkali.

There are many examples including universal indicator, litmus paper and natural ones such as red cabbage.

End point 1: Identification of an acid or alkali using the pH scale