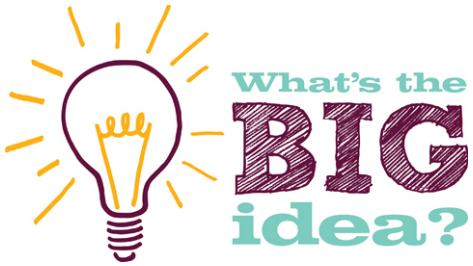
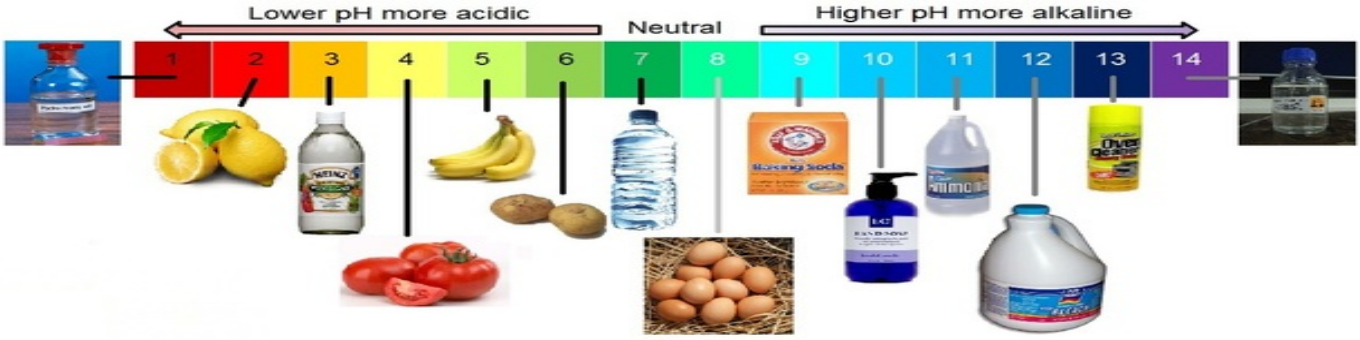
You need to know the content of this sheet. 100%

# 100% Sheet
# Acids & Alkalis

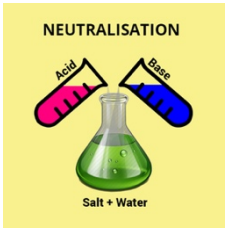

**Chemical reactions**
involve rearrangement of atoms in substances to form new substances.



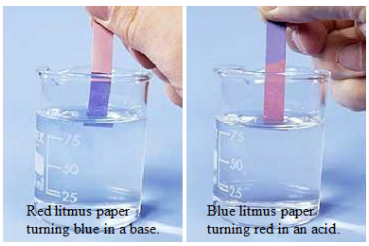

The key words that you need to learn are

**pH** – the scale of acidity or alkalinity from 0 – 14
**Indicators** – substances used to identify whether unknown solutions are acidic or alkaline
**Base** – a substance that neutralises an acid, those that dissolve in water are known as **alkalis**
**Concentration** – a measure of the number of particles in a certain volume

Acids and alkalis are at opposite ends of the pH scale. If you mix exact amounts of each they will neutralise each other and make neutral water (Neither an acid of alkali) of pH 7 and a salt.
You must learn this word equation for neutralisation
Acid + Alkali → Salt + Water




Universal indicator tells you the strength of an acid or alkali
Indicators such as Red Cabbage juice or litmus paper can only be used to say if it is an acid OR alkali, they do not tell you about the strength



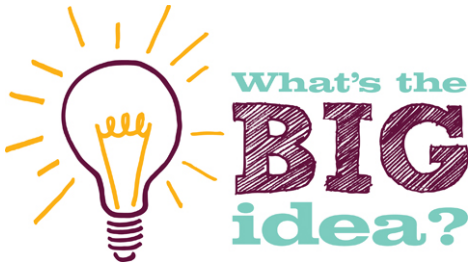

## Applications of Neutralisation

- **Insect Stings**
  **Bee stings are acidic and can be neutralised with baking soda (bicarbonate of soda).**
  **Wasp stings are alkaline and can be neutralised with vinegar.**

- **Indigestion: Our stomach carries around hydrochloric acid.**
  **Too much of this leads to indigestion.**
  **To cure indigestion, you can neutralise the excess acid with baking soda or specialised indigestion tablets.**

**You need to know the content of this sheet. 100%**

# 100% Sheet
# Acids & Alkalis

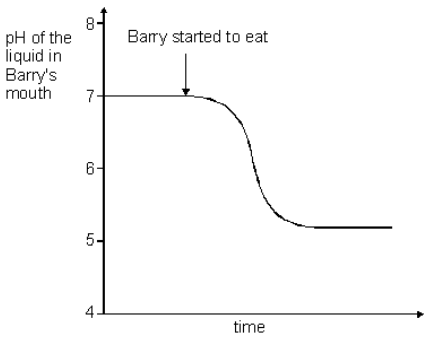




**Chemical reactions**
involve rearrangement of atoms in substances to form new substances.

From memory, draw a pH scale from 1-14, label it with strong acid, weak acid, string alkali, weak alkali and neutral. What are the colours at pH 1, 7 and 14?

Describe how the indigestion remedy, Gaviscon works by using your knowledge of neutralisation


The graph shows the pH of Barry's mouth




Describe what happens to the pH in his mouth as he eats.

Why might this be a problem for Barry?

What type of food could he have been eating?

What will happen to the pH if he brushes his teeth?