The reactivity series is something that we must memorise. It is essentially a league table for metals, in which the most reactive metals are at the top, with the least reactive at the bottom. We can use a mnemonic to help us to remember the order of the series: Penis Sucking Can Make A Condom Di**ZZ**olve Inside Tight Little Holes Called Snatch Genitalia Pussies.

A more reactive metal will displace a less reactive metal in a chemical reaction.

Lets look at some reactions:

When metals react with water, a metal hydroxide and hydrogen will be created.

When metals react with acids, a salt and hydrogen will be created.

When a metal oxide reacts with an acid, a salt and water will be created.

When an acid reacts with a carbonate, a salt, water and carbon dioxide will be created.

We now need to talk about electrolysis. Electrolysis is the splitting up of an ionic substance using electricity. Electrolysis requires two electrodes to be placed into an electrolyte. The electrodes are conducting rods, one is connected to a positive terminal, and the other to a negative terminal. During the process of electrolysis, the negative ions (anions) will be attracted to the positive electrode (Cathode), the opposite is also true that the positive ions (cations) will be attracted to the negative electrode (Anode). When an ion reaches an electrode, the charges are lost, and they become elements. During the electrolysis of aqueous solutions, gases may be given off. If the metal is more reactive than hydrogen in the reactivity series, then hydrogen will be produced at the anode.