Reactivity Series

Displacement Reactions

Year 7

Week 5

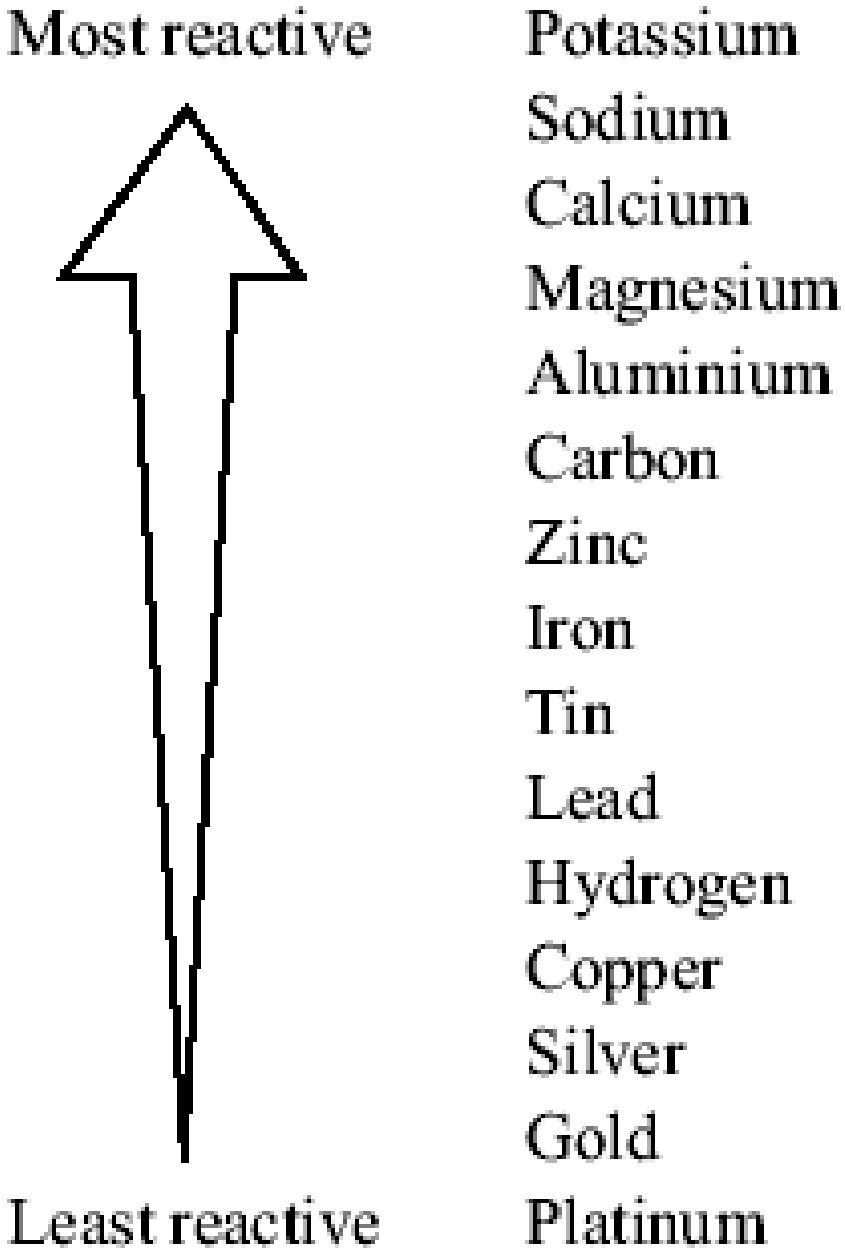
Displacement Reactions

- **WALT: demonstrate that a more reactive metal will displace a less reactive one**

- I must be able to carry out a practical to demonstrate displacement
- I should be able to predict the products formed
- I could answer some more advance questions on this correctly

Last lesson we learnt that if a metal reacts with an acid…

1. …….. gas is produced
2. A …… is also formed
3. The relative vigorousness of the reactions can tell us the ……..


Most reactive
Potassium
Sodium
Calcium
Magnesium
Aluminium
Carbon
Zinc
Iron
Tin
Lead
Hydrogen
Copper
Silver
Gold
Least reactive
Platinum

A more reactive metal will displace a less reactive metal from its compound

- For example if lead is added to copper sulphate, you will get lead sulphate and copper:

- Lead + copper sulphate >>> lead sulphate + copper

Turn to page 232

- You are going to add some zinc to copper sulphate solution.

- When you are finished:

1. Write a method
2. Write the word equation for what happened
3. In your conclusion write down what kind or reaction this was.

Watch the demo of what happens when aluminium is burnt with iron oxide

After the experiment

1. Look at the table on p.233. Write down what the table shows us about the reactivity series of metals and why it proves this.
2. Answer questions 1 and 2 on page 237

PLENARY

You have four metals: A, B, C and D

B reduces C oxide when they are heated

There is no reaction when B is heated with D oxide

There is no reaction when A is heated with B oxide

Put the metals in order of reactivity with the most reactive first

Answer = D, B, C, A