Name:

Reactions of metals and water

Your teacher is going to demonstrate some experiments to you. You do not need to interpret the experiments, but you need to write down what you see happen.

Reaction of lithium and water
A small piece of lithium is dropped into a large dish of water.
Does the lithium move? If so, in what way does it move?

Is there a flame? If so, what colour is the flame?

Is the reaction fast or slow?

Reaction of sodium and water
A small piece of sodium is dropped into a large dish of water.
Does the sodium move? If so, in what way does it move?

Is there a flame? If so, what colour is the flame?

Is the reaction faster or slower than the reaction of lithium?

Reaction of potassium and water
A small piece of potassium is dropped into a large dish of water.
Does the potassium move? If so, in what way does it move?

Is there a flame? If so, what colour is the flame?

Is the reaction faster or slower than the reaction of sodium?

Is the water alkaline, neutral or acidic at the end of these reactions?

Name:

Reaction of magnesium and steam

A piece of magnesium is coiled inside a tube containing some wet cotton wool. It is heated to produce steam.

What do you notice happening inside the tube?

What do you notice at the end of the tube?

What do the contents of the tube look like after the reaction has finished?

Reaction of magnesium and water

You are going to set up the reaction between magnesium and water. You must keep your goggles on for this part of the experiment!

Label a large beaker with your name.

Place a piece of magnesium ribbon in a large beaker of water.

Put a few drops of indicator into the water and then cover the ribbon with an upside-down funnel.

Over the end of the funnel put an upside-down test tube which needs to be full of water. This will collect any gas which is produced.

Draw a diagram of your apparatus.

We will come back to the experiment next week.