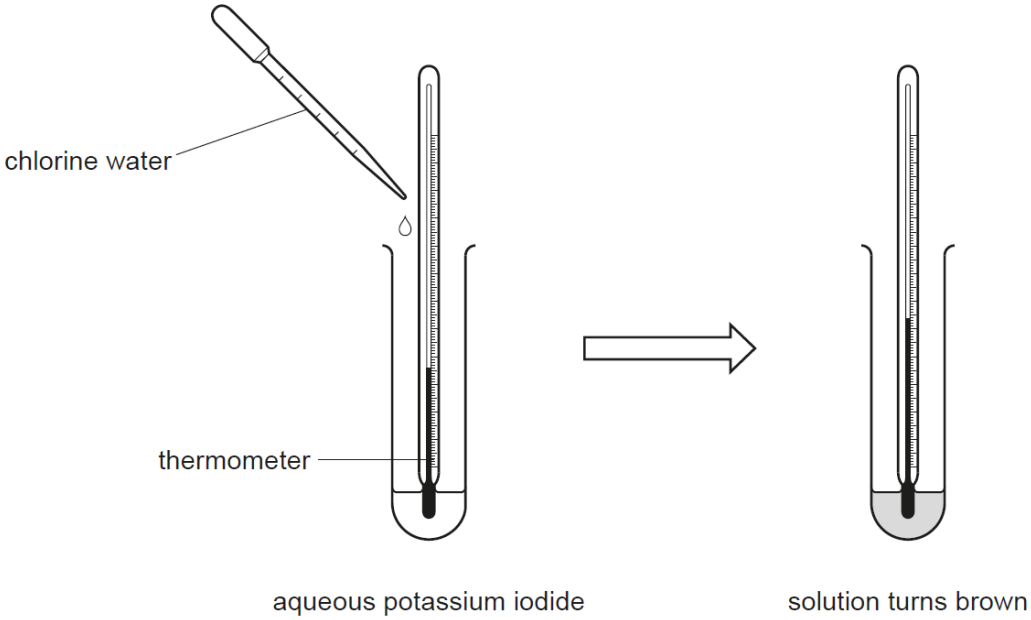
GCSE Chemistry B (Twenty First Century Science)

J258/02 Depth in chemistry (Foundation Tier)

Question Set 15

1 Eve does an experiment to find out if chlorine is more reactive than iodine.

She adds a few drops of chlorine water to aqueous potassium iodide.



The solution turns brown and there is an increase in temperature.

She writes this equation for the reaction.

$$Cl_2\,(aq) \quad + \quad 2KI(.....) \quad \rightarrow \quad I_2\,(aq) \quad + \quad 2KCl\,(.....)$$

(a) Add the missing **state symbols** to the equation. **[1]**

(b) Write a **word** equation for this reaction. **[1]**

(c) Explain why the solution turns brown. **[1]**

(d) Complete the sentences about this reaction by putting a ring around **one** word in each line.

The temperature increase shows that the reaction is **endothermic / exothermic**.

The reaction happens because chlorine is **more / less** reactive than iodine.

This type of reaction is called **displacement / precipitation**.

The reaction makes iodine and a **metal / salt**.

[3]

Total Marks for Question Set 15: 6

Resource Materials

The Periodic Table of the Elements