

1 When heated, magnesium reacts with steam to make magnesium oxide and hydrogen gas.

Fig. 1.1 shows the apparatus a teacher uses to react clean magnesium ribbon with steam and collect the hydrogen gas produced.

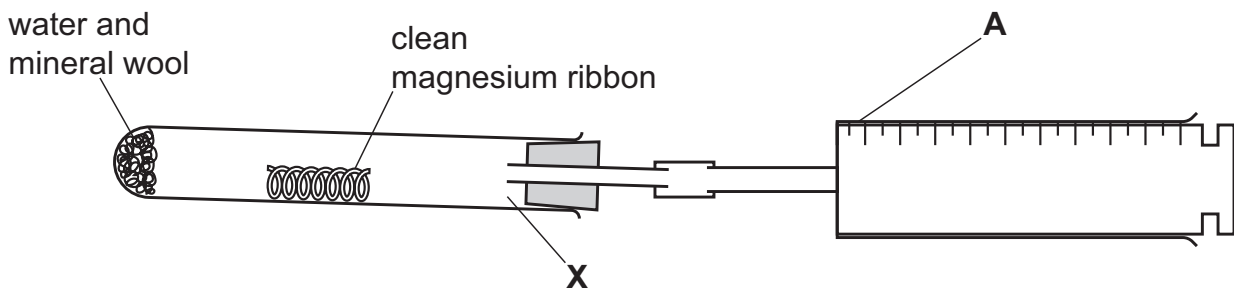


Fig. 1.1

(a) Name the item of apparatus labelled **A** in Fig. 1.1.

..... [1]

(b) Suggest how the magnesium ribbon should be cleaned before use.

.....
..... [1]

(c) State the purpose of the mineral wool.

.....
..... [1]

(d) Draw **two** arrows on Fig. 1.1 to show the **two** places where the apparatus should be heated. [2]

(e) During the reaction a colourless liquid collects at the point marked **X** on Fig. 1.1.

Suggest the identity of liquid **X**.

..... [1]

(f) The gas collected in **A** is **not pure** hydrogen.

Suggest why the gas collected is **not pure**.

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..... [1]