

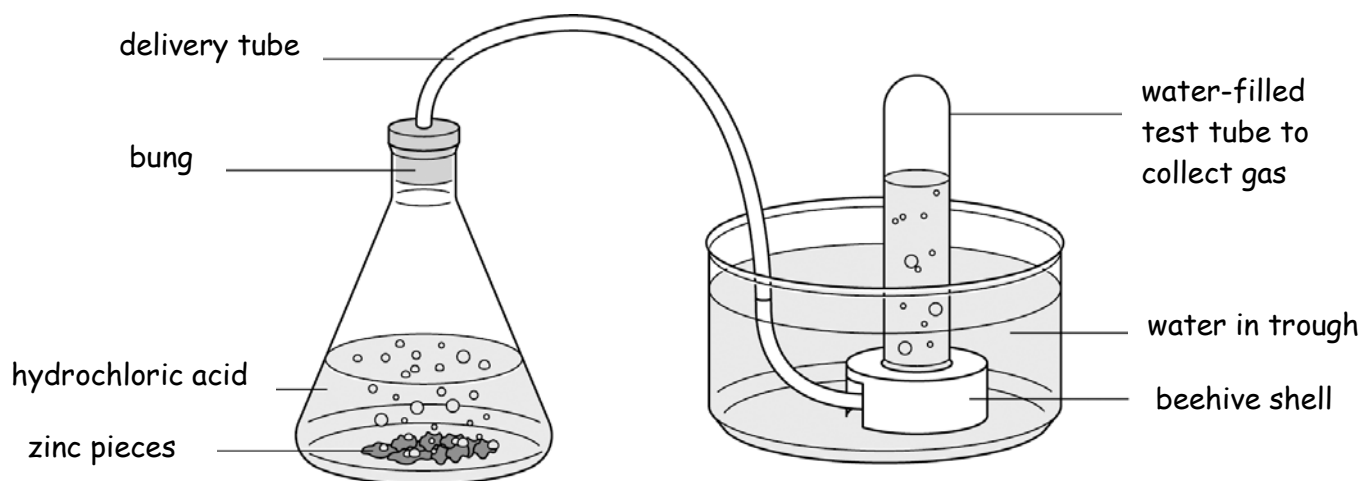
Name \_\_\_\_\_ Class \_\_\_\_\_

- 1 Metals have different uses. For each metal give two reasons why the metal is suitable for its use.

| Metal  | Use                     | Why this metal is used                |
|--------|-------------------------|---------------------------------------|
| copper | house electrical wiring | i _____<br>_____<br>ii _____<br>_____ |
| gold   | making jewellery        | i _____<br>_____<br>ii _____<br>_____ |

[4 marks]

- 2 Ann put a piece of zinc metal into some dilute hydrochloric acid. She collected the gas that was given off using the apparatus shown below.



- a What can Ann see that tells her that a reaction is taking place?

\_\_\_\_\_

[1 mark]

- b Ann touches the flask with the acid and zinc in it.

How could this help her to decide if a reaction was taking place?

\_\_\_\_\_

[1 mark]

- c Ann thought the gas was hydrogen. How would she test the gas to see if it was hydrogen?

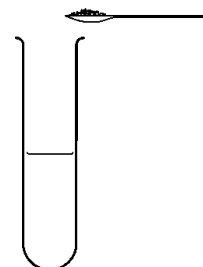
\_\_\_\_\_  
\_\_\_\_\_

[2 marks]

- 3 Sam put some black copper oxide powder into sulphuric acid.

The copper oxide neutralises the sulphuric acid.

The when the reaction has finished, the liquid in the test tube is blue.



- a What can Sam see to tell him that a reaction has happened?

\_\_\_\_\_

[1 mark]

- b i What could Sam use to check that the acid had been neutralised at the end of the reaction?

\_\_\_\_\_

[1 mark]

ii What colour would this be if the liquid was neutral?

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[1 mark]

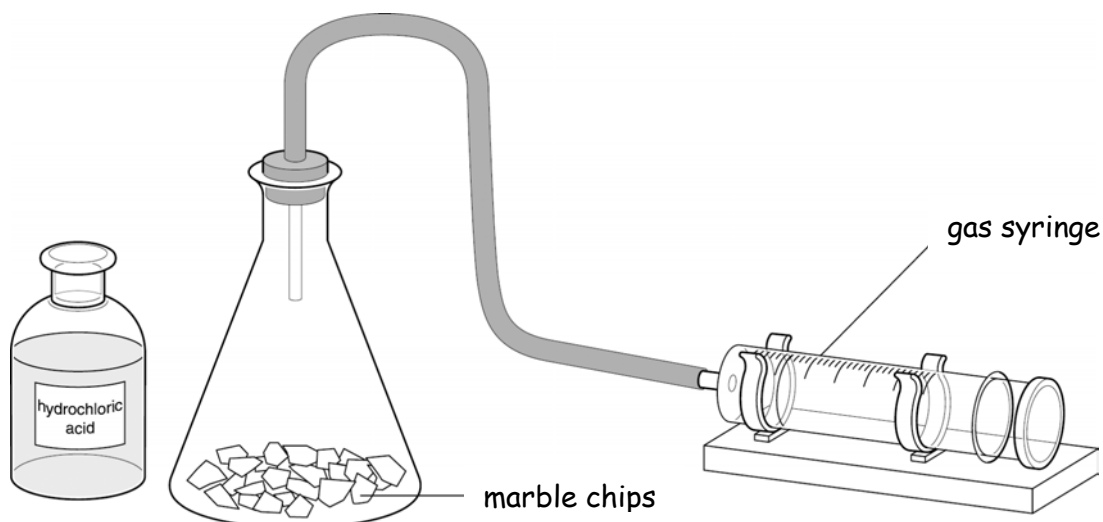
c There was some black powder left in the test tube at the end of the experiment.

How could Sam separate the powder from the liquid?

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[1 mark]

4 Vijay added some dilute hydrochloric acid to some calcium carbonate in a conical flask.

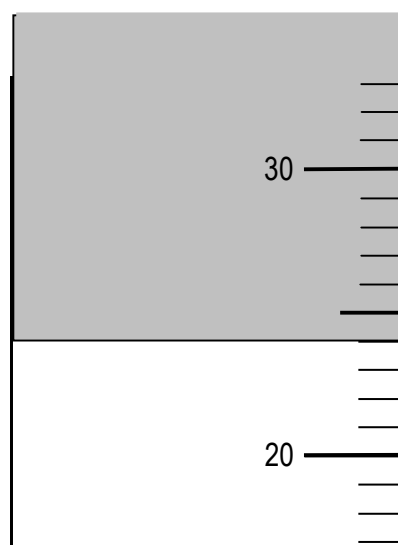


He used the gas syringe to measure the amount of gas given off. The diagram shows his result

a How much gas did he collect?

\_\_\_\_\_  $\text{cm}^3$

[1 mark]



- b How could Vijay test the gas to see if it was carbon dioxide?

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*[1 mark]*

- c Vijay wants to test different samples of limestone, to see which produce the most carbon dioxide when they are put into a large amount of acid. Write down one thing he will have to keep the same to make his test fair.

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*[1 mark]*