

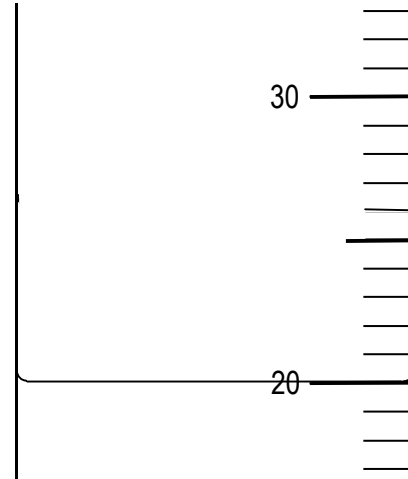
Name _____ Class _____

1 Sanjay used a measuring cylinder to measure out some sulphuric acid.

a How much acid did he use?

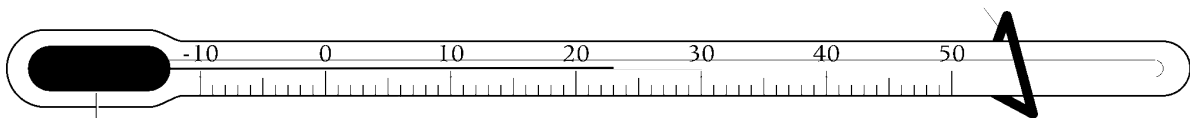
Volume of acid = _____ cm^3

[1 mark]



Sanjay added a 2 cm strip of magnesium to the sulphuric acid. He measured the temperature when the reaction was over.

b What was the temperature at the end of the experiment?



Temperature = _____ $^{\circ}\text{C}$

[1 mark]

When the reaction was over there was no magnesium left in the tube.

c What would Sanjay have **seen** that would tell him that a reaction was taking place?

[1 mark]

Sanjay. wants to find out if he gets the same temperature rise with other kinds of acid.

d Write down two things that Sanjay must keep the same to make sure his test is fair.

i _____

ii _____

[2 marks]

2 Draw lines to match the correct description with the name of the metal

a A metal that is used in jewellery because it is shiny and unreactive. copper

b A metal that rusts if it is left out in damp air. tin

c A metal that can be used as a coating on cans because it is less reactive than iron. iron

d A metal that is soft and can be cut with a knife, and reacts easily with air and water. silver

e A metal that is used for coins and pipes because it hardly reacts with air or water. sodium

[5 marks]

- 3 When archaeologists dig up old remains, they sometimes find objects made of metal.

Objects made of **copper** are often black when they are found.
Gold objects are still shiny and in very good condition.
Objects made of **iron** are usually corroded and are mainly rust.
They never find any objects made of **magnesium**.

- a Which of the four metals is the least reactive?

[1 mark]

- b Which statement is true? Tick the correct box.

Gold is more reactive than copper.

Iron is less reactive than copper.

Iron is more reactive than gold.

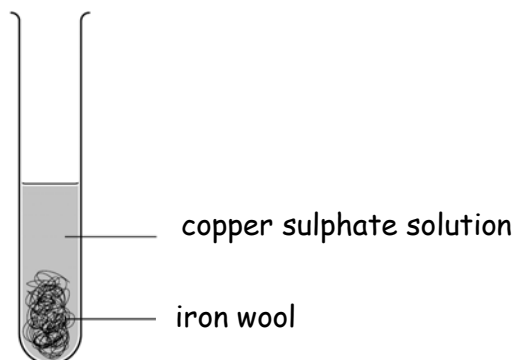
Copper is less reactive than gold.

[1 mark]

- c Iron objects coated with tar do not rust very much. Why is this?

[1 mark]

- 4 Tanya carried out an experiment in which she placed some iron wool into blue copper sulphate solution.



In her book she wrote

I predict that the iron will react with the copper sulphate because iron is higher than copper in the Reactivity Series. I think that I will see some colour changes.

Describe the two colour changes Tanya would see that would show that her prediction was correct.

- i The grey iron will _____
- ii The blue colour of the solution will _____

[2 marks]