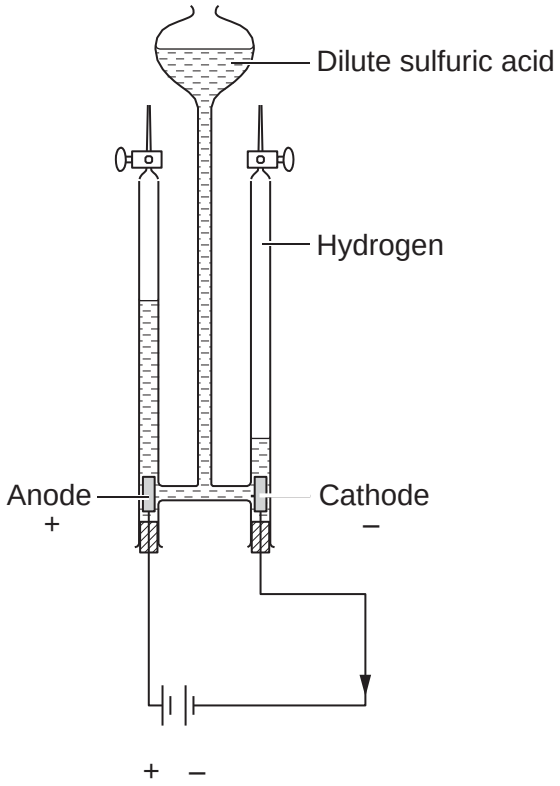
GCSE Chemistry A (Gateway Science)

J248/01 Chemistry A C1-C3 and C7 (Foundation Tier)

Question Set 18

1 A student electrolyses dilute sulfuric acid.



Hydrogen gas is made at the cathode.

The student measures the volume of hydrogen made at the cathode every 2 minutes for 10 minutes.

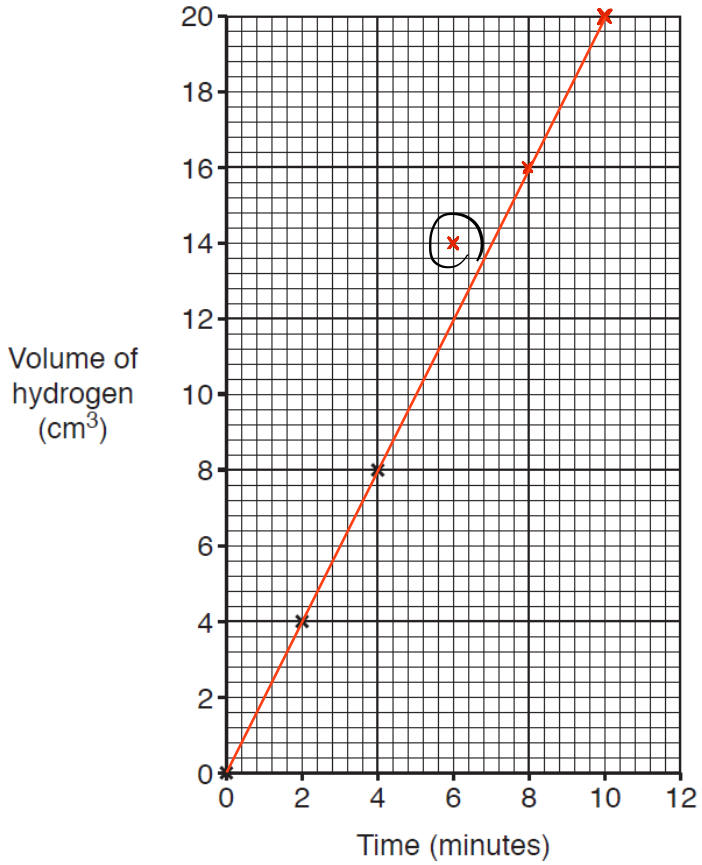
Look at his results.

Time (minutes)	**Volume of hydrogen (cm^3)**
0	0.0
2	4.0
4	8.0
6	14.0
8	16.0
10	20.0

(a) Plot the results on the grid. The first 3 points have been done for you.

Draw a line of best fit.

[2]



(b) One of the results is **anomalous**.

Circle the anomalous result on the graph. **[1]**

(c) Sulfuric acid contains these particles.

H^+ OH^- H_2O SO_4^{2-}

Which particles are attracted to the **anode**?

[1]

(d) The student also investigates the electrolysis of some molten (liquid) salts.

Complete the table.

Molten salt	Formula	Product at cathode	Product at anode
Potassium chloride	KCl	Potassium	Chlorine
Lead iodide	PbI_2	Lead	Iodine

[2]

Total Marks for Question Set 18: 6