

2. Diagram 2 shows the electrolysis of water.

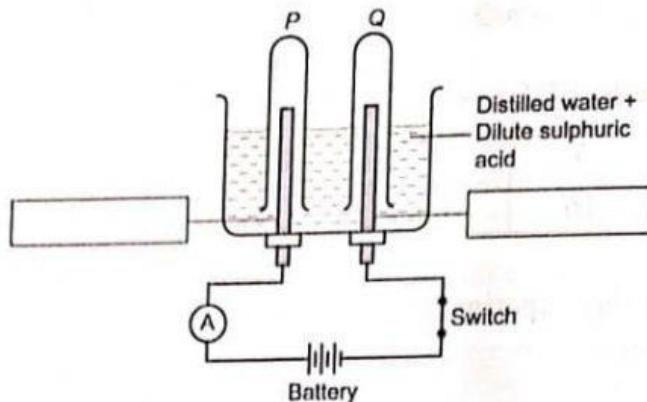


Diagram 2

(a) On Diagram 2, label the electrodes using the following words.

Anode Cathode Electrolyte

[2 marks]

(b) On Diagram 2, draw the water level in the test tubes *P* and *Q* to show the volume of gas collected. [2 marks]

(c) State the ratio of gas collected in test tubes *P* and *Q*.

(d) Draw line to show the test for the gas collected. [1 mark]

Gas in test tube *P*

• Lighted wooden splint explodes with a 'pop' sound

Gas in test tube *Q*

• Turns cobalt chloride paper pink

• Turns lime water chalky

• Lighted wooden splint burns more brightly

(e) Name gases *P* and *Q*. [2 marks]

(i) *P* : _____

(ii) *Q* : _____

[2 marks]