

C2 Electrolysis Quiz

1. Write a half equation for the formation of chlorine gas from chloride ions.
2. Write a half equation for the formation of hydrogen gas from hydrogen ions.
3. Write a half equation for the formation of oxygen gas from oxide ions.
4. Write a half equation for the formation of aluminium from aluminium ions.
5. Why is the formation of chlorine from chloride ions classed as oxidation?
6. Why is the formation of sodium from sodium ions classed as reduction?
7. What is an electrolyte?
8. What is electrolysis?
9. Why do chloride ions move to the anode?
10. Why do hydrogen ions move to the cathode?
11. How can you plate a spoon in silver?
12. During the electrolysis of brine hydrogen is produced at the cathode instead of sodium. Why?

13. During electrolysis, which particles carry the electric current through the solution and which particles carry the current through the external wire?

14. During the electrolysis of brine, what are the three products? What are they used for?

15. Why does electrolysis of solid KBr not work?

16. Describe the electrolysis of brine.

17. Describe the electrolysis of molten aluminium oxide.

18. Describe how you would produce pure copper from a lump of impure copper.