

ELECTROLYSIS Roll it Recap

Instructions; Roll the dice to choose a column. Roll again to decide the row. Answer on a post-it note and stick it on top.

1. Explain what happens at the anode and the cathode when using copper electrodes during the electrolysis of copper sulphate (4)	2.Explain why solid LiCl does not conduct electricity but molten LiCl does? (2)	3. In aqueous solutions, as well as the ions from the ionic compound what other ions are present?(2)	4. A dilute solution of copper (II) chloride is electrolysed, what gas is produced at the anode (2)	5.What process takes place when a substance gains electrons? (1)	6.What is the name of the positive electrode (1)
7.Define Electrolysis (2)	8.What can inert electrodes be made from and why? (2)	 Explain why the electrolysis of acidified water produces twice as much hydrogen as oxygen?(3) 	10. What is the test for detecting chlorine gas? (1)	11. Explain the term electrolyte (1)	12. Write the half equation for the reaction at the negative electrode during the electrolysis of molten lead bromide (2)
13.Write the half equation for the reaction at the positive electrode during the electrolysis of copper sulphate using copper electrode (2)	14.What process takes place when a substance loses electrons? (1)	15. Explain the formation of the products during the electrolysis of molten zinc chloride (3)	16.What is the name of the negative electrode? (1)	17. When a solution of Na ₂ SO ₄ is electrolysed, the product formed at the electrodes are hydrogen and oxygen. Explain the formation of the products at the electrodes (4)	18.Describe what happens to the colour of the solution when copper chloride is electrolysed?(2)
19. Using the reactivity series to predict the following products found at the anode and cathode during the electrolysis of dilute sulphuric acid (acidified water). (3)	20. Whether you get the metal or hydrogen during electrolysis depends on the position of the metal in the reactivity series: the metal will be produced if? (2)	21. When silver nitrate is electrolysed, will the metal be produced at the positive or negative electrode? (1)	22. Which ions are oxidised during electrolysis?(1)	23. Predict the product formed at each electrode during the electrolysis of molten magnesium bromide (3)	24. Whether you get the metal or hydrogen during electrolysis depends on the position of the metal in the reactivity series: hydrogen will be produced if?(2)
25. Predict the following products found at the anode and cathode. State if reduction or oxidation has occurred in Molten Zinc chloride (ZnCl ₂) (4)	26. How do you wash and dry the electrodes during the electrolysis of copper sulphate? Why do this? (3)	27. Explain what happens at the anode and the cathode when using inert electrodes during the electrolysis of copper sulphate? (4)	28. Explain how hydrogen ions change into hydrogen molecules at the negative electrode? (2)	29.Explain why the electrolysis of sodium chloride solution produces hydrogen and chlorine at the electrodes? (3)	30. Give the name and formula of the compound left in the solution at the end of the electrolysis of sodium chloride? (2)

	31. The gas formed at the negative electrode during the electrolysis of sulphuric acid gives a squeaky pop with a lighted splint. Identify this gas and Explain how the gas is formed from the ions in the solution (3)	32. Molten zinc bromide, containing Zn ²⁺ and Br ⁻ ions, is electrolysed with graphite electrodes. Give the name of the product formed at the negative electrode and positive electrode. (2)	33. Predict the following products found at the anode and cathode. State if reduction or oxidation has occurred in Molten Potassium chloride (KCI). (4)	34. Copper chloride solution is electrolysed using graphite electrodes. Give the name of the product formed at the negative electrode (2)	35. The gas formed at the positive electrode during the electrolysis of sulphuric acid relights a glowing splint. Identify this gas? (1)	36. State how the electrolyte would need to be changed to produce sodium at the negative electrode during the electrolysis of sodium chloride? (2)
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