KEC

K Education Centre

GCSE Chemistry SC 10-Edexcel

Extracting Metals, Equilibria

Assignment Questions

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SC 10: Extracting Metals, Equilibria

Q1 : What is displacement reaction ? Give examples.

Q2: Magnesium reacts with nitric acid (HNO₃) solution.

- a) Write down the full balance equations along with state symbols.
- b) Write ionic equations for this reaction.
- c) Explain why it is a redox reaction.

Q3: What is an ore ? Give advantages and disadvantages of bioleaching and phytoextraction.

Q4: Describe the method for obtaining Sodium from sodium chloride.

Q5 : Explain the procedure of obtaining Aluminium from its ore. Include diagram and ionic equations in your answer.

Q6: Tin is extracted from its Ore SnO_2 with heating with powdered carbon. Carbon monoxide also forms in the reaction.

- a) Write a balance equation for this reaction.
- b) Explain in terms of gain or loss of oxygen, whether tin oxide is oxidised or reduced.

Q7 : What is rusting ? Explain why Aluminium do not corroded completely being a reactive metal.

Q8: What are the stages of life cycle assessment of a product?

Q9: What is dynamic equilibrium?

Q10: Explain how equilibrium position can be altered by change in various conditions.

Q11: The formation of ammonia is exothermic. Describe three ways to increase the amount of Ammonia at equilibrium.

Q12: Formation of methanol is an exothermic reaction in forward direction.

$CO(g) + 2H_2(g) \rightleftharpoons CH_3OH(g)$

Explain the effect on position of equilibrium of increasing:

a) Temperature b) Pressure c) Carbon monoxide concentration.