

Galvanic Cells Quiz PDF

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In a galvanic cell, where does oxidation occur?

- Cathode
- Anode
- Salt bridge
- Electrolyte

What is measured in volts in a galvanic cell?

- Current
- Resistance
- Cell potential
- Charge

What is the standard electrode potential used for?

- To measure current
- To calculate cell potential
- To determine temperature
- To store energy

What is the role of the cathode in a galvanic cell?

- Site of oxidation
- Site of reduction
- Maintains electrical neutrality
- Provides a pathway for electron flow

Describe a real-world application of galvanic cells and explain how they function within that application.

Which applications utilize galvanic cells?

- Electroplating
- Corrosion prevention
- Heating systems
- Battery technology
- Water purification

Describe the role of the salt bridge in a galvanic cell and why it is essential for the cell's operation.

What are the differences between primary and secondary galvanic cells? Provide examples of each.

Discuss the importance of standard electrode potentials in determining the cell potential of a galvanic cell.

How does the flow of electrons differ from the flow of ions in a galvanic cell?

Which component of a galvanic cell maintains electrical neutrality?

- Electrodes
- Electrolyte
- Salt bridge
- External circuit

What is the primary function of a galvanic cell?

- Convert electrical energy into chemical energy
- Convert chemical energy into electrical energy
- Store thermal energy
- Measure temperature

Explain how a galvanic cell converts chemical energy into electrical energy.

Which metal is commonly used as an electrode in galvanic cells?

- Iron
- Gold
- Copper
- Mercury

Which of the following statements about the salt bridge are true?

- It conducts electrons
- It prevents charge buildup
- It allows ion flow
- It is an insulator
- It maintains electrical neutrality

Which of the following is a primary cell?

- Lead-acid battery
- Nickel-cadmium battery
- Alkaline battery
- Lithium-ion battery

Which processes occur in a galvanic cell?

- Oxidation
- Reduction
- Combustions
- Neutralization
- Electron flow

Which of the following are components of a galvanic cell?

- Anode
- Cathode
- Electrolyte
- Transformer
- Salt bridge

In a galvanic cell, what roles do the electrodes play?

- Anode releases electrons
- Cathode releases electrons
- Anode gains electrons
- Cathode gains electrons
- Both electrodes are neutral

What are the characteristics of secondary cells?

- Rechargeable
- Single-use
- Used in smartphones
- Non-rechargeable
- Used in remote controls