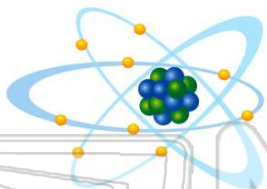




Name _____ Class _____ Date _____

1 When a **redox reaction** occurs, there must be a **transfer** of

- A electrons
- B neutrons
- C protons
- D ions



2 What is the **oxidation number** of **carbon** in NaHCO_3 ?

- A -2
- B +2
- C -4
- D +4



3 A **redox reaction** is set up so that both half reactions take place in separate beakers that are connected by a salt bridge and an external conductor. **A path for the transfer of ions** is provided by the

- A anode
- B cathode

4 An **oxidation half-reaction** always **involves** the

- A gain of electrons and a decrease in the oxidation number
- B gain of electrons and an increase in the oxidation number
- C loss of electrons and a decrease in the oxidation number
- D loss of electrons and an increase in the oxidation number



PREVIEW

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7 Using smallest whole numbers, the **coefficient of $\text{Cl}(\text{aq})$** will be

- A 1
- B 2
- C 6
- D 7

- A 0.45 V
- B 1.92 V
- C 2.37 V
- D 2.82 V

9 A metal object is to be **electroplated** with silver. **Which set of electrodes** should be used?

- A a silver anode and a metal object as the cathode
- B a platinum anode and a metal object as the cathode
- C a silver cathode and a metal object as the anode
- D a platinum cathode and a metal object as the anode



10 In an **electrolytic cell**, the **anode** is **always** the

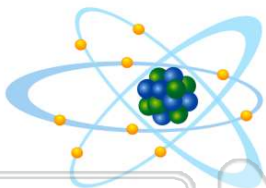
- A negative electrode, where reduction occurs
- B negative electrode, where oxidation occurs
- C positive electrode, where reduction occurs
- D positive electrode, where oxidation occurs



ANSWER KEY

When a **redox reaction** occurs, there must be a **transfer** of

- A electrons
- B neutrons
- C protons
- D ions



(a)

What is the **oxidation number** of **carbon** in NaHCO_3 ?

- A -2
- B +2
- C -4
- D +4



(d)

A **redox reaction** is set up so that both half reactions take place in separate beakers that are connected by a salt bridge and an external conductor. A **path for the transfer of ions** is provided by the

- A anode
- B cathode
- C salt bridge
- D

(c)

An **oxidation half-reaction** always **involves** the

- A gain of electrons and a decrease in the oxidation number
- B gain of electrons and an increase in the oxidation number
- C loss of electrons and a decrease in the oxidation number
- D loss of electrons and an increase in

(d)



PREVIEW

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- A 1
- B 2
- C 6
- D 7

- A 0.18 V
- B 1.92 V
- C 2.37 V
- D 2.82 V

A metal object is to be **electroplated** with silver. Which set of **electrodes** should be used?

- A a silver anode and a metal object as the cathode
- B a platinum anode and a metal object as the cathode
- C a silver cathode and a metal object as the anode
- D a platinum cathode and a metal object as the anode



(a)

In an **electrolytic cell**, the **anode** is **always** the

- A negative electrode, where reduction occurs
- B negative electrode, where oxidation occurs
- C positive electrode, where reduction occurs
- D positive electrode, where oxidation occurs

(d)