

IGCSE Chemistry

Name: _____ Score: _____

1. Electrolysis is the breaking down of a compound using:
 - ☐ an electric current
 - ☐ heat only
 - ☐ light
 - ☐ a catalyst
2. In OIL RIG, oxidation is:
 - ☐ loss of electrons
 - ☐ gain of electrons
 - ☐ loss of protons
 - ☐ gain of neutrons
3. Electrolysing copper sulfate with copper electrodes is used to:
 - ☐ purify copper
 - ☐ make oxygen
 - ☐ electroplate silver
 - ☐ produce sodium
4. The only product of a hydrogen–oxygen fuel cell is:
 - ☐ water
 - ☐ carbon dioxide
 - ☐ methane
 - ☐ oxygen
5. Positive ions move towards the:
 - ☐ cathode (negative electrode)
 - ☐ anode (positive electrode)
 - ☐ electrolyte
 - ☐ power supply
6. Why is electroplating used? (Select all that apply.)
 - ☐ to improve appearance
 - ☐ to protect from corrosion

☐ to make a cheap object look expensive

☐ to melt the object

Tick every correct option.

7. Negative ions move towards the positive anode.

☐ True ☐ False

8. Reduction is the gain of electrons.

☐ True ☐ False

9. In electroplating, the plating metal forms the anode.

☐ True ☐ False

10. A drawback of fuel cells is that hydrogen is difficult to store and transport.

☐ True ☐ False

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1. **an electric current**

An electric current decomposes the electrolyte.

2. **loss of electrons**

Oxidation Is Loss of electrons.

3. **purify copper**

The impure copper anode dissolves; pure copper deposits on the cathode.

4. **water**

Hydrogen + oxygen $\rightarrow$ water.

5. **cathode (negative electrode)**

Opposite charges attract: positive ions $\rightarrow$ negative cathode.

6. **to improve appearance; to protect from corrosion; to make a cheap object look expensive**

Electroplating coats, not melts.

7. **True**

Anions are attracted to the anode.

8. **True**

Reduction Is Gain (RIG).

9. **True**

The anode supplies the metal that coats the cathode.

10. **True**

Hydrogen storage is a major challenge.