Anode & Cathode

1. During the electroplating of copper spoons, copper is deposited by

a	oxidizing copper ions at the cathode
b	reducing copper ions at the cathode
С	oxidizing copper ions at the anode
d	reducing copper ions at the anode

2. Use this information to answer the question that follows.

$$3Zn^{2+}(aq) + 2AI(s) \rightarrow 3Zn(a) + 2AI^{3+}(aq)$$

This equation represents the reaction in an electrochemical cell.

The half-cell reaction that occurs at the anode is _____

а	$Zn(s) \rightarrow 2e^{-} + Zn^{2+}(aq)$
b	$Zn^{2+}(aq) + 2e^{-} \rightarrow Zn(s)$
С	$Al(s) \rightarrow 3e^{-} + Al^{3+}(aq)$
d	Al ³⁺ (aq) + 3e ⁻ → Al(s)

3. In an electrochemical cell, the cathode is the electrode at which electrons____ the half cell and _____ takes place.

а	Leave	Oxidation
b	Leave	Reduction
С	Enter	Oxidation
d	Enter	Reduction

Solutions:

- 1. B
- 2. C
- 3. D