

Name:

Date:

Class:

## Galvanic Cells and Circuits Pre/Post-Quiz

**Instructions:** Choose the **ONE** choice that best answers the question.

- Which of the following statements is true about a galvanic cell?
  - oxidation occurs at the cathode and the cathode is positive.
  - oxidation occurs at the anode and the anode is negative.
  - reduction occurs at the cathode and the cathode is negative.
  - reduction occurs at the anode and the anode is positive.
- Which two reactants will lead to the greatest cell potential in a galvanic cell?
  - lithium metal with fluoride ions
  - fluorine gas with chloride ions
  - zinc metal with silver ions
  - potassium ions with lithium metal
- Which of the following statements is true about the salt bridge of a galvanic cell?
  - positive ions flow into the anode half-cell, while negative ions flow in the other direction
  - electrons flow to complete a circuit.
  - positive ions flow to the negative electrode, while electrons flow in the opposite direction.
  - positive ions flow into the cathode half-cell, while negative ions flow in the other direction.
- What current is flowing in a wire if 0.67 C of charge passes a point in the wire in 0.30 s?
  - 0.67 A
  - 0.20 A
  - 0.30 A
  - 2.2 A
- A light bulb operating at 110 V draws 1.40 A of current. What is its resistance?
  - 109  $\Omega$
  - 12.7  $\Omega$
  - 78.6  $\Omega$
  - 154  $\Omega$
- What is one major difference between how a voltaic cell produces energy and how an electrolytic cell produces energy?