1752 – 1947

History of Electricity Quiz

Name _____ Date _____

Fill in the circle beside the best answer.

1. What did Franklin's kite experiment prove?

- (A) That lightning is unrelated to static sparks, a separate kind of force
- (B) That lightning is a form of electricity, a natural force people can study
- (C) That lightning is a kind of burning gas, a fire that starts high inside clouds
- (D) That electricity is made only by machines and is never found in nature

2. Why was Volta's battery such an important invention?

- (A) It gave the first steady, reliable electric current instead of brief sparks
- (B) It was the first device to turn sunlight directly into electric current
- (C) It made electric current by spinning a magnet inside a very large coil of wire
- (D) It showed that an electric current can move a nearby compass needle

3. What did Ørsted discover in 1820?

- (A) That a moving magnet can make a current flow in a nearby wire
- (B) That an electric current can move a nearby compass needle
- (C) That atoms contain tiny charged particles called electrons
- (D) That stacked zinc and copper discs can make a steady current

4. What is the principle behind all electrical generators, discovered by Faraday?

- (A) A hot wire carrying current glows and gives off light inside a glass bulb
- (B) A beam of sunlight on a metal plate makes an electric current flow
- (C) A chemical reaction between two metals makes an electric current flow
- (D) A moving magnet near a wire makes an electric current flow in the wire

5. Why was Edison's Pearl Street Station historically important?

(A) It was the first lasting commercial power station in the United States

(B) It was the first place where Edison showed his light bulb to the public

(C) It was the first power plant to run on falling water at Niagara Falls

(D) It was the first power station to send alternating current to its customers

6. What was the War of Currents, and why did AC electricity win?

(A) Edison's DC against Tesla and Westinghouse's AC; DC won because it was much safer

(B) Edison's AC against Tesla and Westinghouse's DC; DC won because it travels much farther

(C) Volta's batteries against Faraday's generators; generators won because they lasted longer

(D) Edison's DC against Tesla and Westinghouse's AC; AC won because it travels much farther

7. What did J.J. Thomson's discovery of the electron explain?

(A) What lightning actually is: a giant spark of static electricity

(B) What the atom's center actually is: a dense nucleus with a positive charge

(C) What electricity actually is: a flow of tiny particles called electrons

(D) What light actually is: a wave made of electric and magnetic fields

8. Why is the transistor considered one of the most important inventions of the 20th century?

(A) It replaced direct current with alternating current, making long power lines possible

(B) It replaced batteries with generators, making steady electric current possible

(C) It replaced bulky vacuum tubes with a tiny switch, making modern electronics possible

(D) It replaced gas lamps with electric bulbs, making indoor lighting safe and cheap

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History of Electricity Quiz: Answer Key

1. **B** That lightning is a form of electricity, a natural force people can study

2. **A** It gave the first steady, reliable electric current instead of brief sparks

3. **B** That an electric current can move a nearby compass needle

4. **D** A moving magnet near a wire makes an electric current flow in the wire

5. **A** It was the first lasting commercial power station in the United States

6. **D** Edison's DC against Tesla and Westinghouse's AC; AC won because it travels much farther

7. **C** What electricity actually is: a flow of tiny particles called electrons

8. **C** It replaced bulky vacuum tubes with a tiny switch, making modern electronics possible