



Electricity and Circuits

Name: _____

Date: _____

Grade: Grade 4

Part A: Multiple Choice

Circle the best answer for each question.

1. A toaster converts electrical energy mainly into which form of energy?

- A) sound energy
- B) light energy
- C) heat energy
- D) chemical energy

2. Which safety device in a home is designed to prevent electrical fires?

- A) light switch
- B) extension cord
- C) circuit breaker
- D) power strip

3. Two identical bulbs are connected in series to one battery. A third identical bulb is connected in parallel to the same battery by itself. Which bulb is brightest?

- A) One of the series bulbs
- B) They are all equally bright
- C) The parallel bulb
- D) None will light up

4. What happens to the overall resistance when you add more bulbs in series?

- A) Resistance decreases
- B) Resistance stays the same
- C) Resistance increases
- D) Resistance disappears

Part B: Fill in the Blank

Write the correct answer on each line.

1. A light bulb converts electrical energy into light and _____ energy.
2. The push that moves electrons through a circuit is called _____.
3. Resistance is measured in units called _____.
4. A generator converts mechanical energy into _____ energy.
5. Power lines carry electricity at very high _____ over long distances.

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Part B: Fill in the Blank

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1. A light bulb converts electrical energy into light and heat energy.
2. The push that moves electrons through a circuit is called voltage .
3. Resistance is measured in units called ohms .
4. A generator converts mechanical energy into electrical energy.
5. Power lines carry electricity at very high voltage over long distances.