

- 1 The buildup of charges on an object is called
- A static discharge.
  - B static electricity.
  - C positive charge.
  - D negative charge.
- 2 Electric charges that are different
- A attract each other.
  - B repel each other.
  - C exist in pairs.
  - D do not interact.
- 3 If an electric water heater uses 40 kW of power and runs for 8 hours, what is the total amount of energy used?
- A 5 kilowatt-hours
  - B 32 kilowatt-hours
  - C 48 kilowatt-hours
  - D 320 kilowatt-hours
- 4 According to Ohm's law, resistance is equal to voltage divided by
- A time.
  - B conduction.
  - C current.
  - D potential.
- 5 What is a disadvantage of using fuses?
- A When a fuse burns out, it cannot be used again.
  - B A fuse shuts off when the current gets too high.
  - C A fuse contains a thin strip of metal that can melt.
  - D A fuse prevents circuits from overheating.

## Chapter 16 Test

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- 6 A complete, unbroken path through which electric charges can flow is a(n)
- A electric circuit.
  - B electrical resistance.
  - C magnetic field line.
  - D magnetic pole.
- 7 In a series circuit with three bulbs, adding another bulb will
- A make the nearest bulb brighter.
  - B make some of the bulbs dimmer.
  - C make all the bulbs brighter.
  - D make all the bulbs dimmer.
- 8 In a parallel circuit with three bulbs,
- A the bulbs must all be located on the same branch.
  - B there is only one path for the current to take.
  - C current from each bulb has its own path.
  - D the overall resistance increases if a new branch is added.
- 9 In a closed circuit, electric current flows out from the source and
- A is completely converted to other forms of energy.
  - B is completely conserved as electrical energy.
  - C returns back as potential energy.
  - D returns back to the energy source.
- 10 Materials through which charge can flow easily are called
- A insulators.
  - B conductors.
  - C resistors.
  - D magnets.