

### DIRECTIONS:

Circle the correct answer.

- 1 Why is it so dangerous to touch a power line?
  - a you might set off alarms
  - b the voltage is strong enough to injure or kill you
  - c you will stop the electrical flow
  - d the power line will blow up
- 2 A complete circuit is
  - a a straight path for electricity when the flow of electricity is stopped two parallel paths for electricity
  - b like a circle where the electricity travels along a path that takes it back to where it started
- 3 Why should you never experiment with the electricity that comes from a wall outlet?
  - a you might damage a nearby power plant
  - b you might break the outlet
  - c you might be seriously injured or killed
  - d the current is too weak
- 4 Two examples of good conductors are
  - a metal and water
  - b plastic and rubber
  - c water and glass
  - d air and plastic
- 5 An insulator is
  - a something that electricity can easily move through
  - b something that does not allow electricity to easily pass through
  - c a special type of metal
  - d warm water
- 6 Why is a short circuit dangerous?
  - a more electricity flows through it
  - b the electricity moves faster
  - c the wires are too short
  - d it could cause a fire

# UNDERSTANDING ELECTRICITY & ELECTRICAL SAFETY

## PRE/POST TEST

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- 7 True or false? Fuses and circuit breakers protect our home electrical systems by turning off the power when a circuit gets too hot.
- a True
  - b False
- 8 Which of the following is an example of a dangerous electrical situation in a home?
- a electric cords with bare wire showing
  - b overloaded outlets
  - c electrical cords running under furniture
  - d all of the above
- 9 An electromagnet is
- a a giant magnet
  - b a very strong electrical particle
  - c a strong electron
  - d when electricity travels through a piece of metal, and it becomes magnetized
- 10 Why is it important to be careful around electricity?
- a our bodies conduct electricity
  - b you might get shocked or electrocuted
  - c you could be seriously injured or killed
  - d a, b, and c

# UNDERSTANDING ELECTRICITY & ELECTRICAL SAFETY

## ANSWER SHEET

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**Information that relates to each question can be found on the pages listed below.**

- 1 b) the voltage is strong enough to injure or kill you. Page 5
- 2 d) like a circle where the electricity travels along a path that takes it back to where it started. Page 6
- 3 c) you might be seriously injured or killed. Page 7
- 4 a) metal and water. Page 8
- 5 b) something that does not allow electricity to easily pass through. Page 8
- 6 d) it could cause a fire. Page 10
- 7 a) True. Fuses and circuit breakers protect our home electrical systems by turning off the power when a circuit gets too hot. Page 14
- 8 d) all of the above. Page 16
- 9 d) when electricity travels through a piece of metal and it becomes magnetized. Page 13
- 10 d) a, b, and c. Page 5, 7, and 8