

Experiments to Explore Electricity

Pre/Post Test

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. 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
3. Two examples of good conductors are
a) metal and water
b) plastic and rubber
c) water and glass
d) air and plastic
4. 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
5. 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
6. 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) a, b, and c
7. 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
8. The burners on top of the range are working correctly if they
a) have a blue flame
b) have a large, yellow flame
c) have a red flame
d) are flickering
9. What should you do if you smell natural gas in your home?
a) stay in your house
b) tell an adult
c) turn on the lights
d) use your phone to call the gas company
10. Leaks from natural gas pipelines can be recognized by
a) the smell of rotten eggs
b) dirt blowing in the air
c) a hissing sound
d) a, b, and c

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Answer Key

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. c) you might be seriously injured or killed. Page 7
3. a) metal and water. Page 8
4. b) something that does not allow electricity to easily pass through. Page 8
5. d) it could cause a fire. Page 10
6. d) a, b, and c. Page 16
7. d) a, b, and c. Pages 7, 8, 13
8. a) have a blue flame. Page 15
9. b) tell an adult. Page 15
10. d) a, b, and c. Page 15