

ELECTRICITY SAFETY VOCABULARY

Draw a line to the definition that best describes each phrase.

VOCABULARY

Appliances

Power line

Insulator

Overhead or underground

Electron

Energy

Conductor

Transmission line

Voltage

Atom

Generator

Current

Circuit

Substation

Transformer

Kilowatt

Static electricity

Glass and rubber

Electricity

Utility

Nucleus

Distribution line

DEFINITIONS

A path where electrons flow freely when closed

The smallest unit of matter

The ability to do work

The center of an atom, made of particles called protons and neutrons

A power line that transports high-voltage electricity long distances

Examples of good insulators

Devices such as clothes dryers, dishwashers, refrigerators, and toasters that use electrical energy to accomplish work

A power line that carries electricity from substations to homes and buildings

A facility consisting of wires, transformers and switchgear where transformers reduce or increase electricity's voltage

A device used to increase or decrease electricity's voltage

Places where distribution lines can run

The flow of electrons

Something that does not allow electricity to flow through it easily

A company or other organization that provides a public service, such as supplying electricity, natural gas or water

A form of electrical energy that results from an imbalance of positive and negative charges

A wire used to transport electricity

The movement or flow of electricity

A machine that converts mechanical energy into electrical energy

1,000 watts of electricity

A measure of the pressure under which electricity flows

Something that allows electricity to flow through it easily

Small particles that orbit around the nucleus of an atom

Did you know that one lightning strike could carry up to 100 million electrical volts? That is as much electricity as 8 million car batteries generate.

SAFETY FIRST

Let's see how many electric safety tips you know by completing the "Safety First" activity.

For each sentence below, circle TRUE or FALSE after each safety tip.

- | | |
|--|------------|
| 1. You can plug a three-pronged plug into a two-prong outlet. | TRUE FALSE |
| 2. Stay out of substations. | TRUE FALSE |
| 3. It is OK to dry your clothes on a space heater. | TRUE FALSE |
| 4. Never put anything but a plug into an electric socket. | TRUE FALSE |
| 5. You can get shocked by touching a frayed cord. | TRUE FALSE |
| 6. Do not overload extension cords. | TRUE FALSE |
| 7. Stay away from high voltage towers and transformers. | TRUE FALSE |
| 8. Always unplug an appliance by the plug, never by pulling on the cord. | TRUE FALSE |
| 9. Always call 811 before digging in your yard. | TRUE FALSE |
| 10. It is OK to swim during a thunderstorm. | TRUE FALSE |
| 11. Rubber is a good insulator. | TRUE FALSE |
| 12. Keep electric tools and appliances away from water. | TRUE FALSE |
| 13. Do not climb trees that are close to power lines. | TRUE FALSE |

Did you know that it takes about 10,000 volts to create a one-inch spark of lightning? Lightning contains millions of volts and can easily jump 10 to 20 feet (3 to 6 meters)! A word to the wise for those outside: "If you can hear it, clear it. If you can see it, flee it." Go indoors as quickly as possible. There is no safe place outside except for a permanent structure or inside a vehicle with all the windows closed.

