

The Way into a Career Part II

Vocabulary

Ex. 1. Match the words with their definitions.

1. sinusoid	a. a component in an electrical circuit that limits the flow of electric current.
2. solid state	b. a three-dimensional shape with a flat base and triangular sides that meet at a single top point.
3. point-contact transistor	c. the part of a battery or circuit that has a higher electric potential and attracts electrons.
4. reflex	d. an automatic response of the body to a stimulus, such as pulling your hand away from something hot.
5. form	e. two items that are matched or used together, like shoes or socks.
6. positive terminal	f. a condition where materials are firm and not liquid or gas, often used to describe electronic devices that have no moving parts.
7. connect wires	g. a smooth, wave-like curve that represents periodic oscillations in mathematics and physics.
8. pair	h. the shape or structure of something, which can be physical or abstract.
9. resistor	i. a type of electronic switch that controls current flow using a small contact point instead of traditional connections.
10. pyramid	j. to join electrical cables so that electricity can flow between them.

Ex. 2. Complete the sentences with the given words.

semiconductor, control, base, A junction transistor, transistor, diode, power source, chaos, current, bipolar
--

A _____(1) is an important component used in electronic circuits today.

_____(2) can amplify signals in radios and other devices.

You can _____(3) the brightness of a light bulb with a dimmer switch.

Too much _____(4) can damage electrical devices if not controlled properly.

The _____(5) of a transistor is where the input signal is applied.

When too many devices are connected, it can create _____(6) in the circuit.

A _____(7) is a material that conducts electricity better than insulators.

The _____(8) must provide enough voltage for all devices to work correctly.

A _____(9) allows current to flow in only one direction in a circuit.

A _____(10) transistor uses both electron and hole charge carriers for operation.

Reading

Ex. 1. Read the text.

Working as an electrician in the USA can be a rewarding career. Electricians are responsible for installing, maintaining, and repairing electrical systems in homes, businesses, and factories. They ensure that wiring and circuits are safe and meet building codes.

To become an electrician, you usually need a high school diploma or GED, and you must complete an apprenticeship program. This hands-on training helps you learn the trade from experienced professionals. Some states also require you to pass a licensing exam to demonstrate your knowledge and skills.

Electricians work in a variety of environments, from construction sites to residential homes. The job can be physically demanding, often requiring bending, climbing, and working in tight spaces. Safety is a top priority

because electricians work with high voltage and must follow strict safety guidelines to prevent accidents.

Despite the challenges, many electricians enjoy the problem-solving aspect of the job and the satisfaction of completing a project. The demand for electrical work remains steady, offering job security and the potential for a good salary.

Ex. 2. *Answer the questions.*

1. What are the responsibilities of an electrician in the USA?
2. What are the typical educational requirements to become an electrician?
3. How do apprenticeship programs help individuals become electricians?
4. In what environments do electricians typically work?
5. Why is safety a top priority for electricians?
6. What aspects of the job do many electricians find satisfying?
7. What opportunities does working as an electrician in the USA offer for career stability and fulfillment?

Communication

Ex. 1. *Make sentences using the following words.*

1. electricians/install/repair
2. work/wires/circuits
3. safety/prevent/accidents
4. tools/pliers/screwdrivers
5. indoors/outside
6. license/work
7. problem-solving/skills
8. read/technical/blueprints
9. independently/team
10. communicate/clients/needs