**Definition**

**Vocabulary Word**

|  |  |
| --- | --- |
| conductor | **CHAPTER 10** |
| Current electricity | the controlled flow of electric charges in a circuit |
| Joule | the SI unit for measuring energy and work |
| Battery | a combination of two or more electric cells |
| Load | any device that converts electrical energy into another form of energy; for  example, the filaments in an electric toaster |
| Circuit diagram | a diagram that uses a set of standard symbols to represent the  components in an electric circuit |
| Electric current (*I*) | an electric current that flows in one direction only through an  electric circuit |
| Ampere(A) | the SI unit for measuring electric current |
| Conventional current | the flow of positive charges in a circuit, which is opposite  in direction to the flow of electron: from the positive terminal to the negative  terminal of the energy source |
| Electron flow | the direction that electrons move in an electric circuit: from the  negative terminal to the positive terminal of the energy source |
| Direct current (DC) | an electric current that flows in one direction only through an  electric circuit |
| Alternating current (AC) | an electric current that periodically reverses its  direction |
| Series circuit | circuit in which the components are connected end to end so that  the electric current has only one path to follow |
| Parallel circuit | a circuit in which each electrical load is connected to the energy  source by its own separate path; the electric current is split among the loads |
| Ammeter | an instrument that measures electric current in amperes or  milliamperes |
| Voltage (V) | the electric potential difference between two points in an electric circuit;  measurement of the energy that would be required to move a unit of electric  charge from one point to the other; measured in volts; the symbol is *V* |
| Volt (V) | the SI unit for measuring voltage (electric potential difference) |
| Volt meter | an instrument that measures voltage (electric potential difference)  in volts |
| Resistor | an electrical device designed to resist the flow of electric current in a  circuit; a load in a circuit that converts electrical energy to another form of  energy, such as light energy or heat energy |
| Ohm (Ω) | the SI unit for measuring resistance |
| Resistance (*R*) | a measurement of the opposition to the flow of electric current  through a circuit; measured in ohms; the symbol is *R* |
| Ohm`s Law | the law that defines the relationship between voltage, current, and  resistance; voltage varies directly with current |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |