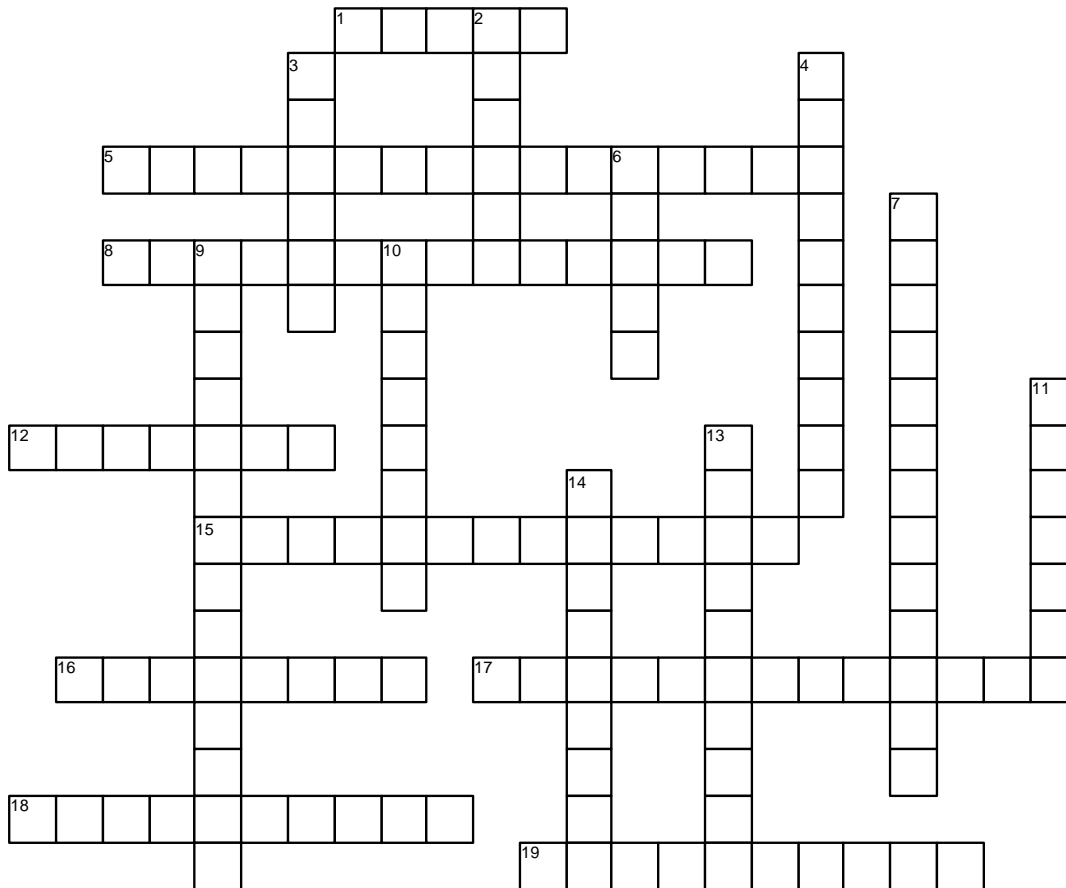


# Electronic Fundamentals

## Chapter 48



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### ACROSS

- 1 The positive electrode of a diode is called the \_\_\_\_\_.
- 5 Another name for a clamping diode is a \_\_\_\_\_.
- 8 Another name for a clamping diode is a \_\_\_\_\_.
- 12 \_\_\_\_\_ is an example of a semiconductor.
- 15 \_\_\_\_\_ is silicon or germanium that is doped with an element such as phosphorus, arsenic, or antimony, each having five electrons in its outer orbit.
- 16 The point where the two types of materials join in a diode is called the \_\_\_\_\_.
- 17 A diode connected across the terminals of a coil to control voltage spikes is called a \_\_\_\_\_.
- 18 A \_\_\_\_\_ is a diode designed to operate with a reverse-bias current.
- 19 The doping elements are called \_\_\_\_\_; therefore, after their addition, the germanium and silicon are no longer considered pure elements.

### DOWN

- 2 When another material is added to a semiconductor

material in very small amounts, it is called \_\_\_\_\_.

- 3 A common term heard in the electronic and computer industry is \_\_\_\_\_, which means to operate an electronic devices such as a computer, for a period of several hours to several days.
- 4 A \_\_\_\_\_ is a semiconductor material, such as silicon, that has been doped to provide a given resistance.
- 6 A \_\_\_\_\_ is an electrical one-way check valve made by combining a P-type material and an N-type material.
- 7 \_\_\_\_\_ is produced by doping silicon or germanium with the element boron or the element indium.
- 9 \_\_\_\_\_ are materials that contain exactly four electrons in the outer orbit of their atom structure and are, therefore, neither good conductors nor good insulators.
- 10 An \_\_\_\_\_ is an electronic circuit that changes DC into AC.
- 11 The negative electrode of a diode is called the \_\_\_\_\_.
- 13 A \_\_\_\_\_ is a semiconductor that, in a circuit, can act as an electrical switch, act as an amplifier, and regulate current.
- 14 \_\_\_\_\_ is an example of a semiconductor.