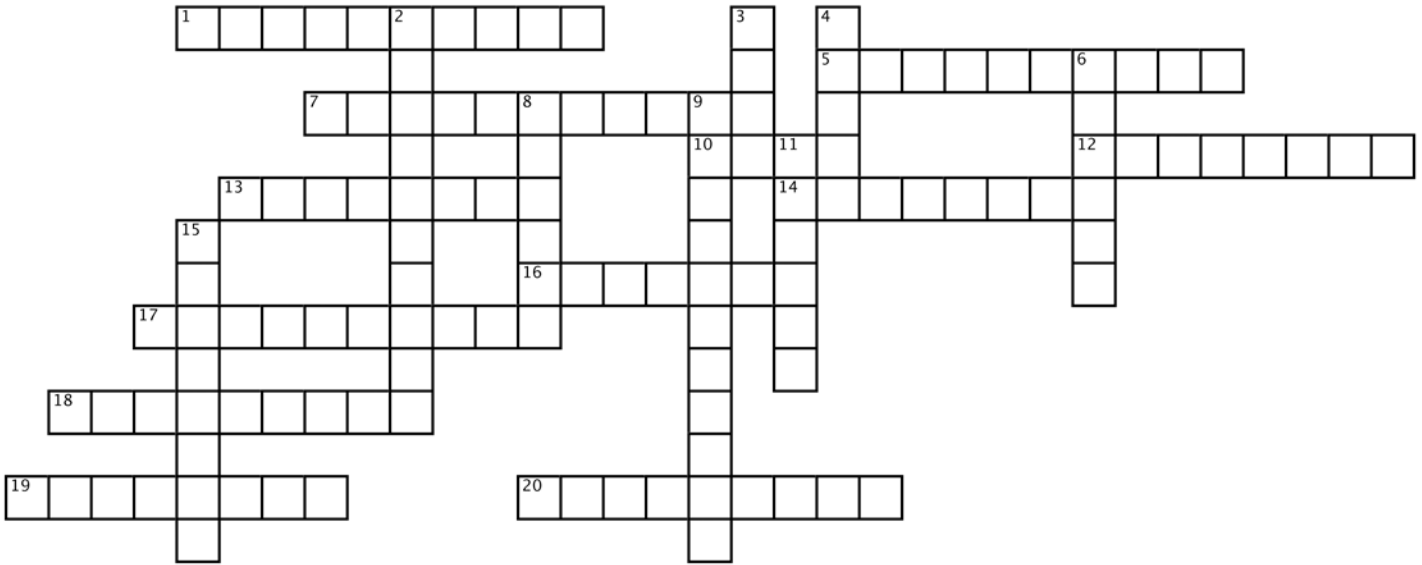# What Makes Electronics Work?

*Are you an electronics genius?*
*Take our crossword challenge and test your knowledge!*



## Across

1. The opposition of a body or substance to current passing through it, resulting in a change of electrical energy into heat or another form of energy.
5. The property of an electric circuit by which an electromotive force is induced in it as the result of a changing magnetic flux.
7. A device used to transfer electric energy from one circuit to another.
10. A conductor by which one circuit element is electrically connected to another.
12. Relating to or designating an electric charge of a sign opposite to that of an electron.
13. A device used to control current in an electric circuit by providing resistance.
14. Of or relating to an electric charge of the same sign as that of an electron.
16. Information and other material expressed in numerical form, especially for use by a computer.
17. A material that insulates, especially a nonconductor of sound, heat, or electricity.
18. An electric circuit element used to store charge temporarily.
19. A stable subatomic particle and a unit of negative electric charge.
20. A collector or emitter of electric charge or of electric-charge carriers.

## Down

2. A small electronic device containing a semiconductor and having at least three electrical contacts, used in a circuit as an amplifier, detector, or switch.
3. Pliable metallic strand, often electrically insulated, and used to conduct electricity.
4. An electronic device that restricts current flow chiefly to one direction.
6. The amount of electric charge passing a point in an electric circuit.
8. Unit of capacitance.
9. Physical phenomena caused by the attraction of particles with opposite charges and the repulsion of particles with the same charge.
11. When numerical data are represented by measurable physical variables, such as electrical voltage, it is in what form?
15. A connection between two conductors that permits a flow of current or heat.