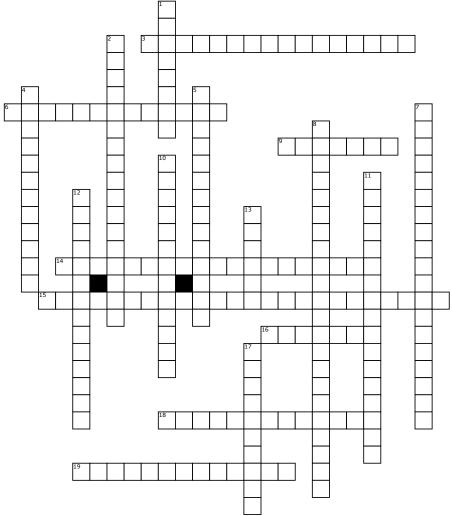
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## Electromagnetism



## Across

- **3.** the interaction of electric currents or fields and magnetic fields.
- **6.** a region around a magnetic material or a moving electric charge within which the force of magnetism acts.
- $\boldsymbol{9.}$  an electromotive force or potential difference expressed in volts.
- **14.** a material whose internal electric charges do not flow freely; very little electric current will flow through it under the influence of an electric field.
- **15.** the induction of an electromotive force by the motion of a conductor across a magnetic field or by a change in magnetic flux in a magnetic field.
- **16.** an electromotive force or potential difference expressed in volts.
- **18.** a closed circuit in which the current follows one path, as opposed to a parallel circuit where the circuit is divided into two or more paths.

**19.** a soft metal core made into a magnet by the passage of electric current through a coil surrounding it.

## Down

- **1.** a cylindrical coil of wire acting as a magnet when carrying electric current.
- **2.** a stationary electric charge, typically produced by friction, which causes sparks or crackling or the attraction of dust or hair.
- **4.** each of the points near the extremities of the axis of rotation of the earth or another celestial body where a magnetic needle dips vertically.
- **5.** the quantity of unbalanced electricity in a body (either positive or negative)
- **7.** is an object or type of material which permits the flow of electric charges in one or more directions.

- **8.** the induction of an electromotive force by the motion of a conductor across a magnetic field or by a change in magnetic flux in a magnetic field.
- **10.** an electric machine that converts electrical energy into mechanical energy.
- **11.** a device that converts mechanical energy to electrical energy.
- **12.** an electrical circuit where the current branches out and flows into more than one electrical device and then flows back together again to complete the circuit.
- **13.** a piece of iron attracting other iron-containing objects or aligning itself in an external magnetic field.
- **17.** a substance or device opposes the passage of an electric current, causing energy dissipation.

## **Word Bank**

static electricity
Electric charge
voltage
magnetic field
series circuit

electromagnetism
PARALLE CIRCUIT
electromagnet induction
magnetic pole
magnet

Electrical insulator solenoid electric motor resistance electrical conductor electromagnetic induction Electromagnet electric genorator voltage