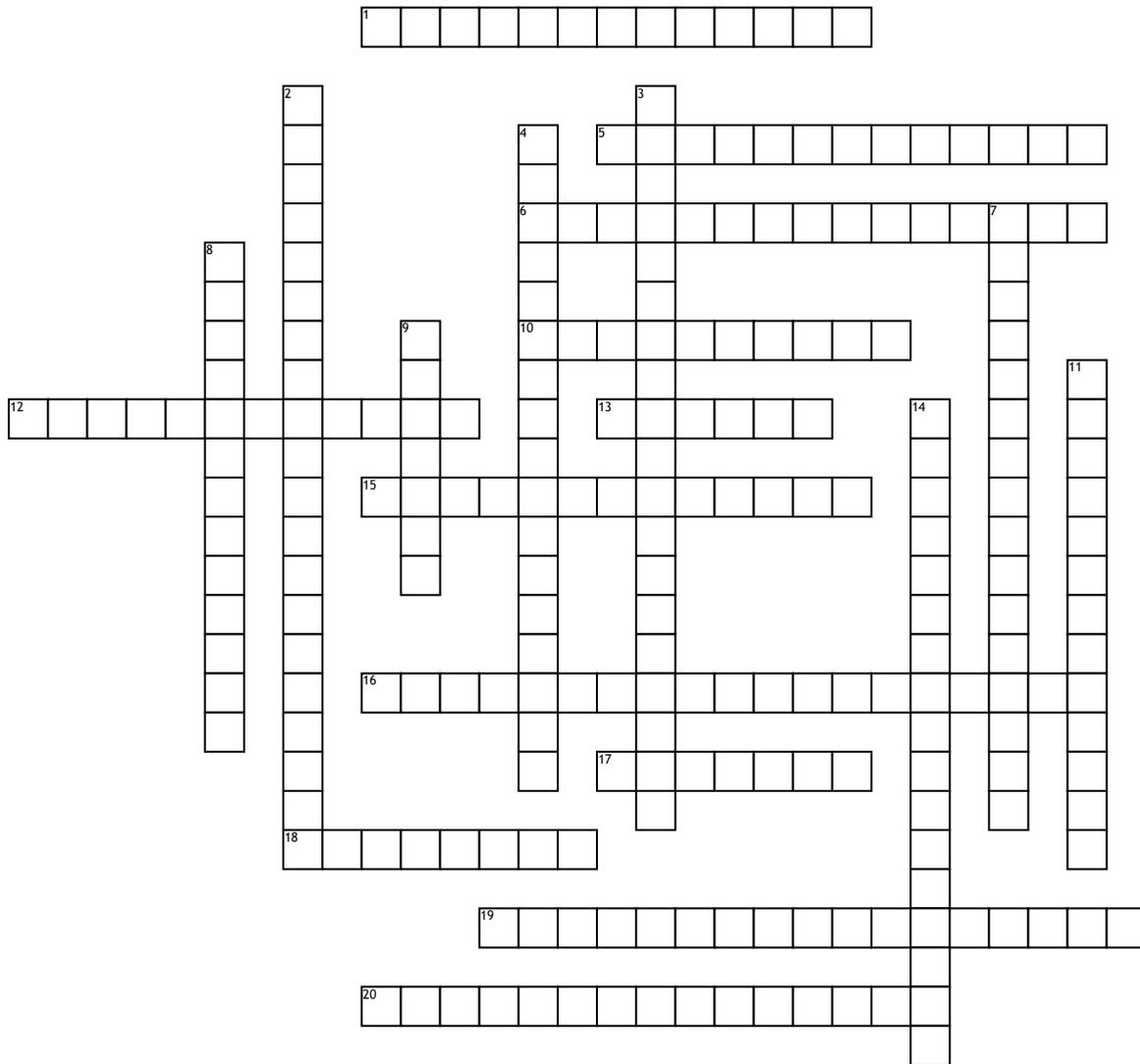


# ELECTRICITY AND MAGNETISM



**Across**

- 1. an electrical machine that converts electrical energy into mechanical energy.
- 5. a soft metal core made into a magnet by the passage of electric current through a coil surrounding it.
- 6. a flow of electric charge. In electric circuits this charge is often carried by moving electrons in a wire.
- 10. the refusal to accept or comply with something; the attempt to prevent something by action or argument.
- 12. 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
- 13. piece of iron that has its component atoms so ordered that the material exhibits properties of magnetism, such as attracting other iron-containing objects or aligning itself in an external magnetic field.

- 15. a region around a magnetic material or a moving electric charge within which the force of magnetism acts.
- 16. 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.
- 17. the highest taxonomic rank of organisms in the three-domain system of taxonomy
- 18. a cylindrical coil of wire acting as a magnet when carrying electric current
- 19. the release and transmission of electricity in an applied electric field through a medium such as a gas. Several types of electric discharges
- 20. closed circuit in which the current divides into two or more paths before recombining to complete the circuit

**Down**

- 2. Things that are negatively charged and things that are positively charged pull on (attract) each other.

- 3. a substance in which electrical charge carriers, usually electrons, move easily from atom to atom with the application of voltage
- 4. machine that converts one form of energy into another, especially mechanical energy into electrical energy, as a dynamo, or electrical energy into sound, as an acoustic generator.
- 7. the interaction of electric currents or fields and magnetic fields.
- 8. a region around a charged particle or object within which a force would be exerted on other charged particles or objects.
- 9. an electromotive force or potential difference expressed in volts.
- 11. resistors are arranged in a chain, so the current has only one path to take
- 14. a stationary electric charge, typically produced by friction, that causes sparks or crackling or the attraction of dust or hair.