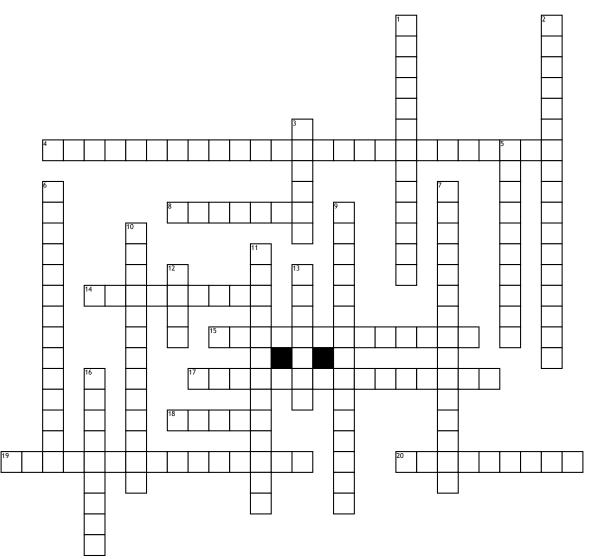
## **Electricity and Magnetism**



## <u>Across</u>

4. states that charge can be transferred from one object to another but cannot be created nor destroyed.
8. SI unit for electrical potential difference

14. material that can carry electricity or heat

15. The force of attraction or repulsion between objects due to charge17. the pathway that an electric

current follows

18. a device that changes electrical energy into energy of motion19. a circuit in which parts are connected so that the electric current passes along more than one pathway

**20.** a devise that uses magnetism to convert energy of motion into electrical energy

## Down

 a temporary magnet that uses electricity to produce magnetism
 an electric charge that builds up on a material

**3.** an object that attracts iron and certain other materials

**5.** tendency for a material to oppose electron flow and change electrical energy into thermal energy and light; measured in ohms (O). Caused by internal friction

6. A device that protects a circuit from current overloads

**7.** a continuous flow of electric charges

**9.** tiny particles that carry units of electricity

**10.** the two areas on a magnet where the magnetic force is greatest

**11.** a circuit in which the parts are connected so that the electric current passes through each part along a single pathway

**12.** A device containing a metal strip that melts when current in the circuit becomes too great.

**13.** a device that turns chemical energy into electrical energy

**16.** material that resist the flow of electricity or heat