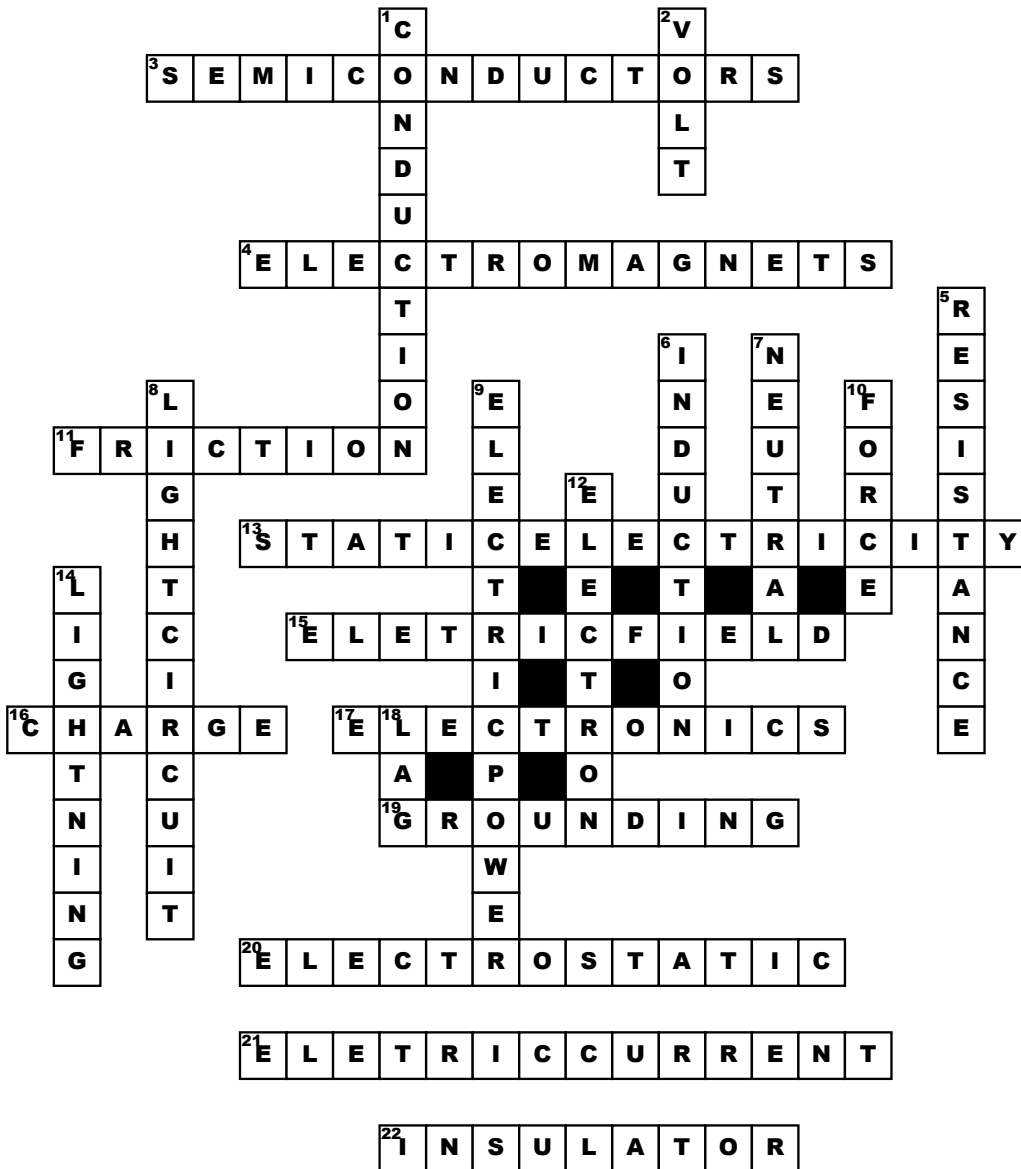


# Electricity



**Across**

3. have special properties that make them fair conductors not good conductors

4. Electric currents generate magnetic fields, and changing magnetic fields generate electric currents

11. the transfer of electrons between two neutral objects

13. an imbalance of electric charges within or on the surface of a material

15. an especially simple type of electromagnetic field produced by an electric charge even when it is not moving

16. a form of charge that exerts an electric force

17. deals with electrical circuits that involve active electrical components

19. connecting an object to a large body like Earth

20. a list of materials arranged in order of their tendency to gain electrons

21. a measure of the rate of electron flow past a given point in a circuit

22. a material that does not easily allow the movement of electrons

**Down**

1. charging an object by contact with a charged object

2. the SI unit of electromotive force

5. the ability of a material to oppose the flow of electric current

6. charging a neutral object by bringing another charged object close but not touching

7. an object that has equal numbers of protons and electrons

8. wiring that provides power to lights

9. the rate at which electric energy is transferred by an electric circuit

10. the force exerted by an object with an electric charge

12. a subatomic particle with a negative elementary electric charge

14. an electric discharge that occurs between clouds

18. The condition where the current is delayed in time to the voltage in an circuit