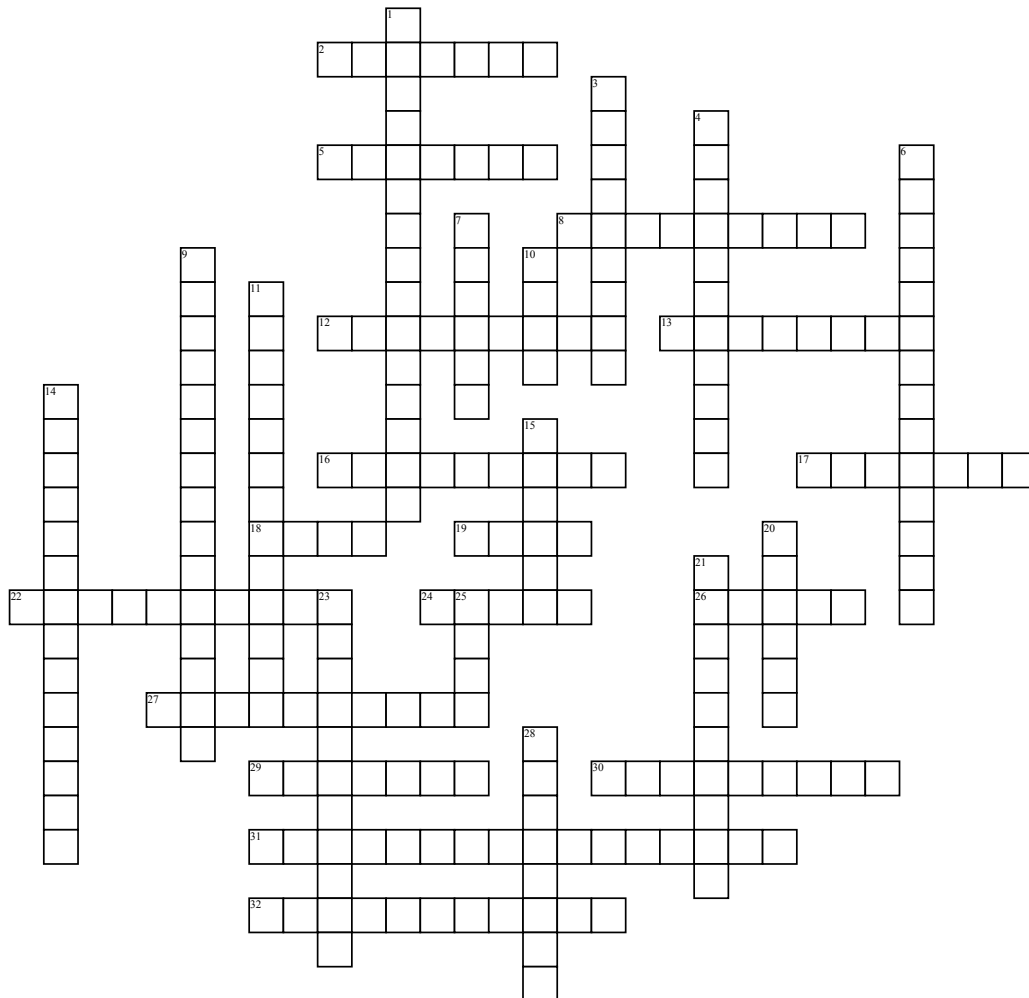


Electricity 2



Across

- 2. _____ is the electromotive force, measured in volts, that pushes the electric current through the circuit.
- 5. Where would you find direct current being used? A toy with a _____.
- 8. Changing the polarity of an electromagnet involves _____ the current.
- 12. Where does the electrical energy produced by a battery come from? _____ stored within the battery.
- 13. _____ is the number of electrons that pass a given point in a circuit at a given time.
- 16. The north pole of a magnet is repelled by the _____ of another magnet.
- 17. Direct _____ always flows in the same direction; the direction of an alternating current switches back and forth.
- 18. A _____ generates a stronger magnetic field.
- 19. Electromagnets are made from copper wire coiled around a _____.
- 22. Electromagnets are made from _____.
- 24. Magnets have two opposite ends, called _____.
- 26. Scientists believe the _____ is one giant magnet.

- 27. _____ to carry the electricity (i.e., wires) is a part of a circuit.
 - 29. Hans Christian _____ discovered, in 1819, accidentally that electricity and magnetism were connected.
 - 30. The north pole of a magnet is attracted to the _____.
 - 31. Function of a generator to turn _____ into electrical energy.
 - 32. _____ current is being used by a lamp plugged into the wall.
- Down**
- 1. What is the simplest requirement for an electromagnet?
 - 3. _____ is the force by which objects are attracted to other objects or repelled by other objects.
 - 4. Proved that parallel wires carrying electrical currents in the same direction in a circuit would attract each other like unlike poles on the ends of bar magnets.
 - 6. _____ coined the phrase magnetic field and created an electrical current using magnets.
 - 7. Where does a magnetic field occur in relation to an electrified wire? Around the _____ length of the wire

- 9. _____ discovered in 1825 that you could increase the power of an electromagnet by placing a bar of soft iron inside a coil of wire.
- 10. What are the three parts of the circuit? Source, a _____ or electronic device (i.e., lamp), and conductors to carry the electricity (i.e., wires).
- 11. A _____ is a "barrier" of magnetic energy found in proximity to a magnet.
- 14. _____ strength can be changed.
- 15. The _____ of the electricity (i.e., battery) is a part of a circuit.
- 20. Electromagnets differ because they can be _____ on or off.
- 21. _____ create current by using an electromagnet.
- 23. _____ is often used to make one type of magnet, called an electromagnet.
- 25. _____ Law states that the electromotive force in a circuit (measured in volts) equals the current (measured in amps) multiplied by the resistance.
- 28. Electromagnets _____ can be reversed.

Word Bank

North Pole	Source	Electromagnets	Poles	Generators	Coil
Polarity	Chemicals	Turned	Copper Wire	Battery	Magnetic Field
Voltage	Mechanical energy	Earth	Michael Faraday	André Ampere	William Sturgeon
Electricity	Current	Load	South Pole	Reversing	Oersted
Amperage	Magnetism	Conductors	Entire	Core	Alternating
Ohm's	Electrified wire				