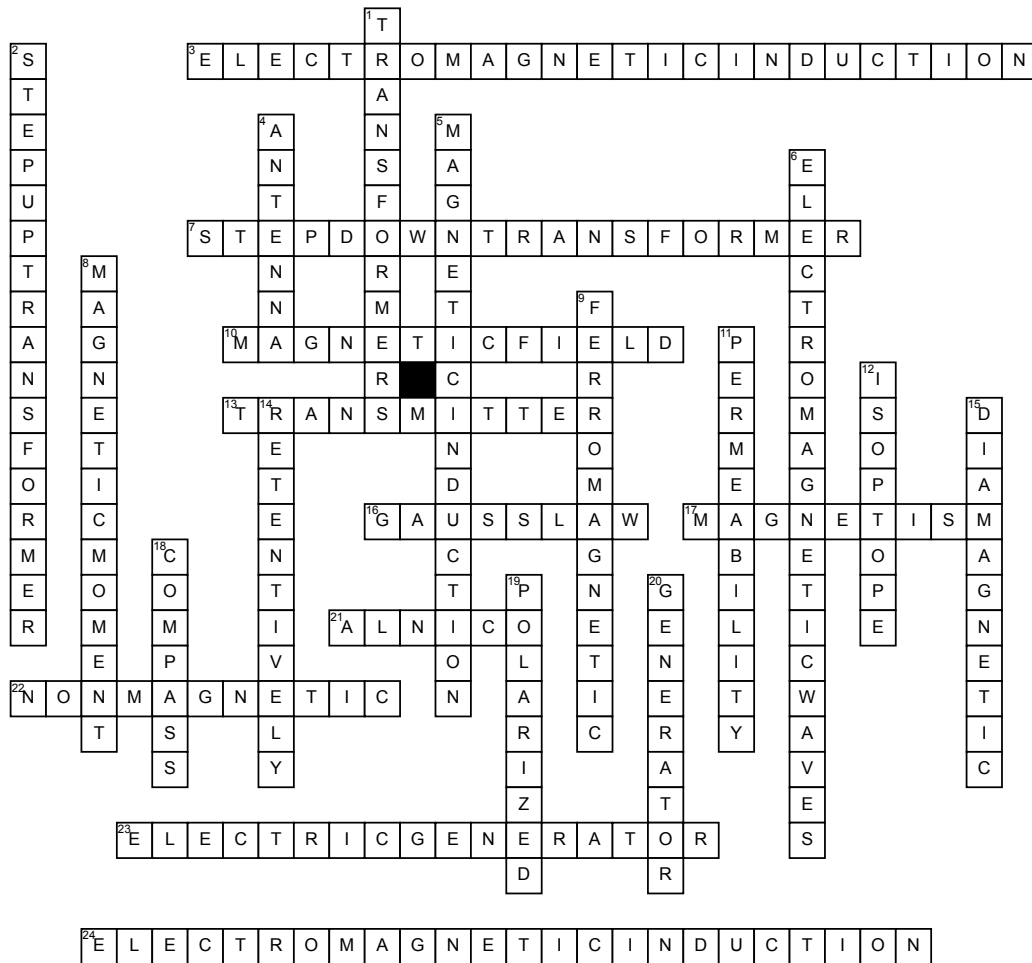


Name: \_\_\_\_\_

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# Magnetism & Electromagnetism Crossword



## Across

3. the process of generating current through a wire in a circuit in a changing magnetic field
7. secondary potential difference is smaller than primary potential difference
10. exists in a space where magnets would experience a force
13. device that converts voice, music, pictures, or data to electronic signals, amplifies signals, and then sends the signal to an antenna
16. The force of attraction or repulsion between magnetic poles varies directly with pole strength and inversely as the square of the distance between them.
17. The ability of certain materials to exert a force of attraction or repulsion on certain metal. Basic property of matter.
21. An alloy containing iron, nickel, aluminum, and either cobalt, copper, or titanium. Utilized for man-made, permanent magnets

## Down

1. device that increases or decrease potential differences with relatively little waste of energy
2. secondary potential difference is larger than primary potential difference
4. Create the electromagnetic waves that propagate through the air
5. Process by which a magnet induces a non-magnet to become magnetized. Lines of force, flux lines, Magnetic lines of induction. •Magnetic domains align giving a net North and South pole.
6. oscillating electric and magnetic fields that propagate through space and matter
8. An accumulation of dipoles arranged North to South. A quantity that determines the force that the magnet can exert on electric currents and the torque that a magnetic field will exert on it.
9. Strongly attracted to magnets, Can usually be permanently magnetized
11. The ease with which a material can be magnetized
12. each form of the same atom that has the same chemical properties but a different mass
14. The ability of a magnet to resist demagnetization.
15. Slightly repelled by magnets
18. A device that uses the Earth's magnetic field to indicate which way north is.
19. two opposite end, called poles
20. A device that changes motion into electricity using magnets and spinning coils of wire.

## Word Bank

Alnico  
MAGNETIC FIELD  
Magnetism  
Diamagnetic  
ISOPTOPE  
Ferromagnetic  
TRANSMITTER

Retentively  
Permeability  
ELECTROMAGNETIC WAVES  
Paramagnetic  
ELECTRIC GENERATOR  
COMPASS

STEPDOWN TRANSFORMER  
Magnetic induction  
Gauss Law  
GENERATOR  
Nonmagnetic  
POLARIZED

ELECTROMAGNETIC INDUCTION  
STEPUP TRANSFORMER  
Magnetic moment  
TRANSFORMERS  
ELECTROMAGNETIC INDUCTION  
ANTENNA