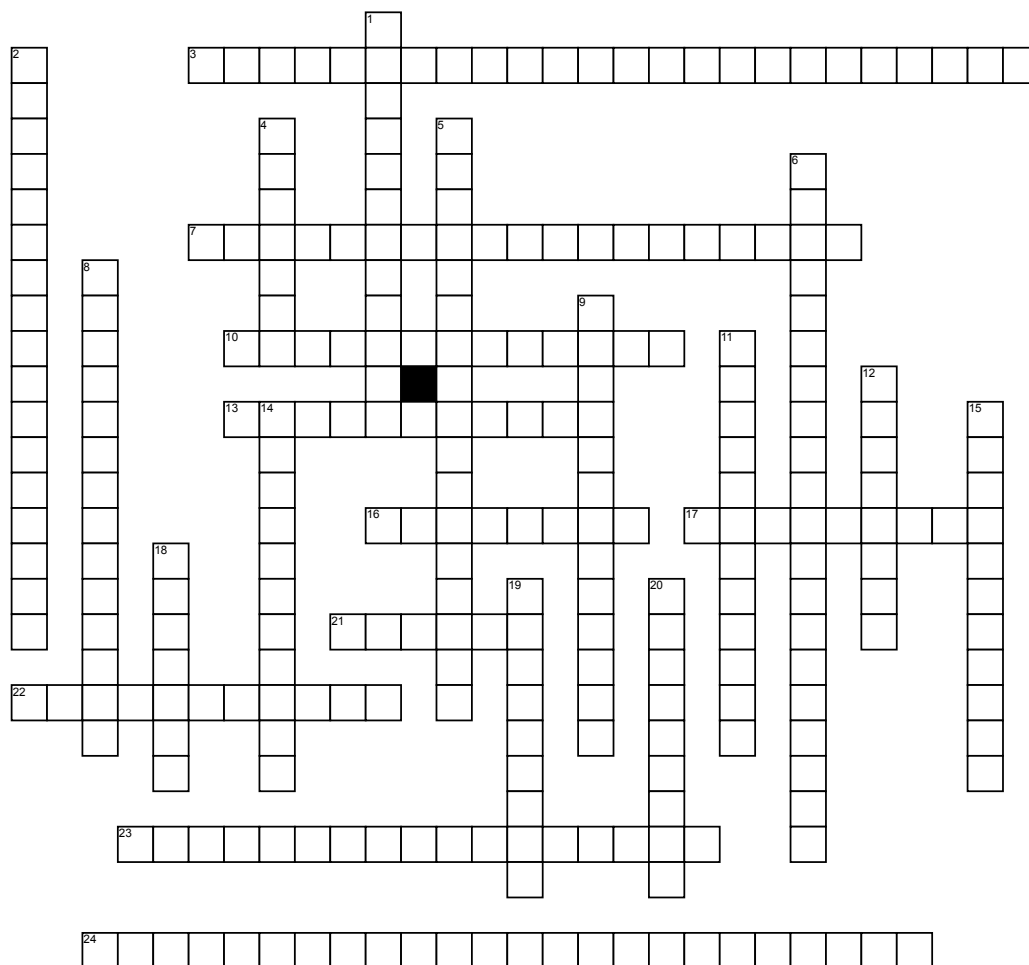


Name: \_\_\_\_\_

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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

22. Unaffected by magnetic, Cannot be magnetized

23. converts mechanical energy to electrical energy

24. the process of generating current through a wire in a circuit in a changing magnetic field

25. Slightly attracted to magnets, MRI contrast agents.

## 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

ANTENNA

ELECTROMAGNETIC INDUCTION

COMPASS

MAGNETIC FIELD

Paramagnetic

Magnetic moment

Alnico

Diamagnetic

GENERATOR

ELECTROMAGNETIC INDUCTION

TRANSFORMERS

Retentively

Magnetic induction

Gauss Law

ISOPTOPE

ELECTRIC GENERATOR

POLARIZED

Ferromagnetic

TRANSMITTER

ELECTROMAGNETIC WAVES

Magnetism

STEP DOWN TRANSFORMER

Permeability

Nonmagnetic

STEP UP TRANSFORMER