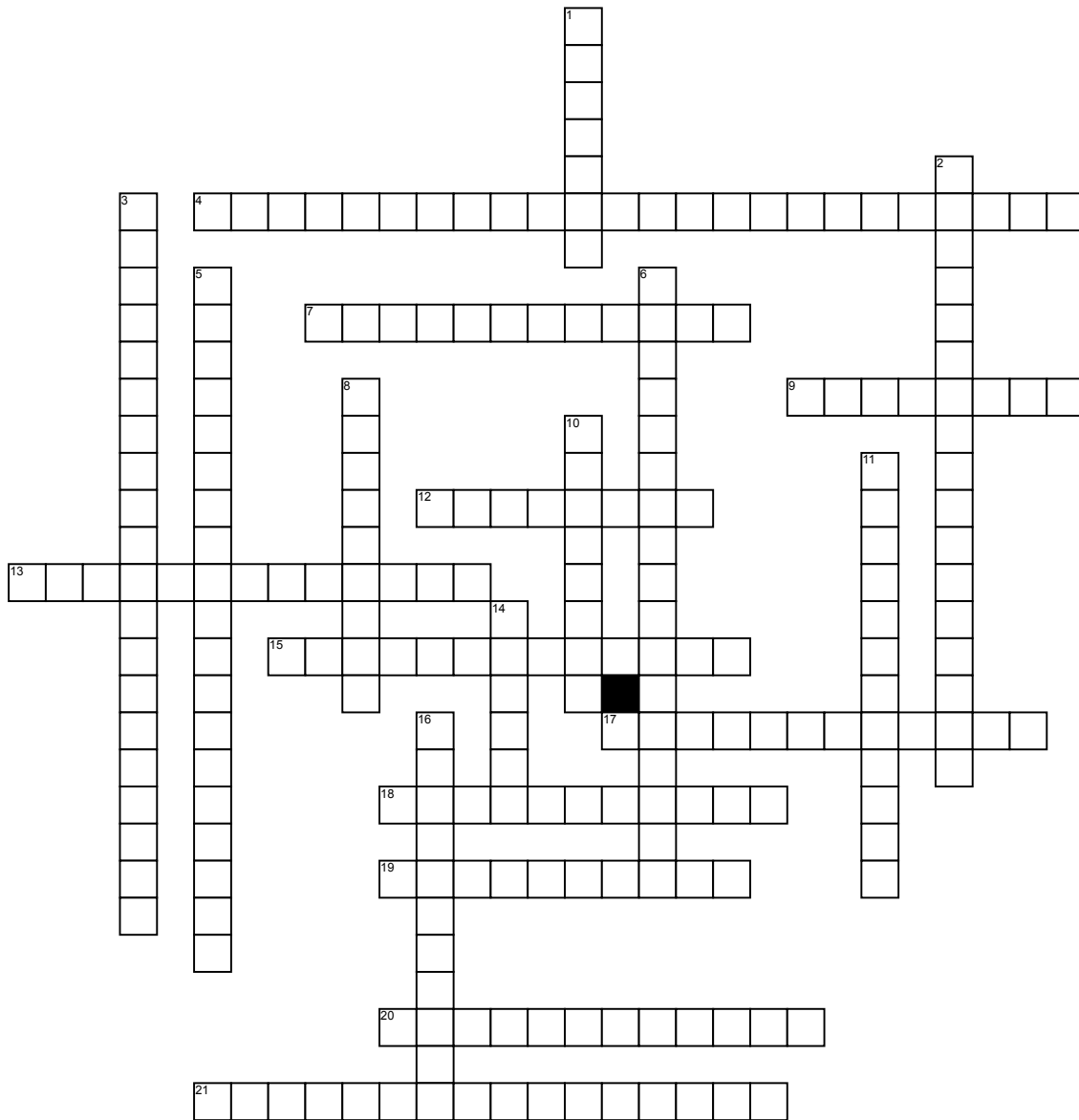


# Electromagnetism Crossword Puzzle



**Across**

- 4. the process of generating current through a wire in a circuit in a changing magnetic field
- 7. number of magnetic passing through a surface perpendicular to the lines
- 9. each form of the same atom that has the same chemical properties but a different mass
- 12. wire connected to a circuit and coiled into many spiral loops
- 13. exists in a space where magnets would experience a force
- 15. a magnet whose magnetic field is produced by electric current
- 17. device that increases or decrease potential differences with relatively little waste of energy

- 18. device that converts voice, music, pictures, or data to electronic signals, amplifies signals, and then sends the signal to an antenna
- 19. a poor conductor of electric current whose electric charges partially align with an electric field
- 20. a device used to measure very small currents
- 21. an instrument that measures the charge-to-mass ratio of positive ions within a material

**Down**

- 1. create the electromagnetic waves that propagate through the air
- 2. secondary potential difference is larger than primary potential difference

- 3. oscillating electric and magnetic fields that propagate through space and matter
- 5. secondary potential difference is smaller than primary potential difference
- 6. converts mechanical energy to electrical energy
- 8. two opposite end, called poles
- 10. magnetic field produced by the induced current is in the direction that is opposite the original field
- 11. generated in any piece of metal moving through a magnetic field; the magnetic they produce opposes the motion that caused the currents
- 14. a group of neighboring atoms whose poles are aligned
- 16. a specific wave length in the radio part of the electromagnetic spectrum