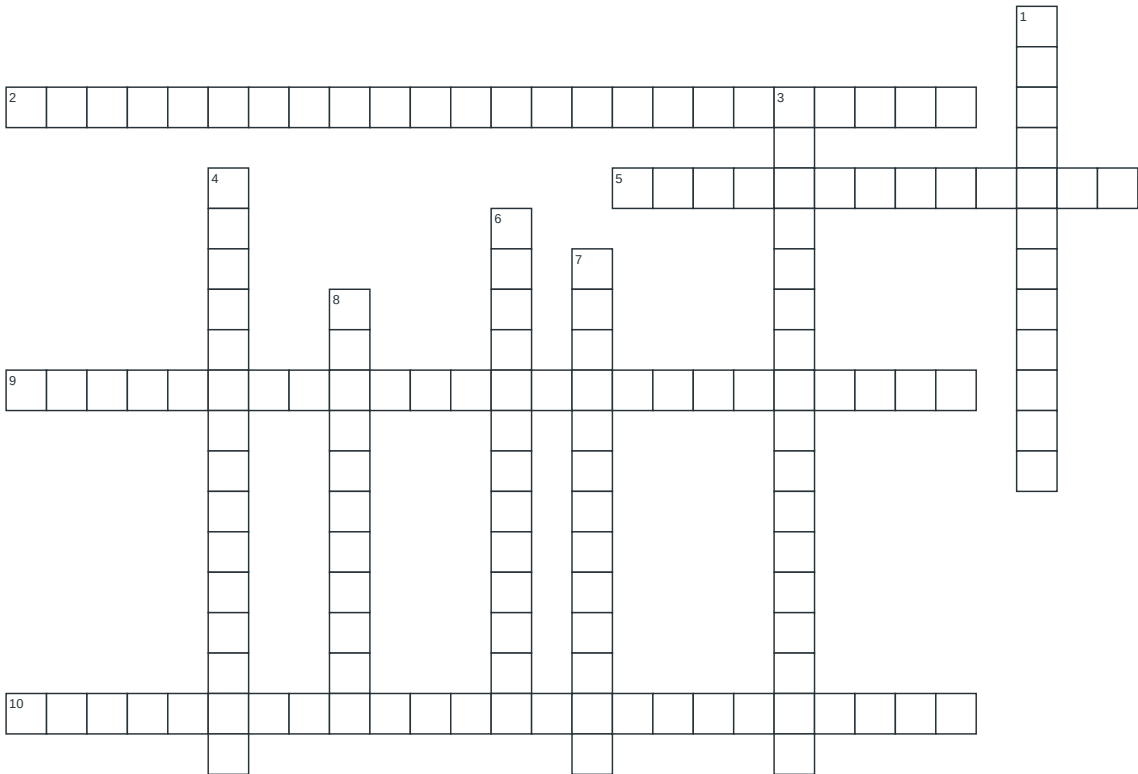


# Magnetism and Electromagnetism Crossword

Easy | 10 clues | Student Worksheet

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

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

- 2. Happens to a coil's magnetic polarity when its current direction reverses
- 5. Region where magnetic forces can act on magnets or moving charges.
- 9. Producing an electric effect through changing magnetic flux
- 10. A turbine spins a generator during electricity production. What supplies the mechanical energy

DOWN

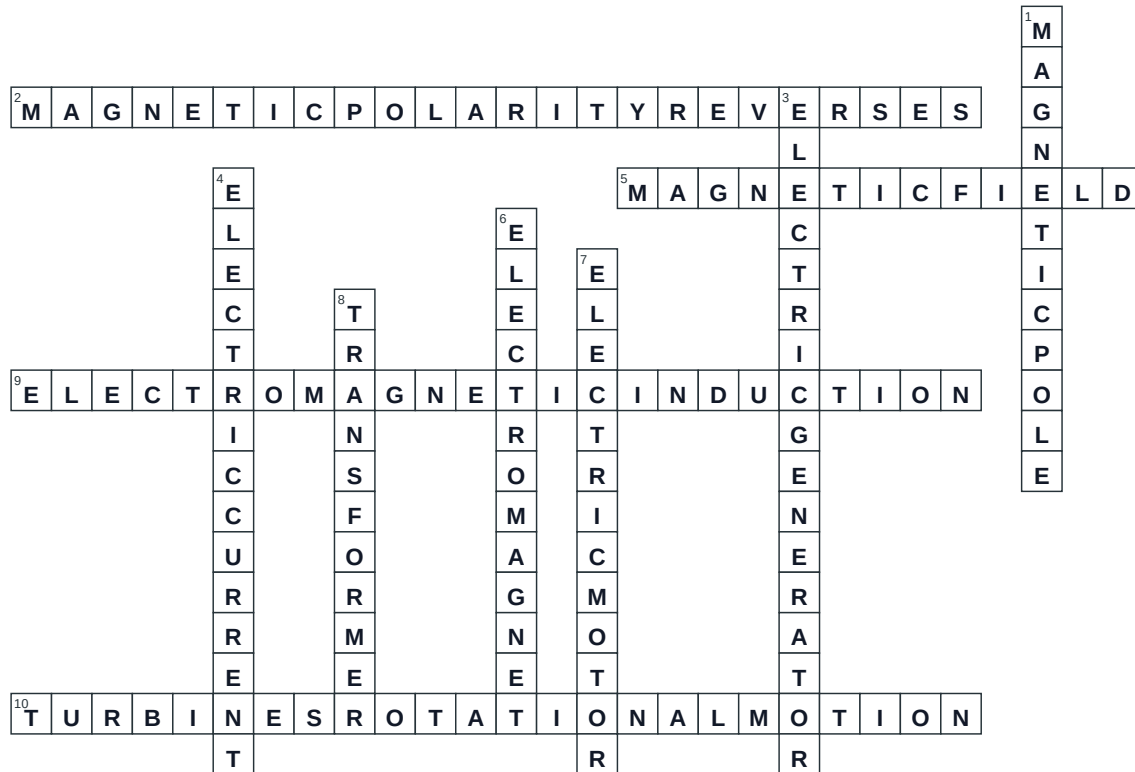
- 1. Region near an end of a magnet where its magnetic effect is strongest.
- 3. Device that converts mechanical energy into electrical energy
- 4. Creates a magnetic field around a wire
- 6. A device whose magnetism is produced by electric current
- 7. Device that converts electrical energy into mechanical energy
- 8. Changing current in one coil induces voltage in another coil through changing magnetic flux

# Magnetism and Electromagnetism Crossword

Easy | 10 clues | Teacher Answer Key

## TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



### ACROSS

2. Magnetic Polarity Reverses
5. Magnetic field
9. Electromagnetic Induction
10. Turbine's Rotational Motion

### DOWN

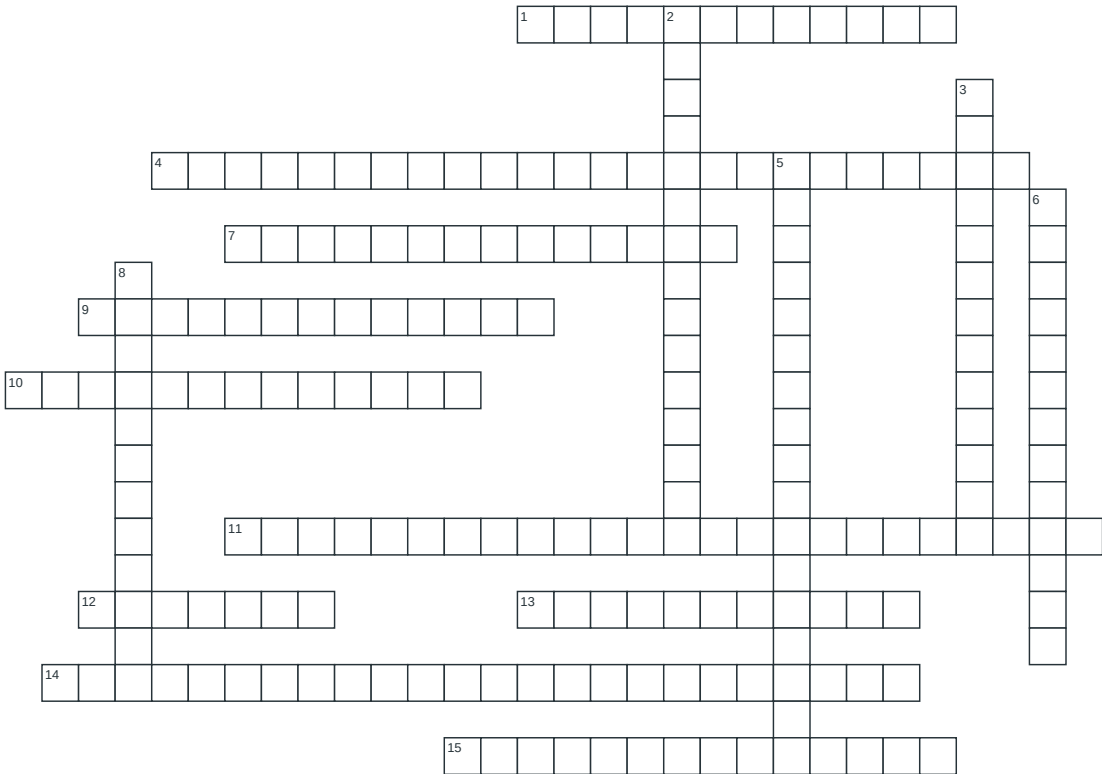
1. Magnetic pole
3. Electric Generator
4. Electric Current
6. Electromagnet
7. Electric Motor
8. Transformer

# Magnetism and Electromagnetism Crossword

Medium | 15 clues | Student Worksheet

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

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



ACROSS

- 1. Measure of magnetic field passing through a specified area.
- 4. Happens to a coil's magnetic polarity when its current direction reverses
- 7. Region in a material where many atomic magnetic moments align.
- 9. Region where magnetic forces can act on magnets or moving charges.
- 10. Alignment of magnetic domains that gives a material a net magnetic effect.
- 11. A turbine spins a generator during electricity production. What supplies the mechanical energy
- 12. Instrument whose magnetic needle aligns with a local magnetic field.
- 13. Changing current in one coil induces voltage in another coil through changing magnetic flux

ACROSS (continued)

- 14. Producing an electric effect through changing magnetic flux
- 15. Current produced when magnetic flux through a conducting loop changes.

DOWN

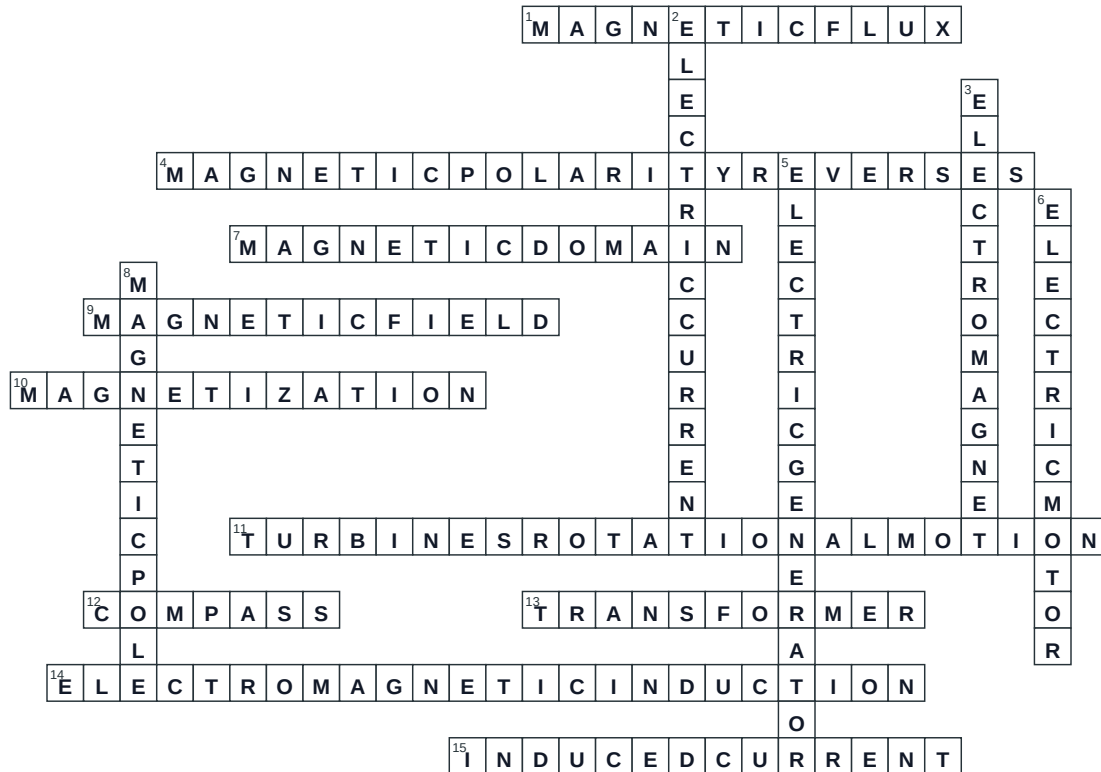
- 2. Creates a magnetic field around a wire
- 3. A device whose magnetism is produced by electric current
- 5. Device that converts mechanical energy into electrical energy
- 6. Device that converts electrical energy into mechanical energy
- 8. Region near an end of a magnet where its magnetic effect is strongest.

# Magnetism and Electromagnetism Crossword

Medium | 15 clues | Teacher Answer Key

## TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



## ACROSS

1. Magnetic flux
4. Magnetic Polarity Reverses
7. Magnetic domain
9. Magnetic field
10. Magnetization
11. Turbine's Rotational Motion
12. Compass
13. Transformer

## ACROSS (continued)

14. Electromagnetic Induction
15. Induced current

## DOWN

2. Electric Current
3. Electromagnet
5. Electric Generator
6. Electric Motor
8. Magnetic pole

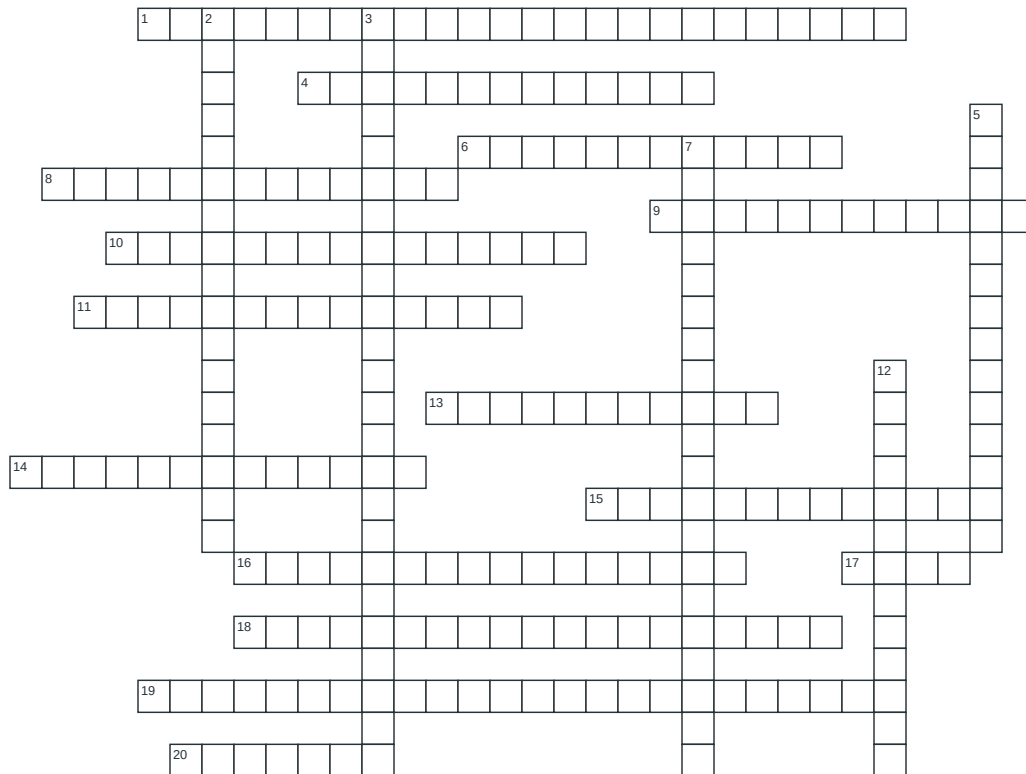
# Magnetism and Electromagnetism Crossword

Hard | 20 clues | Student Worksheet

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

Date: \_\_\_\_\_

Directions: Use the clues to complete the grid. Omit spaces, punctuation, and hyphens.



## ACROSS

1. Producing an electric effect through changing magnetic flux
4. Region where magnetic forces can act on magnets or moving charges.
6. Region near an end of a magnet where its magnetic effect is strongest.
8. Device that converts electrical energy into mechanical energy
9. Measure of magnetic field passing through a specified area.
10. Creates a magnetic field around a wire
11. Region in a material where many atomic magnetic moments align.
13. Changing current in one coil induces voltage in another coil through changing magnetic flux
14. Measure of the intensity of a magnetic field.
15. Alignment of magnetic domains that gives a material a net magnetic effect.
16. Designation of a magnet's north-seeking and south-seeking ends.

## ACROSS (continued)

17. Wire wound into loops to strengthen the magnetic field produced by current.
18. Attraction or repulsion between magnets or magnetic materials.
19. A turbine spins a generator during electricity production. What supplies the mechanical energy
20. Instrument whose magnetic needle aligns with a local magnetic field.

## DOWN

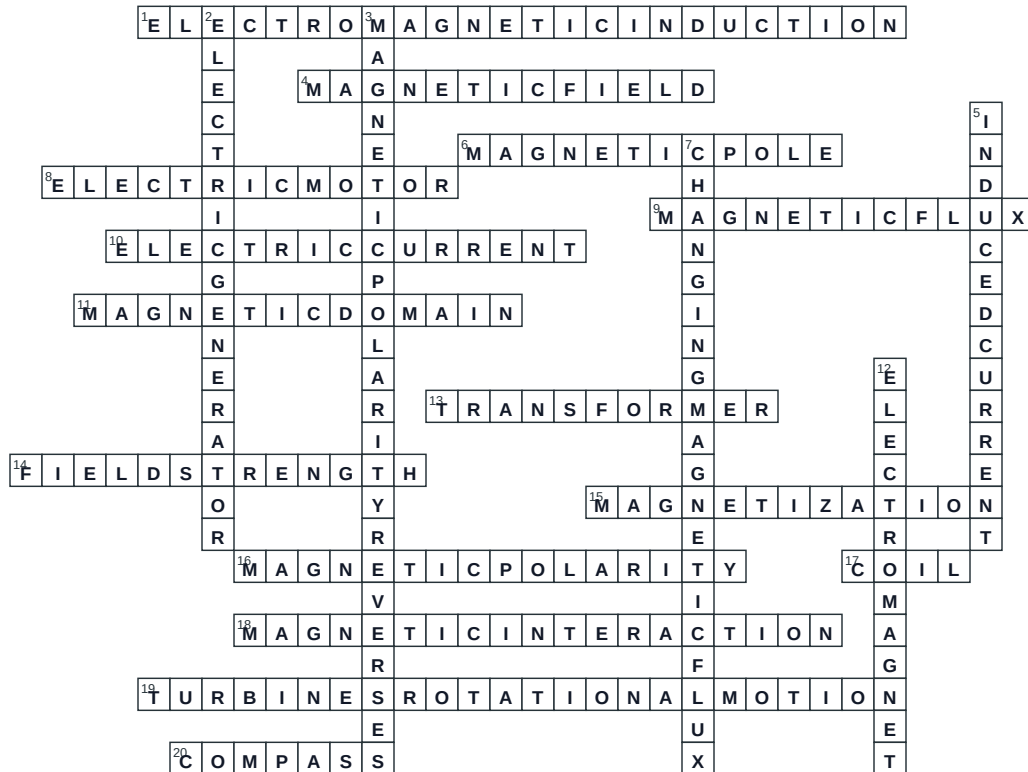
2. Device that converts mechanical energy into electrical energy
3. Happens to a coil's magnetic polarity when its current direction reverses
5. Current produced when magnetic flux through a conducting loop changes.
7. Variation in magnetic field through a loop that can induce voltage.
12. A device whose magnetism is produced by electric current

# Magnetism and Electromagnetism Crossword

Hard | 20 clues | Teacher Answer Key

## TEACHER ANSWER KEY

Completed grid and numbered answers. Spaces and punctuation are omitted in the grid.



## ACROSS

1. Electromagnetic Induction
4. Magnetic field
6. Magnetic pole
8. Electric Motor
9. Magnetic flux
10. Electric Current
11. Magnetic domain
13. Transformer
14. Field strength
15. Magnetization
16. Magnetic polarity

## ACROSS (continued)

17. Coil
18. Magnetic interaction
19. Turbine's Rotational Motion
20. Compass

## DOWN

2. Electric Generator
3. Magnetic Polarity Reverses
5. Induced current
7. Changing magnetic flux
12. Electromagnet