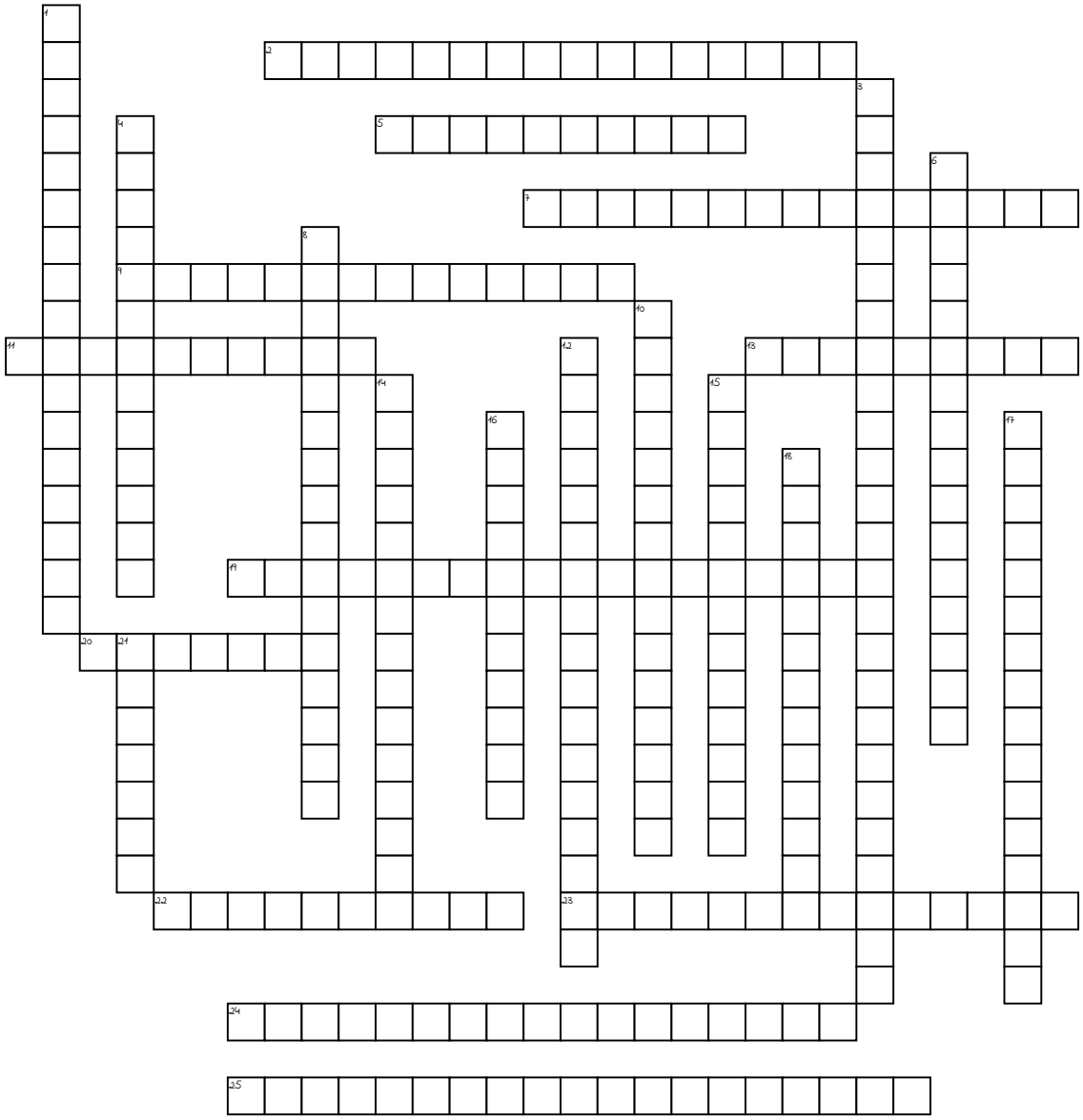
Name: _____

Electricity and Magnetism



Across

2. contains 2 connected plates made of different metals in a conducting solution

5. material where electrons move easily

7. group of atoms with aligned magnetic poles

9. temporary magnet made by wrapping a wire coil carrying a current around an iron core

11. tendency for a material to oppose the flow of electrons, changing electrical energy into thermal and light energy

13. refers to the properties and interactions of magnets where there is a force of attraction or repulsion between like or unlike poles

19. reverses the direction of the current flow in regular patterns

20. force that causes electric charges to flow

22. material where electrons are not able to move easily

23. a small piece of metal that bends when it gets hot, opening the circuit and stopping the current

24. an accumulation of excess electric charges on an object

25. earranging of electrons on one object that cause a charge to a nearby object

Down

1. a device that changes mechanical energy into electrical energy

3. electric charges can be transferred from object to object but cannot be created or destroyed

4. exerts a force on other magnets and objects made of magnetic materials

6. only a few metals, such as iron, cobalt, and nickel are attracted to magnets or can be made into permanent magnets

8. chemical reactions occur in a moist paste causing transfer of electrons

10. closed path that electric current follows

12. transferring charge by touching or rubbing

14. net movement of electric charges in a single direction through a wire or a conductor

15. device that changes electrical energy into mechanical energy

16. substance that conducts electricity

17. made by placing a magnetic material in a strong magnetic field forcing magnetic alignment to occur

18. current that flows in only one direction through a wire

21. current is equal to voltage of a circuit divided by resistance