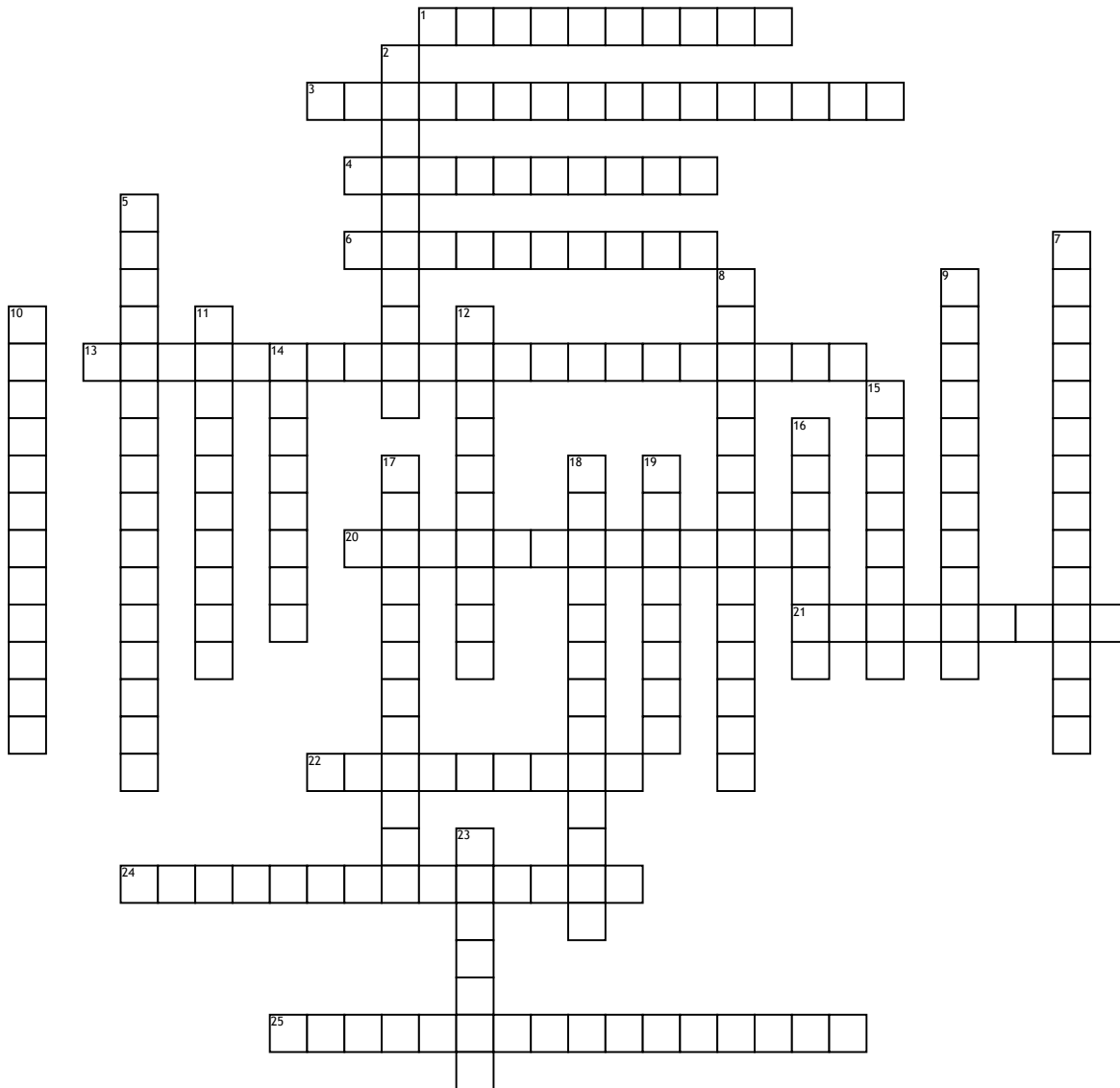


Name: \_\_\_\_\_

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

# Engineering Disciplines



## Across

1. Design, produce, operate, and service machines and mechanical devices
3. Maintain the flow of raw materials by discovering, extracting, and processing minerals for products
4. Plan, coordinate, and implement the specifications for a new car, engineering every part
6. Create safer structures and fit more people and objects per square inch into these structures
13. Responsible for the design, development, testing, and supervision of the manufacturing of electrical equipment, such as household appliances or guidance systems for satellites
20. Apply engineering principles in order to improve and maintain the environment
21. Design, develop, test, and help manufacture aircraft, missiles, and spacecraft
22. Concerned with maintaining the safe flow of petroleum, exploring for crude oil deposits, removing and transporting oil, and refining oil
24. The application of engineering principles to biological systems

25. Develop new materials, improve traditional materials, and produce materials that are economical and reliable through synthesis and processing

## Down

2. Design, improve, and install integrated systems of people, materials, and energy
5. Designing and supervising the construction of roads, buildings, airports, tunnels, bridges, and water and sewage systems
7. Concerned with the exploration of oceans, the transportation of products over water, and the utilization of resources in the world's oceans, lakes, and seas
8. Responsible for the design, development, testing, and supervision of the manufacturing of electrical equipment, such as household appliances or guidance systems for satellites
9. Concerned with providing healthier products to consumers, who increasingly rely on food products
10. Concerned with the production and processing of agricultural products, which are critical to our ability to feed the ever-expanding world population
11. Plan, perfect, or improve the sound of an architectural space
12. Use science to work with land and water
14. Concerned with programming robots and systems to perform tasks autonomously
15. Responsible for the coding of computer software that results in a simple and friendly environment for computer users
16. Study nuclear energy, radiation, and their beneficial uses
17. Concerned with the management and operation of construction projects
18. Applies science and math to the design, development, and implementation of manufacturing systems
19. Take what chemists do in a laboratory, apply fundamental engineering, chemistry, and physics principles, and design and develop processes to produce products for use in our society
23. Use science to research genes found in the cells of plants and animals to develop better products