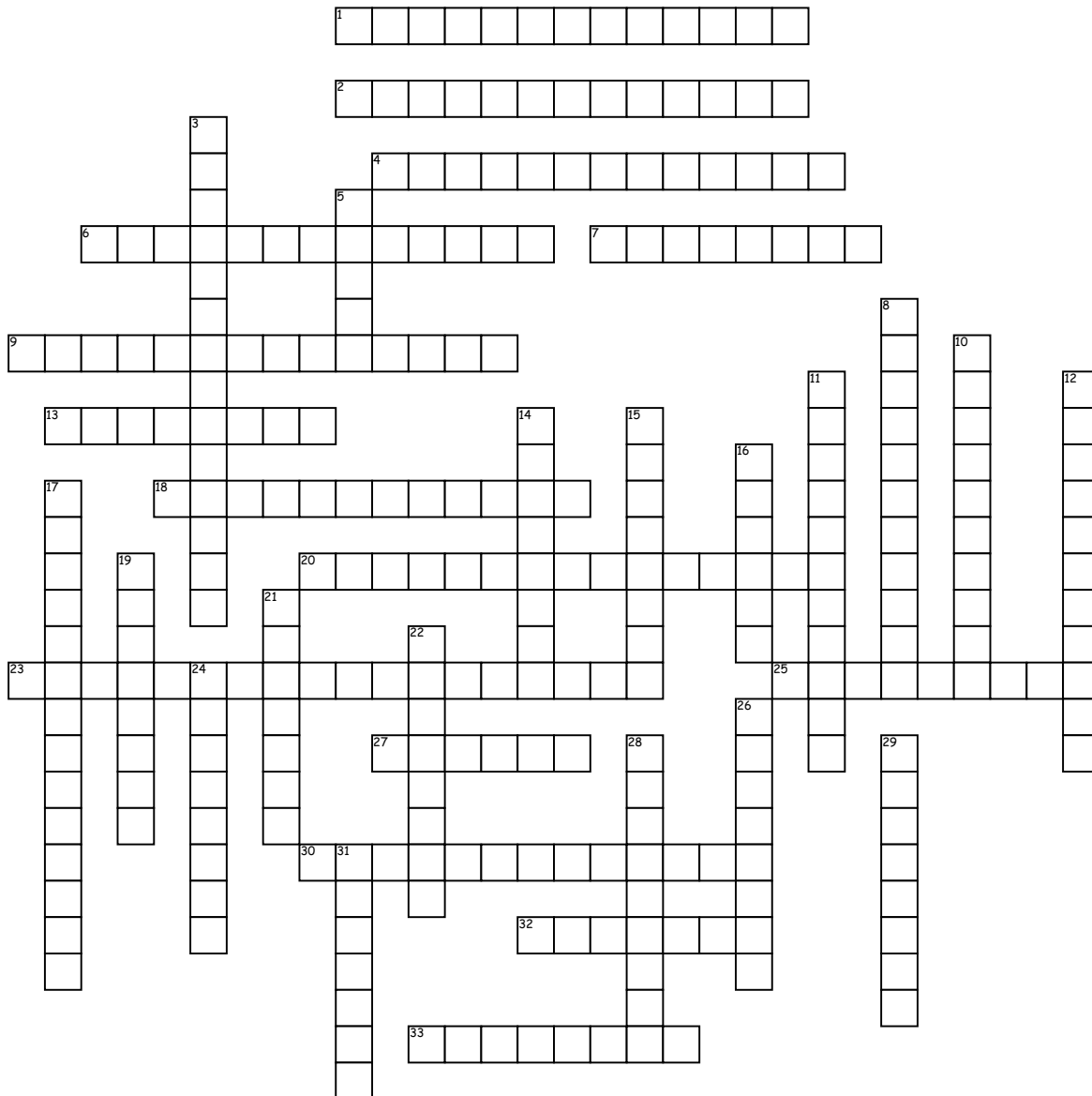


Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

# SCIENCE 1.2 VOCAB



## Across

1. Formation of mental visual images
2. Extremely rapid increase
4. A systematic problem-solving strategy, with criteria and constraints, used to develop many possible solutions to a problem or to satisfy human needs and wants and winnow (narrow) down the possible solutions to one final choice
6. A method of shared problem solving in which all members of a group spontaneously, and in an unrestrained discussion, generate ideas.
7. An exchange of one thing in return for another; especially relinquishment of one benefit or advantage for another regarded as more desirable
9. The process of understanding a problem, devising a plan, carrying out the plan, and evaluating the plan in order to solve a problem or meet a need or want
13. Desired specifications (elements or features) of a product or system
18. The parameters placed on the development of a product or system. The requirements include the safety needs, the physical laws that will limit the development of an idea, the available resources, the cultural norms, and the use of criteria and constraints
20. The act of trying out a new procedure, idea, or activity
23. famous english playwright
25. A measure in one direction
27. An iterative decision-making process that produces plans by which resources are converted into products or systems that meet human needs and wants or solve problems

30. A detailed description of the design and materials used to make something

32. The feel, appearance, or consistency of a surface, substance, or fabric

33. A person who designs any of a variety of things

## Down

3. The factors (e.g., line, color, light, shadow, space, texture) that define a product and take into account the aesthetics and function of the product.
5. A visual, mathematical, or three-dimensional representation in detail of an object or design, often smaller than the original. A model is often used to test ideas, make changes to a design, and to learn more about what would happen to a similar, real object
8. To observe or study by close examination and systematic inquiry
10. The study of workplace equipment design or how to arrange and design devices, machines, or workspace so that people and things interact safely and most efficiently
11. A written plan that identifies a problem to be solved, its criteria, and its constraints. The design brief is used to encourage thinking of all aspects of a problem before attempting a solution
12. A limit to the design process. Constraints may be such things as appearance, funding, space, materials, and human capabilities.
14. An act, process, or methodology used to make a design or system as effective or functional as possible within the given criteria and constraints
15. Pleasing in appearance
16. Change to ensure accuracy
17. A tool for systematically ranking alternatives according to a set of criteria

19. To form an idea of the amount or value of; assess.

21. A method for collecting data

22. Systematic, scientific, documented study

24. A sketch on which notes are made to provide further information.

26. A person who is trained in and uses technological and scientific knowledge to solve practical problems

28. A full-scale working model used to test a design concept by making actual observations and necessary adjustments

29. A person or household that purchases goods or services.

31. Human activities used to create, invent, design, transform, produce, control, maintain, and use products or systems; a sequence of actions that combines resources to produce an output