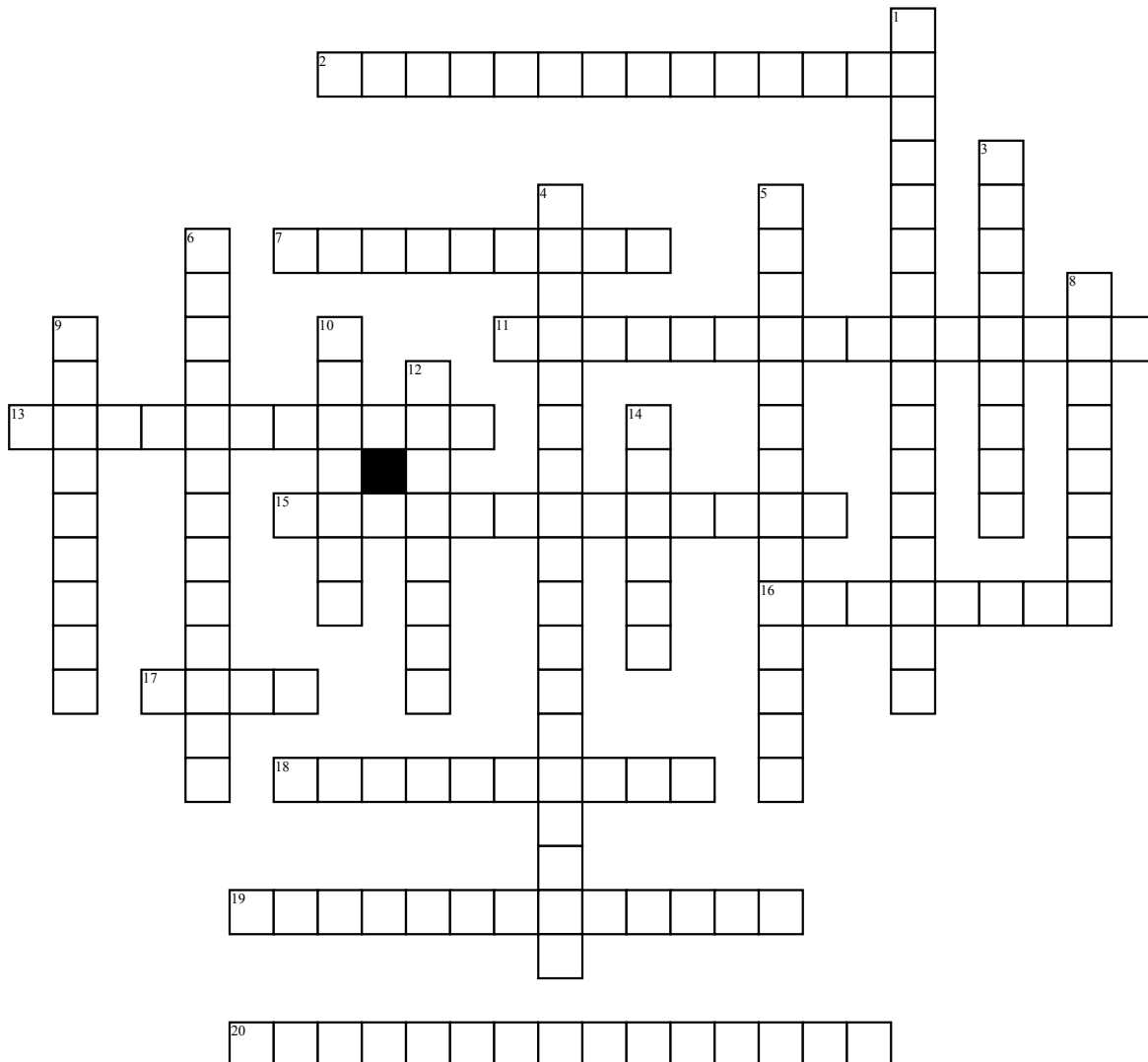


Name: \_\_\_\_\_

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

# Statistics and Kinematics



## Across

2. A person or group for which product or service design efforts are intended.

7. A part or element of a larger whole.

11. A sketch that shows an object's height, width, and depth in a single view.

13. A written plan that identifies a problem to be solved, its criteria, and its constraints. The design brief is used to encourage consideration of all aspects of a problem before attempting a solution.

15. A type of 3D CAD modeling that represents the volume of an object, not just its lines and surfaces. This allows for analysis of the object's mass properties.

16. A group of machined or handmade parts that fit together to form a self-contained unit.

17. A collection of individuals, each with his or her own expertise, brought together to benefit a common goal.

18. A limit to a design process. Constraints may be such things as appearance, funding, space, materials, and human capabilities.

19. A group technique for solving problems, generating ideas, stimulating creative thinking, ect., by unrestrained spontaneous participation in discussion.

20. A part of a design brief that challenges the designer, describes what a design solution should do without describing how to solve the problem, and identifies the degree to which the solution must be executed.

## Down

1. A part of a design brief that clearly and consciously identifies a client's or target consumer's problem, need, or want.

3. A general agreement

4. A major or minor change in the design of an item, effected in order to correct a deficiency, to facilitate production, or to improve operational effectiveness.

5. A tool for systematically ranking alternatives according to a set of criteria.

6. A systematic problem-solving strategy, with criteria and constraints, used to develop many possible solutions to solve a problem or satisfy human needs and wants and to narrow down the possible solutions to one final choice.

8. The condition or quality of being true, correct, or exact; precision; exactness.

9. Not having fixed limits; unrestricted; broad.

10. The reason for which something is done or for which something exists.

12. A person who designs any of a variety of things. This usually implies the task of creating drawings or in some way using visual cues to organize work.

14. A rough drawing representing the main features of an object or scene and often made as a preliminary study.