

Engineering Design Crossword

Easy | 10 clues | Student Worksheet

Name: _____

Date: _____

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

[illegible]

ACROSS

1. Improving one feature while accepting a disadvantage in another
4. One repetition of an experimental procedure.
8. Feature or level of performance a solution should achieve
9. Limit such as cost, time, or materials that restricts a design
10. Design develops solutions to needs; science investigates explanations of phenomena

DOWN

2. Improving performance within stated criteria and constraints
3. Information gathered with senses or scientific instruments.
5. Testable proposed explanation or prediction.
6. Preliminary version built to test a design
7. Repeating a test-and-revision cycle

Easy | 10 clues | Teacher Answer Key

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



2. Optimization
3. Observation
5. Hypothesis
6. Prototype
7. Iteration

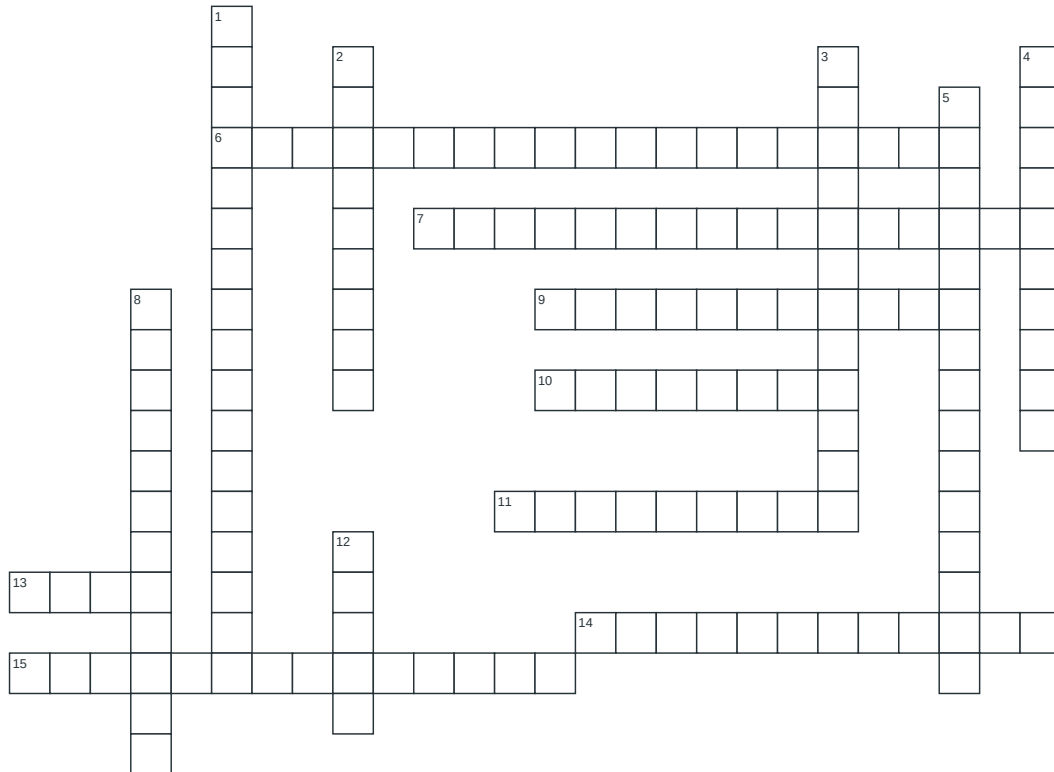
Engineering Design Crossword

Medium | 15 clues | Student Worksheet

Name: _____

Date: _____

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



ACROSS

6. Factor deliberately changed by the investigator.
7. Limit such as cost, time, or materials that restricts a design
9. Information gathered with senses or scientific instruments.
10. Condition kept the same across comparison groups.
11. Preliminary version built to test a design
13. Recorded observations and measurements from an investigation.
14. Comparison group that does not receive the tested treatment.
15. Improving one feature while accepting a disadvantage in another

DOWN

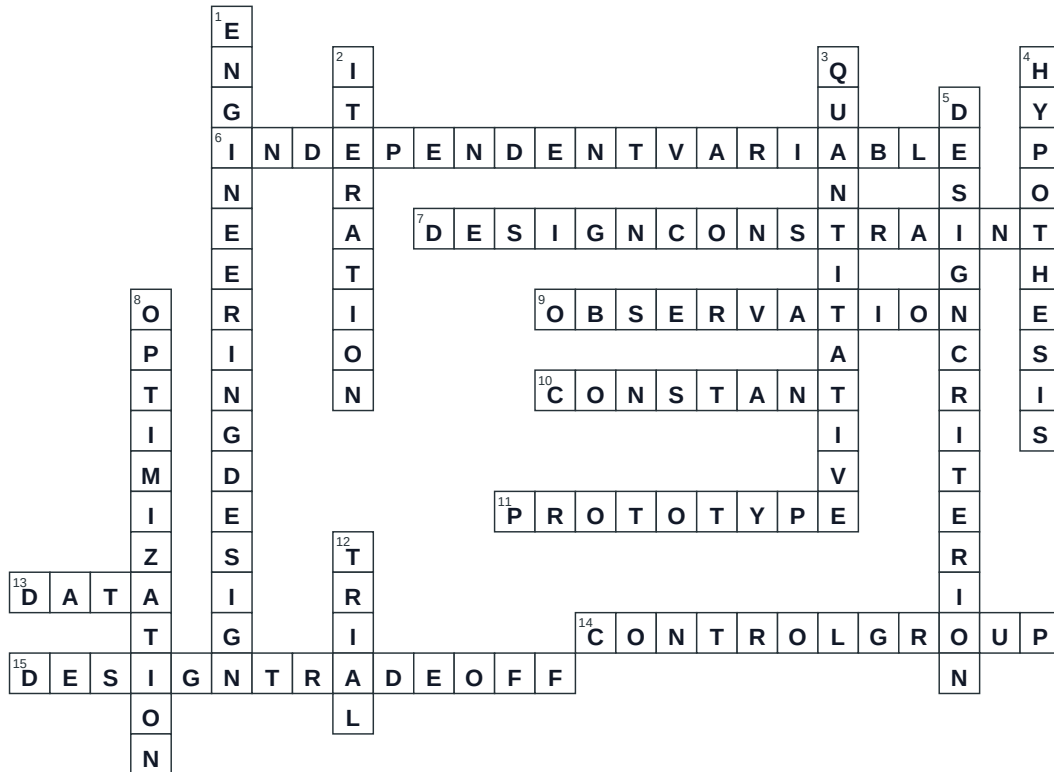
1. Design develops solutions to needs; science investigates explanations of phenomena
2. Repeating a test-and-revision cycle
3. Describes data expressed as numbers or measurements.
4. Testable proposed explanation or prediction.
5. Feature or level of performance a solution should achieve
8. Improving performance within stated criteria and constraints
12. One repetition of an experimental procedure.

Engineering Design Crossword

Medium | 15 clues | Teacher Answer Key

TEACHER ANSWER KEY

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



ACROSS

6. Independent Variable
7. Design Constraint
9. Observation
10. Constant
11. Prototype
13. Data
14. Control Group
15. Design Tradeoff

DOWN

1. Engineering Design
2. Iteration
3. Quantitative
4. Hypothesis
5. Design Criterion
8. Optimization
12. Trial

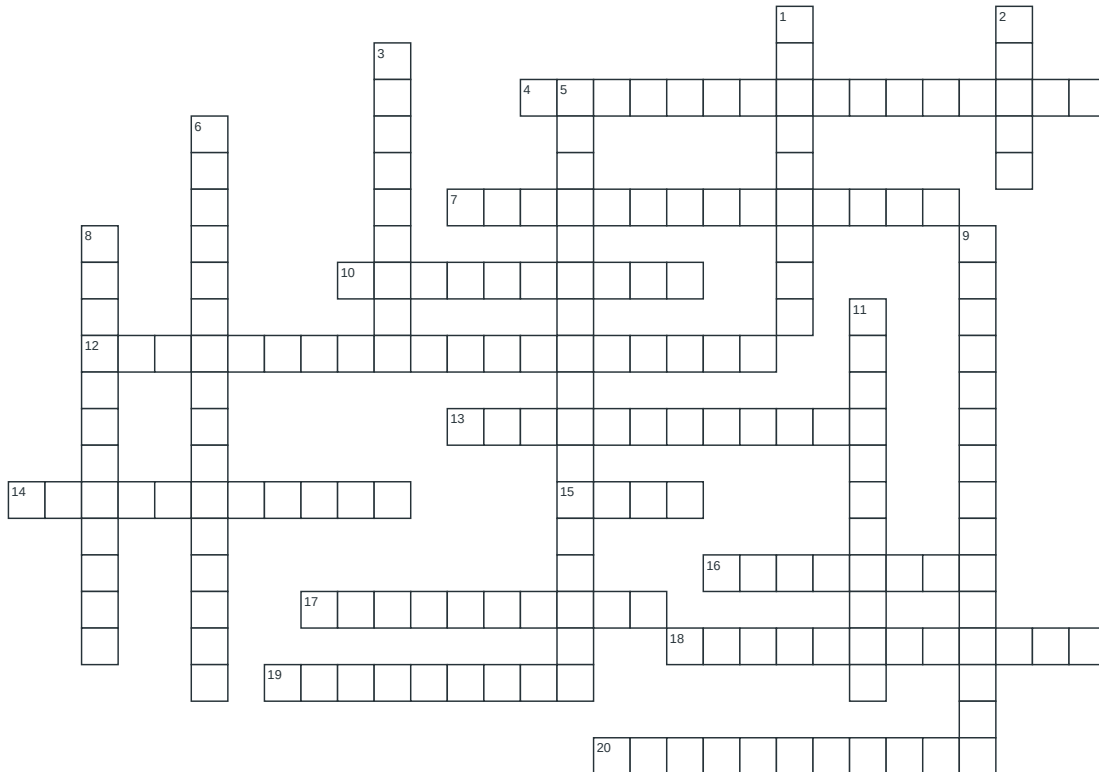
Engineering Design Crossword

Hard | 20 clues | Student Worksheet

Name: _____

Date: _____

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



ACROSS

4. Limit such as cost, time, or materials that restricts a design
7. Improving one feature while accepting a disadvantage in another
10. Testable proposed explanation or prediction.
12. Factor deliberately changed by the investigator.
13. Describes data expressed as numbers or measurements.
14. Describes observations about qualities rather than numerical amounts.
15. Recorded observations and measurements from an investigation.
16. Condition kept the same across comparison groups.
17. Number of individuals or observations included in a study.
18. Comparison group that does not receive the tested treatment.

ACROSS (continued)

19. Repeating a test-and-revision cycle
20. Repeating an investigation to check whether results are consistent.

DOWN

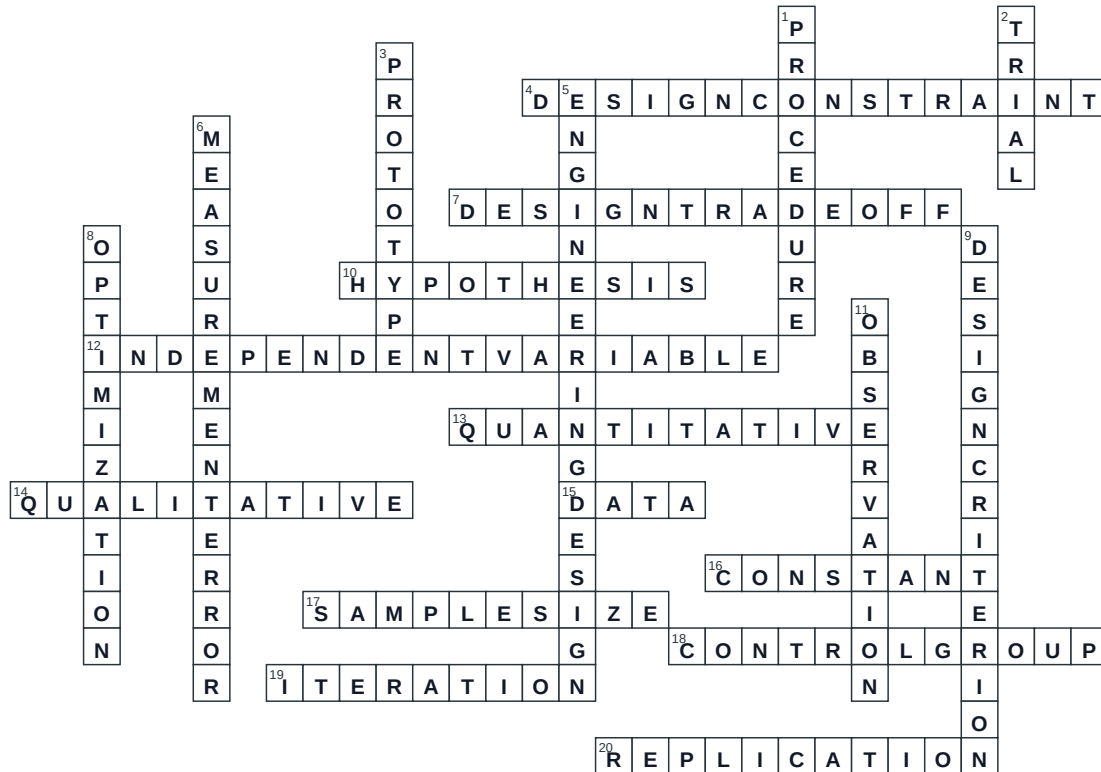
1. Ordered steps used to carry out an investigation.
2. One repetition of an experimental procedure.
3. Preliminary version built to test a design
5. Design develops solutions to needs; science investigates explanations of phenomena
6. Difference between a measured value and the quantity's true value.
8. Improving performance within stated criteria and constraints
9. Feature or level of performance a solution should achieve
11. Information gathered with senses or scientific instruments.

Engineering Design Crossword

Hard | 20 clues | Teacher Answer Key

TEACHER ANSWER KEY

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



ACROSS

4. Design Constraint
7. Design Tradeoff
10. Hypothesis
12. Independent Variable
13. Quantitative
14. Qualitative
15. Data
16. Constant
17. Sample size
18. Control Group
19. Iteration

ACROSS (continued)

20. Replication

DOWN

1. Procedure
2. Trial
3. Prototype
5. Engineering Design
6. Measurement Error
8. Optimization
9. Design Criterion
11. Observation