Fill in the blanks in these sentences with the word that fits.

1. ____________ is the systematic application of mathematical, scientific and technical principles, to yield tangible end products that meet our needs and desires. This process takes into account a number of factors.

2. The descriptors that define the ____________ design process are: human needs and wants, continuous improvement, design and identify constraints.

3. The descriptors that define the ____________ method are: exact starting point, hypothesis, closed ended, and defined linear procedure.

4. The process of checking to see if a solution to a problem already exists is called ____________.

5. In science, you report results; in engineering, you ____________ results.

6. In science, you form a hypothesis; in engineering, you ____________ the problem.

7. The Scientific Method is a defined ____________ procedure.

8. Data is collected during ____________.

9. The steps of the ____________ are: name the problem or question, form a hypothesis and make a prediction, test the hypothesis, interpret your results/hypothesis, and report your results.

10. The ____________ design process is a systematic, iterative problem solving strategy, with criteria and constraints, used to develop many possible solutions to a problem to satisfy human needs and wants.

11. A systematic application of mathematical, scientific and technical principles is ____________.

12. The Engineering design process follows an undefined ____________ path.

13. The ____________ design process is a systematic, iterative, problem-solving strategy, with criteria and constraints, used to develop many possible solutions to a problem to satisfy human needs and wants.

14. ____________ is the study of the history of the natural world and how the natural world works, based on observable physical evidence.

15. A ____________ is a model that performs exactly as the final solution would.
16. Design portfolios, design journals, drawing and schematics are used to ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___.

17. The processes of ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ and demonstration involves: observation of phenomena, formulation of a hypothesis, experimentation, and conclusion.

18. By ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ the problem, the designer clearly identifies what humans need or want.

19. The steps of the ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ method are: name the problem or question, form a hypothesis and make a prediction, test hypothesis, interpret your results/hypothesis and report your results.

**Select your answers from the following words:**

- linear
- scientific
- engineering
- define
- engineering
- communicate
- Engineering design
- testing
- research
- scientific method
- scientific
- defining
- engineering design
- Science
- engineering
discovery
circular
prototype
communicate
Word Search - 4.2.1 Engineering Design Process

Name: ________________________   Class: __________   Date: __________

Try to find the hidden words.

S M S C I E N T I F I C M E T H O D F C
E N G I N E E R I N G D E S I G N V X O
B Q C U N N V P E U Z K E Q I U J W V M
X M O O K G D L N Y G P E C X N Q P G M
X A M A Y I I I L G L T E S T I N G X Q U
Y O M C R N S L I S I U T T G M Z B M N
E G N Z R E O N E Y H I E B N R L Q M C
F K I Q G R V G E W E E E E A N V L P N A
I N C Z S I E I R R W F Z N R N G T U T
N P A I C N R N I C B P R O T O T Y P E
I S T Z I G Y E N G I N E E R I N G T N
N G E C E T K E G Q K I S J Y K F U M V
G O G I N V S R D H Q D E F I N E I F A
N Y O R T Z C I E G U W A C F C J K C T
N L X C I V I N S S U S R Q B P P B Y T
Z Q B U F V E G I O I C C E V A W T W N
N J W L I A N P G L B I H K U P J W V G
S C V A C R C K N C M W N K F W L Q S Y
K W O R J J E S V L U W X K Q T Q B U G

Select from the following words:

- scientific method
- define
- scientific
- linear
- engineering
discovery
- Engineering design
- prototype
- testing
- engineering
communicate
- engineering design
- research
- engineering
defining
- circular
- communicate
- scientific
Fill in the blank with the letter next to the word that best completes the sentence.

1. The descriptors that define the __________ design process are: a. engineering human needs and wants, continuous improvement, design and identify constraints.

2. The process of checking to see if a solution to a problem already exists is called __________ .

3. Design portfolios, design journals, drawing and schematics are used to __________ .

4. The processes of __________ and demonstration involves: d. scientific observation of phenomena, formulation of a hypothesis, experimentation, and conclusion.

5. In science, you report results; in engineering, you __________ results.

6. The steps of the __________ are: name the problem or question, form a hypothesis and make a prediction, test the hypothesis, interpret your results/hypothesis, and report your results.

7. __________ is the systematic application of mathematical, scientific and technical principles, to yield tangible end products that meet our needs and desires. This process takes into account a number of factors.

8. The Scientific Method is a defined __________ procedure.

9. By __________ the problem, the designer clearly identifies what humans need or want.

10. The Engineering design process follows an undefined __________ path.

11. The descriptors that define the __________ method are: exact starting point, hypothesis, closed ended, and defined linear procedure.

12. The steps of the __________ method are: name the problem or question, form a hypothesis and make a prediction, test hypothesis, interpret your results/hypothesis and report your results.
13. The __________ design process is a systematic, iterative problem solving strategy, with criteria and constraints, used to develop many possible solutions to a problem to satisfy human needs and wants.

14. A __________ is a model that performs exactly as the final solution would.

15. __________ is the study of the history of the natural world and how the natural world works, based on observable physical evidence.

16. A systematic application of mathematical, scientific and technical principles is __________.

17. Data is collected during __________.

18. The __________ design process is a systematic, iterative, problem-solving strategy, with criteria and constraints, used to develop many possible solutions to a problem to satisfy human needs and wants.

19. In science, you form a hypothesis; in engineering, you __________ the problem.
Across

1. The steps of the _____________ are:
   name the problem or question, form a hypothesis and make a prediction, test the hypothesis, interpret your results/hypothesis, and report your results.
2. Design portfolios, design journals, drawing and schematics are used to ____________.

3. In science, you form a hypothesis; in engineering, you ____________ the problem.

4. The process of checking to see if a solution to a problem already exists is called ____________.

5. The Scientific Method is a defined ____________ procedure.

6. The descriptors that define the ____________ method are: exact starting point, hypothesis, closed ended, and defined linear procedure.

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9. A systematic application of mathematical, scientific and technical principles is ____________.

10. ____________ is the systematic application of mathematical, scientific and technical principles, to yield tangible end products that meet our needs and desires. This process takes into account a number of factors.

Down

1. The processes of ____________ and demonstration involves: observation of phenomena, formulation of a hypothesis, experimentation, and conclusion.

2. By ____________ the problem, the designer clearly identifies what humans need or want.

3. In science, you report results; in engineering, you ____________ results.

4. ____________ is the study of the history of the natural world and how the natural world works, based on observable physical evidence.

5. The ____________ design process is a systematic, iterative problem-solving strategy, with criteria and constraints, used to develop many possible solutions to a problem to satisfy human needs and wants.

6. The Engineering design process follows an undefined ____________ path.

7. The steps of the ____________ method are: name the problem or question, form a hypothesis and make a prediction, test hypothesis, interpret your results/hypothesis and report your results.
8. The descriptors that define the design process are: human needs and wants, continuous improvement, design and identify constraints.

9. Data is collected during ___ ___ ___ ___ ___ ___ ___.

Select your answers from the following words:

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<thead>
<tr>
<th>testing</th>
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<th>scientific</th>
<th>Engineering design</th>
</tr>
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