Fill in the crossword puzzle by using the clues.

Across

2. ____________ ___ strength: The mechanical property of the ability of a metal to withstand a constant weight or force at elevated temperatures.
3. In _______ _______ _______ _______ _______ manufacturing products are made with no interruption to the production line from the input to output. Product examples are: cars, food products, bricks.

4. In manufacturing the primary processes are to turn _______ _______ materials into standard stock (timber cut into boards).

5. _______ _______ _______ _______ : The mechanical property of a material to resist permanent indentation.

6. The magnetic property of _______ _______ temperature: the temperature at which a material will lose magnetism.

7. The thermal property of thermal _______ _______ _______ _______ _______ _______ _______ : indicates a material’s ability to conduct heat.

8. _______ _______ _______ _______ manufacturing is a one of kind item made by a specialist. Product examples: yacht, clothing, purse.

9. _______ _______ _______ _______ _______ _______ _______ _______ use the material properties to select appropriate materials for product production.

10. _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ strength: The mechanical property of the ability of material to resist various kinds of rapidly changing stresses.

11. The thermal property of heat _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ 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4. In the manufacturing process secondary processes are to turn standard stock into ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ (boards turned into furniture).

5. ___ ___ ___ ___ ___ ___ ___ ___ ___ manufacturing products are made in batches. The components of a product are completed at a workstation before they move to the next one. Product examples are: bakery items, paints, special edition shoes.

6. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ parts are parts that are identical, meaning to replace the part, you do not have to make a custom piece. There is already one the same size.

7. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ strength: The mechanical property of measuring resistance to being pulled apart.

8. The electrical property of ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___: the opposition of a material to the flow of electrical current.

Select your answers from the following words:

saturation manufactured finish products Custom resistivity conductivity continuous Tensile expansion susceptibility Batch Creep Interchangeable Conductivity conductivity susceptibility Fatigue Curie Fracture Engineers capacity Hardness raw
Try to find the hidden words.

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

Select from the following words:

- resistivity
- Fracture
- expansion
- Hardness
- conductivity
- capacity
- Interchangeable
- Tensile
- manufactured
- Fatigue
- susceptibility
- Custom
- continuous
- conductivity
- Creep
- saturation
- Conductivity
- finish products
- raw
- Batch
- Curie
- Engineers
Fill in the blank with the letter next to the word that best completes the sentence.

1. _______ toughness: The mechanical property of the ability of a material containing a crack to resist fracture.
   a. conductivity

2. The thermal property of heat _______: the amount of heat required to change a material's temperature by a given amount.
   b. Fracture

3. _______ strength: The mechanical property of measuring resistance to being pulled apart.
   c. Conductivity

4. _______: The mechanical property of measuring how well a material accommodates the movement of an electric charge.
   d. resistivity

5. The electrical property of _______: the opposition of a material to the flow of electrical current.
   e. expansion

6. _______: The mechanical property of a material to resist permanent indentation.
   f. saturation

7. _______ strength: The mechanical property of the ability of a material to resist various kinds of rapidly changing stresses.
   g. finish products

8. _______ manufacturing is a one of kind item made by a specialist. Product examples: yacht, clothing, purse.
   h. Fatigue

9. _______ strength: The mechanical property of the ability of a metal to withstand a constant weight or force at elevated temperatures.
   i. capacity

10. The magnetic property of magnetic _______: the ratio of magnetization (M) to magnetic field (H).
    j. Hardness

11. Final _______ products can be one of three types: custom, batch or continuous.
    k. Interchangeable

12. _______ parts are parts that are identical, meaning to replace the part, you do not have to make a custom piece. There is already one the same size.
    l. continuous

13. In _______ manufacturing products are made with no interruption to the production line from the input to output. Product examples are: cars, food products, bricks.
    m. susceptibility

14. The thermal property of thermal _______: indicates a material's ability to conduct heat.
    n. conductivity
15. The electrical property __________: the measure of how well a material accommodates the movement of an electric charge.

16. In manufacturing the primary processes are to turn __________ materials into standard stock (timber cut into boards).

17. __________ manufacturing products are made in batches. The components of a product are completed at a workstation before they move to the next one. Product examples are: bakery items, paints, special edition shoes.

18. __________ use the material properties to select appropriate materials for product production.

19. In the manufacturing process secondary processes are to turn standard stock into __________ (boards turned into furniture).

20. The magnetic property of __________ magnetization: state reached when an increase in applied external magnetizing field H cannot increase the magnetization of the material further.

21. The magnetic property of __________ temperature: the temperature at which a material will lose magnetism.

22. The thermal property of coefficient of thermal __________: how much a material will expand for each degree of temperature increase.
Fill in the blanks in these sentences with the word that fits.

1. ___ ___ ___ ___ ___ ___ ___ strength: The mechanical property of measuring resistance to being pulled apart.

2. ___ ___ ___ ___ ___ ___ ___ toughness: The mechanical property of the ability of a material containing a crack to resist fracture.

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6. ___ ___ ___ ___ ___ ___ ___ ___ ___ ___: The mechanical property of measuring how well a material accommodates the movement of an electric charge.

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17. In the manufacturing process secondary processes are to turn standard stock into ________ ________ ________ ________ ________ ________ ________ ________ ________ (boards turned into furniture).

18. Final ________ ________ ________ ________ ________ ________ ________ ________ ________ products can be one of three types: custom, batch or continuous.

19. ________ ________ ________ manufacturing is a one of kind item made by a specialist. Product examples: yacht, clothing, purse.

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22. ________ ________ ________ ________ ________ ________ ________ ________ parts are parts that are identical, meaning to replace the part, you do not have to make a custom piece. There is already one the same size.

Select your answers from the following words:

Fracture susceptibility Curie expansion capacity Engineers resistivity Interchangeable raw Tensile conductivity finish products Conductivity continuous Hardness Custom Batch conductivity Creep Fatigue saturation manufactured