Complete the following sentences:

1. Gases have ..... shape and no fixed volume.
2. The ..... matter has a fixed shape and a fixed volume
3. The shape of ..... matter and its volume are variable.
4. Thermal conductivity is one of the ..... properties of the matter.
5. The roof of the house in ..... climate environment is flat.
6. ..... is formed when two or more materials not chemical combined.
7. The matter change from solid state to liquid state when ..... thermal energy.
8. Heat is considered a form of .....
9. Shaping copper into wires is considered a ..... change.
10. ..... and ..... are examples of chemical change in matter.
11. The melting of a piece of butter is a ..... change.
12. ..... of matter is measured with a measuring cup.
13. The length of class can be measured by ..... units.
14. 5 kilograms = ... grams.
15. Iron rust is an example of a change in the ..... properties of a substance.
16. Colour, taste and smell are from ..... properties of a substance.
17. ..... is used to measure the volume of a substance.
18. ..... gas is used to fill balloons.
19. ..... is used to make electrical wires because it is a good conductor of electricity.
20. ..... is used in the manufacture of cooking utensils.
21. Water turns into steam as a result of ..... thermal energy.
22. ..... consists of two or more substances that are chemically united.
23. The motion of the particles of a substance increases as the temperature of the substance .....
24. The changes of a substance from a gas to a liquid is called .....
25. A mixture of solids dissolved in water is separated by .....
26. Digestion of food is one of the ..... changes.
27. The change of ice into water is considered a ..... change.
28. ..... changes do not change the composition of a substance.
29. Salt sea water becomes drinkable after the .....
30. The formation of gas bubbles when a quantity of vinegar is mixed with baking soda is evidence of a ..... change of the substance.
31. ..... is the space occupied by an object in a vacuum.
32. 5 liters= ..... cm^3
33. We use ..... to measure the mass of a book.
34. Wood is ..... conductor of electricity.
35. ..... is used in the manufacture of eyeglasses.

36. ..... is one of the chemical properties of a substance.
37. Shaping copper into wires is considered a ..... change.
38. The mass of a mixture of solids before mixing is ..... mass after mixing.
39. Grinding sugar is one of the ..... changes.
40. The formation of rust on an iron nail is a sign of ..... change.
41. The change of state of water from a solid to a liquid is a ..... change.
42. Matter is made up of small units invisible to the naked eye called .....
43. ..... is from units of volume.

Write what the following statements indicate:

1. The state of water after freezing. (.....)
2. A copy of something to explain its shape or how its work. (.....)
3. The basic unit of matter. (.....)
4. The amount of matter which an object contains. (.....)
5. The amount of space occupied by the matter. (.....)
6. A measure of how fast the particles of matter move. (.....)
7. Everything that has mass and occupy the space. (.....)
8. A non-toxic matter used to fill balloons. (.....)
9. The ability of a matter to conduct electricity and heat through it. (.....)
10. Properties that can be observe by using five senses. (.....)
11. A process in which matter change from solid state to liquid state by increasing temperature. (.....)
12. A process in which matter changes from gaseous state to liquid state. (.....)
13. Mixing two or more substances and can be separated them easily again. (.....)
14. A red chemical crust called iron oxide. (.....)
15. The process of separating salt from water. (.....)
16. A change in the shape, size and state of matter. (.....)
17. A changes in the structure c a substance and produces a new substance. (.....)
18. A tool used to measure the mass of fruit. (.....)
19. A tool used to measure the length of a book. (.....)
20. A tool used to measure the volume of a liquid. (.....)
21. The ability of a material to transfer heat and electricity through it. (.....)
22. Properties of matter such as colour, shape, texture and smell. (.....)
23. The amount of space occupied by a substance. (.....)
24. The amount of matter contained in an object. (.....)
25. A measure of how fast the particles that make up matter move. (.....)
26. Change from a solid to a liquid state. (.....)
27. A form of matter made up of two or more substances. (.....)

28. The process of separating salt from water. (.....)
29. A red chemical crust is called iron oxide. (.....)
30. A process by which water turns into ice. (.....)
31. A form of matter consists of two or more parts that are chemically united. (.....)

Correct the underlined word:

1. Rusting iron is considered a physical change. (.....)
2. Apple and orange can be distinguished by texture. (.....)
3. Melting ice is considered a chemical change. (.....)
4. Salt and sugar can be distinguished by odor. (.....)
5. Rusting of iron is considered a physical change. (.....)
6. Vinegar and strawberry juice can be distinguished by color. (.....)
7. Vegetable salad is considered from compounds. (.....)

Give reasons for:

1. Vinegar takes the shape of the container it is in.

   .....

2. Oxygen has no fixed shape or volume.

   .....

3. A cup has a fixed shape and a fixed volume.

   .....

4. Melting of candle is considered a physical change.

   .....

5. Dissolving salt in water is considered a physical change.

   .....

6. Burning paper is considered a chemical change.

   .....

7. Balloons which filled by helium gas rise upward.

   .....

8. Handles of cooking pots are made of plastic not metal.

   .....

9. Glass is used in the manufacture of electric lamps.

   .....

10. Wood is not used, in manufacturing of electric wires.

    .....

11. Condensation is the reverse of evaporation.

    .....

12. Heat is not matter.

.....

13. Atmospheric air is considered a mixture.

.....

14. Melting is considered physical change.

.....

15. Sugar solution is considered a mixture.

.....

16. Melting ice is considered physical change.

.....

17. Desalination of seawater has become an important process for some countries.

.....

18. Burning wood is considered a chemical change.

.....

19. Burning paper is one of the chemical properties of matter.

.....

20. The shape of houses varies from one environment to another.

.....

21. The roof of a house is sloped in a cold climate.

.....

22. Glass is used to make windows and lamps.

.....

23. Helium gas is used to fill balloons.

.....

24. Aluminium is used in the manufacture of cooking utensils.

.....

25. Copper is used to make electrical wires.

.....

26. The importance of chlorophyll in plant leaves.

.....

27. Wood is not used to make electrical wires.

.....

28. Sunlight is one of the basic needs of plants.

.....

29. Humans feed on plants and animals.

.....

What happens if:

1. Destroy a cup of sugar.

.....

2. Water is exposed to high temperature.

.....

3. You press a balloon filled with a large amount of air.

.....

4. Water is exposed to a temperature below zero.

.....

5. Wood is used to make electric wires.

.....

6. You put a piece of cork in a glass container filled with water for one weak.

.....

7. Putting an iron nail in a glass container filled with water.

.....

8. A magnet is brought close to an aluminium spoon.

.....

9. A matter gains thermal energy.

.....

10. A liquid matter loses its heat.

.....

11. Putting a small amount of sea water directly under the sun for several days.

.....

12. Cooling water to temperature less than zero Celsius degree.

.....

13. Exposing a piece of iron to humid air?

.....

14. Putting a piece of ice in sun for a long period of time.

.....

15. Boiling seawater after filtering it.

.....

16. Mixing vinegar and baking soda.

.....

17. Iron reacts with atmospheric oxygen.

.....

18. Iron is left uncoated in the atmospheric air.

.....

19. The substance absorbs thermal energy or light energy (According to the movement of particles).

.....

20. Ice cubes gains thermal energy

.....

21. Liquid water is heated.

.....

22. Vinegar is mixed with baking

.....

23. Seawater was boiled after filtration.

.....

24. Oxygen reacted with carbon and hydrogen.

.....

25. Wood was burned.

.....

26. The handles of cooking utensils are made of iron.

.....

Explain:

1. The property which you can distinguish between each two of the following:

Substances	Property
Salt- sugar	.....
Flour- Salt	.....
Vinegar- Water	.....
Strawberry juice- Banana juice	.....

2. The reason for the change in the properties of the matter.

.....

3. How the state of matter partially depends on its temperature by describing the kinetic energy of particles when the temperature increases and decreases.

.....

.....

4. The difference between heating and cooling the matter in terms of particle motion.

.....

.....

5. The changes of the matter resulting from condensation process.

.....

6. The methods of mixture separation.

.....

Mention:

1. **One state of:** matter that has a variable shape and fixed volume.

   .....

2. **One use for each of the following material:** Steel - Rubber - Copper.

   .....

   .....

   .....

3. **One difference between:** House roofs in cold area and in hot desert area.

   .....

   .....

Mention the importance of each of the following

1. **Globe model.**

   .....

   .....

   .....

   .....

2. **Solar system model:** .....
3. **Measuring tape:** .....
4. **Recycling:** .....

Compare between:

1. The process of: Melting - Freezing.

   .....

   .....

2. Mixture and compound.

Mixture	Compound
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....
.....	.....

3. The types of changes that occur to a substance in term of the possibility of returning the substance to its original state.

   .....

   .....

4. Solid matter and gaseous matter in terms of:

Comparison	Solid matter	Gaseous matter
Volume	.....	.....
Example	.....	.....

5. Producers and consumers organisms in terms of:

Comparison	Producers	Consumers
Definition	....	....
Example	.....	.....

Identify the type of change:

1. Melting wax. .....
2. The folding of the fabric. .....
3. Wood burning. .....

Mention units for measuring:

1. Volume: .....
2. Mass: .....

Mention one use for:

1. Copper: .....
2. Helium: .....
3. Glass: .....

What is meant by:

1. Freezing: .....
2. Melting: .....
3. Condensation: .....

What is the tool that used to measure:

1. The volume of a quantity of oil? .....
2. The temperature. .....
3. The length of the class? .....

Mark (√) or (x) in front of the following statements:

1. A piece of cork sinks in water and a piece of wood floats. (.....)
2. A solution of table salt is considered a mixture. (.....)

Answer:

1. **What** are the physical properties of the matter?

   .....

2. **What** is the effect of increasing the speed of the particles of a solid matter (Ice) on its state?

   .....

3. **What happen to:** the mass of matter when heating or cooling it.

   .....

4. **Determine** the benefits of desalination of seawater.

   .....

5. **Identify the following changes into physical and chemical:**

   Melting wax - Burning wood - Cutting fruit - Rotting fruit - Cutting paper - Dissolving sugar in water.

Physical change	Chemical change
.....	.....
.....	.....