Complete the following statements:

1. ..... disease is one of well-known disorders that affect the endocrine system.
2. People have this disease cannot make ..... or cannot use it.
3. The organ responsible for secreting insulin is .....
4. ..... is a device attached to the body that regulates blood sugar levels with automatic insulin injections insulin when the body needs it.
5. Researchers are now working to develop an ..... so that diabetics would not need to connect an external insulin pump.
6. Gravity attracts any object that has .....
7. Wind turbines need ..... to generate electricity.
8. Magnets can be made from .....
9. An electric generator converts mechanical energy into ..... energy.
10. The pattern formed by iron filings near a magnet is a diagram of .....
11. Electrical energy is transferred to electrical devices through .....
12. A moving magnet generates ..... inside a coil.
13. Electrical wires are covered with material ....., which is an insulating
14. To make a pacemaker, we need ....., an insulated electrical wire and .....
15. When the material gains thermal energy, the speed of its molecules ..... and ..... from each other and therefore the matter ..... or .....
16. When the material loses thermal energy, the speed of its ..... and ..... of each other and therefore the matter ..... or .....
17. Your body should get enough amount of ....., ... and .....
18. The process of getting rid of wastes is called .....
19. The systems responsible for the excretion processes are ....., ... and .....
20. The urinary system removes wastes products from your .....
21. ..... performs an important function of the urinary system.
22. One of the most important wastes that the kidneys get rid of is .....
23. Urea comes from the breakdown of .....
24. ..... is the process of expelling urine from the body.
25. ..... is a microscopic unit that filters blood.
26. Function of the ..... system is the secretion of hormones to regulate many processes in the body.
27. ..... hormone regulates the amount of sugar in the blood.
28. ..... forces keep the stability of objects on the Earth's surface.
29. The area surrounding the magnet is known as .....
30. The pattern that iron fillings made near the magnet is known as .....
31. The magnet may ..... or ..... with another magnet.
32. There are two factors that affect the gravitational forces, ... and .....
33. Energy is neither ..... nor ..... from nothing.

34. ..... changes mechanical energy into electrical energy.
35. ..... is a closed path for the movement of electric current.
36. Charges moving in a conductor called .....
37. ..... uses to open and close the electrical circuit.
38. Materials are divided in terms of their conductivity of electricity into electric conductors, and electric .....
39. ..... is considered one of the components of the circuit that limits the flow of electric current.
40. The electric circuit is connected in ..... or ..... connection.
41. ..... connection is done in home.
42. The mutual effect between magnetism and electricity is used in ....., ... and .....
43. ..... used for the heart patient.
44. The thermal energy of an object depends on .....
45. The energy that the body acquires because of its movement is the ..... energy.
46. There are three ways of heat transfer, ..., ... and .....
47. The state of matter depends on .....

Write what the following statements mean:

1. A system whose function is to get rid of waste produced by the vital processes that take place inside our bodies. (.....)
2. The organ responsible for producing the insulin hormone. (.....)
3. A device attached to the body that helps diabetics regulates their blood sugar levels. (.....)
4. The space around a magnet where its magnetic force appears. (.....)
5. Materials that are not attracted to magnets. (.....)
6. The force that pulls objects down toward the center of the Earth. (.....)
7. A closed path for passing electric current. (.....)
8. A material that is attracted to magnets. (.....)
9. A material that allows electric charges to flow through it. (.....)
10. The two factors that affect the force of gravity. (.....)
11. The most common tool for opening and closing an electrical circuit. (.....)
12. The force of the Earth that attracts all objects on its surface toward its center. (.....)
13. Materials that allow electrical charges to flow through them. (.....)
14. Materials that do not allow electrons to flow through them easily. (.....)
15. A material that allows electrons to flow through it easily. (.....)
16. A device that is inserted into the chest and stimulates the heart muscle to beat at regular intervals. (.....)
17. State of matter that bonding forces between its particles disappears. (.....)
18. The process of eliminating wastes from the body. (.....)
19. A system that works to get rid of dissolved wastes from the blood. (.....)
20. Microscopic units that filter blood. (.....)

21. One of the most important wastes that the kidneys work to get rid of. (.....)
22. A process, after is completed, urea, other wastes and water become urine. (.....)
23. An organ that collects urine inside it. (.....)
24. A tube that transports urine to the bladder. (.....)
25. The process of expelling urine out of the body. (.....)
26. The system responsible for secreting hormones to regulate many processes in the body. (.....)
27. A disease that occurs as a result of a disorder in the secretion of the insulin hormone. (.....)
28. The organ responsible for the secretion of the insulin hormone. (.....)
29. Force affected by two factors, distance and mass. (.....)
30. The area that surrounds the magnet. (.....)
31. Materials attracted to magnets. (.....)
32. Materials that are not attracted to magnets. (.....)
33. A device used to light homes and operate appliances. (.....)
34. A current produced by the flow of electrons in a conductor. (.....)
35. A circuit that allows electric current to pass through it. (.....)
36. A device used to adjust the temperature in electrical appliances. (.....)
37. A material through which electrical energy does not flow easily. (.....)
38. Materials that allow electricity to pass through. (.....)
39. A component in the circuit that reduces current flow. (.....)
40. A type of electrical connection in which all components of the circuit are connected in one path. (.....)
41. A type of connection in which the lamps are connected to two different branches. (.....)
42. A device that stimulates the heart muscle to beat at regular intervals. (.....)
43. A measure of the average kinetic energy of particles in a substance. (.....)
44. The process of converting matter from its solid state to its liquid state. (.....)
45. The process of converting a substance from a gas to a liquid. (.....)
46. The process of converting a substance from a liquid state to a solid state. (.....)
47. A device used to infer the passage of electric current in a circuit. (.....)

Correct the following statement:

1. <u>The electric switch</u> is the source of electrons that flow through the electrical circuit. (.....)
2. A galvanometer is used to measure small <u>masses</u>. (.....)
3. Electrical wires are covered with a layer of <u>aluminium</u> because it is an insulating material. (.....)

Give reason:

1. Proteins do not pass through the nephrons.

   .....

2. The urinary bladder plays an important role in the urinary system.

   .....

3. The kidney acts as a filter in the urinary system.

.....

4. When exposed to a dangerous situation, the endocrine system secretes chemicals.

.....

5. Why the electric lamp connected to a battery does not light up when there is cutting in the connecting wire.

.....

6. A human is exposed to an electric shock when touching an uninsulated wire through which an electric current is passing.

.....

7. Electric generators play an important role in our life.

.....

8. Cobalt and nickel are magnetic materials.

.....

9. Cobalt and nickel are magnetic materials.

.....

10. When a ball is thrown into the air, it stops rising and then falls back to the ground.

.....

11. Gravity and magnetism differ from other forces.

.....

12. Wood and copper are not attracted to magnets.

.....

13. In a parallel electrical circuit, when an electric lamp is turned off or removed, the other lamps remain lit.

.....

14. Some electrical circuits contain electrical resistors.

.....

15. Many devices such as toasters, microwaves, and electric ovens contain electrical resistors.

.....

16. The amount of heat energy of molten wax is greater than that of solid wax.

.....

What happens when\ if:

1. The body is unable to secrete enough insulin or use it.

.....

2. The distance between an object and the center of the Earth increases.

.....

3. The switch in the electrical circuit is opened.

.....

4. A magnet is close to the end of the plastic ruler.

.....

5. The distance between the object and the center of the Earth decreases.

.....

6. The mass of the object increases (in relation to gravity).

.....

7. The switch in the electrical circuit is closed.

.....

8. A glass rod is placed in an electrical circuit containing a switch, a battery and a light bulb.

.....

9. A piece of aluminum is placed in an electrical circuit containing a switch, a battery, and a light bulb.

.....

10. Electrical wires are covered with aluminum foil.

.....

11. Electrical circuits in the home are connected in series.

.....

12. A person's heartbeat is irregular or slow.

.....

13. Two objects of the same temperature contact each other.

.....

14. A rubber thread is used instead of a metal wire in the electrical circuit.

.....

15. One of the components of the electrical circuit is removed or damaged.

.....

What happens to:

1. Water when it heats to its boiling point?

.....

2. Ice cream when you leave it in the air for a while?

.....

3. The water when you put it in the freezer?

.....

What is the function of each of the following:

1. Battery (dry cell): .....
2. Switch: .....
3. Copper wires: .....

What is meant by each of the following:

1. Electrically conductive materials: .....
2. Electrically insulating materials: .....

Classify the following materials in the table below:

1. (plastic spoon - piece of glass - copper wire - iron nails)

Magnetic materials	Non-magnetic materials
.....	.....

2. (Clip - Metal pins - Copper wire - Iron nails)

Magnetic materials	Non-magnetic materials
.....	.....

3. (Clip - Plastic spoon - Copper wire - Iron nails)

Magnetic materials	Non-magnetic materials
.....	.....

Compare between:

1. Electrically conductive materials and insulating materials in terms of definition- examples?

	Electric Conductors.	Electric insulators
Definition	.....	.....
Example	....	.....

Answer the following questions:

1. Explain how gravity is similar to magnetism.

.....

2. What is meant by the following: Electricity - Electric current

.....

.....

.....

3. What factors affect the gravitational force of an object?

.....

.....

4. What are the components of an electric circuit?

.....

5. **What** is the importance of a thermostat?

.....

6. **What** is the importance of a pacemaker?

.....

7. **What** do we use to make pacemaker?

.....

8. **Why** there is an antenna inside the pacemaker?

.....