*Everything should be made as simple as possible, but not simpler (Albert Einstein)*

**Переведите 3 текста на выбор и сделайте аудиозапись**

Text 1

Everything happens because of energy. Without it there would be no life on Earth. Scientists classify energy into several different types, including chemical energy, light energy, and nuclear energy. Most types of energy can switch from one form to another. It is when energy switches form that things happen, or work is done. In a car, for example, gasoline provides chemical energy, which turns into mechanical energy, heat energy, electrical energy, and sound energy when the engine is started.

Text 2

Scientists divide energy into seven main types. These include heat energy, which raises the temperature of matter, electrical energy, which converts into other energy forms, including heat and light, and chemical energy, contained in fuels. All energy that comes directly or indirectly from the Sun is known as radiant energy and makes up the electromagnetic spectrum.

Text 3

Heat is a form of energy that transfers from one object or body to another if there is a difference in temperature between the two. When you are hot, for example, and the air outside your body is cooler, you lose heat to the air. A change in a body's level of heat results in a change in the energy of its molecules. This gives rise to a temperature change, which may in turn lead to a change of state.

Text 4

Almost any form of energy can be converted into electricity. The most common methods of producing electricity are those used in batteries or generators. Power from batteries is generated by converting chemical energy into electrical energy. Most generators convert heat energy (from burning fuel) into electrical energy. Some generators exploit such natural resources as sunlight or wind to obtain electrical energy.

Text 5

The different behavior of matter in its solid, liquid, and gaseous states is explained by kinetic theory. The state of any particular matter is determined by the amount of energy contained inside its atoms (the tiny particles that make up all matter). Changes of state occur when the energy levels of atoms change. The atoms in a gas have the most energy. The total amount of energy contained by the atoms of a substance is known as the kinetic energy of the substance. The substance's temperature and the pressure it is under affect its kinetic energy; so does the volume of its container.

**Чтение с пониманием**

***1. Найдите эквиваленты***

|  |  |
| --- | --- |
| *A* | *B* |
| 1. solid | a. материя |
| 2. substance | b. состояние |
| 3. give rise to | c. твердое тело |
| 4. obtain | d. обеспечивать |
| 5. occur | e. вещество |
| 6. make up | f. определять |
| 7. switch from | g. давление |
| 8. matter | h. получать |
| 9. convert into | i. составлять |
| 10. fuel | j. источник |
| 11. volume | k. включать |
| 12. provide with | l. топливо |
| 13. include | m. объем |
| 14. state | n. превращаться в |
| 15. determine | о. происходить |
| 16. pressure | p. переходить из |
| 17. affect | q. иметь результатом |
| 18. result in | r. содержать |
| 19. source | s. влиять |
| 20. contain | t. приводить к |

**2. *Дополните предложения:***

1. There are seven main types of energy including

2. Most types of energy can

3. The energy that comes from the Sun is

4. Radiant energy composes

5. The energy which raises the temperature of matter is called

6. The energy contained in fuels is known as

7. Temperature change of a body may lead to

8. Electrical energy can be obtained from

9. Some generators exploit such natural resources as

10. Kinetic theory explains

11. Changes of state occur when

12. The kinetic energy of the substance is known as

***3. Ответьте на вопросы***

1. What wouldn’t we exist on Earth without?

2. How does the energy switch from one form to another in a car?

3. When does heat energy occur?

4. What can a change in a body’s level of heat result in?

5. What are the most common methods of producing electricity?

6. What natural resources do the generators use to produce electricity?

7. What is the state of any particular matter determined by?

8. What are atoms?

9. When does the change of a state happen?