

The sun's rays travel in straight lines are called heat rays. When its radiation is absorbed or reflected. Darker surfaces absorb more of the radiation and lighter surfaces reflect the radiation. So you would be cooler if you wear light or white clothes in the summer.

Exercise 3. Translate the following words and word combinations. Stored energy, nuclear energy, named after, amount of energy, flash light batteries, potential energy, kinetic energy, excellent conductors, warm air, daytime, convection, radiation, nighttime, final form, sun's rays, heat rays, light clothes, sunlight, conduction.

Exercise 4. Write the verbs related to the following nouns. Translate them. Measurement, invention, discovery, weight, transformer, creation, existence, storage, conduction, radiation, movement, change, heat, transfer, reflection, absorption, darkness.

Exercise 5. Write the nouns related to the following verbs. Define the suffixes used to form nouns. Translate them. Weight, destroy, occur, apply, recover, convert, substitute, estimate, mate, light, amount, invent, create, feel, replace, travel.

Exercise 6. Identify by suffixes: a) nouns; b) adjectives; c) adverbs; d) verbal forms. Translate them. Conversion - convertible - converting; equal - equality - equally; refinement - refined - refining; significance - significant - significantly - signify; availability - available; heavy - heavily; recovery - recover - recovered; exist - existence - existent; heat - heated - heatedly - heater - hot.

Exercise 7. Work in pairs. Make a question for each answer below with reference to the text. Use the question word given in brackets. 1. Energy is measured in many ways. (How?)

2. Heat is a type of energy. (What?)

3. James Joule lived from 1818 to 1889. (When?)

4. Energy has always existed in one form or another. (What?)

5. Warm air rises because it is lighter. (Why?)

6. It becomes kinetic energy. (What kind?)

7. The directions change during the night time. (When?)

8. We use heat for a lot of things. (What ... for?)

Exercise 8. Give words which mean the opposite of those given below. Light, hot, daytime, outside, safe, progressive, final, empty, absorb, look into, create, turn on.

Exercise 9. Insert prepositions wherever necessary. 1. Street lamps use electrical energy to light our way ... night. 2. Energy is measured ... joules. 3. English scientist James Joule lived ... 1818 ... 1889. 4. Ukrainian officials have announced new projects and possibilities of the transit ... Caspian oil and gas ... EU countries. 5. The pipeline is used ... supplying to European markets instead ... it operating ... the reverse direction. 6. A thousand joules is equal ... a British thermal unit. 7. The meeting was held ... the beginning of October. 8. Energy can be transformed ... another sort of energy. If you stir a pan ... soup ... the stove ... a metal spoon, the spoon will heat up. 9. You should wear light and white clothes ... the summer. 10. There is a possibility of establishing transit of electricity ... Ukraine ... Baltic countries.

Exercise 10. Change the sentences into the Passive Voice. 1. Around the world, scientists measure energy in joules. 2. No-body can create or destroy energy. 3. One can find energy in a number of different forms. 4. We use the pipeline for supplying oil. 5. Our country will transit electricity to Baltic countries through Belarus. 6. Metals conduct heat energy. 7. Our body uses stored energy to do work. 8. You can easily understand the information. 9. The officials have announced new projects. 10. GUEU consortium is developing the project for gas supply-ing. 11. We plan to implement the project in three stages.

Exercise 7. Work in pairs. Make a question for each answer below with reference to the text. Use the question word given in brackets. 1. Energy is measured in many ways. (How?)