



Grade 6



SCIENCE



Energy in day-to-day life

Learning outcomes :

- The ability to do work is defined as energy.
- State different sources of energy that are useful in day-to-day activities.
- Identify the sun as the main source of energy.
- Construct simple setups to demonstrate the uses of energy sources.
- Appreciate the sustainable use of energy.

Activities

- ❖ Energy is the ability
- ❖ Sources that supply energy are known as

Activity 1

- Take a bit heavy stone. Go to a free place in the home garden and throw the stone. Now using a measuring tape, measure the distance.
- Give it a member of your family and ask them to do as above. And measure the distance.
- What form of energy is used in doing the above activity?

Activity 2

- Take an empty plastic bottle. Now wrap half of the bottle with an aluminium foil along the vertical axis.



- Now put water into the bottle and keep it under the sun. Place the bottle so that the wrapped side will be facing the upward.



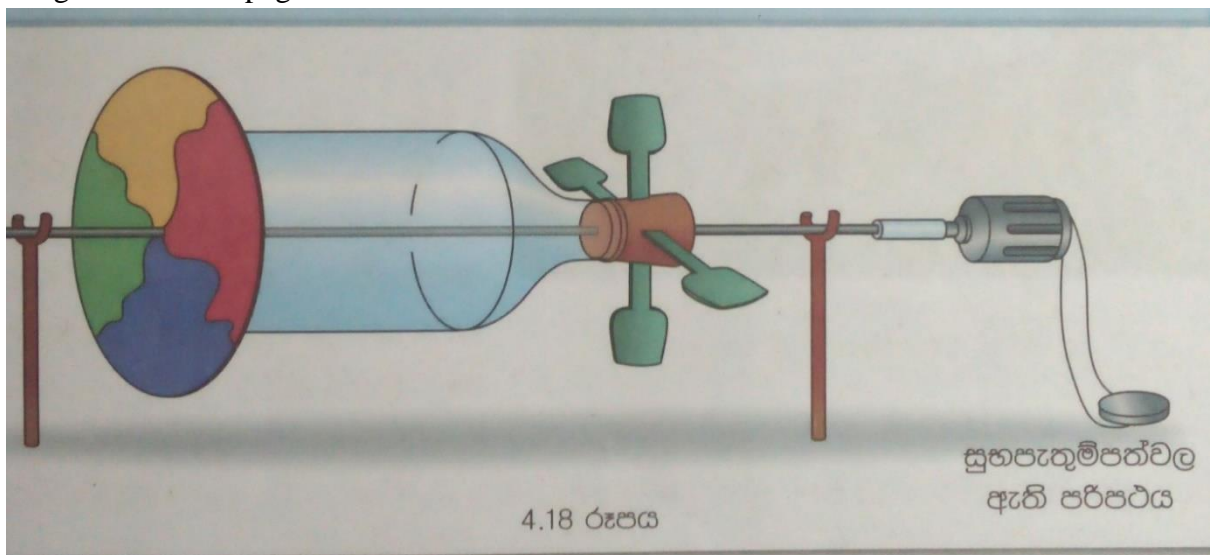
Place the bottle so that the wrapped side of the bottle face upwards. Use a supporter to place it as shown in the figure.

- Check the temperature of the water inside after an hour.
- What type of energy contribute for the rise of temperature of water in the bottle?

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Activity 3

- Design a small hydro power plant according to the instructions given in the 4.7 assignment on the page no. 59 of the textbook.



- What changes should be done to the above setup to generate more electricity?

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- What is the form of energy used here to generate electricity?

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Activity 4

- Make a wind propeller using tender coconut leaves (“gokkola”) or papers.
- Go to a windy place in the home garden and observe the rotation of the wind propeller.
- What are strategies that you can use to make a wind propeller that rotates faster?

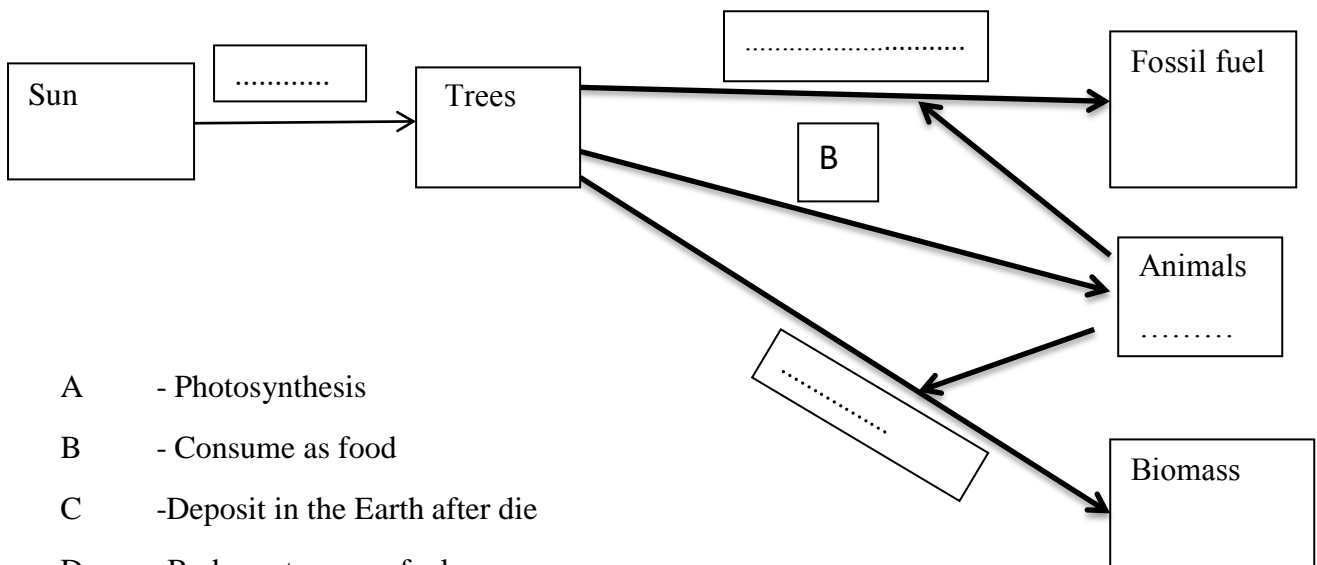
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Based on the above activities match the relevant energy sources.

Activity	Energy source
Throwing a stone	Flowing water
Boiling water	Energy in foods
Activating the circuit	Wind
Rotation of the wind propeller	Sun

Put suitable letter in the relevant process.



- A - Photosynthesis
- B - Consume as food
- C - Deposit in the Earth after die
- D - Body parts use as fuel



- Think that L.P. gas is used for cooking purposes at your home. Suddenly, you got to know that there aren't L.P. gases in the market. Though the remaining amount is sufficient for now, it will be over in a few days. How you and your family members use gas? What are the alternatives that can be used instead of gas?

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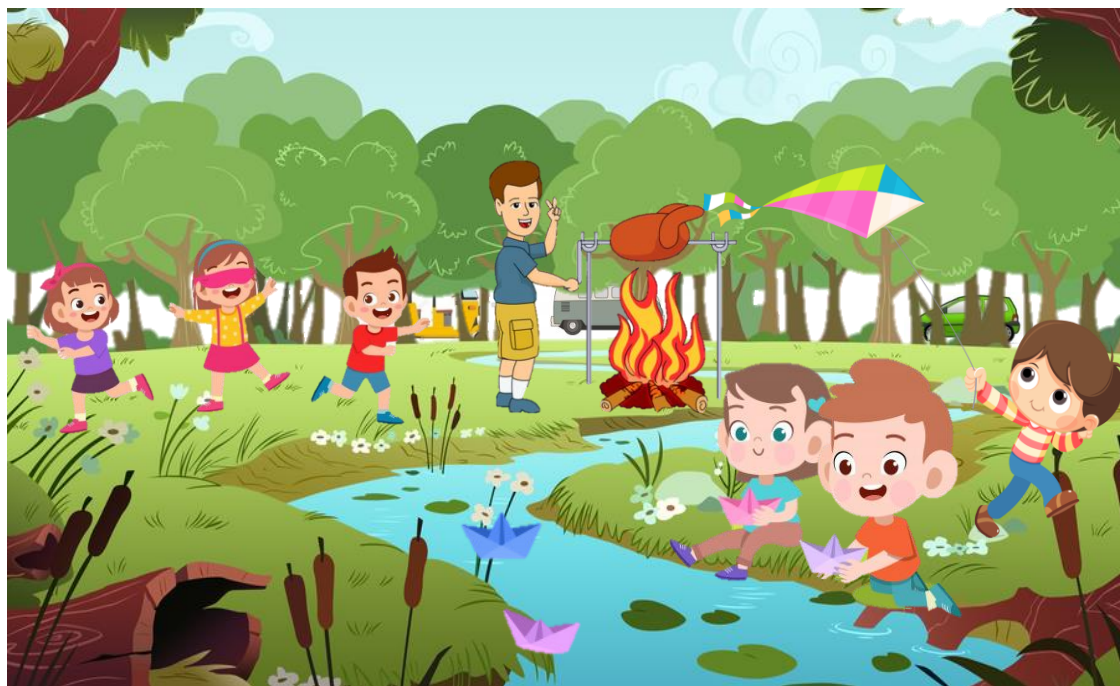
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As in the above case, fossil fuel will be also finished in the near future. Therefore, such resources should be used mindfully.

- Select the statement which describes the use of resources in a sustainable way.
 - I. Avoid using energy sources.
 - II. Use of energy sources in a limitless manner.
 - III. Use energy sources as well as protect them for the future generations.

Evaluation

Following picture shows things done by a set of people who has went on a picnic. Study it well and fill the following table.





Action	Energy sources
Running motor vehicles	
To cook food	
To send kites	
To send paper boats	
To play	

(Biomass, wind, petrol, flowing water, energy in foods)

Summary

