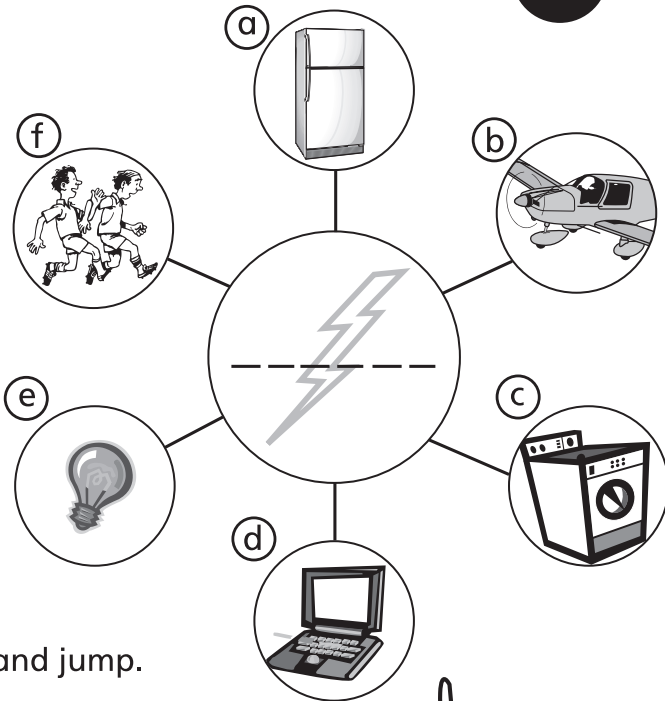


SCIENCE

Energy.

1 Write

- a A _____ needs energy to keep things cold.
- b A _____ needs energy to fly.
- c A _____ needs energy to wash clothes.
- d A _____ needs energy to work.
- e A _____ needs energy to give light.
- f _____ need energy to run, walk and jump.



2 Read and complete the table

Energy makes things work. Electricity, heat and light are all forms of energy.

Why is energy important?

Energy is very important. Computers, fridges, televisions and mobile phones all need energy. Cars, planes, trains, buses and motorbikes don't work without energy.

Where does energy come from?

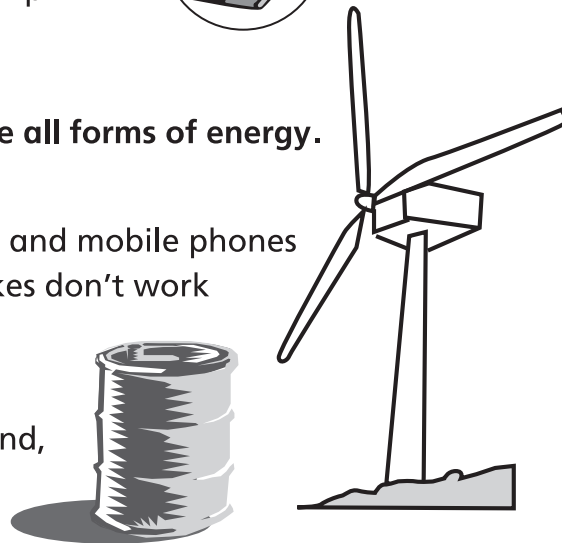
Energy comes from different sources such as oil, coal, wind, water, the sun and natural gas.

What are renewable energy sources?

The sun, wind and water are renewable energy sources. We can use these sources again and again. They don't run out. They are good for the environment.

What are non-renewable energy sources?

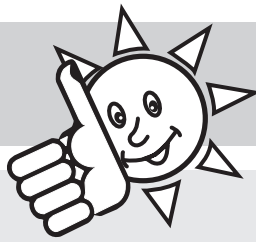
We can only use non-renewable energy sources once. They run out. Natural gas, oil and coal are non-renewable energy sources. They are bad for the environment.



sun	coal	wind	oil	water	natural gas
They run out.			They don't run out.		
They are bad for the environment.			They are good for the environment.		

Non-renewable energy sources	Renewable energy sources

Energy.



Aim

- To study different sources and uses of energy.

Language focus

Key vocabulary: *energy, fridge, plane, washing machine, computer, bulb, light, electricity, heat, oil, coal, wind, water, sun, natural gas, non-renewable energy sources, renewable energy sources, run out, environment.*

Key language: *Energy makes things work. Energy comes from different sources such as oil ... and natural gas. Computers need energy. Renewable energy sources don't run out. They are good for the environment.*

Materials

- Worksheet.
- (Optional) Flashcards.

Warm-up

- Use flashcards or copy the pictures in Activity 1 onto the board. Elicit information from the class by asking questions such as *What can you see? Do you use a computer at home?* etc.

Completing the Worksheet

Activity 1

- Point to the pictures in Activity 1 and ask the pupils *What have these things got in common?* The pupils may suggest different connections between the items. Ask *What do you need to make the computer; the fridge or the washing machine work? And to make cars and buses move? What does a plane need to fly? Energy!*
- Write *Energy* on the board and tell the pupils to write the word in the circle in the centre of the illustration in Activity 1 on their worksheets.
- Explain how different machines and people need energy, eg, *Cars and buses need energy* (explain that they get energy from petrol). *A light bulb needs energy* (electricity). *Mobile phones need energy*

(electricity from batteries). *People need energy* (food).

- Explain that *the energy we need to walk, run and work comes from the food we eat. That's why it's important to have a healthy diet.*
- Ask the pupils to complete the sentences in Activity 1 with the names of the things in the pictures. Check answers with the class.

Answers: a-fridge; b-plane; c-washing machine; d-computer; e-(light) bulb; f-Children (or People)

Activity 2

- Read the text in Activity 2 with the class and check comprehension. Ask the pupils *Can you use the sun one day and another day and another day? Yes. We can use the sun again and again. Which energy sources can be used again and again? The wind, water and the sun. Which energy sources can only be used once? Oil, coal and natural gas.* Explain that *the energy sources that can only be used once are called non-renewable sources and the ones that can be used again and again are called renewable sources. Non-renewable sources like oil or coal run out (finish) and are bad for the environment. Renewable sources like the sun or wind don't run out and they are good for the environment.*
- Tell the pupils to read the text again and then write the words in the box in the correct column in the table.

Answers: Non-renewable energy sources: coal, oil, natural gas. They run out. They are bad for the environment. Renewable sources: sun, wind, water. They don't run out. They are good for the environment.

Extension activity

- Explain that we use a lot of energy and that it is important to save energy (to help protect the environment). Ask *How can we save energy?* Elicit some ideas, eg, *When you leave a room, switch off the light. Walk, ride a bike or use public transport. Make sure the washing machine is always full.*
- Ask the children to do a project on energy. It can include information about different energy uses, renewable and non-renewable energy sources and how to save energy. They can call their project **Let's save energy every day!**