

Think and learn

1

Look and write.

solar panels solar-powered plane wind turbines battery biofuel



wind turbines



2

Match the definitions with the words from Activity 1.

- 1 ☐ d Many electronic games and toys need these to work.
- 2 ☐ This is made from natural materials from trees and crops.
- 3 ☐ One of these has flown around the world.
- 4 ☐ These collect energy from the sun.
- 5 ☐ These make electricity from a natural source. They can be on land or in the sea.

3

Read and write *true* or *false*.

RENEWABLE ENERGY PAST, PRESENT AND FUTURE

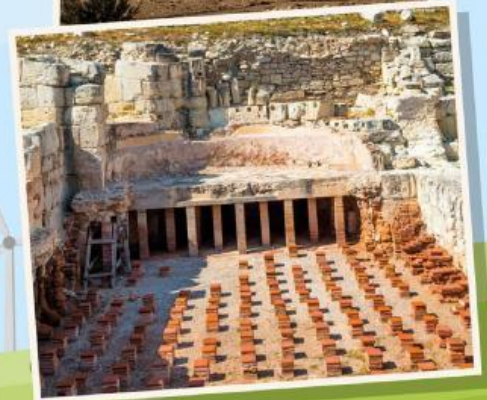
We are using more renewable energy now than ever before, but it isn't a new idea.

Windmills were made in Iran over 2,000 years ago and the Romans used warm air from the earth, called geothermal energy, under their floors to heat their homes.

Today, in the UK, almost one third of the electricity used comes from renewable sources. Solar power can be used even when the sun isn't shining because it can be stored in salt and then used at night.

In 2016, the whole country of Portugal used only renewable energy for 107 hours in a row – amazing!

Scientists think it's possible that solar power will be the world's main source of power by 2050. They also say it's possible that Europe and North Africa will be able to use 100% renewable energy by then.



- 1 Renewable energy was used for the first time in the 20th century.
- 2 Solar power, wind and biofuel are the only forms of renewable energy.
- 3 Around 30% of the UK's electricity comes from renewable energy.
- 4 You can use energy from solar power in the day and at night.
- 5 In 2050, Europe and North Africa might use only renewable energy.

false

30

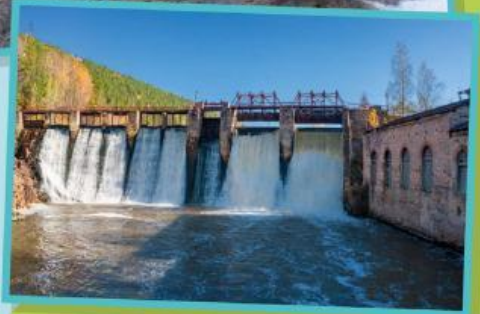
Environmental science

- 4  Read about two more types of renewable energy. Match the advantages and disadvantages (1–6) to each one.

Energy from the EARTH & WATER

The Earth's natural heat and the power of water are two more types of renewable energy. As well as being renewable, they are both very clean sources of energy, and they can be found in many different parts of the world. In fact, 100% of Iceland's energy comes from the Earth and from water.

These are not new ideas: people have used the Earth's natural heat since Roman times. The Ancient Greeks used the power of water to move water wheels in mills that made flour. Nowadays, water is stored in large man-made lakes, called dams, and the energy from the moving water is changed into electricity.



- 1 Can cause problems for fish in the environment.
- 2 Can be used to make people's homes warm.
- 3 Can provide a place for people to swim and go on boats.
- 4 Doesn't depend on the weather.
- 5 Can help to control floods.
- 6 Can cause earthquakes.

Energy from the Earth



Energy from water



- 5  **Project** Look, read and complete the information.

ARE YOU READY FOR A WIND-POWERED CAR?

Is it a bike? Is it a car? It's a ventomobile!

It uses a wind turbine for power.

It doesn't go fast, but it only uses energy from the wind.

Will this be the future of car travel?

The (1) ventomobile was invented in 2008 by a group of university students.

It had three (2) _____ and it looked more like a (3) _____ than a car.

Its power comes from a two-metre (4) _____ on top.

It was probably the first car to use only the power of the (5) _____.

