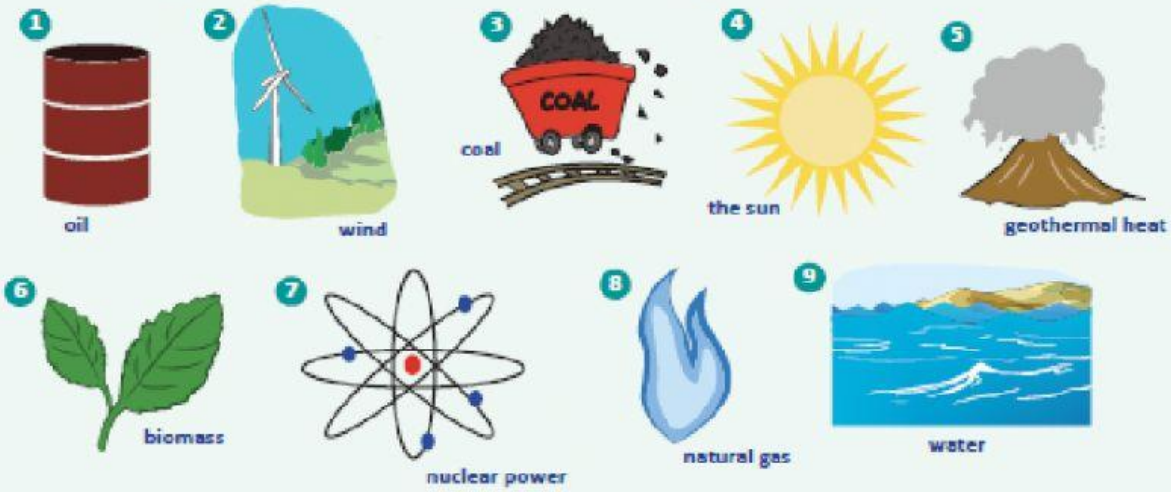
1 Think and sort.

Look at the different sources of energy below.
Sort the energy into renewable and non-renewable energy sources.



2 Listen and answer.

1 Listen to a phone conversation between a student and his aunt.
Read the statements 1-6. Is each statement True (T) or False (F)?
Listen and write T for True or F for False.

1 Renewable energy and non-renewable energy come from the same sources.
2 Renewable energy is generated from sources that never run out.
3 The most common types of renewable energy are solar power, wind power, hydropower, geothermal power and biofuel.
4 Biofuel is produced using water.
5 Renewable energy is cheaper than non-renewable energy.
6 Renewable energy is better for the environment.

2 Look at the vocabulary in bold in the statements. Discuss the meanings of these words.

3 Read and complete.

Read the facts about renewable energy.
Complete the facts with words in the boxes.
Note: There are two extra words.

renewable sources

solar panels | convert | invention | generate

electricity | to power | turbines

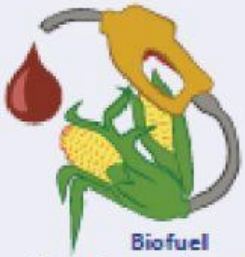
Renewable Energy Facts

1 _____ of energy include solar, wind and hydropower.
2 Energy from renewable sources can be used to _____ electricity.
3 _____ are used on wind farms and hydropower plants.
4 _____ are used to convert heat from the sun into electricity.
5 Natural heat from the earth or geothermal energy can also be used to generate _____.
6 Electricity generated from renewable sources can be used _____ our homes, schools, offices and even whole cities.

Types of Renewable Energy

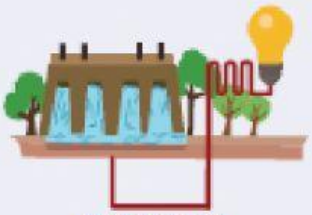
Wind Power
The wind can be used to power wind turbines on wind farms which generate electricity.

Geothermal Energy
Natural heat and steam in the ground can be used to generate electricity.



Biofuel
Organic mass from plants and animals can be burned to create electricity or used to power vehicles.

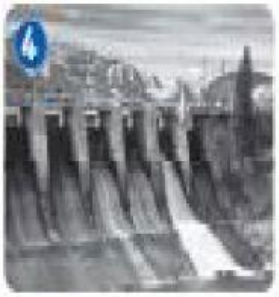
Solar Energy
Heat from the sun can be collected using solar panels and converted into electricity.



Hydropower
Hydropower plants use turbines which are turned by water passing through dams or from waves in the ocean to generate electricity.

1 Read and match.

Look at the pictures 1-4 and match them to the types of power plants below.



..... a geothermal power plant

..... a solar power plant

..... a wind farm

..... a hydroelectric dam

2 Read and complete

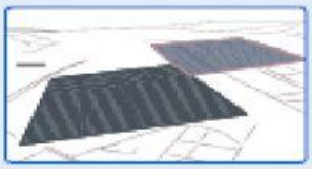
2 Read and complete.

Read the information leaflet about some of the largest renewable energy projects in the world. Complete the leaflet by writing the project names from the box below into the spaces 1-4.

Walney Extension | Ipaitu Dam | The Geysers | Andasol Solar Power Plant

Largest Renewable Energy Projects in the World

1 _____



This solar power plant is located in Andalusia, in Spain. It has a total capacity of 150 MW. The energy generated by the massive solar panels at the plant provides electricity to 450,000 residents in Spain.

2 _____

This enormous hydroelectric dam, built on the Paraná River between Brazil and Paraguay is 7,235 metres long. The dam has 18 turbine generators with a total capacity of 14,000 MW. It provides 78% of Paraguay's electricity.

3 _____

This is the world's largest wind farm. It is located in the Irish Sea because the wind there is powerful. The wind farm has 87 turbines and each turbine is 640 feet tall. The total capacity of the wind farm is 659 MW and it provides electricity for more than 590,000 homes.

4 _____

A geyser is a hole in the ground which produces steam and hot water. This geothermal field in California generates power from the natural heat in the ground. Its 18 geothermal power plants have a capacity of 835MW. It produces enough power for the whole of San Francisco.

3 Read and transfer.

Read the information leaflet in Activity 2 again. Complete the missing information in the table below.

Name	Type of renewable energy	Location	Total capacity (MW)	Who does the plant provide energy to?
The Andasol Solar Power Plant			150MW	
Walney Extension		Irish Sea		
Ipaitu Dam	hydropower			
The Geysers				the whole of San Francisco

4 Sort the words.

Sort the letters to make words to complete the sentences.

ntlap — 1 The power ..... burns fossil fuels which pollute the environment.

druocep — 2 Wind farms uses turbines to ..... electricity.

teengare — 3 Renewable energy sources provide ways to ..... 'clean' energy.

tmategaw — 4 One ..... of electricity can power approximately 750 homes.