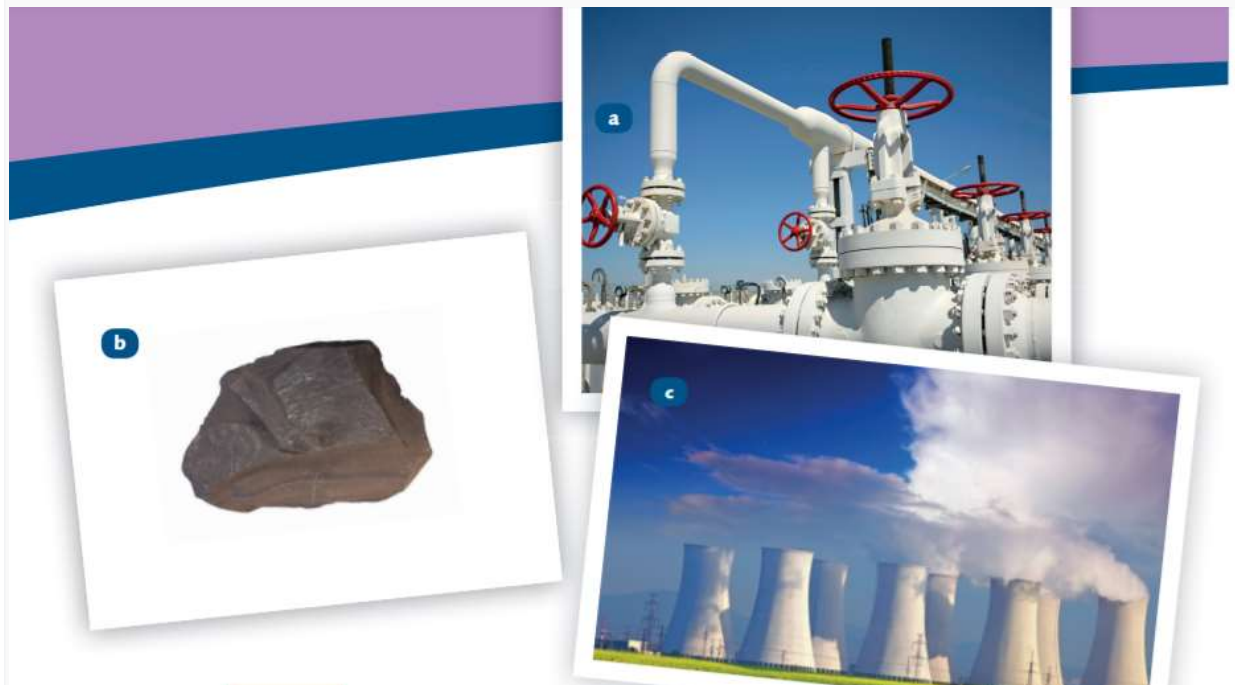


Unit 5

Lessons 5+6

SB pages 48-49



Listening

1 Work in pairs and discuss what you can see in the photographs.

Answers

a oil and gas plant

b oil shale

c nuclear power plant

2 Listen to a professor talk about different types of non-renewable energy in Jordan. Which type(s) of energy is/are not used at the moment in Jordan, but will be very important in Jordan's future?

Answer

shale oil and nuclear energy

3 Listen again and complete the notes. You will need to write a phrase or a few words in each gap.

Jordan depends a lot on (1) sources. Ninety-six per cent of the country's energy comes from oil and natural gas imported from neighbouring Arab countries. Because of this dependence on other countries, Jordan has invested in research projects to identify (2) of energy.

At the moment, imported natural gas is used to fulfil the country's energy needs and to (3)

However, a recent discovery of natural gas in Jordan means that, in the future, less natural gas will need to be imported. Oil shale rock has also been found in Jordan, most notably in the west-central area.

Shale oil can be produced from this type of sedimentary rock. It is a substitute for crude oil, but the (4) for shale oil is more expensive. The process is also quite dangerous and produces a lot of (5)..... . At the moment, no shale oil industry exists in Jordan but several companies are considering using it to generate (6)

Nuclear power holds hope for Jordan's future energy supply. Plans are in place to construct two (7) which will double the country's electricity generation capacity. Jordan plans to get 60 per cent of its (8) from nuclear energy by 2035 CE.

Answers

1 foreign energy

2 alternative sources

3 generate electricity

4 extraction process

5 waste product

6 thermal power

7 nuclear reactors

8 energy needs

Audioscript

Jordan depends a lot on **foreign energy** sources. Ninety-six per cent of the country's energy comes from oil and natural gas imported from neighbouring Arab countries. Because of this dependence on other countries, Jordan has invested in research projects to identify **alternative sources** of energy.

At the moment, imported natural gas is used to fulfil the country's energy needs and to **generate electricity**. However, a recent discovery of natural gas in Jordan means that, in the future, less natural gas will need to be imported.

Oil shale rock has also been found in Jordan, most notably in the west-central area.

Shale oil can be produced from this type of sedimentary rock. It is a substitute for crude oil, but

the **extraction process** for shale oil is more expensive. The process is also quite dangerous and produces a lot of **waste product**. At the moment, no shale oil industry exists in Jordan but several companies are considering using it to generate **thermal power**.

Nuclear power holds hope for Jordan's future energy supply. Plans are in place to construct two **nuclear reactors**, which will double the country's electricity generation capacity. Jordan plans to get 60 per cent of its **energy needs** from nuclear energy by 2035 CE.

Speaking

4 Which of the words in the box below refer to the following energy sources a-c?

imported	expensive	dependence	liquid
thermal	substitute	reactors	hope
investments			

a natural gas

b shale oil

c nuclear power

Answers

a imported, dependence, investments

b expensive, liquid, thermal, substitute, investments

c reactors, hope, investments

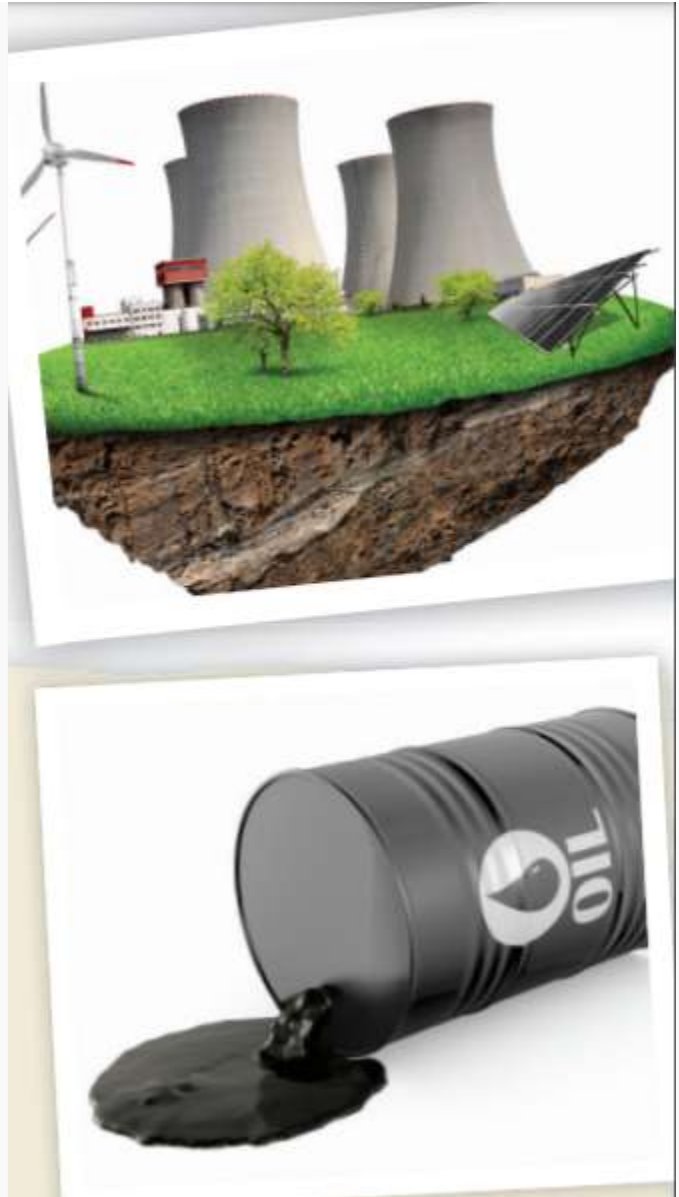
Note: 'investments' applies to all the energy sources as a result of the statement at the end of the first paragraph.

5 With a partner, choose one non-renewable energy source from exercise 4 and briefly explain why you think it is the best one for the future of Jordan.

Answers

Students' own answer

6 Look at the photograph on the right. What concept does it suggest? Complete the following chart accordingly in your notebook. Then, extend the diagram to include examples of each concept.

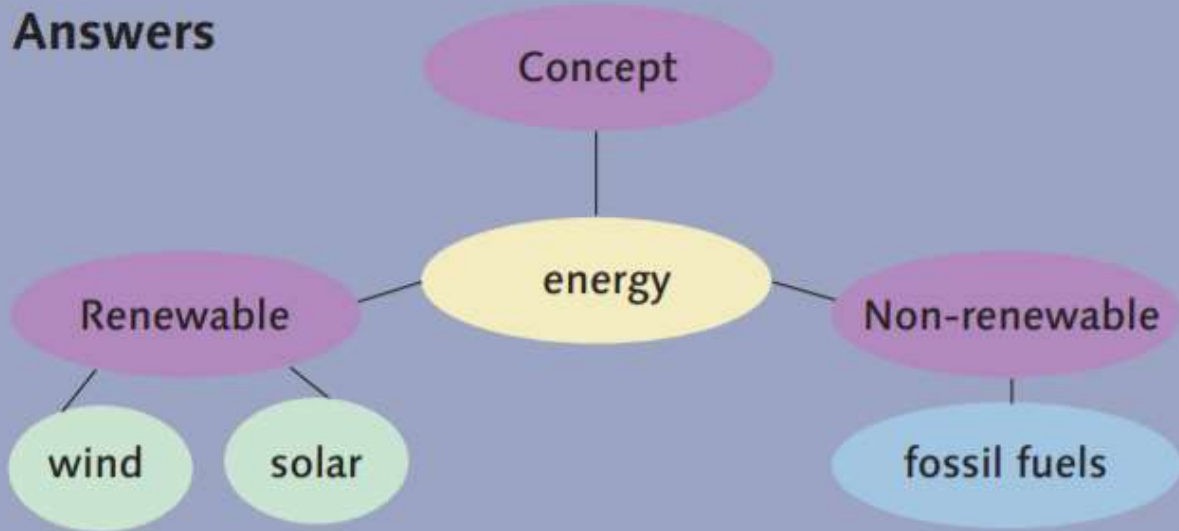


Conc

Renewable

Answers

Answers



Reading

7 Read the text below. What does it describe?

المعلم الإلكتروني الشامل

Crude oil is currently the most important source of energy in the world. It is a fossil fuel which is formed over many years by the decomposition of organic compounds, or anything that contains the element Carbon. These organic materials come from the remains of animals and plants. When sediment and other organic materials are buried deep under the ground under high temperature and pressure, crude oil is formed. It then undergoes many different processes before it is ready to be used as energy, and from it we get petrol, diesel and kerosene, among other fuels. However, due to the time taken to form new supplies of crude oil, it is considered to be a finite, non-renewable source of energy

Answer

It describes the process of how crude oil is formed underground over many years.

8 Find the words 1-4 in the text and match them with their definitions a-d.

1 decomposition	a a matter that settles to the bottom of a liquid
2 organic	b the process of decaying
3 sediment	c limited in size or supply
4 finite	d something that came from living matter

Answers

1 b

2 d

3 a

4 c

Writing

9 The text in exercise 7 states that crude oil is currently the most important source of energy in the world. Do some research, make notes and write a short report to explain this statement in three paragraphs divided as follows:

Paragraph 1: topic sentence

Paragraph 2: supporting paragraph

Paragraph 3: concluding sentence

Answer

Students' own answers

Unit 5

Activity Book pages 33 and 34

Vocabulary

8 Choose as many words as you can from the picture below to make five sentences about natural resources, energy and power.

المعلم الإلكتروني الشامل



Answers

1 Rubbish can be a valuable source of energy.

2 Natural gas is an expensive fuel.

3 Wind turbines are an alternative source of renewable energy.

4 Shale oil is not expensive to obtain, but the process used, called 'fracking' is harmful to nature.

5 We should use 'green' (or renewable) energy as often as we can.

Reading

9 Read the following article about the Borneo rainforest. Suggest a title for the article.

Students' own answers

The Borneo rainforest is an ecological region on the island of Borneo, in Southeast Asia. It is the richest rainforest in the world. It is home to thousands of plant species, hundreds of bird species and a very large range of animals. Living things are not the only resources in the Borneo rainforest; minerals and fossil fuels are hidden underground. Recently, companies from Europe, the United States and Australia have drilled for large amounts of oil and natural gas. People have also cleared large areas of the rainforest for logging and growing oil palms. These trees make oil that can be sold for a lot of money. We have to save the remaining rainforest; otherwise, it will lose more than half of its natural resources.

10 Answer the following questions about the article in exercise

1 What makes this region in Borneo a rainforest?

2 How is the Borneo rainforest being destroyed?

3 What do you think people can do to protect and save the Borneo rainforest?

4 In your opinion, how can we make use of the rainforest's resources without destroying it?

Answers

1 Suggested answer:

It is a tropical area with heavy rainfall. It is also home to thousands of plant species, hundreds of bird species and a very large range of animals.

2 Companies have drilled for large amounts of oil and natural gas. People have also cleared large areas of the rainforest for logging and growing oil palms.

3 Suggested answers:

Organisations should raise awareness through campaigns to show people that the natural resources found in this rainforest are worth a lot more than the money they make by drilling and growing oil palms. People living in the area should also learn how to take care of the environment around them without exhausting its resources. There should also be international laws preventing businesspeople from investing in this rainforest.

4 Suggested answers:

We should plant new trees if we have to cut down old ones to use their wood. We shouldn't start fires in the

forest. We shouldn't hunt in the forest. We can raise money for funding organisations.

Writing: A job application

11 Complete a form to apply for the following job as a care assistant.

Vacancy for Enthusiastic Young Person Care assistants needed to look after patients at a hospital. The job requires you to be well organised, sociable and compassionate. You must be responsible, caring and willing to learn quickly. You will discuss duties with nurses, make patients feel at ease and bring food and drink to the wards. You should have previous experience in a position of responsibility, and you should be able to dedicate at least two days per week to working at the hospital. If you think you have what it takes to work with our patients, fill in an application form today.

1 What kind of information would you provide in an application form?

Students' own answers

2 What reasons might you have for applying for this job? Write notes.

Students' own answers

CARE ASSISTANT Application Form	
Surname: _____	First name: _____
Date of birth: _____	Gender: Male / Female
Address: _____	
Email: _____	Telephone: _____
Education: _____	School: _____
Grade: _____	Specialisation: _____
Work experience or positions of responsibility:	

Briefly tell us why you would be good at this job. Refer to the advertisement.	

12 Now complete the application form.

13 Exchange books with your partner to show them your application form. Do you think your partner is suitable for the job? Why / Why not?

Students' own answers