Unit 4

Lesson 1

Student's Book pages 32-33

Science and scientists

Before you begin

Look at the picture

1 Look at the pictures and say what you can see in each one. What is the word for the type of science subjects shown in each picture?

Answers

Left to right: Biology, Chemistry, Physics

2 Read the words in the box. Which words refer to types of science? What areas are

covered in these types of science? Check the meaning of any words you don't know in the Activity Book Glossary or in a dictionary.

organism	botany	zoology	
ecology	environmental science		
combine	branch	interact	cell

Answers

Botany: plants

Zoology: animals

Ecology: organisms and their environment

Environmental science: a mix of biology, chemistry, ecology and geology and how the environment is affected by the processes studied in these separate subjects.

3 Read and listen to Part 1 of an extract from a science radio programme. Write down the questions that you hear about the three main areas of science.

Science matters

Do you like science? Whatever you think of science, there is no doubt that it can be very surprising.

Science tries to answer many of the questions that we like to ask about the world around us. Do you know, for example, that lightning is ten times hotter than the Sun? Or that a hundred million micro-organisms live in your mouth?

The three main areas of science are Biology, Chemistry and Physics. Biology is the study of living things. It includes the fields of botany, zoology, ecology and environmental science. Chemistry is the study of the building blocks of nature and how **they** combine to form the solids, liquids and gases that make up everything. Physics is the branch of science that deals with matter and energy and how **they** interact.

Science tries to answer questions such as: Why do we see lightning before we hear thunder? Why do we need to breathe in more air during exercise? What do oil and coal come from?

Answers

1 Why do we see lightning before we hear thunder?

2 Why do we need to breathe in more air during exercise?

3 What do iol and coal come from?

Comprehension

4 Discuss the questions you have written down in exercise 3 with a partner and try to answer them.

Students' own answers

5 Read and listen to Part 2 and check your answers.

Physicists have shown us that light travels faster than sound. **It** is the fastest thing we know. Biologists explain that when we do exercise, the cells in our body need more oxygen. Chemists have found that oil and coal come from plants and animals that lived millions of years ago.

Answers

1 Light travels faster than sound.

2 The cells in our body need more oxygen.

3 Oil and coal come from plants and animals that lived millions of years ago.

COMPREHENSION

6 Read and listen to the texts again and answer the questions.

1 What do the pronouns in bold refer to?

2 What's the importance of science?

3 Why are ecology, botany and zoology considered branches of Biology? Explain.

4 If you want to know about how plants grow, which branch of science can be helpful? Explain.

5 In your opinion, what is the most important question that scientists were able to answer? Explain your choice.

6 What other questions do you think scientists should answer?

Answers

1 it: Biology

They: the building blocks of nature

They: matter and energy

It: light

2 Science is important it tries to answer many of questions that we like to ask about the world around us.

3 Because they are branches that study living things like plants and animals.

4 Botany can be helpful because it studies how plants grow.

5 Students' own answers

6 Students' own answers

Unit 4

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Activity Book page 24

Vocabulary

Match the words and phrases from each column to find the definitions of the words in the first column. Then, write the definitions in full sentences.

ecology botany zoology astronomy geology environmental science	-a branch of -working for -studying how -study relating -the study -a natural science that deals	-the earth is made of different rocks -biological science concerned with plants -protection of the natural world -with the stars and planets -of relationships between living organisms and the world they live in -to the animal kingdom

Ecology is the study of the relationships between living organisms and the world they live in.

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Ecology is the study of the relationships between living organisms and the world they live in.

Botany is a branch of biological science concerned with plants.

Zoology is the study relating to the animal kingdom.

Astronomy is a natural science that deals with the stars and planets.

Geology is studying how the earth is made of different rocks.

Environmental science is working for the protection of the natural world.