

Unit 1

Before you read

Discuss these questions with your partner.

Обсуждение вопросов перед чтением текста проводится в небольших группах или парах. Даже при минимальном уровне знаний учащиеся могут дать начальную классификацию живых организмов: животные (*animals*), растения (*plants*), грибы (*fungi*) и микроорганизмы (*micro-organisms*).

A Vocabulary

Match these words with their definitions.

Учащиеся должны подобрать правильные определения к словам из текста. Если некоторые слова представляют трудность, перевод можно посмотреть в *Glossary* в конце «Книги для студента» или воспользоваться словарём.

Answers: 1 B; 2 D; 3 A; 4 E; 5 C; 6 F; 7 G; 8 P;
9 I; 10 L; 11 H; 12 J; 13 N; 14 M; 15 O;
16 K; 17 Q

Reading 1

Biology An introduction

Внимательное чтение и перевод текста, который представляет собой очерк развития биологии на протяжении нескольких столетий.

B Comprehension

Read the text and decide if the following statements are true or false.

Answers: 1 T; 2 F; 3 F; 4 F; 5 T; 6 F

Before you listen

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Учащиеся должны проявить свои знания, отвечая на вопросы, предложенные к обсуждению перед прослушиванием аудиозаписи. Если вопросы вызывают затруднения, то к ним следует вернуться после прослушивания аудиозаписи, которая содержит необходимую информацию.

C Listening

Listen to this lesson about germs. Circle the correct word or phrase to make true statements.

Tapescript

Teacher: OK, listen up class. Today we're going to learn what germs actually are. So let's begin by clearing up one mistaken belief many people have. Germs are not all bad. No, indeed, germs are basically microbes and they can live in many places, such as in or on humans, animals or plants. While you might think that sounds disgusting, let me explain something: some germs actually help the human

body. For instance, they help us digest our food. Of course, there are some bad ones which can make us ill too, giving us sore throats, for example.

Anyway, to be more specific, there are actually four basic types of germ – bacteria, viruses, protozoa and fungi. Starting with bacteria, they are single-celled animals and are found everywhere. Be it in the air, the water, the earth or even in us, this is where they find their food. As you know, we can't see them without a microscope and that's because they are so small that there can be literally billions in, for example, a few drops of water.

You may well ask what they look like and the answer is that it depends. They can be round, like balls, but others are completely different; perhaps long and thin. Alternatively, some have hairs over their bodies which help with their movement.

Now moving on to viruses ...

Answers: 1 mistakenly; 2 microbes; 3 some;
4 germ; 5 different shapes

Before you read

Discuss these questions with your partner.

Обсуждение общих вопросов до чтения текста: какие области биологии наиболее важны для общества и интересны учащимся, каким направлением биологии хотели бы заниматься учащиеся.

D Vocabulary

Complete the sentences below with words from the box.

Answers:

- | | |
|--------------|--------------------|
| 1 threatened | 6 composition |
| 2 mammal | 7 adapt |
| 3 crops | 8 species |
| 4 cell | 9 environment |
| 5 diseases | 10 building blocks |

Reading 2

Biology today

Текст 'Biology Today' оформлен в виде письма, что дает преподавателю возможность в общих чертах познакомиться с особенностями деловой переписки. Стоит подчеркнуть следующие моменты: традиционное начало – *Dear Sir/Madam, Dear Mr Shearer*; отсутствие неформальных и сленговых выражений; традиционное завершение – *Faithfully/Sincerely yours*.

E Comprehension

Read the text and answer the questions in your own words.

Answers:

- 1 zoology, botany, molecular biology, genetics
- 2 molecular biology
- 3 By protecting them from becoming extinct.

- 4 **By studying the effect of new types of food crops on the environment.**
 5 **Astrobiology is the science of looking at the possibilities of life on other planets.**

Before you listen

Discuss these questions with your partner.

Учащиеся в парах или группах высказываются по предложенным к обсуждению вопросам. Информация по теме:

- Climate change is otherwise known as 'global warming', which means the increase in global temperatures caused by the buildup of greenhouse gases (carbon dioxide, methane, ozone etc) in the atmosphere as a result of destructive human activities.

Тема климатических изменений сейчас очень актуальна, и каждый найдёт, что сказать по этому поводу.

F Listening

Listen to part of a TV programme about climate change. Then decide if the following statements are true or false.

Tapescript

Presenter: Good afternoon. Today we're considering how worried we really need to be about climate change. In particular, how worried we should be about plant life and the future of animals on this earth. Sarah's report gives us some reasons to be optimistic and some reasons to really worry. Sarah.

Sarah: Hello there. Yes, it's true that climatic change does affect animal and plant life but not always to the point of disaster. Many animals and plants are actually very adaptable – you know, able to change according to conditions. Of course, historically ice ages and droughts – a severe lack of water – have completely destroyed certain types of animal and plant life, but many managed to survive extreme, long-term climate change by adapting.

Now, many biologists and ecologists believe the Earth today may again be in the middle of climate change because over the last century many studies have shown rising global temperatures, on average about half a degree centigrade, and although this may seem very little, it is actually happening much faster than before and it can affect life enormously.

Climate change leads some plants and animals to find new homes, while others that are not so lucky become extinct. Mountains give a good example of this. A hotter climate means trees and plants can grow higher up mountains. In the Alps, it's been observed that every decade sees plants moving up about four metres. And how does this influence animal life? Well, unfortunately, some animals, which have become highly specialised in order to live on mountain tops, have no escape if conditions change. They simply cannot survive in warm weather.

So let's go over to Dr Bernard in Switzerland who will fill us in with more details ...

Answers: 1 T; 2 F; 3 F; 4 T; 5 T

G Speaking

Учащиеся в парах или группах высказываются по предложенным к обсуждению вопросам, а затем в соответствии с планом готовят презентации на тему 'What is biology?'. Учащимся предлагается следовать рекомендациям, данным в упражнении. Учитель может прослушать ход обсуждения и подготовленные выступления, переходя от одной пары/группы к другой.

H Writing

Учащиеся должны написать официальное письмо объёмом 100–140 слов, следуя предложенному плану и используя данные в упражнении ключевые слова и фразы.

Model answer

Dear Mrs Jones,

I am writing this letter to let you know about the areas of biology I am mostly interested in specialising in. These are molecular biology and genetics.

I have chosen these areas because I have always been interested in the cell, this tiny living organism, and the ways it works. I would like to know everything about how its different systems interact. Also, DNA is another great mystery to me. I would like to learn how all this genetic information is stored and passed on from one generation to the next.

I realise that there are no hard lines between these two areas of study, that is, molecular biology and genetics, so I would like to know how my choice now will affect my career prospects later. What I hope to do when I graduate is work with doctors and chemists and do research in order to find cures for different diseases.

I would very much appreciate it if you could meet me during your office hours in order to discuss my options. Would Monday 17th October at 10am be suitable for you?

Thank you very much for your time. I am looking forward to hearing from you.

Yours sincerely,

Carly Brown

Unit 2

Before you read

Discuss these questions with your partner.

Обсуждение вопросов до чтения текста должно подготовить учащихся к восприятию новой информации.

Информация по обсуждаемым вопросам:

- Microscope – an optical instrument that uses lenses to make very small objects look larger, so that they can be examined and studied.
- Equipment – tools, machines and other things that are needed for a particular purpose.
- Tools and equipment: gloves, pipette, test tube, clamp stand, burner, slide, x-rays etc.