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<td><strong>1 ANIMALS</strong></td>
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<td><strong>Key reading skill:</strong> Reading for main ideas</td>
<td>Academic adjectives 1 (e.g. common, healthy, endangered)</td>
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<td>Using your knowledge to predict content</td>
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<td>Sharks</td>
<td><strong>Key reading skill:</strong> Reading for detail</td>
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<td>Customs in Dagestan</td>
<td><strong>Key reading skill:</strong></td>
<td>Academic adjectives 2 (e.g. brief, certain, obvious)</td>
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<td>Identifying purpose and audience</td>
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<td><strong>2 CUSTOMS AND TRADITIONS</strong></td>
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<td><strong>Key reading skill:</strong> Reading for detail</td>
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<td>Academic vocabulary</td>
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<td>(e.g. display, document, period)</td>
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<td><strong>3 HISTORY</strong></td>
<td>Egyptian archaeology</td>
<td><strong>Key reading skill:</strong></td>
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<td>Reading for main ideas</td>
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<td>(e.g. display, document, period)</td>
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<td><strong>4 TRANSPORT</strong></td>
<td>Indian transport</td>
<td><strong>Key reading skill:</strong></td>
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<td>Using visuals to predict content</td>
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<td>Making inferences from the text</td>
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<td>Collocation (e.g. traffic congestion, public transport, rush hour)</td>
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<td>Academic synonyms (e.g. prevent, select, consider)</td>
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<td><strong>5 ENVIRONMENT</strong></td>
<td>Alaskan glaciers</td>
<td><strong>Key reading skill:</strong></td>
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<td>Scanning to find information</td>
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<td>Identifying purpose</td>
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<td>Academic vocabulary</td>
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<td>(e.g. annual, issue, predict)</td>
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<td>Topic vocabulary</td>
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<td>(e.g. deforestation, climate change, flood)</td>
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<tr>
<td>GRAMMAR</td>
<td>CRITICAL THINKING</td>
<td>WRITING</td>
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<td><strong>Comparative adjectives</strong></td>
<td>• Analyze a diagram for information</td>
<td><strong>Academic writing skills:</strong></td>
<td></td>
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<tr>
<td><strong>Grammar for writing:</strong></td>
<td>• Evaluate information from a diagram</td>
<td>• Punctuation: capital letters, full stops, commas</td>
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<td><em>Word order, using and, but and whereas</em></td>
<td></td>
<td><strong>Writing task type:</strong></td>
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<td></td>
<td></td>
<td>Write two comparison paragraphs.</td>
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<td><strong>Writing task:</strong></td>
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<td></td>
<td></td>
<td>Compare and contrast the two sharks in the diagram.</td>
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<td><strong>Avoiding generalizations with can and tend to Adverbs of frequency</strong></td>
<td>• Analyze a description</td>
<td><strong>Academic writing skills:</strong></td>
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<tr>
<td><strong>Grammar for writing:</strong></td>
<td>• Identify the structure of a description</td>
<td>• Essay structure</td>
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<tr>
<td><em>Adding detail for interest Prepositional phrases</em></td>
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<td><strong>Writing task type:</strong></td>
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<td>Write three descriptive paragraphs.</td>
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<td><strong>Writing task:</strong></td>
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<td></td>
<td>Describe the laws and traditions concerning weddings. Have there been any changes in recent years?</td>
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<td><strong>Making suggestions</strong></td>
<td>• Analyze different opinions</td>
<td><strong>Academic writing skills:</strong></td>
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<tr>
<td><strong>Grammar for writing:</strong></td>
<td>• Evaluate the importance of information</td>
<td>• Write an introduction</td>
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<tr>
<td><em>Stating opinions Linking contrasting sentences with but, however, although and on the other hand</em></td>
<td>• Organize ideas in a chart</td>
<td><strong>Writing task type:</strong></td>
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<td></td>
<td>Write a balanced opinion essay.</td>
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<td><strong>Writing task:</strong></td>
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<td>Should museums be free or should visitors pay for admission? Discuss.</td>
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<td><strong>Grammar for writing:</strong></td>
<td>• Analyze an essay question</td>
<td><strong>Academic writing skills:</strong></td>
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<td><em>First conditional Using if ... not and unless</em></td>
<td>• Evaluate advantages and disadvantages</td>
<td>• Write a conclusion</td>
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<td></td>
<td>• Create your own list of advantages and disadvantages</td>
<td><strong>Writing task type:</strong></td>
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<td></td>
<td>Write a problem–solution essay based on a map.</td>
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<td><strong>Writing task:</strong></td>
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<td>Describe the traffic problems in this city and outline the advantages and disadvantages of the suggested solutions.</td>
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<td><strong>Grammar for writing:</strong></td>
<td>• Evaluate ideas and examples using an ideas map</td>
<td><strong>Academic writing skills:</strong></td>
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<tr>
<td><em>Cause and effect Using because and because of</em></td>
<td>• Create your own ideas and examples/evidence</td>
<td>• Write a topic sentence.</td>
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<td><strong>Writing task type:</strong></td>
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<td></td>
<td>Write two cause–effect paragraphs.</td>
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<td><strong>Writing task:</strong></td>
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<td>Outline the human causes of climate change. What effects will these have on the planet?</td>
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<td>UNIT</td>
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</table>
| 6 HEALTH AND FITNESS | Cycling | **Key reading skill:**  
Reading for detail  
Understanding key vocabulary  
Using your knowledge to predict content  
Skimming  
Reading for main ideas  
Using key vocabulary  
Making inferences from the text | Academic verbs and nouns (e.g. injure, suffer, encourage)  
Collocation (e.g. life expectancy, serious illness, junk food) |
| 7 DISCOVERY AND INVENTION | Robots | **Key reading skill:**  
Scanning to predict content  
Using your knowledge to predict content  
Skimming  
Reading for detail  
Making inferences from the text | Understanding prefixes (e.g. misunderstand, underperform, unsafe) |
| 8 FASHION | Missoni Italian fashion | **Key reading skill:**  
Distinguishing fact from opinion  
Using your knowledge to predict content  
Reading for main ideas  
Reading for detail  
Making inferences from the text  
Understanding key vocabulary  
Skimming | Hyponyms (e.g. fashion and clothing, beauty products and cosmetics)  
Homonyms (e.g. approach, volume, goal) |
| 9 ECONOMICS | The Russian economy | **Key reading skill:**  
Skimming  
Understanding key vocabulary  
Reading for main ideas  
Identifying purpose  
Reading for detail  
Making inferences from the text  
Using your knowledge to predict content | Academic vocabulary (e.g. economy, finance, industry)  
Synonyms (e.g. purchase and buy, domestic and household) |
| 10 THE BRAIN | The amazing brain | **Key reading skill:**  
Previewing  
Skimming  
Reading for detail  
Making inferences from the text  
Scanning to predict content | Medical language (e.g. surgery, vaccination, treatment)  
Academic verbs (e.g. recover, care, confirm) |
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<th>GRAMMAR</th>
<th>CRITICAL THINKING</th>
<th>WRITING</th>
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</table>
| **Grammar for writing:**  
  • Giving reasons  
  • Giving examples with such as, for instance, for example, especially | • Understand and subdivide arguments  
  • Apply subdivided arguments to the organization of an essay plan | **Academic writing skills:**  
  • Write supporting sentences.  
  **Writing task type:** Write a problem-solution essay.  
  **Writing task:** What can people do to live longer? What can a government do to increase the average life expectancy of its country's citizens? |
| Making predictions with *will*, *could* and *won’t*  
**Grammar for writing:**  
  • Relative clauses  
  • Advantages and disadvantages | • Remember ideas clearly by listing advantages and disadvantages  
  • Understand an issue by finding reasons and evidence to support ideas | **Academic writing skills:**  
  • Edit for common errors  
  **Writing task type:** Write an advantage–disadvantage essay.  
  **Writing task:** Choose one new area of technology or invention and outline its advantages and disadvantages. |
| **Grammar for writing:**  
  • Prepositional phrases (e.g. *apart from*, *rather than*, *along with*)  
  • Counter-arguments (e.g. *argue*, *claim*, *insist*, *state*) | • Evaluate arguments and counter-arguments | **Academic writing skills:**  
  • Cohesion  
  • Coherence  
  **Writing task type:** Write a balanced opinion essay.  
  **Writing task:** Fashion is harmful. Discuss. |
| **Grammar for writing:**  
  • Describing graphs – noun phrases and verb phrases  
  • Using prepositions and conjunctions to add data  
  • Writing approximations of numerical data (e.g. *nearly*, *more than*, *approximately*) | • Understand and interpret visual information  
  • Analyze a graph | **Academic writing skills:**  
  • Writing a description of a graph  
  **Writing task type:** Write an explanatory paragraph describing a graph  
  **Writing task:** Describe both graphs and explain the data. |
| **Grammar for writing:**  
  • Passive (in narrative tenses and with modal verbs) | • Analyze a diagram to understand a process | **Academic writing skills:**  
  • Writing a description of a process  
  **Writing task type:** Write a process paragraph  
  **Writing task:** Explain how the body responds to changes in temperature. |
**UNLOCK UNIT STRUCTURE**

The units in *Unlock Reading & Writing Skills* are carefully scaffolded so that students are taken step-by-step through the writing process.

<table>
<thead>
<tr>
<th><strong>UNLOCK YOUR KNOWLEDGE</strong></th>
<th>Encourages discussion around the theme of the unit with inspiration from interesting questions and striking visuals.</th>
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<tbody>
<tr>
<td><strong>WATCH AND LISTEN</strong></td>
<td>Features an engaging and motivating <em>Discovery Education™</em> video which generates interest in the topic.</td>
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<tr>
<td><strong>READING 1</strong></td>
<td>Practises the reading skills required to understand academic texts as well as the vocabulary needed to comprehend the text itself.</td>
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<tr>
<td><strong>READING 2</strong></td>
<td>Presents a second text which provides a different angle on the topic in a different genre. It is a model text for the writing task.</td>
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<tr>
<td><strong>LANGUAGE DEVELOPMENT</strong></td>
<td>Practises the vocabulary and grammar from the Readings in preparation for the writing task.</td>
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<tr>
<td><strong>CRITICAL THINKING</strong></td>
<td>Contains brainstorming, evaluative and analytical tasks as preparation for the writing task.</td>
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<tr>
<td><strong>GRAMMAR FOR WRITING</strong></td>
<td>Presents and practises grammatical structures and features needed for the writing task.</td>
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<tr>
<td><strong>ACADEMIC WRITING SKILLS</strong></td>
<td>Practises all the writing skills needed for the writing task.</td>
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<tr>
<td><strong>WRITING TASK</strong></td>
<td>Uses the skills and language learnt over the course of the unit to draft and edit the writing task. Requires students to produce a piece of academic writing. Checklists help learners to edit their work.</td>
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<tr>
<td><strong>OBJECTIVES REVIEW</strong></td>
<td>Allows students to assess how well they have mastered the skills covered in the unit.</td>
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<tr>
<td><strong>WORDLIST</strong></td>
<td>Includes the key vocabulary from the unit.</td>
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</table>

This is the unit’s main learning objective. It gives learners the opportunity to use all the language and skills they have learnt in the unit.
UNLOCK YOUR KNOWLEDGE

Work with a partner. Discuss the questions below.

1. Is it better to see animals in a zoo or in the wild? Why?
2. Are there more wild animals in your country now or were there more in the past? Why?
3. Why do people keep domestic animals in their homes?
4. What things do we need animals for?
5. Which animals do you think are going to die out in the near future?
6. Can we live without animals?

PERSONALIZE

Unlock encourages students to bring their own knowledge, experiences and opinions to the topics. This motivates students to relate the topics to their own contexts.

DISCOVERY EDUCATION™ VIDEO

Thought-provoking videos from Discovery Education™ are included in every unit throughout the course to introduce topics, promote discussion and motivate learners. The videos provide a new angle on a wide range of academic subjects.

"The video was excellent! It helped with raising students’ interest in the topic. It was well-structured and the language level was appropriate."

Maria Agata Szczerbik,
United Arab Emirates University,
Al-Ain, UAE
Organizing information from a diagram is an important critical thinking skill.

1. Look at the diagram of the two sharks and the boxes in Exercise 2. Write a sentence for each feature to explain how the sharks are similar or different.

   1. Size:
   2. Colour:
   3. Skin pattern:
   4. Mouth:
   5. Fins and tail:

- **Whale shark**
  - Large tropical sharks
  - No teeth
  - No fins

- **Tiger shark**
  - Human
  - Large tropical sharks

**BLOOM’S TAXONOMY**

The Critical Thinking sections in *Unlock* are based on Benjamin Bloom’s classification of learning objectives. This ensures learners develop their lower- and higher-order thinking skills, ranging from demonstrating knowledge and understanding to in-depth evaluation.

The margin headings in the Critical Thinking sections highlight the exercises which develop Bloom’s concepts.

**LEARN TO THINK**

Learners engage in evaluative and analytical tasks that are designed to ensure they do all of the thinking and information-gathering required for the end-of-unit writing task.
COLLOCATION 1

1 Match the nouns (1–8) to the nouns (a–h) to make collocations about transport.

1 traffic  a transport
2 public   b restrictions
3 cycle    c charge
4 rush     d congestion
5 car      e lane
6 road     f share

COMPLETE THE SENTENCES WITH COLLOCATIONS FROM EXERCISE 1.

1 is a big problem in this city. The traffic jams are terrible.
2 I use like trains or the underground to get to work.
3 You can't drive in the . It's only for bicycles.
4 stop anyone leaving their car here.

First conditional

We often use the first conditional to persuade or negotiate. Notice how we use if and will to link two sentences.

idea/action: The government increases tax on fuel.
consequence: People use their cars less.

If the government increases tax on fuel, people will use their cars less.

or

People will use their cars less, if the government increases tax on fuel.

ACADEMIC LANGUAGE

Unique research using the Cambridge English Corpus has been carried out into academic language, in order to provide learners with relevant, academic vocabulary from the start (CEFR A1 and above). This addresses a gap in current academic vocabulary mapping and ensures learners are presented with carefully selected words they will find essential during their studies.

“The language development is clear and the strong lexical focus is positive as learners feel they make more progress when they learn more vocabulary.”

Colleen Wackrow,
Princess Nourah Bint Abdulrahman University, Al-Riyadh, Kingdom of Saudi Arabia

GRAMMAR FOR WRITING

The grammar syllabus is carefully designed to help learners become good writers of English. There is a strong focus on sentence structure, word agreement and referencing, which are important for coherent and organized academic writing.
UNLOCK ONLINE WORKBOOKS
The Online Workbooks are accessed via activation codes packaged with the Student’s Books. These easy-to-use workbooks provide interactive exercises, games, tasks, and further practice of the language and skills from the Student’s Books in the Cambridge LMS, an engaging and modern learning environment.

CAMBRIDGE LEARNING MANAGEMENT SYSTEM (LMS)
The Cambridge LMS provides teachers with the ability to track learner progress and save valuable time thanks to automated marking functionality. Blogs, forums and other tools are also available to facilitate communication between students and teachers.

UNLOCK EBOOKS
The Unlock Student’s Books and Teacher’s Books are also available as interactive eBooks. With answers and Discovery Education™ videos embedded, the eBooks provide a great alternative to the printed materials.

FLEXIBLE
Unlock is available in a range of print and digital components, so teachers can mix and match according to their requirements.
COURSE COMPONENTS

• Each level of *Unlock* consists of two Student’s Books: *Reading & Writing* and *Listening & Speaking* and an accompanying Teacher’s Book for each. Online Workbooks are packaged with each Student’s Book.
• Look out for the **ONLINE** symbols in the Student’s Books which indicate that additional practice of that skill or language area is available in the Online Workbook.
• Every *Unlock* Student’s Book is delivered both in print format and as an interactive eBook for tablet devices.
• The *Unlock* Teacher’s Books contain additional writing tasks, tests, teaching tips and research projects for students.
• *Presentation Plus* software for interactive whiteboards is available for all Student’s Books.

## READING AND WRITING

<table>
<thead>
<tr>
<th></th>
<th>978-1-107-61399-7</th>
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<th>978-1-107-61526-7</th>
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<tr>
<td>Student’s Book and Online Workbook Pack*</td>
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<tr>
<td>Presentation Plus (Interactive whiteboard software)</td>
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<td>978-1-107-65605-5</td>
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<td>978-1-107-68245-0</td>
</tr>
</tbody>
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## LISTENING AND SPEAKING

<table>
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*eBook available from [www.cambridge.org/unlock](http://www.cambridge.org/unlock)*

The complete course audio is available from [www.cambridge.org/unlock](http://www.cambridge.org/unlock)
<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about sharks</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Identify the main ideas in a text</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Structure and punctuate a paragraph</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write two comparison paragraphs</td>
</tr>
</tbody>
</table>
UNLOCK YOUR KNOWLEDGE

Work with a partner. Discuss the questions below.

1 Is it better to see animals in a zoo or in the wild? Why?
2 Are there more wild animals in your country now or were there more in the past? Why?
3 Why do people keep domestic animals in their homes?
4 What things do we need animals for?
5 Which animals do you think are going to die out in the near future?
6 Can we live without animals?
PREPARING TO WATCH

1. You are going to watch a video about sharks. Before you watch, discuss the questions below with a partner.
   1. Which shark species is shown in the photograph?
   2. What size do these sharks grow to?
   3. What kind of prey do sharks eat?
   4. Why do sharks attack humans?
   5. Do sharks ever attack boats?

2. Watch the video and check your answers.

3. Complete the short paragraph using the words in the box.
   fatal   prey   mistake   hunters   attack   dangerous

Swimming near sharks can be very (1) ______________ because of the risk of an attack. Sharks are very good at locating their food, so they are considered expert (2) ______________. They (3) ______________ their (4) ______________ at high speed. In other words, they swim to their food very quickly. As a result, they may bite humans by (5) ______________. This can be (6) ______________ because the person may drown or lose a lot of blood.
WHILE WATCHING

4 Watch again and circle the correct answer (a–c) to complete the statement below.

The video is about great white sharks and
a the speed they swim in the water.
b how they hunt seals and fish in South Africa.
c why they sometimes attack humans.

5 Match the sentence halves. Then watch again and check your answers.

1 Great white sharks mainly eat seals and 
a 60,000 seals that swim there.
b they mistake us for seals.
c 40 kph, swimming up from deep down in the bay.
d large sea creatures like tuna.
e if they look like a fish.
f an average of three people.
g they cannot tell the difference at high speeds.

6 Work with a partner. Try to answer the questions below.

1 Why did the shark bite into the boat in the video?
2 Why do the seals risk swimming in the water with sharks?
3 Why do sharks prefer seals and tuna to humans?

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 Should we be worried about sharks when we swim in the sea?
2 Should we protect sharks from fishing?
3 What are the benefits of research into animal behaviour?
PREPARING TO READ

1 Complete the table below with the names of any endangered animals and extinct animals you know.

<table>
<thead>
<tr>
<th>endangered animals</th>
<th>extinct animals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 Scan the factsheet on page 19 opposite and add any animals mentioned to your list of endangered animals.

WHILE READING

3 Read the factsheet and match the main ideas (1–4) to the paragraphs where they are mentioned (A–D).

1 How hunting and overfishing cause animals to become endangered
2 The difference between endangered and extinct animals
3 How governments and normal people can protect animals
4 How humans destroy and pollute animal habitat

Reading for the main ideas
Read the first sentence or two of each paragraph to understand the main idea.

4 Look at the bold words in the questions below. Which paragraph (A–D) of the factsheet should you look at to find each answer?

1 Who are most responsible for animal extinctions and endangered species?
2 Why does pollution and chopping down trees cause problems for animals?
3 What do people hunt animals for?
4 Which large sea creatures have become endangered because of overfishing?
5 What can individuals do to protect animal species from becoming endangered?
6 What should governments do about hunting and fishing of animals?
7 What should governments invest in to get more animals back into the wild?
Endangered species

An endangered species is a group of animals that could soon become extinct. Extinction happens when the last of the species has died out and there will be no more. Many species are nearly extinct and could disappear off the face of the earth very soon if we don’t do anything to save them. There are many reasons why species become endangered but most of them are due to humans. However, there are things that we can do to save endangered species.

Habitat destruction is the main reason why animals become endangered and this happens in two ways. When humans move into a new area, the animals’ habitat – where they live – is destroyed and there is nothing to eat because humans chop down trees and build houses and farms. Animal habitats are also destroyed because of pollution. Chemicals in rivers and poisons on farms cause the destruction of habitats and animals can no longer live there.

Endangered species are also the result of hunting and fishing. Animals such as the Arabian oryx have been hunted to the edge of extinction because of the high price of their meat. Other animals are killed for their fur, bones or skin, or just for sport. Some seal species are now on the verge of extinction because they are killed for their fur to make coats. Tigers are shot to make medicine and tea from their bones, and crocodiles are caught to make bags and shoes. Overfishing means that large sea creatures like whales, tuna and sharks have all become endangered species, because too many are caught to make things like shark’s fin soup.

So what can individuals and governments do to protect animal and plant species from becoming endangered? We should take care not to pollute natural areas, and farmers or companies who destroy animal habitats should face a financial penalty. The public can help out by refusing to buy any products that are made from animals’ body parts, such as seal fur coats or crocodile bags. Governments can help, too, by making it against the law to hunt, fish or trade in endangered species. They can also provide funding for animal sanctuaries and zoos, to protect animals from extinction by breeding more endangered animals, which they later release into the wild. If we all cooperate by taking these steps, we will protect our planet so that our children and their children can enjoy it too.

5 Read the factsheet again and answer the questions (1–7) in Exercise 4.
READING BETWEEN THE LINES

6 Read the last paragraph of the factsheet and underline words and phrases that mean the same as the bold words below.

1 Companies who destroy animal habitats should pay a fine.
2 Individuals should help to protect animals by choosing not to buy products like fur.
3 The government can make it illegal to hunt, fish or trade in endangered species.
4 Governments can pay for animal sanctuaries and zoos.
5 If we work together by taking this action, we can protect our planet.

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 What other endangered species do you know about?
2 Should the government spend money to save animal habitats even if this means less money for roads or hospitals?

READING 2

PREPARING TO READ

1 Work with a partner. Look at the photographs and discuss the questions below.

1 What are the animals in the photographs?
2 Do you have them in your country?
3 Which animal is more successful in Britain? Why do you think this is?
Losing the battle for survival

Red squirrels used to be a common sight in British forests and countryside. However, fewer than 140,000 individuals are thought to be left and most of them are found in Scotland. In contrast, grey squirrels are now so common they are seen as a pest and can be legally trapped and destroyed. The population decrease in red squirrels is claimed to be due to the introduction of the grey squirrel from North America, but disease and the loss of its native woodland habitat have also played a major role in the decline of the red squirrel in Britain.

On first sight, the two species of squirrel are similar. They both have a distinctive long tail, which helps the squirrel to balance when jumping from tree to tree, and the same large eyes, small ears and powerful back legs. However, the grey squirrel has a clear physical advantage over the red. The red squirrel has a typical head-and-body length of 19 to 23 centimetres, a tail length of 15 to 20 centimetres and a body weight of 250 to 340 grams. Compared to this, the grey squirrel is a larger animal. The head and body measures between 23 and 30 centimetres long and the tail is between 19 and 25 centimetres long. Adult grey squirrels are heavier, weighing between 400 and 600 grams. This size allows them to store more fat and helps them to survive a harsh winter, which would be fatal to their smaller cousins.

So why are red squirrels losing out in competition with grey squirrels? Size is one factor but there are others. Red squirrels live high up in trees, whereas greys spend more of their time on the ground. This means that any reduction in forest habitat greatly affects the red squirrel population. Another reason for the grey squirrel’s success is its ability to use food provided by humans. Like the fox, the grey squirrel can survive in an urban environment because of its intelligence and adaptability. The other problem for the red squirrel is disease. Both squirrels carry the parapox virus. While this does not seem to affect grey squirrels, it is fatal to reds.

There does not seem to be much we can do to help red squirrels survive. Some politicians support destroying populations of grey squirrels but this would be seen as cruel by most people in Britain. However, red squirrels have been successfully introduced from other countries and they could be effectively protected in places like the Isle of Wight and Anglesey, where there are no grey squirrels. Another question is whether we should protect red squirrels at all. Worldwide, they are not an endangered species, so many scientists would prefer government conservation funding to be spent on other endangered animals.
The article compares the red and the grey squirrel. The (1) grey / red squirrel was introduced to Britain and has become very successful since then. Now there are (2) fewer / more than 140,000 native red squirrels left in the wild, but the grey is regarded as a (3) pest / pet. The main reason why the red squirrel is less successful is that the grey squirrel is (4) fatter / thinner so it is less affected by cold weather. Another reason is that grey squirrels are (5) unable / able to live in cities. A further reason may be the parapox virus, which (6) kills / injures red squirrels. (7) Most / Few British people support destroying grey squirrels and because red squirrels (8) are / aren’t endangered worldwide, they could be reintroduced to the UK.

**READING BETWEEN THE LINES**

5 Look again at the article on page 21 and try to answer the questions below.

1. Why do you think grey squirrels are regarded as a pest?
2. Who do you think are the ‘smaller cousins’ mentioned in paragraph two?
3. Why might some British politicians be in favour of saving the red squirrel?
4. Why do you think there are no grey squirrels on Anglesey and the Isle of Wight?

**DISCUSSION**

6 Work with a partner. Discuss the questions below.

1. Should we save British red squirrels
   a. by killing grey squirrels?
   b. by planting more trees?
   c. by trying to protect them from disease?
2. Is trying to save British red squirrels a waste of time and money?
3. Are introduced animal species a problem in your country?
ACADEMIC ADJECTIVES 1

1 Match the adjectives (1–7) to their definitions (a–g).

1 endangered a unkind and unpleasant
2 aggressive b strong and well
3 healthy c easy to recognize
4 cruel d facing a high risk of extinction
5 familiar e seen in a lot of places
6 common f not strong
7 weak g behaving in an angry or violent way

Comparative adjectives

When we compare things, we have to use the comparative form of the adjective.

2 Complete the table below using the adjectives in the box. The first one in each category has been done for you as an example.

<table>
<thead>
<tr>
<th>one-syllable adjective</th>
<th>two- (or more) syllable adjective</th>
<th>two-syllable adjective ending with -y</th>
</tr>
</thead>
<tbody>
<tr>
<td>adjective + -er + than</td>
<td>more/less + adjective + than</td>
<td>adjective + -ier + than</td>
</tr>
<tr>
<td>1 weaker than</td>
<td>3 more familiar than</td>
<td>7 heavier than</td>
</tr>
<tr>
<td>2 _____________________</td>
<td>4 _______________________________</td>
<td>8 ________________________________</td>
</tr>
<tr>
<td>5 _____________________</td>
<td>6 _______________________________</td>
<td></td>
</tr>
</tbody>
</table>

3 Use comparative forms from the table to complete the sentences below.

1 The red squirrel is smaller and __________________ the grey squirrel.
2 Grey squirrels are generally __________________ their smaller cousins, because greys are not affected by the parapox virus.
3 Great white sharks are __________________ tiger sharks, which are not at risk of extinction.
4 Whale sharks are __________________ tiger sharks and do not attack anything.
CRITICAL THINKING

At the end of this unit, you will write two comparison paragraphs. Look at this unit’s Writing task in the box below.

Compare and contrast the two sharks in the diagram.

Organizing information

Organizing information from a diagram is an important critical thinking skill.

1. Look at the diagram of the two sharks and the boxes in Exercise 2. Write a sentence for each feature to explain how the sharks are similar or different.
   1. Size: _______________________________________________________
   2. Colour: _____________________________________________________
   3. Skin pattern: ________________________________________________
   4. Mouth: _____________________________________________________
   5. Fins and tail: _______________________________________________

Large tropical sharks

Whale shark

Tiger shark

Human

2. Look at more information about the two sharks and answer the questions on page 25 opposite.

**Whale shark**
- Length – 10 metres
- Weight – 9 tonnes
- Diet – plankton, krill, other very small animals
- Conservation status – endangered
- Behaviour towards humans – no recorded attacks

**Tiger shark**
- Length – 4 metres
- Weight – 500 kg
- Diet – tuna, dolphins, turtles
- Conservation status – not currently at risk of extinction
- Behaviour towards humans – 119 attacks since 2009
1 Which shark is smaller?
2 Which shark is heavier?
3 Which shark uses its teeth to eat large prey?
4 Which shark filters tiny sea creatures from water?
5 Which shark is less endangered?
6 Which shark is more dangerous?
7 Why do you think one of the sharks attacks humans and the other one does not?

**WRITING**

**GRAMMAR FOR WRITING**

**Word order**

In English, the subject (S) usually comes before the verb (V) and the object (O). These example sentences show other common features of English word order.

<table>
<thead>
<tr>
<th>S</th>
<th>V</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Squirrels</td>
<td>eat</td>
<td>seeds, nuts and fruit.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S</th>
<th>V</th>
<th>adjective</th>
<th>prepositional phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey squirrels</td>
<td>are</td>
<td>common</td>
<td>in Britain.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>linker</th>
<th>S</th>
<th>V</th>
<th>prepositional phrase</th>
</tr>
</thead>
<tbody>
<tr>
<td>However,</td>
<td>they</td>
<td>were introduced</td>
<td>from North America.</td>
</tr>
</tbody>
</table>

1 Use some of the words in the box above to label the different parts of grammar in the sentences below.

1 The tiger shark doesn’t hunt in fresh water.
2 However, the whale shark isn’t aggressive.
3 The tiger shark has markings on its skin.
4 The whale shark has a large mouth and eats plankton.
Using and, or, but and whereas

Using words to join sentences together can make our text flow better. When we join the two sentences together, we can also take out some words so we don’t repeat them. This makes the sentences shorter and better, because we can avoid repetition and fit more information into our writing.

2 Look at sentences (a–e) below. Answer the questions.

1 What is the difference between the first three lines (a–c) below?
2 What is the difference between the use of and and or in the sentences (a–e)?

   a The tiger shark has sharp teeth. The tiger shark has a powerful bite.
   b The tiger shark has sharp teeth and the tiger shark has a powerful bite.
   c The tiger shark has sharp teeth and a powerful bite.
   d The whale shark does not have sharp teeth. The whale shark does not have a powerful bite.
   e The whale shark does not have sharp teeth or a powerful bite.

3 Join the pairs of sentences below with and or or. Take out the repeated words.

   1 The whale shark is light blue. The whale shark has dots on its body.

   2 The tiger shark is dark blue. The tiger shark has a stripe pattern on its body.

   3 The tiger shark eats large sea creatures. The tiger shark is dangerous to humans.

   4 The whale shark is not aggressive. The whale shark is not dangerous to swim with.

   5 The tiger shark is not an endangered species. The tiger shark is not a protected species.

   6 The whale shark is an endangered species. The whale shark is protected from fishing.

4 Look at the example below, which shows how to contrast two sentences using whereas. Then link the pairs of sentences above (1–2, 3–4 and 5–6) in the same way, using but or whereas.

   The tiger shark has sharp teeth and a powerful bite, whereas the whale shark does not have sharp teeth or a powerful bite.
Using *both* and *neither*

We can use other phrases to compare two different things. If two things/people have the same characteristic, we can use *both ... and ...*.

*Both the grey squirrel and the red carry the parapox virus.*

If they do not have a particular characteristic, we can use *neither ... nor ...*.

*Neither the grey squirrel nor the red are found in the north of Scotland.*

5 Write sentences using the information in the table below.

<table>
<thead>
<tr>
<th></th>
<th>red squirrels</th>
<th>grey squirrels</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>have long tails</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>live on the Isle of Man</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>are meat-eaters</td>
<td>No</td>
</tr>
<tr>
<td>4</td>
<td>are an endangered species</td>
<td>No</td>
</tr>
<tr>
<td>5</td>
<td>live in forests</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**ACADEMIC WRITING SKILLS**

**Punctuation**

When we write, we need to use correct punctuation. We always start a new sentence with a *capital letter* and usually end it with a *full stop*. We use capital letters for names of countries, cities and people. We use *commas* when we write a list of adjectives or nouns. We also use a comma before *whereas* and after *however*.

1 Correct the punctuation of the sentences (1–5) below.

1 however the whale shark has to be protected in countries in asia like taiwan and the philippines because it is so slow and easy to catch
2 the whale shark is a large slow-moving fish with wide fins a long tail and a huge mouth
3 this gentle giant is not dangerous to humans and divers can swim with it touch it and even ride on its back fin
4 it does this by ram feeding which means it swims fast to force water and animals into its mouth
5 it uses this mouth to eat very small plants and animals like krill plankton and algae
Paragraph structure
We start a paragraph with a topic sentence, which introduces or defines the topic. We follow this with supporting sentences, which give extra information about the topic. We end the paragraph with a concluding sentence, which sums up the paragraph and links back to the topic sentence.

2 Put the sentences in Exercise 1 in order to make a paragraph that starts with a topic sentence, has supporting sentences in the middle and ends with a concluding sentence.

WRITING TASK
Compare and contrast the two sharks in the diagram.

**Whale shark**
- Length – 10 metres
- Weight – 9 tonnes
- Diet – plankton, krill, other very small animals
- Conservation status – endangered
- Behaviour towards humans – no recorded attacks

**Tiger shark**
- Length – 4 metres
- Weight – 500 kg
- Diet – tuna, dolphins, turtles
- Conservation status – not currently at risk of extinction
- Behaviour towards humans – 119 attacks since 2009
1 Read the introduction and the conclusion of the essay below, which compares and contrasts the two sharks. Then complete the essay by comparing three or four features of the sharks in each of the two supporting paragraphs.

The diagram gives information about two kinds of large tropical shark, the whale shark and the tiger shark. The sharks have a number of differences in terms of size, shape and colour.

The sharks are also different in terms of diet, behaviour and conservation status.

Overall, it is clear that the whale shark is a much larger animal, but it is a gentle giant, whereas the smaller tiger shark is much more dangerous.
2 Use the checklist to review your paragraphs for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you used a topic sentence to introduce each paragraph? ✔</td>
</tr>
<tr>
<td>Have you included measurements from the diagram to add detail?</td>
</tr>
<tr>
<td>Have you compared three or four features and included what is similar, as well as what is different, about the sharks?</td>
</tr>
</tbody>
</table>

3 Make any necessary changes to your paragraphs.

4 Now use the language checklist to edit your paragraphs for language errors which are common to B1 learners.

<table>
<thead>
<tr>
<th>LANGUAGE CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you used comparative adjectives correctly? ✔</td>
</tr>
<tr>
<td>Have you used and, or, but, whereas, neither and both correctly?</td>
</tr>
<tr>
<td>Have you used capital letters, commas and full stops correctly?</td>
</tr>
</tbody>
</table>

5 Make any necessary changes to your paragraphs.
OBJECTIVES REVIEW

6 Check your objectives.

I can ...

| Watch and understand a video about sharks | very well | not very well |
| Identify the main ideas in a text | very well | not very well |
| Structure and punctuate a paragraph | very well | not very well |
| Write two comparison paragraphs | very well | not very well |

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>attack (n)</td>
<td>aggressive (adj)</td>
</tr>
<tr>
<td>extinction (n)</td>
<td>common (adj)</td>
</tr>
<tr>
<td>fatal (adj)</td>
<td>cruel (adj)</td>
</tr>
<tr>
<td>habitat (n)</td>
<td>endangered (adj)</td>
</tr>
<tr>
<td>hunt (v)</td>
<td>familiar (adj)</td>
</tr>
<tr>
<td>hunting (n)</td>
<td>weak (adj)</td>
</tr>
<tr>
<td>overfishing (n)</td>
<td></td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td></td>
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<tr>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about customs in Dagestan</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Read for detail</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Structure an essay</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write three descriptive paragraphs</td>
</tr>
</tbody>
</table>

UNIT 2
UNLOCK YOUR KNOWLEDGE

Work with a partner. Discuss the questions below.

1. Which celebration is shown in the photograph?
2. What customs and traditions do visitors to your country need to know?
3. What traditional celebrations do you have in your country?
PREPARING TO WATCH

1 Work with a partner. Look at the photographs and try to answer the questions below.
1 Where do you think the photographs were taken?
2 Is it a rural area or an urban area?
3 Is it a traditional region or a modern region?
4 What industry do you think is in the area?
5 Do you think people live in nuclear families that include just the parents and children, or extended families that include children, parents and grandparents?

2 Watch the video and check your answers. Now choose the best description of the topic of the video.
   a Industry  b Weddings  c Culture  d Family life

WHILE WATCHING

3 Watch the video and number the ideas (a–h) in the order that you hear them. Not all the ideas are mentioned.
   a holidays  b languages  c history  d family networks  e traditional industry  f marriage  g migration  h law
4 Watch again and correct the factual mistakes in the sentences below.

1 Dagestan is smaller than Scotland.
2 Dagestan is in Russia.
3 Thirty-five languages are spoken in the region.
4 Carpet-making is done by machine.
5 Younger people are local leaders.
6 The population of Dagestan is declining.
7 Dagestanis want to be buried in the capital city.

5 Which words and phrases (a–i) are mentioned in relation to carpet-making in Dagestan?

- a traditional
- b modern designs
- c local
- d cotton
- e wool
- f thread
- g vegetables
- h galleries
- i museums

6 Work with a partner. Answer the questions below.

1 Why are Dagestani carpets so popular?
2 Why do many Dagestanis live outside the country?

DISCUSSION

7 Work with a partner. Discuss the questions below about your country.

1 What are some traditional industries?
2 Do young people stay in the country or do they move away?
   Why do they make this choice?
3 Discuss family life.
   a What is family life like there?
   b Are extended families or nuclear families more popular?
   c What do young people like to do?
PREPARING TO READ

1 Scan the magazine article opposite for the words and phrases in the box and underline them each time they appear.

- kiss
- shake hands
- touch
- gift
- dress

2 Answer the questions below, according to the information in the article. Use the text around the words you have underlined to help you.

1 In which countries should you not kiss your business partner?

2 In which countries do men shake hands when they meet each other?

3 In which country do people touch each other when they are talking?

4 In which country is it common to give a present at a business meeting?

5 In which country is it unlucky to give white flowers?

WHILE READING

3 Read the article on page 37 opposite. Which of the customs (a–g) below are not mentioned?

- a greetings
- b personal space
- c giving gifts
- d business meetings
- e table manners
- f giving business cards
- g being punctual
As more and more people travel all over the world, it is important to know what to expect in different countries and how to react to cultural differences so that you don’t upset your foreign contacts. In our ‘Customs around the world’ series, we look at three different cultures every month to help you prepare for that important trip. This month’s locations are Brazil, Japan and India.

**BRAZIL** Brazilians are very friendly people and are generally informal, so it is important to say hello and goodbye to everyone. Women kiss men and each other on the cheek but men usually just shake hands. Brazilians stand very close to each other and touch each other’s arms, elbows and back regularly while speaking. You should not move away if this happens. If you go to a business meeting, you are not expected to take a gift. In fact, an expensive gift can be seen as suspicious. On the other hand, if you’re invited to someone’s house, you should take a gift – for example, flowers or chocolates. However, stay clear of anything purple or black, as these colours are related to death. If you are invited to dinner, arrive at least 30 minutes late, but always dress well because appearances are very important to Brazilians.

**JAPAN** The Japanese are quite different from the Brazilians. They can be quite formal, so don’t stand too close. Kissing or touching other people in public is not common. When you meet someone, they may shake your hand, although bowing is the more traditional greeting. In a business meeting, Japanese people often like to know what your position is in your company before they talk to you. You should hand over a business card using both hands and when you receive a business card, you should immediately read it carefully. It is important to be punctual in Japan. It is recommended that you arrive early and dress formally. Gifts are often exchanged, but it is common to refuse before you accept them. When you present your gift, you should say that it is just a token of your appreciation. Most visitors are entertained in a restaurant, so it is a great honour to be invited to a Japanese person’s house.

**INDIA** Hierarchy is important in India, so when you meet Indians, it is important to greet the oldest or the most senior person first. Men may shake hands with men, and women often also shake hands with women, but men and women tend not to shake hands. When leaving, you should say goodbye to everyone individually. Personal relationships are important in business in India and you should not be surprised if the first meeting is spent getting to know everyone. In addition, it is important to know that many Indians do not like to say ‘no’, so it may be difficult to know what they are really thinking. Appointments are necessary and punctuality is important. Business dress is formal, so men and women should wear dark suits. If you are invited to an Indian’s home, arrive on time. You do not have to bring a gift but gifts are not refused. However, do not bring white flowers, because these are used in funerals.
4 Match the sentence halves. Then read the article again and check your answers.

1 In Brazil, women kiss men and each other on the cheek, but men
2 Taking a gift to a business meeting
3 If you are going to a Brazilian’s house for dinner, you
4 Bowing is a common way to
5 In Japan it is very impolite to
6 Spend time getting to know everyone when you
7 In India and Japan punctuality is very important, so you should

a is not a good idea in Brazil.
b arrive on time.
c put away a business card without studying it first.
d do not kiss each other.
e meet Indian business partners.
f greet Japanese people.
g can arrive late.

Reading for detail

Reading for detail is an important part of academic reading and it is a skill which is tested in many language examinations. Look for key words in the text and pay attention to words like not, however and but which show contrasting views or information.

READING BETWEEN THE LINES

5 Work with a partner. Try to answer the questions below.

1 In Brazil, why would people be suspicious of an expensive gift?
2 Why shouldn’t you move away if Brazilians touch you during conversation?
3 Why is it important for Japanese business people to know your position in a company?
4 Why do Indians not like to say ‘no’?
5 Why is it important to know about other people’s customs?

DISCUSSION

6 Work with a partner. Discuss the questions below.

1 Have you ever been abroad? Where?
2 Which country would you like to visit? Why?
3 What advice about customs in your country would you give a visitor?
PREPARING TO READ

1 Match the words and phrases (1–9) to their definitions (a–i).

1 legal requirement   a the event during which the couple are married
2 registry office     b the man who is going to get married
3 engagement ring    c the woman who is going to get married
4 groom               d in Britain, a non-religious building where you can get married
5 marriage certificate e a document which shows all the different presents that a couple would like to receive for their wedding
6 wedding ceremony   f something that you need to do according to the law
7 bride               g a celebration or meal which takes place after the wedding ceremony
8 wedding list        h a ring which is given as a promise to marry
9 reception           i a piece of paper which proves that two people are married

2 Work with a partner. Look at the title on page 40 and try to answer the questions below.

1 How old are most people when they get married in Britain?
2 On average, how many guests are invited to British weddings?
3 Are British attitudes to marriage changing or staying the same?

3 Now read the page from a citizenship guide on page 40 and check your answers.

WHILE READING

4 Choose the best summary.

a The text describes traditional British weddings and says how the traditions are changing.
b The text contrasts traditional and modern relationships in Britain.
c The text describes marriage customs around the world and in the UK.
d The text describes what happens on a traditional wedding day in Britain.
Weddings are important occasions in British life. They can be very expensive and take a long time to organize. There are also many traditional aspects of weddings that are important for people who get married. However, many traditions have become less common in recent years and marriage in Britain is changing.

Marriage is legal from the age of 18, but this can be lowered to 16 if the couple have their parents’ permission. The average age of people who get married in the UK is about 30. People can marry in a civil ceremony, at a registry office, or they may have a religious ceremony in a church, mosque or other place of worship. All couples must sign a marriage certificate. This is a legal document which proves that they are married. Divorced men and women can remarry but this may not be possible in a church.

In the past, a traditional marriage in the UK meant a couple first got engaged. This was when the man formally asked the woman to marry him with a ring. It was also traditional, for the groom to ask the bride’s father if he agreed. The wedding commonly took place at the bride’s local church with about a hundred guests. It was a tradition for the groom’s father to buy the flowers and champagne but for the bride’s father to pay for everything else. The two families sat on different sides of the church and the bride’s father gave away his daughter to the groom. Female friends and family members helped her with her long dress and were called bridesmaids. The couple exchanged rings, kissed and then signed the marriage certificate. When they left the church, guests threw paper confetti at them and took a lot of photographs. Everyone then went to a hotel or restaurant for the wedding reception and they had a meal, made speeches and danced. The guests brought wedding presents for the couple’s new home and the couple then went on a long holiday called a honeymoon. The new bride took her husband’s surname.

These days, however, many people do not always follow tradition so closely. It is now common for the woman to ask the man to marry her, and not many men ask the woman’s father for her hand in marriage. People frequently marry in a town hall. A few even marry on a beach in a hot country. The couple tend to pay for the wedding themselves but still expect both families to help them pay for the reception. These days not every woman wants to change her surname so she might keep her maiden name or take both names.
5 Correct the factual mistakes in the sentences below.

1 Weddings in the UK are cheap and easy to organize.
2 Most people get married between the ages of 35 and 40.
3 Couples can choose to sign a marriage certificate if they want to.
4 Divorced men and women can remarry in a church.
5 When a couple get engaged, the woman gives the man a ring.
6 The bride’s father gives his daughter away and helps her with her dress.
7 After the wedding ceremony, the guests take wedding presents to the couple’s new home.
8 Nowadays, the groom’s father pays for the reception and the couple pay for the rest.

READING BETWEEN THE LINES

6 Scan the guide and circle the word this each time you see it. What does this refer to in the following phrases?

1 this can be lowered to 16
2 this is a legal document
3 this may not be possible in a church
4 this is when the man asks the woman to marry him

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 What happens in a traditional wedding ceremony in your country?
2 Are any of the traditional celebrations in your country changing? How?
Avoiding generalizations

In academic English, we have to be careful not to make general statements unless we have the data to prove them. A reader of the example sentence below can argue that not all weddings are expensive.

*Weddings are expensive.*

Notice how we avoid generalizations by using *can* or *tend to*.

Modal verb

*Weddings can be expensive.*

Verb

*Weddings tend to be expensive.*

Notice the second verb (*be*) is in the infinitive form.

1 Use the words in brackets to avoid generalizations in sentences (1–5).

1. We tip the waiter in restaurants. *(tend to)*

2. Weddings are less common these days. *(tend to)*

3. Birthdays are important. *(can)*

4. Blowing your nose in public is rude in Japan. *(can)*

5. Shaking hands is how most people greet you in India. *(tend to)*

Adverbs of frequency

We can also use adverbs of frequency to avoid generalizations. Notice the position of the adverbs in the sentences below.

Before the main verb

*People usually have barbeques in summer.*

*Weddings can sometimes take place in hotels.*

After the verb *to be*

*Weddings are often difficult to organize.*
2 Use the words in brackets to avoid generalizations in sentences (1–5).
1 The bride’s family pays for the wedding. (usually)
2 People go for picnics in the countryside at weekends. (often)
3 Professionals can get upset if you don’t use their correct title. (sometimes)
4 Cultural knowledge is important in business situations. (frequently)
5 It is best to arrive on time for an appointment. (usually)

ACADEMIC ADJECTIVES 2
3 Replace the words in bold in the sentences (1–7) below with the academic adjectives in the box.

brief  certain  obvious  common
important  serious  separate

1 The wedding service was very short and we went straight to the reception. ____________
2 Divorce is a bad problem in this country. ____________
3 The bride and groom live in different houses until after the wedding. ____________
4 In some countries, marriage is becoming less popular. ____________
5 People wanted to marry into powerful families for money and status. ____________
6 Some customs and traditions are not clear for people new to the country. ____________
7 It is not usual for people in my country to have large families. ____________
At the end of this unit, you will write three descriptive paragraphs. Look at this unit’s Writing task in the box below.

Describe the laws and traditions concerning weddings in your country. Have there been any changes in recent years?

In order to analyze a description, we need to identify the parts and its structure. Look back at Reading 2 on page 40 and complete the table with information about traditional British weddings.

<table>
<thead>
<tr>
<th>Law</th>
<th>UK</th>
<th>Your country</th>
</tr>
</thead>
<tbody>
<tr>
<td>age</td>
<td>marriage is legal at (1) ________</td>
<td></td>
</tr>
<tr>
<td></td>
<td>most people marry at (2) ________</td>
<td></td>
</tr>
<tr>
<td>documents</td>
<td>both people sign a (3) ________</td>
<td></td>
</tr>
<tr>
<td>place</td>
<td>people marry at a (4) ________</td>
<td></td>
</tr>
<tr>
<td>Proposal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>people</td>
<td>the man may ask the woman’s (5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>________</td>
<td></td>
</tr>
<tr>
<td>gift</td>
<td>the man gives a (6) ________</td>
<td></td>
</tr>
<tr>
<td>Wedding day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>people</td>
<td>(7) ________ guests</td>
<td></td>
</tr>
<tr>
<td>cost</td>
<td>(8) ________ pays for the wedding</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(9) ________ pays for the flowers</td>
<td></td>
</tr>
<tr>
<td>name</td>
<td>the bride usually takes (10)</td>
<td></td>
</tr>
<tr>
<td>reception</td>
<td>- at a (11) ________ or restaurant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- have (12) ________</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- make (15) ________ dance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- afterwards, go on a (14) ______</td>
<td></td>
</tr>
</tbody>
</table>
2 Look back at the last paragraph of Reading 2. Which items in the table on page 44 opposite have changed recently?

3 Look at the table again. Complete the third column with information about the customs and traditions of weddings in your country or region. You may need to add new categories to the chart.

4 Use a different colour to circle on the table where any of the customs and traditions have changed in recent years.

GRAMMAR FOR WRITING

Adding detail for interest
To make our writing more interesting we can add more detail.

1 Look at the simple sentence below. Match the more detailed sentences (1–5) to the methods used for adding detail (a–e).

Weddings are important.

1 Weddings are very important.
2 Traditional weddings are very important.
3 Traditional weddings are very important to many people.
4 In my country, traditional weddings are very important to many people.
5 In my country, traditional weddings tend to be very important to many people.

a add words to avoid generalizations
b add a prepositional phrase
c add two prepositional phrases
d add an adjective to a noun
e add an adverb to an adjective
2 For each sentence (1–3), add the words and phrases in the box to make a longer, more detailed sentence. More than one answer is possible.

1 There is a wedding reception.
   large with hundreds of guests after the ceremony often

2 The man gives a ring.
   to show they are engaged diamond expensive may to his fiancée

3 The guests bring wedding gifts.
   at the reception wrapped usually for the bride and groom

ACADEMIC WRITING SKILLS

Essay structure
An essay should have an introduction which shows the organization of the essay. It should have an appropriate number of main body paragraphs with topic sentences which link back to the topics in the introduction. It should also have a conclusion which summarizes the topics in the paragraphs and links back to the introduction.

1 Look at the essay question and the introduction of an essay written in response to it. This introduction shows the paragraph order of the essay by listing the topics of each paragraph. What are the three topics the writer intends to describe in the essay?

Describe the laws and traditions concerning weddings in your country. Have there been any changes in recent years?

Weddings are very important occasions in my country. They are vital social events which join two families together to celebrate the new marriage. In this essay, I will describe the law concerning marriage where I live, outline the customs and traditions of a typical wedding and show how weddings have changed in recent years.
This introduction shows there are three paragraphs in the main body of the essay. Look back at the Critical thinking section on page 44 and plan the supporting sentences for each paragraph.

<table>
<thead>
<tr>
<th>Paragraph 2 – Law</th>
</tr>
</thead>
<tbody>
<tr>
<td>age –</td>
</tr>
<tr>
<td>people –</td>
</tr>
<tr>
<td>documents –</td>
</tr>
<tr>
<td>place –</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 3 – Typical wedding</th>
</tr>
</thead>
<tbody>
<tr>
<td>proposal –</td>
</tr>
<tr>
<td>people –</td>
</tr>
<tr>
<td>location –</td>
</tr>
<tr>
<td>cost –</td>
</tr>
<tr>
<td>events –</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Paragraph 4 – Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>age –</td>
</tr>
<tr>
<td>cost –</td>
</tr>
<tr>
<td>proposal –</td>
</tr>
<tr>
<td>name –</td>
</tr>
</tbody>
</table>
WRITING TASK

Describe the laws and traditions concerning weddings in your country. Have there been any changes in recent years?

1 Use the introduction provided on p46 and the supporting sentences in your plan to write an essay to answer the question in the writing task.

2 Use the task checklist to review your essay for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you got an introduction and three main paragraphs on different parts of the topic?</td>
</tr>
<tr>
<td>Have you given all the important information about the wedding?</td>
</tr>
<tr>
<td>Have you answered the second question, not just the first one?</td>
</tr>
</tbody>
</table>

3 Make any necessary changes to your essay.

4 Now use the language checklist to edit your essay for language errors which are common to B1 learners.

<table>
<thead>
<tr>
<th>LANGUAGE CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you replaced general adjectives with academic words?</td>
</tr>
<tr>
<td>Have you used the language to avoid generalizations?</td>
</tr>
<tr>
<td>Have you included extra adjectives, nouns and prepositional phrases to make sentences longer and more detailed?</td>
</tr>
</tbody>
</table>

5 Make any necessary changes to your essay.
OBJECTIVES REVIEW

6 Check your objectives.

*I can ...*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Well</th>
<th>Not Very Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>watch and understand a video about customs in Dagestan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>read for detail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>structure an essay</td>
<td></td>
<td></td>
</tr>
<tr>
<td>write three descriptive paragraphs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>bride (n)</td>
<td>brief (adj)</td>
</tr>
<tr>
<td>engagement ring (n)</td>
<td>certain (adj)</td>
</tr>
<tr>
<td>fiancé (n)</td>
<td>common (adj)</td>
</tr>
<tr>
<td>fiancée (n)</td>
<td>important (adj)</td>
</tr>
<tr>
<td>groom (n)</td>
<td>obvious (adj)</td>
</tr>
<tr>
<td>legal requirement (n)</td>
<td>separate (adj)</td>
</tr>
<tr>
<td>marriage certificate (n)</td>
<td>serious (adj)</td>
</tr>
<tr>
<td>punctual (adj)</td>
<td></td>
</tr>
<tr>
<td>reception (n)</td>
<td></td>
</tr>
<tr>
<td>registry office (n)</td>
<td></td>
</tr>
<tr>
<td>tend (v)</td>
<td></td>
</tr>
<tr>
<td>wedding ceremony (n)</td>
<td></td>
</tr>
<tr>
<td>wedding list (n)</td>
<td></td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about archaeology</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Identify purpose and audience of a text</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write an introduction</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write a balanced opinion essay</td>
</tr>
</tbody>
</table>
Unlock Your Knowledge

Work with a partner. Discuss the questions below.

1. Does your country have a long history?
2. What are the most important periods and events in your country’s history?
3. Why are some people uninterested in history?
PREPARING TO WATCH

1 You are going to watch a video about archaeology. Look at the photographs above and answer the questions below.
   1 Where were the photographs taken?
   2 What are the people doing in the photographs?
   3 Why are people interested in this subject?

2 Complete the sentences below using the words in the box.

archaeologist   hieroglyphics   excavation
                     tomb      artefact     remains

1 The ancient Egyptian system of writing is called ________________.
2 An ________________ is someone who studies the objects of people who lived in the past.
3 Someone's dead body or the remaining parts of it are called their ________________.
4 A ________________ is a large stone structure or underground room where someone is buried.
5 An ________________ is removal of the earth which is covering very old objects, to discover things about the past.
6 An ________________ is an ancient object in a museum.
WHILE WATCHING

Watch the video and number the main ideas (a–g) in the order that you hear them.

3

a the archaeological season
b examining and recording
c ancient Egyptian kings
d modern X-ray equipment
e excavation on the site
f the Valley of the Kings

Match the sentence halves. Then watch again and check your answers.

4

1 It is illegal to
2 Hidden underground, these painted tombs and fragile artefacts
3 Before any discoveries can be made
4 It is a time-consuming task but
5 Every new find must be carefully recorded and
6 Every year, archaeologists continue to

a the site is so delicate, heavy machinery is not allowed.
b look for more evidence of this advanced culture.
c excavate or remove artefacts without permission.
d there is always a large amount of earth and sand to move first.
e have been preserved by the dry air of the desert.
f nothing can be moved until it is photographed.

Work with a partner. Try to answer the questions below.

5

1 Why do you think the archaeological season starts in October?
2 Why are only a few archaeologists allowed to excavate artefacts?
3 Why do you think security is tight at the archaeological sites?
4 Why do the artefacts need to be recorded, photographed and preserved before they are moved from the archaeological site?

DISCUSSION

6 Work with a partner. Discuss the questions below.

1 Are there any important historical sites in your country?
   If so, which ones?
2 Why are these sites important for us today?
PREPARING TO READ

1 Work with a partner. Discuss the questions below.
   1 What kinds of museums are there in your country?
   2 Should schools take children to museums as part of their education? Why / Why not?
   3 How can museums make their exhibitions fun for visitors?

2 Match the words and phrases in the box to their definitions (1–9).

ancestarcheology fossil exhibition exhibit field knight natural history sword

1 the remains of an extinct prehistoric animal or plant
2 the study of human cultural objects and sites from the past
3 an object in a museum
4 the study of plants and animals
5 a display of objects or artworks in a museum or gallery
6 very old
7 area of study
8 a fighting man from the mediaeval period
9 a long weapon that cuts

WHILE READING

3 You are going to read four brochures about museums. Scan each text and match it to one of the museums (1–4).

1 Warwick Castle 
2 the Porsche Museum
3 the Museum of Science and Industry Chicago
4 the Natural History Museum

4 Why did each museum produce these brochures?

5 Read the texts on page 55 opposite and answer this question:

Which museum (A–D) would you visit to do the following?

1 learn ancient fighting techniques
2 look at classic automobiles
3 participate in science experiments
4 discover extinct animal life
5 listen to a guide on headphones
6 produce chemical reactions
7 stay overnight
A. **Dino Scene Investigation**

Look at rocks and bones, dig up your own fossils, and find out how to identify prehistoric animals and plants at the Natural History Museum. Dinosaurs became extinct around 65 million years ago, so how do we know what they looked like and how they behaved? Bring your pupils to our Dino Scene Investigation workshops to find out!

If you want more from your dinosaur experience, you can actually spend the night in the museum. Our Dino Snores programme takes you into the museum and on your way to your ‘bedroom’ you solve a puzzle. You can then watch a film before going to sleep under the Diplodocus dinosaur. Although museum admission is free there is a charge for the Dino Snores events, so see the website for details.

B. **Team-Building The Mediaeval Way**

Bring your staff to our special Mediaeval Knight School for a company event they won’t forget! Our experienced knights will tell you about the history of Warwick Castle and will take you back to mediaeval times when the Castle’s soldiers were getting ready to fight. Your employees will improve their business skills, such as leadership and trust, while they learn about fighting with swords and bows and arrows.

*For more information, contact our Sales Team.*

C. **Excellent Technological Achievements in Motorizing!**

Porsche has a unique history in motor racing and engineering innovation. The Porsche Museum in Stuttgart, Germany has around 80 of the most famous Porsche models in the history of the company. Children can take part in the ‘Museum Rallye’, which is a quiz relating to the exhibits. There is also a special children’s audio guide, which is available in several languages. They can learn about the exhibits in any order and at their own speed. It serves to present the excitement and variety of the Porsche brand to children from all over the world.

D. **‘Live Science’ Experiences and Learning Labs**

Our vision is to inspire children to achieve their full potential in the fields of science, technology, engineering and medicine. In our ‘Live Science’ experiences, you can be an atom and discover which other atoms you bond with, or experiment with gravity by throwing things over the balcony!

In our ‘Moving with Newton’ Learning Lab, you can learn about Newton’s three laws of motion, or take part in our ‘Colourful Chemistry’ Learning Lab and see what happens when you mix and heat chemicals to produce light and colours.

You’ll find this and so much more at the Museum of Science and Industry Chicago!
6 Re-read the texts and choose one activity in each case which is not available.

1. the Natural History Museum
   a. digging up fossils
   b. recognizing different dinosaurs
   c. sleeping inside a dinosaur

2. Warwick Castle
   a. handling ancient weapons
   b. learning how to be a better leader
   c. reading the history of Warwick Castle

3. the Porsche Museum
   a. taking part in a model car race
   b. listening to a recorded guide
   c. participating in a quiz

4. the Museum of Science and Industry Chicago
   a. dropping exhibits to demonstrate gravity
   b. learning about atomic energy
   c. doing basic chemical experiments

READING BETWEEN THE LINES

7 Work with a partner. Discuss statements (1–4) below and circle the best answer (a–c) to complete each one.

1. Sleepovers are offered at the Natural History Museum
   a. to attract children to the museum.
   b. to sell more museum tickets to adults.
   c. to allow more time to visit the museum.

2. Companies use the Mediaeval Knight School at Warwick Castle
   a. to learn about sales techniques.
   b. to teach staff to fight.
   c. to help team-building.

3. Porsche wants to attract children to the museum
   a. to inspire children to become engineers in the future.
   b. to help advertise the cars.
   c. to sell model cars in the gift shop.

4. The goal of the Museum of Science and Industry Chicago is
   a. to educate children about chemistry.
   b. to make science funny for children.
   c. to motivate children to have a career in science.

Identifying purpose and audience

It is useful to think about what the author was trying to do when they wrote the text. This will give us a clue about the organization of the text and its function.
DISCUSSION

8 Work with a partner. Discuss the questions below.

1 Have you ever visited any museums like these? If so, what are your strongest memories?
2 Is it better to learn about history from books and the internet or from museums?

READER 2

PREPARING TO READ

1 Match the words and phrases in the box to their definitions (1–7).

- compulsory
- ongoing discussion
- economic benefits
- less obvious
- tuition
- knowledgeable
- beyond

1 teaching
2 unfinished argument
3 not optional
4 not very clear
5 financial advantages
6 knowing a lot about something
7 going a long way past something

WHILE READING

2 In the essay on page 58, the writer responds to a question about whether we should teach History. The word should appears seven times in the main body of the essay. Do tasks 1–3 below.

1 Scan the essay and underline the word should each time you see it. The first one has been done for you as an example.
2 Does the writer think we should or should not teach History?
3 Read the essay in full to check your answer to Question 2 above.

3 Which paragraphs (A–D) mention the points (1–4) below?

1 reasons why we should teach History
2 the writer’s own opinion
3 why we should not teach History
4 the introduction and essay structure
Should we teach History?

A History is still a compulsory subject at lower levels and pupils still choose to study it at higher levels. However, there is an ongoing discussion about whether schools should continue to teach History or whether they should spend the money on other subjects. This essay will deal with the arguments against and in favour of teaching History in school, concluding that we should teach History, because the value of the subject goes beyond the classroom.

B First of all, many pupils suggest that History is one of the less interesting school subjects and that governments should spend the time and money on subjects that are more useful. Some people argue that Maths and English are more important so we can have a society with a good basic education. Other people say that we should spend the money on teaching Science, as this can move a country forward and benefit the economy. However, when we teach History, we are just looking back at the past. The economic benefits of this area are less obvious.

C On the other hand, there are a number of reasons why it is a good idea to teach History. Teaching History is important because students should be able to understand the background to current issues in the news. This will create better-informed citizens. Another reason why teaching History is a good idea is that it helps pupils to understand their culture and background, which also helps them to understand the society they live in. In addition to learning about the past, History tuition can help students to think for themselves. Finally, it also improves pupils’ reading and writing skills, which can help them become better students.

D In conclusion, although there are clearly arguments on both sides, it seems to me that we should teach children about the past because the advantages of teaching the subject go beyond the content of the classes. I would say that the teaching of History helps to create generations of well-educated and knowledgeable individuals.
4 Read the essay again and complete the chart using the phrases in the box.

This knowledge creates better citizens.
Science benefits the economy.
Pupils learn about culture.
Pupils improve reading and writing skills.
We should focus on Maths and English.

Teach history?

No

1

We should teach science instead.

2

It’s good for basic education.

Yes

3

Pupils understand the background to current issues.

4

It helps them to understand society.

5

It can help them become better students.

5 Why does the writer include more reasons in favour of teaching History than reasons against?

READING BETWEEN THE LINES

6 Would the writer agree or disagree with these claims? Underline the section of the text which supports your answer.

1 Government spending on History education should be reduced.
2 The benefits of History education are useful in further study.
3 Teaching History brings many economic benefits to a country.
4 History tuition is just as important as teaching science.
5 Covering History in the classroom is perhaps a waste of time.
DISCUSSION

7 Work with a partner. Discuss the questions below.

1 Which school subjects are popular with students in your country? Why?
2 Should students and their parents be allowed to choose which subjects they study at school?

LANGUAGE DEVELOPMENT

ACADEMIC VOCABULARY

1 Complete each pair of sentences using the words in the box. The same word completes each pair.

display document financial research period

1 We intend to do new ____________ into the site’s early development.
   The museum has its own ____________ programme.

2 The museum needs ____________ assistance because it does not make enough money from ticket sales.
   Until we applied for government funding, we had terrible ____________ problems.

3 The collection houses many ancient texts and a very important legal ____________.
   We make sure to ____________ each artefact that is found on the site.

4 This room is devoted to life in the late mediaeval ____________ in London.
   We spent a long ____________ of time studying history at school.

5 Museums must ensure that they ____________ artefacts with the correct lighting.
   The digital ____________ at the museum is designed to guide you through the collection.
Making suggestions
When we write an academic essay, we use *should* to make suggestions. However, we may need to make more than one suggestion, so we often use other ways to say *should*.

Look at the sentences below, which show different ways to introduce the topic of your suggestion and highlight it for the reader.

*We should teach History in schools.*
*It is important to teach History in schools.*
*Teaching History in schools is a good idea.*

Notice how we add *-ing* to *teach* when we use it as a noun. This is a good way to make an action (a verb) the subject of your sentence.

2 Look at the statements (1–3) and complete the sentences.

1. We should **pay to visit museums**.
   a. **It is important to** ____________________________ .
   b. ____________________________ is a good idea.

2. We should **protect ancient objects from theft**.
   c. **It is important to** ____________________________ .
   d. ____________________________ is a good idea.

3. We should **learn from past mistakes**.
   e. **It is important to** ____________________________ .
   f. ____________________________ is a good idea.

3. Complete sentences (1–6) using the phrases in the box.

   we should    it is important    is a good idea

1. There are a number of reasons why ____________________________ to teach History.

2. Another reason why teaching History ____________________________ is that it helps with writing skills.

3. It seems to me that ____________________________ pay to visit museums in the same way that we pay for other kinds of entertainment.

4. ____________________________ for children of all ages to be taken to museums.

5. I am not entirely convinced that ____________________________ be charged admission to museums.

6. Some people doubt whether ____________________________ for children to visit museums during school time.
CRITICAL THINKING

At the end of this unit, you will write a balanced opinion essay. Look at this unit’s Writing task in the box below.

Should museums be free or should visitors pay for admission? Discuss.

Organizing ideas
Before we write an essay, we have to organize our ideas so that they flow logically. All ideas that relate to the same point should be grouped together.

1 Read the opinions of the people (1–4). Who thinks that museums should be free and who thinks people should pay to visit museums?

1 The government has far more important things to think about. It needs to fund the emergency services and healthcare rather than invest in the arts.

2 There should be no fee to enter a museum. All children, rich or poor, should be able to visit them and smell and touch the artefacts. It makes history so much more interesting than reading about it in a book.

3 Museums are very expensive to build and maintain. It seems to me that the public should help pay for the staff, security and building costs.

4 I think the government should pay for museums. The history of our country should be preserved for future generations. The state should keep its treasures safe from theft and maintained in good condition.

2 Complete the chart below using the opinions in Exercise 1 to make a plan for your essay. The first one has been done for you as an example.

<table>
<thead>
<tr>
<th>Should museums be free?</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government has more important things to fund.</td>
<td>a) They should fund emergency services and healthcare</td>
<td>b) Museums are expensive to build and maintain</td>
</tr>
<tr>
<td></td>
<td>c) All children should be able to visit museums</td>
<td>d) History of our country should be preserved</td>
</tr>
</tbody>
</table>

CRITICAL THINKING
Stating opinions

When we write an essay, we have to state other people’s opinions as well as our own. If we always write some people think ..., our essays can sound repetitive, so we try to use a variety of phrases to say the same thing.

Notice how writers use other phrases to avoid repeating think when they give their own opinion.

<table>
<thead>
<tr>
<th>I think</th>
<th>It seems to me that</th>
<th>I believe that</th>
<th>I would say that</th>
</tr>
</thead>
<tbody>
<tr>
<td>we should teach history.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notice how writers use a number of different words to mean think when they give the other side of the argument.

<table>
<thead>
<tr>
<th>Many people</th>
<th>think</th>
<th>argue</th>
<th>state</th>
<th>claim</th>
<th>suggest</th>
<th>feel</th>
</tr>
</thead>
<tbody>
<tr>
<td>that protecting ancient objects from theft is a good idea.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Rewrite the sentences below using phrases from the explanation box above. The first one has been done for you as an example.

1 History should be replaced by other subjects.

Many people think that History should be replaced by other subjects.

2 A number of people think that museums should make people pay for entry.

3 I think it would be better to teach foreign languages instead of History.

4 Some people think that students should be made to learn History.

5 I think we need to make museums more interesting for young people.

Linking contrasting sentences

We use but, however, although and on the other hand before a new idea that is opposed to, or in contrast to, the first idea.
2 Look at the statements (1–5). How is the punctuation different for each statement?

1 Many people feel that museums should charge visitors an entry fee but others claim that museums should be free to all.

2 Many people feel that museums should charge visitors an entry fee, although others claim that museums should be free to all.

3 Many people feel that museums should charge visitors an entry fee. However, others claim that museums should be free to all.

4 Many people feel that museums should charge visitors an entry fee. On the other hand, others claim that museums should be free to all.

5 Although many people feel that museums should charge visitors an entry fee, others claim that museums should be free to all.

3 Rewrite the sentences below using although. The first one has been done for you as an example. More than one answer is possible.

1 Museums are free but they cost a lot of money to maintain.  
   Although museums are free, they cost a lot of money to maintain.

2 Museums are free, to allow all children to visit them. However, many children never go to a museum.

3 It is a good idea for governments to pay for museums, but there are many other more important things that a government should spend its money on.

4 Some museums may be quite boring for children. However, nowadays many of them are very interactive.

5 Museums are great places for schools to visit but sometimes they are very expensive.

ACADEMIC WRITING SKILLS

Writing an introduction
The introduction to an essay should lead the reader in to the main body of the essay and give background information which the reader needs in order to understand the topic. It also states the structure of the essay and includes the thesis statement – a sentence which explains the writer’s opinion and conclusions from the essay.
1 Look at the different parts of introductions to essays. Match each piece of background information (a–c) to a structuring sentence (1–3) and a thesis statement (i–iii) to make three essay introductions.

<table>
<thead>
<tr>
<th>Background information</th>
</tr>
</thead>
<tbody>
<tr>
<td>a Some people think it is important that museums are free, to provide education for children. However, others argue that museums are entertainment, so visitors should be charged to view the collection.</td>
</tr>
<tr>
<td>b Children sometimes complain that museums are dry and boring places. In order to modernize their image, there is a range of things museums can do to make their exhibitions more fun.</td>
</tr>
<tr>
<td>c State-funded museums drain the government of money which should be spent on other things, like pensions, healthcare and the police.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Structuring sentence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 This essay will suggest that people should pay to enter a museum.</td>
</tr>
<tr>
<td>2 This essay will present the arguments in favour of and against charging for museums.</td>
</tr>
<tr>
<td>3 This essay will suggest solutions for making museums more attractive for children.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Thesis statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>i I will argue that museums should be free because of their educational value for children.</td>
</tr>
<tr>
<td>ii I will conclude by explaining why it is important for museums to modernize their collections.</td>
</tr>
<tr>
<td>iii I will end by explaining how the money spent on museums could be better spent on other things.</td>
</tr>
</tbody>
</table>

2 Which introduction follows the instructions in the writing task and discusses both sides of the argument?
WRITING TASK

Should museums be free or should visitors pay for admission? Discuss.

1. Using your plan from the Critical thinking section on page 63, complete the essay.
   1. Add the introduction from Exercise 2 in the Academic writing skills section.
   2. Write one paragraph about why museums should not be free.
   3. Write one paragraph about why museums should be free.
   4. Write a concluding paragraph.

2. Use the task checklist to review your essay for content and structure.

   TASK CHECKLIST
   
<table>
<thead>
<tr>
<th>Task</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there an introduction, a paragraph saying why museums should not be free, a paragraph arguing that they should be free, and a conclusion?</td>
<td>✔</td>
</tr>
<tr>
<td>Have you included all the points from your essay plan?</td>
<td></td>
</tr>
<tr>
<td>Does the essay achieve the task, without going off the topic?</td>
<td></td>
</tr>
</tbody>
</table>

3. Make any necessary changes to your essay.

4. Now use the language checklist to edit your essay for language errors which are common to B1 learners.

   LANGUAGE CHECKLIST
   
<table>
<thead>
<tr>
<th>Task</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you used however, although and but correctly to link sentences?</td>
<td>✔</td>
</tr>
<tr>
<td>Have you used different phrases to avoid repetition?</td>
<td></td>
</tr>
<tr>
<td>Have you used should correctly?</td>
<td></td>
</tr>
</tbody>
</table>

5. Make any necessary changes to your essay.
OBJECTIVES REVIEW

6 Check your objectives.

I can ...

<table>
<thead>
<tr>
<th>Activity</th>
<th>Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>watch and understand a video about archaeology</td>
<td>very well</td>
</tr>
<tr>
<td>identify purpose and audience of a text</td>
<td>very well</td>
</tr>
<tr>
<td>write an introduction</td>
<td>very well</td>
</tr>
<tr>
<td>write a balanced opinion essay</td>
<td>very well</td>
</tr>
</tbody>
</table>

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ancient (adj)</td>
<td>compulsory (adj)</td>
</tr>
<tr>
<td>archaeologist (n)</td>
<td>display (v)</td>
</tr>
<tr>
<td>archaeology (n)</td>
<td>document (n)</td>
</tr>
<tr>
<td>artefact (n)</td>
<td>economic (adj)</td>
</tr>
<tr>
<td>excavation (n)</td>
<td>exhibition (n)</td>
</tr>
<tr>
<td>exhibit (n)</td>
<td>field (n)</td>
</tr>
<tr>
<td>fossil (n)</td>
<td>financial (adj)</td>
</tr>
<tr>
<td>hieroglyphics (n)</td>
<td>period (n)</td>
</tr>
<tr>
<td>knight (n)</td>
<td>research (v)</td>
</tr>
<tr>
<td>natural history (n)</td>
<td>tuition (n)</td>
</tr>
<tr>
<td>sword (n)</td>
<td></td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about Indian transport</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Predict answers from visual clues</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write a conclusion</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write a problem–solution essay</td>
</tr>
</tbody>
</table>
UNLOCK YOUR KNOWLEDGE

1. Work with a partner. Brainstorm as many different modes of transport as you can.

2. Which modes of transport do you use? Answer the questions below.
   1. Why do you use these modes of transport?
   2. Why do you not use the other modes of transport?
PREPARING TO WATCH

1. You are going to watch a video about transport in India. Before you watch, choose the correct answers (a–d) to the questions (1–6).

1. How many people live in India?
   a. 13 million   b. 0.2 billion   c. 1.2 billion   d. 2.2 billion
2. How many cars are there in India?
   a. 1.2 million   b. 13 million   c. 30 million   d. 13 billion
3. In 2005, how many households owned a bicycle?
   a. 40%   b. 14%   c. 30%   d. 13%
4. When were the railways introduced to India?
   a. 1853   b. 1940   c. 1947   d. 1951
5. How many people do Indian railways carry every day?
   a. 2.8 million   b. 13 million   c. 14 million   d. 30 million
6. How many staff work for the Indian railways?
   a. 7,500   b. 65,000   c. 1.4 million   d. 2.8 million

2. Watch the video and check your answers.

WHILE WATCHING

3. Watch the video and complete the notes on page 71 opposite about the different modes of transport using the words in the box.

- father
- rural
- centuries
- passengers
- freight
- ban
- transport
- afford
- systems
- stations
- efficient
Water taxis
Used for (1)
Take thousands of (2) along the river every day
Boats are handed from (3) to son

Ox carts
Traditional in (4) India
Some cities (5) ox carts because of traffic problems

Bicycles
A common mode of (6) in India
Now more people can (7) to own a bicycle

Trains
In 1947, there were 42 railway (8)
7,500 (9)
2.8 million tonnes of (10) daily
Railways are very (11)

4 Complete the table below with one advantage and one disadvantage of each mode of transport shown in the video.

<table>
<thead>
<tr>
<th>mode of transport</th>
<th>advantages</th>
<th>disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 water taxis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 ox carts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 bicycles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 trains</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION

5 Work with a partner. Discuss the questions below.

1. What is the public transport like in your country?
2. Do you use public transport at home and abroad? Why? / Why not?
READING 1

PREPARING TO READ
1 Work with a partner. Look at the photographs of transport in two cities and try to answer the questions below.
   1. What problem can you see in the first photograph?
   2. How could the vehicle in the second photograph be a solution to this problem?
   3. What do you think is different about the city in the second photograph?

2 Match the words and phrases in the box to their definitions (1–9) below.

- commuting time
- rapid transit
- traffic congestion
- vehicle
- major issue
- outskirts
- vandalism
- route
- carbon-neutral

1. the areas that form the edge of a town or city
2. a way or road between places
3. how long it takes to get to work from home
4. too many cars and lorries close together and unable to move
5. big problem
6. the crime of damaging property
7. not releasing any CO₂ into the atmosphere, or compensating for CO₂ release through a reduction by investing in renewable energy
8. a machine used for transport
9. fast transport

WHILE READING
3 Read the case study on page 73 opposite and answer the questions (1–5).
   1. What is a PRT?
   2. In addition to the PRT, how will Masdar City be better designed than older cities?
   3. Apart from the PRT, what other transport options are available in Masdar City?
   4. What is the main problem with Masdar City's planned PRT system?
   5. How does the PRT work?
The expanding economy and rising population have brought great benefits to Abu Dhabi but with them comes a major issue: traffic jams. Abu Dhabi, like many UAE cities, has a major issue with traffic congestion, and, although it is not as bad as in some cities, the average commuting time of 45 minutes is quite high.

Abu Dhabi’s answer to this is Masdar City, a new city being built near the airport on the outskirts of Abu Dhabi. Masdar, which means ‘source’, is a city which gets all of its electricity from the environment by using renewable energy sources such as solar power. There is a wall around the city to keep out the hot desert wind and the streets are narrow. There is therefore more shade from the sun, and the breeze passes through the streets better. As a result, the city is about 15 °C cooler than Abu Dhabi.

There is no traffic congestion in the six-kilometre-square city of Masdar because cars are not allowed in the city. Instead, people use public transport. There is an underground rail system and a Light Rail Transit system, which run through the centre of the town and connect Masdar to Abu Dhabi and the airport. A Personal Rapid Transit system (PRT) was also planned. This is a system of small, personalised, electric machines that run on solar energy. They are controlled wirelessly and move by being pulled along by magnets along their route. The plan was that 3,000 ‘podcars’, which can carry 2 to 6 passengers, would drive people to about 100 stations all around the city and also take them from outside the city, where they would leave their cars, to their destination in the city.

The problem is that the costs of building Masdar City are substantial: it was projected to cost around US $24 billion, but the global financial crisis of 2008–9 had a negative effect on the plans. Planners now have to find a way to build the PRT at a much lower cost. The dream of a carbon-neutral, congestion-free city could become reality in the future but there are other issues. There is the risk of vandalism for the PRT and also safety concerns about these pilotless cars. However, if all of the problems are solved, the benefits of Masdar City’s green solutions to both traffic and environmental problems will certainly outweigh the financial investment in the longer term.
Complete the sentences below using no more than three words.

1. Abu Dhabi has a big problem with ________________. 
2. The average time it takes to get to work is ________________. 
3. Masdar’s electricity comes from ________________. 
4. Traffic jams are not a problem in Masdar because cars are ________________ in the city. 
5. Instead, people travel around using ________________. 
6. In 2008–09 Masdar suffered the negative effects of the ________________. 

READING BETWEEN THE LINES

5. Work with a partner. Try to answer the questions below.

1. How did the 2008–9 global financial crisis affect the Masdar City project?
2. Why could the PRT be a target for vandalism?
3. What are the safety concerns for a PRT system?

DISCUSSION

6. Work with a partner. Discuss the questions below.

1. Would you like to live in Masdar City? Why / Why not?
2. Do you agree that the benefits of Masdar City will outweigh the financial cost?
3. Would a PRT system work in your city? Why / Why not?

READING 2

PREPARING TO READ

Using visuals to predict content
The images which accompany a text can provide valuable information on the content.

1. Work with a partner. You are going to read an essay about solving traffic congestion. Look at the photographs on page 75 opposite and try to answer the questions below.

1. What solutions to the problem of traffic congestion do the photographs show?
2. What other solutions to traffic congestion can you think of?
3. Read the essay and check your answers.
Choose the best title (a–d) for the essay.

a The effects of traffic congestion in cities
b Solving traffic congestion
c Urban traffic congestion is increasing
d Bicycles can solve urban traffic congestion

Many of the world’s big cities have problems with congestion. There is simply far too much traffic, so governments everywhere have to think about how to solve the problem.

Traffic jams have a number of negative effects. They cause stress to drivers, which may lead to health problems or road rage. They can also reduce productivity because products cannot be delivered on time and employees arrive late for work or meetings. Another important issue is that the emergency services can become caught in traffic. Finally, there are the negative effects that traffic congestion causes to the environment. Traffic congestion wastes fuel, which in turn produces more carbon dioxide through the car exhausts and contributes to the greenhouse effect.

However, there are a number of steps that can be taken to reduce road congestion. The most obvious solutions involve engineering. This means building more roads with wider lanes so that more cars can travel at the same time. Tunnels and bridges can be constructed in order to reduce the congestion that happens when cars have to stop at traffic lights. However, the problems with these kind of solutions are the construction costs and that more roads may actually encourage more traffic.

Other, more creative solutions to the congestion problem are to increase tax on fuel so that it is more expensive, or make people pay to travel on certain roads such as in the centre of a city or on a motorway. If we do this, people are more likely to think carefully about using their car. However, taxing fuel and roads may mean that some people cannot afford to drive their cars and may have to give up their jobs. Also, governments may not want to increase fuel taxation too much if it is unpopular with voters.

A more popular solution, therefore, would be to encourage other forms of transport which will lead to fewer cars on the road. One suggestion is to encourage people to cycle more. Although this mode of transport has obvious health benefits and reduces air pollution, it is not very practical in every climate and can prove dangerous in heavy traffic.

Another possibility is to persuade people to use buses. This means many people can travel in just one vehicle. However, generally, people dislike the image travelling by bus creates. A park and ride system can allow people to drive to the edge of cities, park and then take a bus to the city centre. This allows some flexibility for car drivers but reduces city centre congestion. However, the buses tend not to run at night.

Overall, although there are a number of good ways to tackle this problem, some of these also have negative effects. It would seem that encouraging alternative forms of transport is probably the best solution as this solves the congestion problems and reduces the amount of traffic at the same time, which will also have a positive effect on the environment.
What are the four effects of traffic congestion mentioned in the essay?

Complete the table using one word for each answer.

<table>
<thead>
<tr>
<th>solutions</th>
<th>advantages</th>
<th>disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>engineering</td>
<td>Build more roads, and bridges.</td>
<td>More vehicles can at once.</td>
</tr>
<tr>
<td>tax</td>
<td>Increase tax on roads and .</td>
<td>People will think more about using their cars.</td>
</tr>
<tr>
<td>cycling</td>
<td>It will result in fewer cars on the road.</td>
<td>It has benefits for your and reduces pollution.</td>
</tr>
<tr>
<td>park and ride</td>
<td>People drive to the edge of a city, park their cars and then travel into the city centre by .</td>
<td>It reduces in the city centre.</td>
</tr>
</tbody>
</table>

Work with a partner. Try to answer the questions below.

1. What sort of health problems do you think the author means are caused by stress?
2. Why would a government not want to have an unpopular tax?
3. What is the image problem with using a bus that the author mentions?

Work with a partner. Discuss the questions below.

1. What is the traffic situation like in your town or city?
2. What has your government done to help with traffic problems?
3. Which of the suggestions above would you recommend and why?
4. Do you have any better suggestions?
COLLOCATION 1

1 Match the nouns (1–8) to the nouns (a–h) to make collocations about transport.

1 traffic  a transport
2 public  b restrictions
3 cycle  c charge
4 rush  d congestion
5 car  e lane
6 road  f share
7 congestion  g rage
8 parking  h hour

2 Complete the sentences with collocations from Exercise 1.

1 ________________ is a big problem in this city. The traffic jams are terrible.
2 I use ________________ like trains or the underground to get to work.
3 You can’t drive in the ________________. It’s only for bicycles.
4 ________________ stop anyone leaving their car here.
5 The ________________ is usually from eight until nine in the morning.
6 I use a ________________ programme and drive to work with a co-worker.
7 If people get too angry in a traffic jam, it’s called ________________ .
8 You have to pay the ________________ to drive into the city centre.

ACADEMIC SYNONYMS

3 Replace the verbs in bold (1–8) with their academic synonyms in the box.

prevent organize select attempt consider convince realize require

1 We need more public transport in the city like a light rail network.
2 Commuters try to arrive on time but traffic often causes delays.
3 PRT passengers choose their destination from a digital menu.
4 The government needs to understand that the trains are too crowded.
5 We run a car share programme.
6 We should think about cycling instead of driving short distances.
7 New roads will stop traffic congestion in the short term.
8 It will be difficult to get drivers to use public transport.
At the end of this unit, you will write a problem–solution essay. Look at this unit’s Writing task in the box below.

Describe the traffic problems in this city and outline the advantages and disadvantages of the suggested solutions. Which of the suggestions is most suitable?

1. Work with a partner. Look at the map below, showing a city with serious traffic congestion problems. Discuss what the problems could be and make a list of at least three. One has been done for you as an example.

Problem 1
The residential area is on one side of the river and the economic centre and the schools are on the other side of the river. However, there is only one road into and out of the city centre.

Problem 2

Problem 3

Problem 4
2 Suggest a solution for each of the four traffic problems shown on the map, and make notes on the possible issues. The first one has been done for you as an example.

<table>
<thead>
<tr>
<th>Solutions to traffic congestion</th>
<th>Possible issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Building a tunnel</td>
<td>Expensive to build under the river</td>
</tr>
<tr>
<td></td>
<td>Would fill with traffic eventually</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

**WRITING**

**GRAMMAR FOR WRITING**

**First conditional**

We often use the first conditional to persuade or negotiate. Notice how we use *if* and *will* to link two sentences.

**idea/action:** The government increases tax on fuel.
**consequence:** People use their cars less.

If the government increases tax on fuel, people will use their cars less.

or

People will use their cars less, *if* the government increases tax on fuel.

**idea/action:** We build another bridge.
**consequence:** More traffic can get to the schools and offices.

If we build another bridge, more traffic will be able to get to the schools and offices.
1 Read the grammar explanation on page 79 and answer the questions below.

1 Which clause begins with *if*?
   - a the idea clause
   - b the consequence clause
2 Which clause contains *will*?
   - a the idea clause
   - b the consequence clause
3 What happens to *can* when it follows *will* in a sentence?

2 Link the pairs of sentences below using *if* and *will*. Remember to change *can* in Question 5.

1 We move the offices and schools next to the houses. We have fewer traffic problems.
2 We have a ferry over the river. Fewer people use the bridge.
3 Fewer cars use the roads. We increase the price of fuel.
4 We change the office hours. The cars do not all use the road at the same time.
5 We build a railway line. People can use the train instead of their cars.

3 Link the sentences below using *if* ... *not* or *unless*.

1 The traffic will improve. We build more roads.
2 Pollution will be reduced. We use cleaner transport.
3 We provide a solution. People will get to work on time.
4 We will solve the traffic problem. We build houses closer to the business areas.
5 The city invests in a PRT. There will be less congestion.
ACADEMIC WRITING SKILLS

Writing a conclusion

In an essay conclusion, we bring together all the points from the main body and state our personal opinion on the question. We then make a final comment to answer the question.

1 Match each main point (1–3) to a personal opinion (a–c) and a final comment (i–iii) to make three different conclusions.

1 In conclusion, this town’s traffic problems are as a result of a single bridge over the river.
2 Overall, although there are a number of good solutions to the traffic problem, the main issue is housing.
3 To sum up, it is clear that the traffic congestion is a serious problem which will require a new approach to transport in the city.

a In my opinion, encouraging public transport is cheaper and more effective than building more bridges and roads.
b I would say that building houses next to the offices would solve this problem.
c It is my view that a new river crossing offers the best solution.

i Building more bridges will allow traffic freedom of movement between the two areas and perhaps charging drivers to use one of the bridges will help recover the costs.
ii Buses and trains will be able to solve the congestion problems and reduce the amount of traffic, which might also have a positive effect on the environment.
iii It is a long-term and expensive solution but relocating workers next to their offices should prevent traffic jams and allow people to walk to work.

2 Answer the questions.

1 What phrases are used to introduce the conclusions in Exercise 1?
2 What phrases are used to introduce opinions in Exercise 1?
Describe the traffic problems in this city and outline the advantages and disadvantages of the suggested solutions. Which of the suggestions is most suitable?

1. Look back at the problems and solutions you discussed in the Critical thinking section on page 78 and complete the essay plan below.

**Introduction**

Solution 1: __________________________

Reasons: __________________________

Issues: __________________________

Solution 2: __________________________

Reasons: __________________________

Issues: __________________________

Solution 3: __________________________

Reasons: __________________________

Issues: __________________________
The map shows the traffic problems of a busy city.
The city seems to have very bad traffic congestion. This makes people late, wastes fuel and adds to pollution in the city. People have to travel from their homes on one side of the river to their offices and schools on the other. The main problem is that there is only one main road running through the centre which takes all the car traffic, and only one bridge. The only public transport is a bus which also uses the same road. There is also a junction near the housing area where the traffic builds up during the two rush hours, when people commute to work or drop off their children at school.

2 Respond to the task by writing three paragraphs about the solutions to the city’s traffic problems, explaining the reasons for each solution and its disadvantages. Then write a conclusion, including your personal opinion.
3 Use the task checklist to review your essay for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there three solution paragraphs in the main body, and have you evaluated the different solutions by giving reasons?</td>
</tr>
<tr>
<td>Does your conclusion summarize the main body, give your opinion and answer the question?</td>
</tr>
<tr>
<td>Have you included enough data from the diagram to support your opinion?</td>
</tr>
</tbody>
</table>

4 Make any necessary changes to your essay.

5 Now use the language checklist to edit your essay for language errors which are common to B1 learners.

<table>
<thead>
<tr>
<th>LANGUAGE CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you replaced general verbs with academic words where possible?</td>
</tr>
<tr>
<td>Have you used <em>if, will, unless</em> and <em>if ... not</em> correctly?</td>
</tr>
<tr>
<td>Have you used <em>in conclusion, to sum up or overall</em> to introduce your conclusion?</td>
</tr>
</tbody>
</table>

6 Make any necessary changes to your essay.
OBJECTIVES REVIEW

7 Check your objectives.

I can ...

- watch and understand a video about Indian transport
  very well
  not very well

- predict answers from visual clues
  very well
  not very well

- write a conclusion
  very well
  not very well

- write a problem–solution essay
  very well
  not very well

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>bus lane (n)</td>
<td>attempt (v)</td>
</tr>
<tr>
<td>carbon-neutral (adj)</td>
<td>consider (v)</td>
</tr>
<tr>
<td>congestion charge (n)</td>
<td>convince (v)</td>
</tr>
<tr>
<td>outskirts (n)</td>
<td>issue (n)</td>
</tr>
<tr>
<td>public transport (n)</td>
<td>major (adj)</td>
</tr>
<tr>
<td>roadrage (n)</td>
<td>prevent (v)</td>
</tr>
<tr>
<td>run (v)</td>
<td>realize (v)</td>
</tr>
<tr>
<td>rush hour (n)</td>
<td>require (v)</td>
</tr>
<tr>
<td>traffic congestion (n)</td>
<td>select (v)</td>
</tr>
<tr>
<td>vandalism (n)</td>
<td></td>
</tr>
<tr>
<td>vehicle (n)</td>
<td></td>
</tr>
</tbody>
</table>
**LEARNING OBJECTIVES**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about global warming</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Scan to find detailed pieces of information quickly</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write a topic sentence</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write two cause–effect paragraphs</td>
</tr>
</tbody>
</table>
Work with a partner. Discuss the questions below.
1. Is the weather changing in your country?
2. How have humans affected the environment?
3. Why should we care about the environment?
PREPARING TO WATCH

1 You are going to watch a video about glaciers. Before you watch, discuss the questions below with a partner.
   1 What is a glacier?
   2 Where can you find glaciers?
   3 What is happening to the glacier in the photographs?
   4 What do you think is the cause of the changes to the glacier?

2 Match the words and phrases (1–6) to their definitions (a–f).
   1 a glacier
   2 the environment
   3 an ice sheet
   4 global warming
   5 a melt stream
   6 a transformation

   a the air, water and land in or on which people, animals and plants live
   b a gradual increase in world temperatures
   c a river caused by melting ice
   d a large mass of ice which moves slowly
   e a complete change in the appearance or character of something
   f a thick layer of frozen water that permanently covers an area of land

WHILE WATCHING

3 Watch the video. Complete the summary using the words and phrases in the box.

melt  environment  effects  global warming  formed  glaciers

The video is about the Alaskan (1) ____________ . The speaker explains how they are (2) ____________ and what causes them to (3) ____________. He talks about the (4) ____________ of melting glaciers and blames (5) ____________ for the changes to the (6) ____________ .
4 Watch again and complete the diagram below.

1 ________ falls in winter

2 glacier moves _____ m per hour

3 melt ________ form as glaciers melt

4 glaciers are losing ice at ________ billion tonnes a year

5 ________ into the sea

5 Work with a partner. Try to answer the questions below.

1 The speaker says that every glacier is in balance – if it is not in balance, it will melt. The glaciers are melting, so what part of the balance is wrong?

2 Does the video claim that humans are responsible for the glacier melting?

3 How long have the Alaskan glaciers been there?

DISCUSSION

6 Work with a partner. Discuss the questions below and give reasons for your answers.

1 Do you think climate change is the result of human activity?

2 Whose responsibility is it to try to stop the climate changing?

3 What steps can companies and governments take to reduce the problems of climate change?

4 What steps can you take individually to help to protect the environment?
READING 1

PREPARING TO READ

1 Look at the photographs of the Upsala glacier and answer the questions.
   1 What has happened to the glacier?
   2 How long did this transformation take?
   3 What do you think happened to the water?
   4 How do you think this will affect the world?

WHILE READING

2 Read the leaflet and number the main ideas (a–d) in the order that they are mentioned.
   a a solution to the problem ______
   b changing ecosystems ______
   c melting glaciers ______
   d causes of climate change ______

3 Complete the sentences below using the words and phrases in the box.

mangrove forests agriculture global sea levels extinction
global temperatures coral reefs CO₂ levels

1 ________________ are at their highest for 800,000 years.
2 ________________ could rise by about 59 centimetres by the end of the century.
3 Recently, over 33% of the world’s ________________ have been destroyed.
4 Over the last century, ________________ have gone up by 0.75 degrees.
5 Twenty-five percent of the land on earth is used for ________________.
6 Global increases in temperature could cause the ________________ of 30% of land species.
7 Twenty percent of ________________ have been lost in the last few decades.

Scanning to find information

Scanning is a good way to find detailed pieces of information quickly. Many examinations test your comprehension of figures. It is a good idea to underline all the figures in the questions and then scan the text for each specific figure. When you find the figure in the text, look at the words around it for the answer to the question.
The Upsala glacier in Argentina used to be one of the biggest glaciers in South America. In 1928, it was covered in ice and snow but now the glacier is melting at an annual rate of 200 metres, so the area is covered in water. This is evidence of global warming.

In the last 100 years, the global temperature has gone up by around 0.75 degrees Celsius. This may not sound much but such a small increase is causing sea levels to rise and threatening the habitat of many species of plants and animals. An increase of two degrees Celsius in global temperatures could result in extinction for 30% of the world's land species.

The Northwest Passage is a sea route which runs along the northern coast of Canada between the Atlantic and the Pacific Oceans. In the past, it was often difficult to use, as the waters were frozen; however, increasing temperatures and the subsequent deglaciation have made it easier to travel down this route. The major issue is that this will lead to loss of habitat for the polar bears and other species that live in this area.

Sea levels in the UK have increased by around 10 cm in the last 100 years and experts predict that global sea levels could rise by up to 59 cm by the end of the century. Consequently, areas which were land a few hundred years ago are now submerged and many low-lying islands may be under water in the future.

As a result of the changing climate, the world's ecosystems are also changing faster than ever before. Over one-third of the world's mangrove forests and around 20% of the world's coral reefs have been destroyed in the last few decades. Forests are being cut down to provide land for food because the population is growing at such a rapid rate. Approximately a quarter of land on earth is now used agriculturally for growing food. As a result of the higher temperatures and higher levels of carbon dioxide in the atmosphere, plants are producing more pollen which could lead to more cases of asthma.

So what is causing climate change? The main cause of climate change is the huge amount of greenhouse gases such as methane and carbon dioxide (CO$_2$) in the atmosphere, but the reason for this is the world's population – you and me. As the population increases, more land is needed to provide food, and more energy is needed. Burning fossil fuels for heating, lighting, transport, electricity or manufacturing produces CO$_2$. Furthermore, humans breathe out CO$_2$ and trees 'breathe in' CO$_2$ and produce oxygen – so by cutting down trees, we are increasing the amount of CO$_2$ in the atmosphere and reducing the amount of oxygen. As a result of these activities, CO$_2$ levels are now at their highest for 800,000 years.

The biggest challenge we all face is to prevent further environmental disasters. We must do something before it is too late. We need to reduce the amount of CO$_2$ in the atmosphere. We need to stop burning fossil fuels and start using renewable energy. We can get enough energy from renewable fuels like solar energy, hydroelectric energy or wind power to be able to stop using fossil fuels completely.

Sign the petition to get governments to take action before it is too late!
Look at the leaflet again and answer the questions below in no more than three words.

1. In which country is the Upsala glacier?

2. What is the name of the ‘new’ sea route through the arctic ice?

3. Many forests are being cut down all over the world. What is the land needed for?

4. What medical problem could more pollen production lead to?

5. What is the term for the main chemicals responsible for climate change?

6. What do humans do that reduces the amount of oxygen in the atmosphere?

7. What should governments start using to reduce the amount of CO₂ in the atmosphere?

Reading Between the Lines

5. Why did the author write the leaflet?
   a. To inform the reader about the causes and effects of climate change
   b. To educate the reader about how to stop climate change
   c. To convince people to sign a petition about using renewable fuels

Discussion

6. Work with a partner. Discuss the questions below.
   1. Are there any advantages to the ‘new’ Northwest Passage?
   2. Are there any disadvantages to using renewable energy like solar energy or wind power?
   3. Why don’t governments, corporations and individuals do more to help prevent global warming?
REVIEWING

PREPARING TO READ

1 Look at the photograph and the title of the journal extract on page 94 and try to answer the questions below.

1 Why are trees important to the environment?
2 Why do people cut down trees?
3 What will happen when we destroy too many trees?

2 Match the words and phrases (1–9) to their definitions (a–i).

1 flooding
2 erosion
3 deforestation
4 subsistence farming
5 absorb
6 biodiversity
7 logging
8 grazing
9 livestock

a when all the trees in a large area are cut down
b when animals feed on grass or plants
c the number and types of plant and animal species that exist in a particular area
d when an area is covered in water
e cutting down trees for wood
f cattle or other farm animals
g farming that only provides enough food for farmers and their families to live on
h to take something in, especially gradually
i gradual damage and removal of soil, stone, etc., by the sea, rain, or wind

WHILE READING

3 Read the journal extract on page 94 and complete the summary below using the words in the box.

livestock erosion environment fires crops effects deforestation decade habitats protected

The essay discusses the human causes of (1) ____________ and the (2) ____________ on the environment. Trees are removed for grazing of (3) ____________ and growing (4) ____________ like soya and palm oil. Subsistence farmers traditionally leave the land for a (5) ____________ before reusing it but if the land is constantly reused, it results in (6) ____________ of the soil. Deforestation contributes to global warming because it dries out the trees, causing forest (7) ____________ . It affects biodiversity because it leads to the loss of (8) ____________ . Governments should make sure forests are (9) ____________ from logging. Deforestation will have terrible consequences for the (10) ____________ .
Deforestation means the removal of a forest so that the land is converted for urban use or agriculture. The destruction of forests occurs for many reasons: trees are used as fuel or for construction, while cleared land is used as pasture for livestock and crop plantations. The main adverse effects of deforestation are aridity and damage to animal habitat, as well as climate change and erosion damage. The main causes of deforestation are commercial agriculture by big business and subsistence farming by local people. In Indonesia, industrial logging is carried out to clear areas for the production of palm oil while in Brazil, large areas of the Amazon rainforest were cleared to grow soya and vegetable oil. Subsistence farmers clear an area big enough to graze cattle or grow crops by cutting down the trees and burning them. However, after two or three years, the land can no longer be used so the farmer moves to another piece of land. It takes around ten years for the piece of land to recover. However, in populated areas, the land cannot recover and this leads to heavy erosion because the layer of soil that protects the ground is removed during the crop-growing process. This can cause flooding problems in heavy rain.

One area affected by deforestation is the Amazon Basin in Brazil. The vast rainforests of the Amazon cover an area around 25 times the size of the UK and absorb an estimated 1.5 billion tonnes of carbon dioxide annually. They are thought to have helped keep global warming under control in recent years. However, in areas where deforestation has taken place, the increased temperatures result in less rain because there are not enough trees to provide water for clouds to form. If tropical forests dry out, more trees will die and there will be more logging and more fires. This will cause more emissions of carbon dioxide, making the rainforest contribute to global warming rather than help solve it.

Forest destruction is also having an effect on biodiversity. The growth in the world’s population is causing the loss of habitats and damage to land where plants and animal species live, reducing biodiversity and leading to the extinction of many species. A decrease in biodiversity threatens entire ecosystems and destroys future sources of food and medicine.

The damage caused by humans to the world’s forests leads to changes in the natural environment and causes global warming. Governments should act to protect forests from illegal logging and plant more trees to absorb carbon dioxide. Deforestation on such a large scale is sure to have disastrous effects for the environment.
4 Correct the factual mistakes in the sentences.

1 In Indonesia, trees are cut down to make way for olive oil plantations.

2 Subsistence farmers can graze livestock on their land for ten years.

3 The rainforests of the Amazon cover an area 25 times the size of the USA.

4 Deforestation protects future sources of food and medicine.

5 Governments should plant more trees to absorb oxygen.

6 Small-scale deforestation will have disastrous effects for the environment.

READING BETWEEN THE LINES

5 Work with a partner. Try to answer the questions below.

1 What does the writer mean by the phrases industrial logging and commercial agriculture?

2 Why will there be more logging if forests dry out?

3 Why does deforestation reduce future sources of food and medicine?

DISCUSSION

6 Work with a partner. Discuss the questions below.

1 If a product, service or behaviour is designed not to do harm to the environment, we say it is ‘environmentally friendly’. Do you think you are environmentally friendly? Why / Why not?

2 What measures could governments take to stop humans damaging the natural environment?

3 What is the most important environmental problem in your country?
ACADEMIC VOCABULARY

1 Replace the underlined words in the sentences below with the academic words in the box.

annual issue predict challenge areas trend consequences

1 The most serious problem that threatens the environment is climate change. ________________
2 Experts think that there will not be enough fresh water in the future. ________________
3 Pollution and climate change are the effects of human activity. ________________
4 Fortunately, the pattern is for more recycling and less packaging. ________________
5 In some places, the glaciers have melted or even disappeared as a result of higher temperatures. ________________
6 The twelve-month rate of deforestation between 1990 and 2005 was around seven to eight million hectares. ________________
7 The biggest test we face is to protect the planet. ________________

TOPIC VOCABULARY

2 Complete the collocations related to the environment by adding the missing vowels. Look back at the reading texts if you need help.

1 If we change to r__n__w__bl__ n__rgy instead of using f__ss__l f__ l, we can reduce CO₂ in the atmosphere.
2 Gl__b__l w__rm__ng is caused by the increase in gr__nh__ s__ g__s__ in the atmosphere.
3 The n__t__r__l n__v__r__n__m__nt is being affected by h__m__ _ct__ v__ty.
4 D__f__r__st__t__n caused by cutting down trees is leading to cl__m__t__ ch__ng__.
5Illegal l__gg__ng is having a serious effect on the Amazonian r__n__f__r__t.
6 S__bs__t__c__n__ f__rm__ng in rainforests causes damage to the soil.
7 We must take action to prevent any more __n__v__r__n__m__nt_l d__s__t__rs.
At the end of this unit, you will write two cause–effect paragraphs. Look at this unit’s Writing task in the box below.

Outline the human causes of climate change. What effects will these have on the planet?

Selecting

When you do research for an essay, you need to select which information will be useful for the different parts of your essay. To do this you must constantly think about your essay title and ask yourself whether the information is relevant or not.

Work in pairs and do tasks 1–3 below.

1. Decide which points in the box are causes of climate change and which ones are the effects, and complete the ideas maps below.

   - melting glaciers
   - storms
   - rising sea levels
   - factory emissions
   - deforestation
   - petrol cars
   - loss of habitat
   - species extinction
   - flooding
   - increase in the population
   - droughts
   - power stations
   - livestock

2. Now add some of your own ideas to the ideas maps.

3. Discuss possible solutions to this problem.
Cause and effect

When we write a ‘cause and effect’ essay, we need certain phrases to show the relationship between the causes of the problem and its effects. Look at the sentences below.

<table>
<thead>
<tr>
<th>cause</th>
<th>linking word or phrase</th>
<th>effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deforestation</td>
<td>leads to</td>
<td>habitat destruction.</td>
</tr>
<tr>
<td></td>
<td>causes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>results in</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>effect</th>
<th>linking word or phrase</th>
<th>cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habitat destruction is</td>
<td>caused by</td>
<td>deforestation.</td>
</tr>
<tr>
<td></td>
<td>due to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the result of</td>
<td></td>
</tr>
</tbody>
</table>

1. Using the information from your ideas maps in the Critical thinking section on page 97, complete the flow charts by adding linking words. More than one answer is possible. The first one has been done for you as an example.

Global warming
leads to
higher temperatures, and
melting glaciers.

Melting glaciers are
higher temperatures, which are
global warming.
2 Complete the sentences using one linking word.

1. Deforestation ________________ in animal extinction and loss of biodiversity.
2. Demand for food and energy are expected to rise ________________ to the increase in the population.
3. Burning fossil fuels ________________ an increase in CO₂ in the atmosphere.
4. Flooding, heat waves and other extreme weather are all ________________ by climate change.
5. Reducing livestock on farms may ________________ in lower greenhouse gas emissions.
6. Submerged islands could be the ________________ of rising sea levels.
7. Droughts will ________________ to forest fires and further emission of carbon dioxide.

EXPLANATION

Using because and because of

*because* is a conjunction that introduces a reason. This usually contains a subject, a verb and an object.

The environment is changing because humans are burning fossil fuels.

*because of* is a two-word preposition meaning *as a result of*. It is followed by a noun phrase (made up of articles, adjectives and nouns).

The climate is changing because of human activity.

3 Complete the sentences using because or because of.

1. Rising sea levels are a potential problem ________________ flooding.
2. A loss of biodiversity will be problematic ________________ it will limit new sources of food and medicine.
3. Humans are the cause of climate change ________________ deforestation and burning fossil fuels.
4. Low-lying islands may be submerged ________________ rising sea levels.
5. Animal extinction rates are increasing ________________ habitat is being destroyed.
6. People are now more interested in climate change ________________ recent droughts.
7. The climate is changing ________________ human activity.
Topic sentences
A topic sentence is usually the first sentence in a paragraph. It introduces the topic of the paragraph and links back to the main topic of the essay. We can use a general statement, or we can include the topics of the supporting sentences. Notice that both kinds of topic sentence refer to the main essay topic.

Using a general statement
a Human activity is causing the environment to change in a number of ways.
b The environment is changing in three main ways.

Including the topics of the supporting sentences
c Humans are the cause of climate change because of deforestation and burning fossil fuels.
d Rising temperatures, loss of biodiversity and rising sea levels are the main results of climate change.

1 Look at the topic sentences (a–d) in the box above and answer the questions.
1 Which sentences introduce paragraphs about the causes of climate change? _______________
2 Which sentences introduce paragraphs about the effects of climate change? _______________
3 How many supporting sentences will the paragraph for sentence c have? _______________
4 How many supporting sentences will the paragraph for sentence d have? _______________

2 Complete the sentences using ideas from the Critical thinking section on page 97 and information in the box above.
1 _________________, _______________ and _______________ are the most obvious causes of climate change.
2 There are many effects of climate change including _______________ and _______________.
3 The environment is being affected in _______________.
4 _______________, and _______________ will probably be the main results of a change in the climate.
5 Humans are to blame for changing the climate in _______________.

WRITING TASK

Outline the human causes of climate change. What effects will these have on the planet?

1 Read the introduction and conclusion below. Then write two paragraphs: one about the human causes of climate change and another about the effects.

Human activity is having a major effect on the environment, which will cause many problems for human and animal life in the future. This essay will set out the main causes of climate change and the effects of human activity on the environment.

Human activity is clearly causing the climate to change and, as a result, this is having a number of effects on the planet. It is important that we try to reduce our negative impact on the planet as much as possible – for example, by using renewable energy instead of fossil fuels – before it is too late.
2 Use the task checklist to review your paragraphs for content and structure.

**TASK CHECKLIST**

| ✔ | Have you included a number of causes and effects from your notes in the Critical thinking section? |
| ✔ | Have you used a suitable topic sentence for each paragraph? |
| ✔ | Does the topic sentence link back to the main essay topic? |

3 Make any necessary changes to your paragraphs.

4 Now use the language checklist to edit your paragraphs for language errors which are common to B1 learners.

**LANGUAGE CHECKLIST**

| ✔ | Have you used the correct collocations for the environment? |
| ✔ | Have you used *lead to, due to, cause, result, because* and *because of* correctly? |
| ✔ | Have you used the correct tenses, nouns and adjectives? |

5 Make any necessary changes to your paragraphs.
OBJECTIVES REVIEW

6 Check your objectives.

I can ...

- watch and understand a video about global warming
  very well  not very well

- scan to find detailed pieces of information quickly
  very well  not very well

- write a topic sentence
  very well  not very well

- write two cause–effect paragraphs
  very well  not very well

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>biodiversity (n)</td>
<td>annual (adj)</td>
</tr>
<tr>
<td>climate change (n)</td>
<td>area (n)</td>
</tr>
<tr>
<td>consequence (n)</td>
<td>cause (v)</td>
</tr>
<tr>
<td>deforestation (n)</td>
<td>challenge (n)</td>
</tr>
<tr>
<td>drought (n)</td>
<td>decade (n)</td>
</tr>
<tr>
<td>emission (n)</td>
<td>effect (n)</td>
</tr>
<tr>
<td>erosion (n)</td>
<td>issue (n)</td>
</tr>
<tr>
<td>flood (n)</td>
<td>the environment (n)</td>
</tr>
<tr>
<td>fossil fuel (n)</td>
<td>trend (n)</td>
</tr>
<tr>
<td>glacier (n)</td>
<td>predict (v)</td>
</tr>
<tr>
<td>global warming (n)</td>
<td></td>
</tr>
<tr>
<td>graze (v)</td>
<td></td>
</tr>
<tr>
<td>greenhouse gas (n)</td>
<td></td>
</tr>
<tr>
<td>submerge (v)</td>
<td></td>
</tr>
<tr>
<td>subsistence farming (n)</td>
<td></td>
</tr>
<tr>
<td>LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about professional cyclists</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Read for detail</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write supporting sentences</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write a problem–solution essay</td>
</tr>
</tbody>
</table>
UNLOCK YOUR KNOWLEDGE

1 Match the two halves of these phrases.
   1 avoid
   2 keep
   3 eat
   4 lose
   5 cut down
   6 take
   a some exercise
   b on fat, salt and sugar
   c more fruit and vegetables
   d weight
   e cigarettes and alcohol
   f active

2 Answer the questions.
   1 Do you agree with the advice given in the sentences above?
   2 Why do doctors advise us to look after our health?
   3 Should doctors treat illnesses in people who have not looked after their health?
PREPARING TO WATCH

1 Answer the questions below.
   1 What makes a good professional sportsperson?
   2 How do professional sportspeople get an advantage over their competitors?

2 Complete the sentences by making collocations about fitness using the verbs in the box.

   generate  burn  set  extract  pump

   1 When you breathe, you ______________________ (take away) oxygen from the air and you breathe out carbon dioxide.
   2 Moving your arms and legs makes the heart ______________________ (push) blood to the muscles.
   3 If you want to achieve something, you can ______________________ (decide on) goals to help you.
   4 You need to ______________________ (use up) fat if you want to lose weight.
   5 If you train efficiently, you can ______________________ (produce) more power from the same amount of energy.

WHILE WATCHING

3 Watch the video and circle the points (a–i) that are discussed.

   a French cyclists  f the support vehicle
   b training routine  g sponsors
   c medical problems  h equipment
   d ability to generate energy  i diet
   e the team
Watch again and complete the notes about professional cyclists.

**Top road cyclists**
Ride (1) _______________ kilometres in each race at a speed of (2) _______________ kilometres per hour.

**Fitness**
The best riders extract twice as much (3) _______________ from every breath as a normal person.
Heart pumps (4) _______________ gallons of blood
Normal person pumps (5) _______________ gallons of blood

**Team**
Their job is to block the (6) _______________

**Equipment**
Use (7) _______________ technology for bike
Bike weight: (8) _______________
In the Tour de France, riders eat (9) _______________ calories in carbohydrates daily

5 Work with a partner. Try to answer the questions below.
1 How are professional cyclists able to ride so far and so fast?
2 The best riders use a wind tunnel to analyze their body positions. Why?
3 Why do professional cyclists ride in a team?

**DISCUSSION**

6 Work with a partner. Discuss the questions below.
1 How difficult is it to become a professional sportsperson?
2 Which professional sports are popular in your country?
3 Are professional sportspersons good role models for young people?
PREPARING TO READ

1 Match the words and phrases (1–8) to the definitions (a–h).

1 physical activity
2 heart rate
3 serious illness
4 medical evidence
5 reduce the risk of
6 self-esteem
7 chronic disease
8 manual labour

a major medical problem
b make a problem less likely
c scientific proof
d exercise
e how fast your heart pumps
f working with your hands
g long-lasting disease
h how you feel about yourself

2 Name the types of exercise shown in the photographs.

1 [Photo of people playing a game]
2 [Photo of a tennis match]
3 [Photo of a woman doing yoga]
4 [Photo of a man and a child playing]
5 [Photo of a man walking]
6 [Photo of a woman running]
7 [Photo of a woman swimming]
8 [Photo of a group of people cycling]
A How much physical activity do you do in a week? Are you getting enough exercise? People who do regular activity have a lower risk of many chronic diseases, such as heart disease, type 2 diabetes, stroke and some cancers. Adults who do exercise for just 150 minutes a week can reduce their risk of serious illness by 50%. Regular exercise reduces the risk of early death by 30%. It also improves your mood, self-esteem and sleep quality. Today, we are much less active than in the past and our office jobs are far less physical than the manual labour our grandfathers used to do. In fact, many adults spend seven hours or more on a chair each day.

B This lack of regular physical activity means that people burn fewer calories than in the past, so we need to do something extra to use up all our energy. Adults need to do two and a half hours of moderate exercise per week. This could be fast walking or cycling on a flat road. In addition, you should do exercise to strengthen muscles twice a week.

C Exercise can be expensive, but it doesn’t have to be. Team sports such as football, rugby or cricket can be cheap because all the players share the cost of the pitch. Joining a sports club is usually a cheap way of getting exercise and can be very sociable, too. Local leisure centres usually offer squash at cheap rates if you book a court at off-peak times, and you may be able to get cheap gym membership too. If the leisure centre has a pool, swimming is also a great way to exercise.

D Alternatively, if you don’t want to spend any money at all, go for a run. The only equipment needed for this is a pair of trainers. Similarly, getting off the bus one stop early and walking the extra distance helps. Go to the park. Try getting a group of friends or family together and have a game of football in the park or play the sorts of running games you haven’t played since you were a child. This is a great way to spend time with the family but also to help you get fit again. Alternatively, if you want to stay at home, gardening or doing housework is a great way to get fit and you can enjoy the benefit of a nice garden and a tidy house, too!

E Although adults should do two and a half hours of exercise a week, you don’t have to do it all at one time. Split the time into ten-minute chunks! If you do ten minutes before work, ten minutes during your lunch break and ten minutes after work, five days a week, you’ve achieved the target! Alternatively, go swimming during your lunch hour two or three times a week and you’ve done it! There are many ways of getting fit and we should all recognize the value of doing this, because we will live longer and be more healthy.
4 Match the headings (1–6) to the paragraphs in the text (A–E). There is one extra heading which you do not need.

1 But I can’t afford gym membership!
2 150 minutes a week is all it takes!
3 But I don’t have time!
4 Swimming is the best form of exercise.
5 Burn that extra energy!
6 Exercise can be free.

5 Read the text and answer the questions.

1 Which four medical problems can be avoided by regular exercise?
2 Which three things does exercise improve?
3 How much time do some adults spend each day sitting down?
4 What do team sport players share the cost of?
5 When should you book a squash court for cheap rates?
6 What equipment do you need for running?
7 Where should you go to exercise and spend time with your family?
8 What should we all recognize the value of?

6 Complete the phrases using words from the text to describe ways of getting fit. The first one has been done for you as an example.

1 use up energy
2 burn _________
3 strengthen _________
4 join _________
5 book _________
6 go for _________
7 get off _________
8 live _________

7 Answer the questions.

1 How many different ways to get fit are mentioned in the text?
2 What are they?

READING BETWEEN THE LINES

8 Try to answer the questions below.

1 What have you achieved if you go swimming during your lunch hour two or three times a week?
2 How does exercise improve self-esteem?
3 Why are leisure activities cheaper at off-peak times?
4 Is the leaflet written for adults or for children? How do you know?

DISCUSSION

9 Work with a partner. Discuss the questions below.

1 How do you keep fit?
2 Is doing sport the best way to keep fit? Why / Why not?
3 What problems are associated with doing too much exercise?
PREPARING TO READ

1. Work with a partner. Try to answer the questions below.
   1. What percentage of your diet should be
      a. fruit and vegetables?
      b. carbohydrates?
      c. dairy products?
      d. proteins?
   2. How do countries help people avoid obesity?

2. Scan the essay on page 112 and check your answers to the questions.

WHILE READING

3. Read the essay in more detail. Which paragraphs contain the themes (1–6) below?
   1. a tax on certain foods _____
   2. the importance of the government’s role _____
   3. a healthy diet _____
   4. nutritional value _____
   5. an introduction to the subject _____
   6. advertising _____

4. Read paragraphs B–E again and make notes on why the author suggests these solutions to the problem of obesity.

<table>
<thead>
<tr>
<th>ways to tackle obesity</th>
<th>reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>a balanced diet (paragraph B)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>packaging labels (paragraph C)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>a food tax (paragraph D)</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>a ban on junk food advertising (paragraph E)</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>education campaigns (paragraph E)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Tackling obesity

A Obesity is becoming a major problem in many parts of the world. In Britain alone, there was a 30% increase in the number of people being admitted to hospital with problems related to obesity last year. An estimated 60% of British adults are overweight.

B One way of tackling obesity is to eat less but to eat more healthily. An average man needs around 2,500 calories per day, while an average woman requires around 2,000 per day. We should eat a balanced diet which consists of a variety of foods in order to maintain a healthy weight. A healthy diet should include approximately 35% fruit and vegetables; 35% carbohydrates, such as bread, rice, potatoes and pasta (or other starchy food); around 15% dairy products like milk and cheese; 10% proteins, for example meat, fish, eggs and beans; and only around 5% should be sweet foods – namely cakes or biscuits – especially those that are high in fat and sugar.

C In many countries, nutritional values are shown on food packaging. In Britain, there is a traffic light system to show more clearly how good or bad a particular food product is. Red next to ‘sugar’, for example, means that the product is high in that particular item; yellow means the product is neither high nor low in sugar; and green means the product only has a small amount of sugar in it. The traffic light system helps people to know immediately whether the food product is good for them.

D Some people argue that foods that are high in fat, such as pizza and potato chips, and those high in refined sugar, like chocolate and sweets, should be taxed. This would make junk food too expensive for people to buy in large quantities. In Denmark, there is now a tax on products that contain more than 2.3% of saturated fat. However, taxing fast food is difficult because fast food companies are rich and powerful.

E The role of advertising should not be forgotten. Advertising junk food at times when children are watching TV was banned in Malaysia in 2007. This was designed to better protect them from the influence of advertising while they learn how to choose between treats and foods that are good for them. On the other hand, there have also been TV education campaigns to encourage people to eat five portions of fruit and vegetables per day. It has been estimated that if people ate enough fruit and vegetables, up to 2.7 million lives per year could be saved.

F Governments need to promote healthy eating and the importance of five portions of fruit and vegetables per day. Similarly, they need to fight obesity by discouraging people from eating fats and sugars. They must also encourage people to be more active by providing opportunities for everyone to get fit, no matter how rich or poor they may be. If governments can change people’s habits, the world will be a healthier place in the future.
5 Read the essay again to look for the examples that the author uses to add detail to the argument.

<table>
<thead>
<tr>
<th>topic</th>
<th>examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>carbohydrates</td>
<td>bread</td>
</tr>
<tr>
<td>dairy products</td>
<td></td>
</tr>
<tr>
<td>proteins</td>
<td></td>
</tr>
<tr>
<td>sweet foods</td>
<td></td>
</tr>
<tr>
<td>high-fat foods</td>
<td></td>
</tr>
<tr>
<td>sugary foods</td>
<td></td>
</tr>
</tbody>
</table>

**READING BETWEEN THE LINES**

6 Work with a partner. Try to answer the questions below.

1. Why are governments interested in fighting obesity?
2. Apart from maintaining a healthy weight, why should we eat a variety of different types of food?
3. Many obese people in the UK are from poor areas. Why do you think this is?

**DISCUSSION**

7 Work with a partner. Discuss the questions below.

1. Is obesity a problem in your country?
2. Is your government doing anything to promote a healthy diet?
3. Do you agree that governments should charge a tax on products that are bad for our health? Why / Why not?
Academic verbs and nouns

It is important to recognize both the verb and the noun form of academic words when you are reading, and to spell them correctly when you are writing.

1. Look at the verbs in the table and find their noun forms in the paragraph below. Write the nouns in the table next to the verb forms.

<table>
<thead>
<tr>
<th>verb</th>
<th>noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>injure</td>
<td>1</td>
</tr>
<tr>
<td>provide</td>
<td>2</td>
</tr>
<tr>
<td>reduce</td>
<td>3</td>
</tr>
<tr>
<td>suffer</td>
<td>4</td>
</tr>
<tr>
<td>encourage</td>
<td>5</td>
</tr>
<tr>
<td>solve</td>
<td>6</td>
</tr>
<tr>
<td>recognize</td>
<td>7</td>
</tr>
<tr>
<td>involve</td>
<td>8</td>
</tr>
</tbody>
</table>

Children need to do more sport. We need to see a reduction in the rate of obesity and the suffering and injury it causes young people. The main solution is the increased provision of sports in schools. We also require the involvement and encouragement of parents, who are our main weapon against increasing obesity. The first step is recognition that fat is a real problem for young people.

Collocation 2

2. Look at the short text below and underline ten collocations (noun + noun or adjective + noun) related to health and fitness. The first one has been done for you as an example.

Obesity can reduce life expectancy and lead to serious illness such as heart disease and diabetes. To address this problem, some governments run educational programmes and advertising campaigns. These educate people about the dangers of junk food and the importance of a balanced diet. They also show people how to find out about the nutritional value of food. Another important way to tackle obesity is regular exercise, because the more physical activity we have, the better we feel.
3 Now complete the table below by writing the correct collocation next to the definition.

<table>
<thead>
<tr>
<th>definition</th>
<th>collocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>how long a person can expect to live</td>
<td>life expectancy</td>
</tr>
<tr>
<td>how good a particular kind of food is for you</td>
<td></td>
</tr>
<tr>
<td>classes or material to teach people about a particular topic</td>
<td></td>
</tr>
<tr>
<td>an illness of the heart</td>
<td></td>
</tr>
<tr>
<td>moving around and doing things</td>
<td></td>
</tr>
<tr>
<td>projects to convince people to buy a product or change their behaviour</td>
<td></td>
</tr>
<tr>
<td>a very bad medical problem</td>
<td></td>
</tr>
<tr>
<td>a mixture of the correct types and amounts of food</td>
<td></td>
</tr>
<tr>
<td>sport or movement which people do at the same time each day, week, month, etc.</td>
<td></td>
</tr>
<tr>
<td>food that is unhealthy but is quick and easy to eat</td>
<td></td>
</tr>
</tbody>
</table>

**CRITICAL THINKING**

At the end of this unit, you will write a problem–solution essay. Look at this unit’s Writing task in the box below.

What can people do to live longer? What can a government do to increase the average life expectancy of its country’s citizens?

**Subdividing arguments**

When we plan an essay, we make a list of our arguments. We can then subdivide them to allow us to better organize our essay.
1. Look at the ways we can increase life expectancy and decide which are about exercise (E) and which are about diet (D). The first one has been done for you as an example.

- a. do sports in parks and sports centres \(E\)
- b. invest in school sports
- c. eat healthily
- d. tax junk food
- e. do regular exercise
- f. cut your calorie intake
- g. ban advertising of unhealthy food
- h. take advantage of free sports clubs for children
- i. fund national sports teams and athletes
- j. avoid salty food
- k. keep active with gardening and housework
- l. educate children about healthy food
- m. build more sports centres

2. Complete the chart using the arguments (a–m) above. Decide whether the arguments refer to individuals or to governments.
GRAMMAR FOR WRITING

Giving reasons

When we give reasons for our arguments, we can use to or in order to. Both are followed by an infinitive verb.

Governments should promote healthy eating to increase life expectancy.

We also use so or so that. This is followed by a clause with can.

Governments should build more sports centres so people can do more sports.

1 Complete the sentences below using to, in order to, so or so that. More than one answer is possible.

1 Governments need to increase the tax on junk food _______ make it more expensive.
2 Nutrition labels should be added to packaging _______ people can see how healthy their food is.
3 Governments should provide free sports clubs _______ people from poorer backgrounds can take part in sport.
4 Governments can promote the idea of eating five portions of fruit and vegetables per day _______ improve people’s diets.
5 It might be a good idea to tax unhealthy food _______ make it too expensive to buy a lot of it.
6 Some people argue that the junk food advertising should be banned _______ children are not influenced by it.

Giving examples

It is important to add detail to your writing by adding examples. It helps to give the reader more information and adds strength to your argument.
2 Complete the sentences below using the words and phrases in the box.

Advertising of junk food such as (1)__________________________ and (2)__________________________ should be banned. Medical problems, especially (3)__________________________ and some forms of (4)__________________________, are caused by bad diets. There are many low-fat foods to choose from, like (5)__________________________ and green (6)__________________________. Team sports, for instance five-a-side (7)__________________________ and (8)__________________________, are good social activities. One example of a cheap way to keep fit is (9)__________________________. Growing fruit and vegetables is good exercise and puts food on the table. There are many ways to prevent obesity. A case in point is (10)__________________________. We must teach children about the benefits of a balanced diet.

3 Complete the sentences below using the words and phrases in the box together with your own ideas. The first has been done for you as an example.

1 There are many ways to lose weight, such as gardening and running.

2 Regular physical activity has a range of benefits, such as ____________________________.

3 Obesity can result in medical problems, especially ____________________________.

4 Junk food can be found in many places, for example ____________________________.

5 Schools offer children the chance to do many sports, for instance ____________________________.

6 There are a number of solutions to the problem of obesity, especially ____________________________.
ACADEMIC WRITING SKILLS

WRITING SUPPORTING SENTENCES

1. Look at the words in bold in the paragraph below to see how the supporting sentences give reasons and examples.

<table>
<thead>
<tr>
<th>Topic sentence</th>
<th>Eating a balanced diet is a great way for individuals to stay healthy, but too much fat in your diet can be a problem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting sentence 1: reason</td>
<td>A balance of vitamins and minerals helps your body maintain health.</td>
</tr>
<tr>
<td>Supporting sentence 2: examples</td>
<td>For example, we need protein from meat and carbohydrates from rice and bread, as well as vitamins from fruit and vegetables, in order to stay healthy.</td>
</tr>
<tr>
<td>Supporting sentence 3: reason</td>
<td>However, consuming too much sugar and fat in junk food such as fried chicken or cola drinks causes health risks.</td>
</tr>
<tr>
<td>Supporting sentence 4: examples</td>
<td>Obesity can lead to heart disease and diabetes.</td>
</tr>
</tbody>
</table>

2. Now write your own sentences in the table below to support the topic sentence about keeping fit.

<table>
<thead>
<tr>
<th>Topic sentence</th>
<th>Keeping fit is a great way for individuals to stay healthy, and too little exercise can lead to problems later in life.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting sentence 1: reason</td>
<td></td>
</tr>
<tr>
<td>Supporting sentence 2: examples</td>
<td></td>
</tr>
<tr>
<td>Supporting sentence 3: reason</td>
<td></td>
</tr>
<tr>
<td>Supporting sentence 4: examples</td>
<td></td>
</tr>
</tbody>
</table>
WRITING TASK

What can people do to live longer? What can a government do to increase the average life expectancy of its country’s citizens?

1 Use the words and phrases in the box to plan your essay.

| Introduction | (1) _______________ decrease life expectancy  
(2) _______________ can work together to increase life expectancy |
| Main body 1 | Changes by individuals to their (3) _______________ and their (4) _______________ can increase life expectancy |
| Main body 2 | Government initiatives to change their citizens’ eating habits and exercise habits |
| Conclusion | Governments and individuals can work together to improve diet and fitness so that we can improve (5) _______________ |

2 Write an essay to answer the Writing task. Use the plan above to help you. Remember to include an introduction, a main body paragraph giving individual solutions, another main body paragraph giving government solutions, and a conclusion.

3 Use the task checklist to review your essay for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
<th>✔</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you followed the essay plan and included government and individual solutions?</td>
<td></td>
</tr>
<tr>
<td>Have you used supporting sentences in each paragraph to give reasons and examples?</td>
<td></td>
</tr>
<tr>
<td>Is there a conclusion which summarizes your essay and refers back to the essay topic in the introduction?</td>
<td></td>
</tr>
</tbody>
</table>

4 Make any necessary changes to your essay.

5 Now use the language checklist to edit your essay for language errors which are common to B1 learners.
6 Make any necessary changes to your essay.

OBJECTIVES REVIEW

7 Check your objectives.

_I can_ ...

| watch and understand a video about professional cyclists | very well | not very well |
| read for detail | very well | not very well |
| write supporting sentences | very well | not very well |
| write a problem–solution essay | very well | not very well |

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>balanced diet (n)</td>
<td>education (n)</td>
</tr>
<tr>
<td>calorie (n)</td>
<td>encourage (v)</td>
</tr>
<tr>
<td>heart disease (n)</td>
<td>evidence (n)</td>
</tr>
<tr>
<td>junk food (n)</td>
<td>exercise (n)</td>
</tr>
<tr>
<td>life expectancy (n)</td>
<td>government (n)</td>
</tr>
<tr>
<td>obesity (n)</td>
<td>individual (n)</td>
</tr>
<tr>
<td>self-esteem (n)</td>
<td>injure (v)</td>
</tr>
<tr>
<td></td>
<td>provide (v)</td>
</tr>
<tr>
<td></td>
<td>realize (v)</td>
</tr>
<tr>
<td></td>
<td>reduce (v)</td>
</tr>
<tr>
<td></td>
<td>solve (v)</td>
</tr>
<tr>
<td></td>
<td>suffer (v)</td>
</tr>
</tbody>
</table>
**LEARNING OBJECTIVES**

<table>
<thead>
<tr>
<th>Skill</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about the ASIMO robot</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Scan to predict content</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Edit for common errors</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write an advantage–disadvantage essay</td>
</tr>
</tbody>
</table>
Work with a partner. Discuss the question below.

1. What do you think will happen in the world of science and technology in the next ten years?

2. Match the new technologies (1–3) to the definitions (a–c).
   1. robotics
   2. 3D printing
   3. biomimicry
      a. the study of biology in order to copy nature and solve human problems
      b. making plastic objects by printing designs on a computer
      c. the science of making and using robots
PREPARING TO WATCH

1 You are going to watch a video about a special robot. Before you watch, look at the photographs of the robot and answer the questions below.
   1 What jobs are robots used for now?
   2 Can you think of any jobs robots might be used for in the future?

2 Use the words and phrases in the box to complete the sentences below.

   mobility aid  gesture  centre of gravity
   uneven  disability  humanoid

   1 Something that looks like a human is ____________________.
   2 An ____________________ surface is not flat.
   3 The point in an object where its weight is balanced is its ____________________.
   4 Something that helps you move is a ____________________.
   5 A serious and long-term physical or mental problem that has a negative effect on your daily life is a ____________________.
   6 A ____________________ is a movement of your hands, arms or head to express an idea or feeling.

WHILE WATCHING

3 a) Watch the video and number the main ideas (a–e) in the order that you hear them.
   a Uses for ASIMO  _____
   b What similar robots will be able to do in the future  _____
   c Background and history of ASIMO  _____
   d What robots can do now  _____
   e Recent improvements to ASIMO  _____
The list below shows some of the things that ASIMO can do now and some things that robots like ASIMO will be able to do in the future. Tick (✔) the ones that ASIMO can do now.

1. play football
2. balance on one foot
3. jump
4. walk on uneven surfaces
5. make tea
6. push a cart
7. open and close doors
8. shake hands
9. run down stairs
10. speak English
11. open a bottle

Watch again and complete the sentences with a word or a number.

1. In 1986 the Honda automotive company wanted to create a humanoid _________.
2. It took years to make ASIMO _________ on uneven surfaces.
3. ASIMO can run at _________ kph.
4. ASIMO is _________ cm tall.
5. ASIMO can hold _________ kg.
6. Researchers are working on robots that can respond to touch and _________.

Work with a partner. Try to answer the questions below.

1. Why do you think that ASIMO was designed to have a humanoid shape?
2. Why was ASIMO designed to be smaller than a human, rather than the same size or taller?
3. What are the ‘descendants of this robot’ which are mentioned in the video?

DISCUSSION

Work with a partner. Discuss the questions below.

1. What are the advantages and disadvantages of using robots to do our housework for us?
2. What are the three most important inventions in the home? Why?
3. Which three inventions would you like to see in your home in the future?
PREPARING TO READ

1 Answer the questions.
   1 *bio* is a prefix which means ‘life’. What words do you know that start with *bio*?
   2 Read the first paragraph of the article on page 127 opposite. What do *mimicry* and *biomimicry* mean?
   3 Can you think of any man-made objects that copy from something in nature?

WHILE READING

2 Read the magazine article on page 127 opposite and answer the questions below.
   1 Which products are mentioned in the article?
   2 Which plants or animals were copied to produce these products?
   3 Read the article again and answer the questions below.
      1 Where was George de Mestral from?
      2 Which two features does Velcro® have, that allow it to stick together?
      3 What does the shark’s skin allow a shark to do?
      4 What does the shark’s skin do to bacteria?
      5 Whose eyes did NASA want to protect from dangerous radiation?
      6 What special feature of eagle eyes was copied to make sunglasses?
      7 Which two features of a boxfish skeleton make it good for engineers to copy?
      8 What does the car copy, that allows it to save fuel?

READING BETWEEN THE LINES

4 Work with a partner. Answer the questions below.
   1 Why do you think Velcro® became popular with children’s clothing companies?
   2 Why do you think the Speedo Fastskin® swimsuit was controversial during the Beijing Olympics?
   3 Why do people have different opinions about the Bionic Car?
DISCUSSION

5 Work with a partner. Discuss the questions below.

1. Do you think biomimicry will be more common in the future? Why / Why not?
2. What are the advantages of copying from nature?

THE MAGIC OF MIMICRY

Perhaps the best-known example of biomimicry is Velcro®. It was invented in 1941 by a Swiss engineer called George de Mestral, who looked at the burdock seeds which stuck to his dog’s hair. Under the microscope, he discovered that these seeds had hooks on them, so they stuck to loops on clothing or hair. He copied this idea and used strips of material with tiny hooks on them and strips of material with loose loops on. When he put both strips together they stuck like glue. However unlike glue, he could peel both strips apart and reattach them. Velcro® was initially unpopular with fashion companies but after it was used by NASA to stop items floating in space, it became popular with children’s clothing companies.

More recently, swimwear has also been influenced by nature. The Speedo Fastskin®, a controversial swimsuit, was seen at the Beijing Olympics and worn by 28 of the 33 gold medal winners. The technology is based on the rough patterns on a shark’s skin, which allows the shark to swim faster. Shark skin also stops bacteria growing on it, so scientists are copying this surface to design cleaner hospitals.

For NASA, protecting astronauts’ eyes from the sun’s rays is very important but protecting their eyes from other dangerous radiation is also essential. Scientists studied how eagles and falcons clearly recognize their prey. They discovered that they have yellow oil in their eyes which filters out harmful radiation and allows them to see very clearly. NASA copied this oil and it is now used by astronauts and pilots in Eagle Eyes® glasses. In addition to protecting eyes from all the dangerous rays, these sunglasses also improve vision in different weather conditions such as fog, sunlight or just normal light.

In another development, Mercedes-Benz has developed a new car which is based on the shape of the tropical boxfish. Engineers at Mercedes-Benz chose to copy the boxfish skeleton to make their Bionic Car because of its strength and low weight. The boxfish’s bony body protects the animal’s insides from injury in the same way as a car needs to protect the people inside it. The car’s looks divide opinion but they are designed on the smooth shape of the boxfish. This shape also means the car has less air resistance and so uses less fuel.

It appears that the influence of biomimicry is unlimited, so it will be interesting to see what solutions nature provides us with in the future.
PREPARING TO READ

Scanning to predict content

When we scan a text, we do not read every word. We let our eyes move over the text, looking for key words that help us to understand what the text is about, before we read it carefully. For example, we can look for names, numbers, pronouns (he, she, it, which, them, our, etc.) or lists of words (e.g. words related to speed). This information helps us to think about what we expect the text to tell us.

1 You are going to read an article about technology in the future. Scan the article on page 129 opposite and answer the questions. Look out for the key words, which are in bold in the questions (1–3) below.

1 Which paragraph (A–E) describes a robot suit? ________
2 Which paragraph (A–E) describes a flying car? ________
3 Which paragraph (A–E) describes a 3D printer? ________

WHILE READING

2 Read the article and match the inventions (1–3) to their advantages (a–c) and their disadvantages (i–iii).

1 flying cars
2 3D printing
3 a robot suit

a It could help people walk again.
b We could avoid speeding tickets.
c We could make our own plastic products.

i Mechanical failure might be a big problem.
ii The main disadvantage is cost.
iii The process is slow and expensive.

3 Read the article again and write true (T), false (F) or does not say (DNS) next to the statements below.

1 Flying cars will allow us to avoid traffic congestion on the roads. _____
2 Mechanical failure will not be much of a problem for flying cars. _____
3 We might be able to print things like necklaces or chairs in the future. _____
4 3D printing was invented in 1984. _____
5 BMW and Volkswagen are going to use 3D printing soon. _____
6 Robot suits are heavy objects. _____
7 The battery life of a robot suit is short at the moment. _____
What will the world of the future be like? There are plenty of people who are happy to give their opinion of what we will be doing in 2050. Here are three predictions about the world of tomorrow.

When people talk about the future, we like to think that we will be able to drive out of our garages and take to the skies in our own personal flying car. The advantages are obvious. Some people predict this technology will allow complete three-dimensional freedom of movement. We could fly at 480 kilometres per hour, avoiding traffic lights, busy roads and speeding tickets. However, some people point to the disadvantages of flying cars. They claim that there are certain to be problems with traffic control. Another big problem is mechanical failure. What will happen if they break down? Also, if they become popular, there is likely to be another big problem: air traffic congestion. So it looks like flying cars face more than a few problems if they are to get off the ground!

Most of us have printed out an electronic document on paper, but think about the possibility of printing out a three-dimensional object in plastic. 3D printers build an object using layers of liquid plastic. They build up the layers line-by-line like a normal printer until the object is complete. Vehicle companies like BMW and Volkswagen already use 3D printers to make life-size models of car parts. At the moment the process is slow and quality is low, but before long it might be possible to see a product on a website and then download it to your printer at home. In the future we could make our own furniture, jewellery, cups, plates, shoes and toys from designs on our computers, and reduce the amount of shopping we have to do.

Imagine having your own Ironman suit. There are several companies trying to build a practical robot ‘exoskeleton’. This is a suit of robot arms and legs which follows your movements. It will allow the wearer to lift heavy objects, walk long distances and even punch through walls! There are obvious military advantages for this technology but there are also benefits for people with disabilities. This suit might help people to walk again after disease or injury. However, the obvious disadvantage at the moment is cost. Even a simple exoskeleton can cost hundreds of thousands of pounds. Another problem is battery life. A suit like this needs a lot of power and so batteries only last about 15 minutes at the moment. One other problem is that a badly programmed robot suit could injure the wearer. You wouldn’t want your robot leg or arm bending the wrong way.

So in the future, although we might be able to fly to work, print out a pair of new shoes and lift a car above our heads, there are plenty of problems to solve before this will be possible.
READING BETWEEN THE LINES

4 Work with a partner. Answer the questions below.

1 Why is mechanical failure a problem in a flying car?
2 Why will flying cars cause more traffic congestion, not less?
3 What do you think could be the benefits of robot suits?
4 Why wouldn’t you want a robot suit arm to bend the wrong way?

DISCUSSION

5 Work in pairs and answer the questions.

1 Do you think these inventions are a good idea? Why / Why not?
2 Choose one of the inventions. What would you do if you owned it?

LANGUAGE DEVELOPMENT

Making predictions

We use will, could and won’t with an adverb before the main verb to talk about certainty in the future.

90% = will definitely

Cars will definitely become more efficient in the future.

70% = will probably

The next generation will probably use more digital devices.

50% = could possibly

We could possibly see humans walking on Mars soon.

30% = probably won’t

We probably won’t have flying cars.

10% = definitely won’t

We definitely won’t be travelling to other stars.
1 Complete the sentences about the future using the verb and adverb phrases in the box on page 130.

1 In years to come, biofuels ____________ become more important.
2 Genetic modification ____________ be very controversial before the decade is out.
3 In the near future, electronic human implants ____________ become commonplace.
4 Biomimicry ____________ be a growth industry before too long.
5 Robotic cars ____________ be everyday products within the next ten years.

2 Look again at Exercise 1 and underline the phrases that refer to future time.

Understanding prefixes

We add prefixes to the beginning of a word to make a new word with a different meaning. Understanding the meaning of prefixes can help you guess the general meaning of difficult academic or technical words.

3 Look at these prefixes and their meanings. Use words with these prefixes to make five predictions about new technology.

<table>
<thead>
<tr>
<th>prefix</th>
<th>meaning</th>
<th>example</th>
</tr>
</thead>
<tbody>
<tr>
<td>auto-</td>
<td>self</td>
<td>automatic</td>
</tr>
<tr>
<td>de-</td>
<td>reverse</td>
<td>demotivate</td>
</tr>
<tr>
<td>dis-</td>
<td>reverse or remove</td>
<td>disagree</td>
</tr>
<tr>
<td>mis-</td>
<td>badly</td>
<td>misuse</td>
</tr>
<tr>
<td>post-</td>
<td>after</td>
<td>post-modern</td>
</tr>
<tr>
<td>pre-</td>
<td>before</td>
<td>prehistoric</td>
</tr>
<tr>
<td>re-</td>
<td>again</td>
<td>rewrite</td>
</tr>
<tr>
<td>sub-</td>
<td>under</td>
<td>submerge</td>
</tr>
<tr>
<td>un-</td>
<td>remove, reverse, not</td>
<td>unpack</td>
</tr>
<tr>
<td>under-</td>
<td>less than</td>
<td>undercook</td>
</tr>
</tbody>
</table>
4 Compare the pairs of sentences below. Use the table and say whether the sentences have the same or opposite meanings.

1. Flying cars are unsafe.
   Flying cars are dangerous.

2. The discovery was made by postgraduate students.
   The discovery was made by students who haven’t graduated from university yet.

3. The robots underperformed in their tests.
   The robots performed better than we expected in their tests.

4. We have to rethink the way we use technology.
   We have to think again about how we use technology.

5. Genetic engineering dehumanizes us.
   Genetic engineering makes us less human.

6. People often misunderstand new inventions.
   People often understand new inventions perfectly.

7. The car flies on autopilot.
   The car flies without a human pilot.

8. The chip is inserted in a subcutaneous layer of the skin.
   The chip is put under the skin.

CRITICAL THINKING

At the end of this unit, you will write an advantage–disadvantage essay. Look at the Writing task in the box below.

Choose one new area of technology or invention and outline its advantages and disadvantages.

Listing

Making a list is an important skill which will help you to organize your ideas for your writing. You can brainstorm the ideas alone or in a group.

1. Are the words and phrases in the box advantages or disadvantages of the inventions in Reading 2? Complete the table on page 133.

   mechanical failure  super strong   low quality  possible injury
   freedom of movement  help people with disability
   very expensive  traffic control problems  do less shopping
   slow  avoid traffic congestion  make your own products
<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flying cars</td>
<td>• ____________</td>
</tr>
<tr>
<td></td>
<td>• ____________</td>
</tr>
<tr>
<td>3D printing</td>
<td>• ____________</td>
</tr>
<tr>
<td></td>
<td>• ____________</td>
</tr>
<tr>
<td>Robot suits</td>
<td>• ____________</td>
</tr>
<tr>
<td></td>
<td>• ____________</td>
</tr>
</tbody>
</table>

**Reasoning**

When we think critically, we have to find reasons for what we read or write about. This involves thinking of your own ideas and then finding evidence to support those ideas.
Work in groups of four. Write about your predictions for two inventions (1–2). Say what the advantages and disadvantages are. Some predictions have been done for you as examples.

<table>
<thead>
<tr>
<th></th>
<th>Food:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Genetic modification</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advantages:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Larger types of rice, wheat and vegetables could be grown</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Food could be grown with less water in hot countries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disadvantages:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modified seeds would be expensive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Possible health problems in the future</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Education:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Computer schoolbooks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advantages:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disadvantages:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3 Now think of an invention and complete the third row of the table.
Relative clauses
We use relative clauses to give more information about something without starting a new sentence. We use who after people and which after things. Notice that we also avoid repeating the object of the sentence this way.

Velcro® was invented in 1941 by George de Mestral. George de Mestral saw the seeds on his dog’s hair.

Velcro® was invented in 1941 by George de Mestral, who saw the seeds on his dog’s hair.

1 Join each pair of sentences to make one sentence, using a relative clause. Take out the repeated words.

1 Scientists are developing new robots.
New robots will be able to do dangerous work.

2 There is a great deal of research to help elderly people.
Elderly people will benefit from this new technology.

3 There is a lot of new investment in biofuels.
Biofuels are cleaner and more sustainable than fossil fuels.

4 This technology will save energy.
Saving energy is good for the environment.

5 The concept car has a special design.
A special design makes the concept car more fuel efficient.

6 The research will be done by scientists at the University of Cambridge.
Scientists at the University of Cambridge hope to publish the research next year.

2 In questions 5 and 6, which repeated words can be replaced with it?
Advantages and disadvantages

To make an essay clearer for the reader, we can use prepositional phrases to introduce the advantages and disadvantages of a subject at the start of a new sentence.

3 Complete the table below with the phrases (1–8).

1. The main advantage/disadvantage of ... is ...
2. The main worry about ... is ...
3. One point against ... is ...
4. One good/bad thing about ... is ...
5. Perhaps the biggest concern with ... is ...
6. A real benefit of ... is ...
7. The main argument in favour of / against ... is ...
8. The problem with ... is ...

<table>
<thead>
<tr>
<th>A positive arguments</th>
<th>B negative arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

4 Choose a negative or positive phrase from Exercise 3 to complete the sentences below. More than one answer is possible.

1. ___________________________ about robots is that they can do dangerous or boring jobs instead of humans.
2. ___________________________ against genetic engineering is that it may cause pollution.
3. ___________________________ of medical imaging is that you can see clearly inside patients' bodies.
4. ___________________________ with robots is that they take jobs away from people.
5. ___________________________ about flying cars is that they could crash, causing terrible accidents.
ACADEMIC WRITING SKILLS

Common errors
When you are writing it can be easy to miss out small words. This can be a problem for the reader, especially if there are too many mistakes in one paragraph. The reader may lose confidence in your ideas as well as your English.

1 Read the paragraph below and write one word in each gap.

Computer schoolbooks are expected\(^{(1)}\)\________ become very important in the near future for a number\(^{(2)}\)\________ reasons. Before the end of\(^{(3)}\)\________ decade, students will probably all have tablet computers, which will carry all of the books they need,\(^{(4)}\)\________ well as offer access\(^{(5)}\)\________ the internet. However, there could\(^{(6)}\)\________ some disadvantages to using computer schoolbooks\(^{(7)}\)\________ the future. One problem\(^{(8)}\)\________ that they could possibly get broken in school bags. These tablet computers will also be expensive\(^{(9)}\)\________ buy and replace, which\(^{(10)}\)\________ probably mean less money for teachers. Overall, computer schoolbooks seem\(^{(11)}\)\________ a good idea but they are unlikely to be successful unless they\(^{(12)}\)\________ tough and cheap.

2 Correct the common spelling mistakes in the sentences below.

1 Many major universities are studing artificial intelligence.
2 Scientists have tryed to make this technology work.
3 Inventions cost a lot of mony.
4 It is ture that flying cars are dangerous.
5 It is realy important to use new technology.
6 Robots are machines wich can move on their own.
7 There are many diffrent scientific discoveries every year.
8 Peaple are sometimes afraid of new technology.
9 It will be expensive to equip schools withe tablet computers.
10 Inventors belive the future will be improved by new technology.
WRITING TASK

Choose one new area of technology or invention and outline its advantages and disadvantages.

1 Use your notes from the Critical thinking section on page 132 to answer the task. Remember to include an introduction with references to two or three new areas of discovery or invention. You should then have two or three main body paragraphs with advantages and disadvantages, and a conclusion.

2 Use the task checklist to review your essay for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Have you included an introduction which links to the main body paragraphs and a conclusion which summarizes the essay?</td>
</tr>
<tr>
<td>✔ Do the main body paragraphs have a topic sentence, supporting sentences and a concluding sentence?</td>
</tr>
<tr>
<td>✔ Have you written about advantages and disadvantages?</td>
</tr>
</tbody>
</table>

3 Make any necessary changes to your essay.

4 Now use the language checklist to edit your essay for language errors which are common to B1 learners.

<table>
<thead>
<tr>
<th>LANGUAGE CHECKLIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ Have you used will, could and won’t to give predictions about the future?</td>
</tr>
<tr>
<td>✔ Have you used who or which to link relative clauses?</td>
</tr>
<tr>
<td>✔ Have you introduced advantages and disadvantages with the correct phrases?</td>
</tr>
</tbody>
</table>

5 Make any necessary changes to your essay.
OBJECTIVES REVIEW
6 Check your objectives.

*I can ...*

- watch and understand a video about the ASIMO robot
  - very well
  - not very well
- scan to predict content
  - very well
  - not very well
- edit for common errors
  - very well
  - not very well
- write an advantage–disadvantage essay
  - very well
  - not very well

**WORDLIST**

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>biofuel (n)</td>
<td>advantage (n)</td>
</tr>
<tr>
<td>centre of gravity (n)</td>
<td>benefit (n)</td>
</tr>
<tr>
<td>disability (n)</td>
<td>concern (n)</td>
</tr>
<tr>
<td>genetic modification (n)</td>
<td>definitely (adv)</td>
</tr>
<tr>
<td>gesture (n)</td>
<td>disadvantage (n)</td>
</tr>
<tr>
<td></td>
<td>discovery (n)</td>
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<tr>
<td></td>
<td>innovation (n)</td>
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<tr>
<td></td>
<td>possibly (adv)</td>
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<tr>
<td></td>
<td>probably (adv)</td>
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<tr>
<td></td>
<td>scientific (adj)</td>
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</tbody>
</table>
## LEARNING OBJECTIVES

<table>
<thead>
<tr>
<th>Skill</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about the Missoni fashion house</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Distinguish fact from opinion</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Edit for cohesion and coherence</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write a balanced opinion essay</td>
</tr>
</tbody>
</table>
UNLOCK YOUR KNOWLEDGE

Work with a partner. Discuss the questions below.

1. Which clothing brands are popular in your country?
2. Why do people buy branded clothing?
3. Do you prefer branded clothing or clothes that do not have a brand name?
4. Are shops that sell cheap clothes popular in your country?
PREPARING TO WATCH

1 Look at the photographs above and answer the questions below.
   1. What can you see in the photographs?
   2. What industry is shown?

2 Match the words and phrases (1–5) to the definitions (a–e).
   1. fashion capital
   2. collection
   3. label
   4. Fashion Week
   5. critic

   a. a manufacturer of clothing which can be recognized by its design and logo
   b. a person who reviews or comments on what they see
   c. a city in which fashion is the dominant or central activity
   d. clothing for a new season
   e. a show in which new collections are presented to the public for the first time

WHILE WATCHING

3 Watch the video and choose the best description of the topic.
   a. New York Fashion Week
   b. The city of Milan
   c. Changes in fashion
   d. A family business
4  Watch again and circle the correct words to complete the statements below.

1. Milan is Italy’s second / third biggest city.
2. Angela’s brothers / parents started the Missoni label.
3. Angela runs Missoni with her sisters / brothers.
4. 400 / 800 people work in Missoni’s factory.
5. Angela has to choose suits / dresses to include in the show.

5  Complete the sentences below using the information in the box. Then watch again and check your answers.

one-bedroom  twice a year  $250 million  $6 billion  800  1953

1. The Missoni factory employs ___________ people.
2. The Missoni label was started in ___________ .
3. Each year the fashion industry makes ___________ .
4. Missoni makes ___________ a year.
5. Fashion Week takes place ___________ in Milan.
6. The Missoni label began life in a ___________ flat.

DISCUSSION

6  Work with a partner. Discuss the questions below.

1. What kind of clothes are you most comfortable in? Describe your favourite outfit.
2. Are you interested in fashion? Do you own anything with a designer label?
3. Do you think that young people are too interested in their appearance?
PREPARING TO READ

1 Answer the questions below.
   1 Does fast fashion imply cheap or expensive clothes?
   2 How many times a year do fashions usually change?
   3 What would happen if fashion designers changed fashions every month?

2 Now read the web article on page 145 opposite and check your answers.

WHILE READING

3 Read the article again and number the main ideas (a–f) in the order that they are mentioned. Not all the ideas are mentioned.
   a designer clothing
   b advantages of fast fashion
   c Fast fashion shows
   d the definition of fast fashion
   e advertising fast fashion
   f disadvantages of fast fashion

4 Look at the article again and correct the factual mistakes in the sentences below. The first one has been done for you as an example.
   1 Traditional fashion retailers annually produce 10,000 items.
   2 Fast-fashion designs that are unpopular are withdrawn in less than a month.
   3 Traditional fashion is good for the customer because of the greater volume of sales.
   4 The biggest problem with fast fashion is the theft of ideas.
   5 Cotton growers need to produce more so they have to use more water.
   6 Designer clothing is taking off in the West.
   7 Designer clothes are good for the economy because they last a long time.
It is estimated that the high-street fashion industry is worth around £45bn in the UK alone. Traditionally, fashion retailers had four collections per year, one for each season, but nowadays fast-fashion companies can design and manufacture clothes in as little as four weeks. Fast fashion means that the latest designs that appear at the fashion shows in Paris, London and Milan can be copied and in high-street shops within a month. This means a typical fast-fashion retailer can stock 10,000 items annually, compared with 2,000 for its competitors.

The advantages of rapidly changing fashions are clear. Shortening the product life cycle means if a design doesn’t sell well within a week, it is taken out of the shops and a new design is chosen. This is good for the manufacturer as it means greater volumes of sales, and good for the customer as they can keep up with fast-moving trends cheaply – and every time they visit the store, there is something new.

However, there are also a number of disadvantages to this approach. Perhaps the biggest concern is the impact on the environment of wasted clothes. Buying twelve new sets of clothes rather than four means that more textiles will be thrown away. Furthermore, with fashions changing so quickly, cotton growers need to produce more cotton more cheaply, and that means using more pesticides and chemicals.

The other problem is the theft of ideas. Fashion houses invest a lot of time and money on new ideas, only to see these ideas copied for free by fast-fashion companies.

At the other end of the scale in the fashion industry is high-end designer clothing. At the same time as fast fashion is taking off in the West, Asian consumers are buying more and more expensive, luxury brands. Many buy branded clothes just to show that they can afford them but others choose them for quality, saying that they will last longer. They may have a point. Expensive designer clothes will last and therefore be more environmentally friendly because of their long lifespan.

It seems that the fashion industry is changing almost as fast as the fashion it produces – but what do you think? We’d like to hear your comments about the fashion industry today.

**Comments**

6 comments

Carmen   Reply
I’d love to have the money to buy designer clothes but I have to buy cheaper products because I don’t have much money. I’m sure the quality is not as good as with designer labels.

Like 14
READING BETWEEN THE LINES

5 Look at the comments about the article and answer the questions below.

1. Who is against designer fashion?
   — Ahmet
   — Designer fashion is a waste of money. Wearing brand names is just free advertising for that company and I don’t think the quality is any different.

2. Who wants to buy more expensive clothes?
   — Jasmine
   — Great article! I love fast fashion! I enjoy looking good and having lots of clothes. Fast fashion allows me to buy lots of clothes really cheaply. Why should I feel bad about throwing cheap clothes in the bin when they go out of fashion? I can just go out and get more.

3. Who doesn’t like to follow fashion trends?
   — Ben
   — Response to Jasmine
   — People like you make me really angry. That is such a selfish attitude. Think about the environment. Don’t you care about wasting all that cotton? At least give the clothes to charity shops if you don’t want them anymore.

4. Who has the most likes? Why?
   — Fatima
   — I can understand why people like fast fashion but I prefer to pay for quality, and if the store has ethically produced clothes then that is perfect. I agree with Ben: we need to look after the planet, otherwise our children won’t have a planet to live on. I would rather pay more and know I’m doing good. It’s time more people got a conscience!

5. Who has the fewest likes? Why?
   — Sara
   — Style is important to me. I study fashion at university and I would never buy fast fashion. I don’t want to look like everyone else. I prefer to buy second-hand clothes because older clothes were designed to last. I have my own style. I don’t need to copy Paris or Milan.

DISCUSSION

6 Work with a partner. Discuss the questions below.

1. Do you have any fast-fashion shops in your country? If so, which ones?
2. Do you like the idea of fast fashion?
3. Is fashion more important to younger or older people? Why?
PREPARING TO READ

1 Work with a partner. Try to answer the questions below.

1 Why do companies move their factories to other countries?
2 What are the benefits for a country when a multinational company locates its production there?
3 Are there any disadvantages for workers in the country where the company is based when companies manufacture their products in different countries?

2 Now read the newspaper article below and check your answers.

OFFSHORE PRODUCTION

A The world’s consumption of fashion is huge. The European Union imported textiles (clothing and carpets) to the value of €83.7 billion in 2010*. Prices have fallen, too, with hand-finished shirts costing less than five euros. To make clothes at these low prices, companies have to keep costs down. They use offshore production to do this. Large companies make their products in developing countries where workers are paid much less than in developed countries.

B Multinational companies are careful of their reputation for fairness, so they try hard to make sure local pay and conditions are legal. Supporters of overseas production facilities argue that most multinationals pay the correct minimum wage in the country and sometimes pay more. However, factory workers may actually only earn a few cents to make an item which would sell for hundreds of dollars. This low pay means low labour costs, and the multinational company keeps most of the profit.

C Multinational companies argue that they meet local employment laws and claim that they refuse to work with factories which do not follow their rules. Critics, however, call these kinds of factories ‘sweatshops’. They argue that employees are made to do long hours of work, often in dangerous conditions, and do not get paid overtime.

D Overseas manufacturing plants have been in the media because they sometimes employ children. Supporters argue that often school is too expensive for some children and that children who work in factories are protected from worse jobs on the streets or in the fields. However, critics of overseas production state that child labour is wrong. They claim that children should be in full-time education rather than working in a factory.

E Another point that should be considered is that developing countries encourage developed countries to invest in them to provide jobs. Supporters of overseas production point out that increased investment has positive effects in the long term. Nobel prize-winning economist Paul Krugman points out that the growth in manufacturing has an impact on the rest of the economy, because it reduces the number of people needing to work in agriculture and increases competition for labour. This leads to higher wages, which lead to other improvements, such as the ability to send children to school. On the other hand, the disadvantage of this foreign investment is the fact that it can have a negative impact on the economy of developed countries, because people lose their jobs when production is outsourced to other countries.

F It seems that if multinationals are going to benefit from low production costs by using overseas suppliers, they should do more to improve the social situation – for example, by building schools for the children in those communities. It is also clear that multinationals should invest in communities in the developed countries where they sell their products. In conclusion, there are clear benefits for the multinationals in terms of the lower costs of production in developing countries and their workers, but they should still do more to protect the workers in overseas manufacturing plants.

*European Commission 2011
3 Match the words and phrases (1–8) to their definitions (a–h).

1 offshore production  a the amount of a product that is bought and used
2 multinational company b wages that are below the usual level
3 low pay c the amount a company spends on employing workers
4 employee d factory
5 pay and conditions e a large business which operates in many countries
6 labour costs f wages, salaries and working arrangements
7 consumption g making products in factories that are in other countries
8 manufacturing plant h worker

WHILE READING

4 Read the article again and match the ideas in the box to the paragraphs (A–E). The first one has been done for you as an example.

A low-cost textiles, huge import volume

B

C

D

E

5 Complete the sentences using a word from the article for each gap.

1 A _______________ is a name for a factory where a lot of people work long hours for not very much money.
2 Many famous fashion companies have been in the _______________ because their working conditions were poor.
3 People argue that sweatshop workers are paid badly; however, multinationals often pay more than the _______________ wage.
4 Critics claim that multinationals do not follow local _______________ laws.
READING BETWEEN THE LINES

Distinguishing fact from opinion

When we read a text, we need to be able to decide which points are facts and which points are opinions.

6 Complete the table below by deciding whether the points (1–6) are facts, the author’s opinion or opinions of other people.

<table>
<thead>
<tr>
<th></th>
<th>fact</th>
<th>author opinion</th>
<th>other opinion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>‘The European Union imported textiles … to the value of €86.7 billion in 2010.’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>‘Supporters of overseas production facilities argue that most multinationals pay the correct minimum wage …’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>‘Multinational companies argue that they meet local employment laws …’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>‘Critics of overseas production … claim that children should be in full-time education …’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>‘It seems that … multinationals … should do more to improve the social situation …’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>‘It is also clear that multinationals should invest in communities in … developed countries’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 Do you think overseas production of clothing is a good idea?
2 Do you think that multinationals that invest in developing countries should do more for the local community? Why / Why not?
Hyponyms
A hyponym is a more specific word for something that can also be described using a more general word. For example, crimson and scarlet are types of the colour red, and so the words crimson and scarlet are hyponyms of the word red. In the same way, red is a hyponym of colour.

1. Add the hyponyms in the box to the chart below. Use the Glossary on page 197 to check the meaning of new words.

<table>
<thead>
<tr>
<th>wool</th>
<th>high-heeled shoes</th>
<th>T-shirt</th>
<th>beauty products</th>
</tr>
</thead>
<tbody>
<tr>
<td>natural fibres</td>
<td>nylon</td>
<td>jeans</td>
<td>casual clothes</td>
</tr>
</tbody>
</table>

- fashion
  - clothing
    - 1 ___________
    - 2 ___________
  - footwear
    - cosmetics
  - textiles
    - 3 ___________
    - 4 ___________
    - cotton
    - lycra
    - artificial fibres
    - 5 ___________

- clothing
  - 6 ___________
  - trainers
    - 7 ___________
    - 8 ___________

2. Add five more types of clothes to each part of the chart.
Homonyms

A homonym is a word that has same spelling and pronunciation as another word, but a different meaning. Many words in the Academic Wordlist are homonyms of more common words. Check you know which meaning is used by looking at the context of the word in the sentence.

3 Read the sentences (1–8) and decide whether the word in bold is being used with the general meaning (A) or the academic meaning (B) given in the table of homonyms below.

1. Trade restrictions have been **relaxed** in recent years resulting in more imports. ______
2. The **volume** of sales in luxury brands is increasing. ______
3. There was **drama** last night when it was revealed that a leading fashion manufacturer had been using children to produce clothes. ______
4. The **goal** of the community investment programme is to build new schools in the communities that the company works in. ______
5. The **brief** was to produce a range of clothes which are attractive to young sportspeople. ______
6. Multinationals have a tough **approach** to child labour and cancel their contracts with companies which employ children. ______
7. Multinationals work hard to **accommodate** the requirements of local governments. ______
8. This **area** of the plant is where the textiles are dyed and washed. ______

<table>
<thead>
<tr>
<th></th>
<th>A general meaning</th>
<th>B academic meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>to relax</td>
<td>to become calmer</td>
<td>to make a rule less strict</td>
</tr>
<tr>
<td>volume</td>
<td>a sound level</td>
<td>an amount of something</td>
</tr>
<tr>
<td>drama</td>
<td>a play</td>
<td>excitement</td>
</tr>
<tr>
<td>goal</td>
<td>a point scored in a ball game</td>
<td>an aim</td>
</tr>
<tr>
<td>brief</td>
<td>short</td>
<td>instructions</td>
</tr>
<tr>
<td>approach</td>
<td>coming nearer</td>
<td>a method</td>
</tr>
<tr>
<td>to accommodate</td>
<td>to give someone a place to stay</td>
<td>to give someone what is needed</td>
</tr>
<tr>
<td>area</td>
<td>a piece of land</td>
<td>an academic subject</td>
</tr>
</tbody>
</table>
At the end of this unit, you will write a balanced opinion essay. Look at this unit’s Writing task in the box below.

Fashion is harmful. Discuss.

**Identifying arguments and counter-arguments**

In an argumentative essay, we make points (arguments) which we then respond to (counter-arguments).

1. Complete the table below with the arguments and counter-arguments (1–14). The first two have been done for you as examples.

<table>
<thead>
<tr>
<th>A arguments in favour of fashion</th>
<th>B arguments against fashion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) creates new jobs</td>
<td>(2) causes too much waste</td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. creates new jobs
2. causes too much waste
3. encourages child labour
4. bad pay for overseas workers
5. lets you show your personality
6. helps children make friends
7. is important to the economy
8. designer brands promote materialism
9. allows people to show their social group
10. pressures children to look like adults
11. makes children worry about their size
12. brings investment to developing countries
13. makes people look silly
14. keeps us warm and comfortable
GRAMMAR FOR WRITING

Prepositional phrases
Prepositional phrases can be used to join two pieces of information.

1 Answer the questions (1–3) below about the meaning of the phrases in the box.

<table>
<thead>
<tr>
<th>apart from</th>
<th>rather than</th>
<th>in addition to</th>
</tr>
</thead>
<tbody>
<tr>
<td>instead of</td>
<td>except for</td>
<td>along with</td>
</tr>
</tbody>
</table>

1 Which two phrases mean in preference to?
2 Which two phrases mean not including?
3 Which two phrases mean and?

2 Complete the sentences using the phrases in the box above.

1 ________________ buying disposable fashion, it is better for the environment to choose clothes that last longer.
2 The company closed its offshore production facilities ________________ its overseas retail stores.
3 Most people prefer wearing casual clothes ________________ formal business suits.
4 ________________ perfume, I don’t use any designer products.
5 ________________ encouraging child labour, offshore production also drives wages and working conditions down.
6 You can’t wear any jewellery in the factory ________________ wedding rings.
Counter-arguments

Look at the tables and the example writing below, which show how to give other people's opinions.

<table>
<thead>
<tr>
<th>Supporters Proponents</th>
<th>are in favour of</th>
<th>Y.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critics Opponents</td>
<td>are against</td>
<td></td>
</tr>
</tbody>
</table>

They argue, claim, insist, state that X is an important factor in plays a central role in plays an important part in has a positive/negative impact on Y (because ...).

Supporters of moving production overseas are in favour of foreign investment. They insist that this investment plays a central role in improving the economy in developing countries.

Critics of offshore production are against moving jobs abroad. They claim that this activity is an important factor in unemployment in developed countries.

3 Answer the questions using language from the examples in the box above.

1. What do the supporters and critics of fast fashion think about it?
2. What do the supporters and critics of designer labels think about them?
3. What do the supporters and critics of fashion magazines think about them?
ACADEMIC WRITING SKILLS

Cohesion
At B1 level, students often make mistakes by missing out important subjects, verbs and conjunctions when they are writing. This means the text loses its cohesion and it becomes difficult to follow because the parts that hold it together are missing.

1 Complete the paragraph using the words in the box.

style clothes ones they fashion that and clothing these This

The speed of change in the fashion world means that we buy many more (1) __________ than we need and throw away unused (2) __________ just because (3) __________ are out of fashion.

To keep up with the pace of (4) __________, new shops have recently opened offering clothes made as cheaply as possible so we can throw clothes away ready to buy the next season’s (5) __________.

(6) __________ way of buying clothes means that more cotton needs to be used and (7) __________ means more intensive agriculture (8) __________ damage to the environment. In addition, many of (9) __________ clothes are sewn in sweatshops in developing countries where children and women are paid less than a dollar a day for their work, while the (10) __________ companies in developed countries keep the profit.

Coherence
Even when we check our spelling on a computer, we can still make mistakes if the word is wrong. Using the wrong word can make the text lose coherence – that is, the reader cannot understand the meaning.

2 Find the mistakes in the sentences below and correct them.

1 Second-hand clothes are more environmentally friendly then fast fashion.
2 We buy more clothes, even thought we do not need them.
3 Spending too much on luxury brands is a bed idea.
4 Some designer products are just two expensive.
5 I thing people spend too much time on fashion.
6 Some people bye too many designer bags which they don’t need.
7 It just isn’t health to try and copy those thin fashion models.
8 Body image is quiet a big problem for some teenage girls.
WRITING TASK

Fashion is harmful. Discuss.

1 Think about the advantages and disadvantages of fashion. Use the outline below to plan your essay. Include your ideas from the Critical thinking section on page 152.

| Introduction | • Introduce the topic.  
|             | • Include a sentence about the main arguments.  
|             | • Include a sentence about the main counter-arguments |
| Main body paragraphs | • Give argument 1 and counter-argument 1.  
|           | • Give argument 2 and counter-argument 2.  
|           | • Give argument 3 and counter-argument 3. |
| Conclusion | • Give a summary of main arguments.  
|           | • Say if any of the arguments are particularly strong.  
|           | • Say which arguments you agree with.  
|           | • Give your own argument if you can think of a different one. |

2 Answer the Writing task by writing an essay with four paragraphs, following your plan in Exercise 1.

3 Use the task checklist to review your essay for content and structure.

<table>
<thead>
<tr>
<th>TASK CHECKLIST</th>
<th>✔</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there an introduction, a main body and a conclusion?</td>
<td></td>
</tr>
<tr>
<td>Have you discussed both the advantages and the disadvantages of fashion?</td>
<td></td>
</tr>
<tr>
<td>Have you used counter-arguments to fully discuss the topic?</td>
<td></td>
</tr>
</tbody>
</table>

4 Make any necessary changes to your essay.

5 Now use the language checklist to edit your essay for language errors which are common to B1 learners.
LANGUAGE CHECKLIST

Have you used rather than, instead of, apart from, except for, along with and in addition to correctly?

Have you used argue, claim, insist and state correctly to introduce counter-arguments?

Have you avoided repeating words?

6 Make any necessary changes to your essay.

OBJECTIVES REVIEW

7 Check your objectives.

I can ...

<table>
<thead>
<tr>
<th></th>
<th>very well</th>
<th>not very well</th>
</tr>
</thead>
<tbody>
<tr>
<td>watch and understand a video about the Missoni fashion house</td>
<td></td>
<td></td>
</tr>
<tr>
<td>distinguish fact from opinion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>edit for cohesion and coherence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>write a balanced opinion essay</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>artificial fibres (n)</td>
<td>accommodate (v)</td>
</tr>
<tr>
<td>beauty products (n)</td>
<td>approach (n)</td>
</tr>
<tr>
<td>casual clothes (n)</td>
<td>area (n)</td>
</tr>
<tr>
<td>consumption (n)</td>
<td>brief (adj)</td>
</tr>
<tr>
<td>employee (n)</td>
<td>drama (n)</td>
</tr>
<tr>
<td>manufacturing plant (n)</td>
<td>goal (n)</td>
</tr>
<tr>
<td>multinational company (n)</td>
<td>relax (v)</td>
</tr>
<tr>
<td>natural fibres (n)</td>
<td>volume (n)</td>
</tr>
<tr>
<td>textile (n)</td>
<td></td>
</tr>
</tbody>
</table>
**LEARNING OBJECTIVES**

<table>
<thead>
<tr>
<th>Task</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about an emerging economy</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Skim a text</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write a description of a graph</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write an explanatory paragraph describing a graph</td>
</tr>
</tbody>
</table>
UNIT 9

ECONOMICS

UNLOCK YOUR KNOWLEDGE

Answer the questions about your country or region.

1. What kinds of agricultural crops are produced in your country?
2. What kinds of things are made in your country?
3. What kinds of services are there where you live?
4. How has the economy of your country changed in recent years?
PREPARING TO WATCH

1 Work with a partner. Try to answer the questions below.

1 How do countries make money (e.g. tourism, taxation)?
2 Which of the countries (a–d) do you think is the world’s biggest exporter of oil?
   a Norway  c Venezuela
   b Saudi Arabia d Russia

2 You are going to watch a video about Russia. Before you watch, try to answer the questions below.

1 What is the weather like in Russia?
2 Do you think there are a lot of rich people in Russia? Why? / Why not?
3 Do you think Russia has a successful economy?

3 Complete the gaps in the sentences using the collocations in the box below.

standard of living  natural resources  economic stability
retailing  investment bank  economic growth

1 If the economy of a country doesn’t change much, it has _____________.
2 An ________________ helps companies buy and sell shares, or helps them to buy other companies.
3 The amount of money and comfort people have in a particular society is their _________________.
4 Minerals, forests, coal, etc. which can be used by people are _________________.
5 If a country’s economy is increasing in size, the country is experiencing _________________.
6 Selling goods to the public rather than to businesses is _________________.

UNDERSTANDING KEY VOCABULARY
WHILE WATCHING

4 ( headphones ) Watch the video and number the main ideas ( a–e ) in the order that you hear them.

a Reasons why the economy is growing  
b Economic problems after the end of the Soviet Union  
c What will happen in the future  
d How oil wealth has affected Russians  
e How oil wealth has affected the Russian economy

5 ( headphones ) Watch again and complete the lecture notes.

<table>
<thead>
<tr>
<th>Past</th>
<th>Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil wealth created a lot of</td>
<td>Russia has over one hundred</td>
<td>The oil is</td>
</tr>
<tr>
<td>(1) _______________</td>
<td>(3) _______________</td>
<td>(5) _______________</td>
</tr>
<tr>
<td>These people invested in</td>
<td>Retail sales are</td>
<td>It is predicted that the oil will only last for another</td>
</tr>
<tr>
<td>(2) _______________</td>
<td>(4) _______________</td>
<td>(8) _______________</td>
</tr>
</tbody>
</table>

6 Work with a partner. Try to answer the questions below.

1 How did oil restart the economy and lift many Russians out of poverty?  
2 Why do multinational companies want to invest in Russia?

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 What are the dangers for a country of relying on one major source of income?  
2 What does your country import and export?  
3 How will the economy of your country change in the future?
PREPARING TO READ

1 Match the words and phrases (1–8) to their definitions (a–h).

1 recession  a an expensive mineral like gold, silver and platinum
2 stocks and b putting money into something to make a profit
  shares  c profit
3 investor  d parts of a publicly owned business which can be bought and sold
4 market value e when the economy gets smaller
5 precious metal f what people will generally pay for something
6 investment g a person who puts money into something to make a profit
7 interest rate h the percentage that a bank charges you when you borrow money, or what it pays you when you keep money in an account
8 return on investment

2 Answer the questions.

1 If you want to make some money, what can you invest in?
2 Do you think it is better to invest in gold or in classic cars?

WHILE READING

3 Read the article on page 163 and see whether gold, classic cars or another investment is best.

4 Complete the summary using no more than two words from the article for each gap.

The article looks at the performance of two different ways of (1) ________________ your money: gold, and (2) ________________ . Although gold (3) ________________ have risen considerably over the period discussed, the best way to make use of and (4) ________________ your investment appears to be buying classic cars. From the cars shown on the graph, the Aston Martin DB5 saloon provides the biggest (5) ________________ on investment at 3,000%. However, the best (6) ________________ ever seems to be the James Bond car, which is now worth an unbelievable £1.5m. When investing in classic cars, you should remember that it is a (7) ________________ business and changes in (8) ________________ mean that choosing the right car is difficult.
How should you invest your money?

In a recession, interest rates are low. This means that investing your money in a bank may not be the best way of making money. So what might be the better options?

Stocks and shares are also risky when the economy takes a dive, so where should you invest to make the most of your money? For the brave investor, there are a range of alternative investments, such as precious metals, famous paintings and Ferraris. Gold bars and coins are a popular investment because it is easy to see how the market value changes over time.

Here we can see the sharp rise in gold prices over the last decade, from 2001 to 2011. For the first three years, the price stayed the same, at about £200 per ounce. However, in the second half of 2005 there was a dramatic increase in the price of gold, to nearly £400. Over the next year, the price was stable and it stayed this way until late 2007. This was the beginning of the sharp upward trend, which has continued for the last four years. The price of gold peaked at just under £1,200 in late 2011. Gold prices are expected to rise to around £3,500 by the year 2020, so it looks like a good time to invest. However, it may be wise to take one famous investor’s advice. Warren Buffet, one of the richest men in the world, dislikes gold as an investment. He points out that since 1965 the total return on gold was 4,455%. But the total return on stocks and shares was higher, at 6,072%. He also says it is better for society to use your money for something productive then have it sitting in a bank.

So stocks and shares are clearly the best option, but some people prefer to be able to use and enjoy their investment. Classic cars are proving to be one way to have fun and make lots of money. In fact, over the last thirty years, the value of some classic cars has risen far more than both gold and house prices. A 1972 Ferrari Dino 246 cost £9,000 in 1980 but is worth £150,000 now. And a 1955 Mercedes Benz 300SL cost £25,000 in 1980 but is worth an amazing £500,000 now. But the classic car that provides the biggest return on investment is a 1964 Aston Martin DB5 saloon. This cost £10,000 in 1980 and is now worth £300,000. This is an increase of 3,000% – in other words, it cost half the price of an average UK house in 1980 but is worth almost twice as much as the average one now! However, none of these cars compare to what is perhaps the best investment ever: a man in Tennessee bought the DB5 that was used in two of the James Bond films. It cost just £5,000 in 1970 but it is now worth over one and a half million pounds! This is an incredible 20,000% increase!

One thing to remember with investment is that it is a risky business. Classic cars need to be kept in excellent condition to get the increase in value and, because fashions change, investors need to know which car to choose. Repairs are very expensive and you need to know which car will increase most in value. You may make a big profit but there is no guarantee.
5 Answer the questions below using a figure from the article.

1 Approximately how much did gold cost per ounce for the first three years of the decade?
2 What did the price of gold rise to (approximately) in the second half of 2005?
3 At its peak in late 2011, approximately how much did gold cost?
4 How much is an ounce of gold expected to cost in 2020?
5 How much did a Ferrari Dino 246 cost in 1980?
6 What is a Mercedes Benz 300SL worth now?
7 By what percentage has the value of a 1964 Aston Martin DB5 saloon increased?
8 How much did the Aston Martin used in the James Bond films recently sell for?

REASONING BETWEEN THE LINES

6 Work with a partner. Try to answer the questions below.

1 Why does Warren Buffet dislike gold as an investment?
2 Why are investments in stocks and shares better for society than investing in gold?
3 Why are classic cars a risky investment?

DISCUSSION

7 Work with a partner. Discuss the questions below.

1 Imagine that you and your partner have one million dollars to invest. How would you invest the money?
2 Are there any investments that you definitely would not make? Why would you choose not to invest your money in this way?
3 What investments are popular for people in your country?

READING 2

PREPARING TO READ

1 Work with a partner. Try to answer the questions below.

1 Do you think the standard of living in the USA has increased, decreased or stayed the same since 1950?
2 In what ways do you think the standard of living in the USA has changed? Have these areas got better or worse?
   a the economy
   b unemployment
   c life expectancy
   d wealth
2 Now read the article below and check your answers.

How times have changed

The American Dream has been described as ‘a dream of a land in which life should be better and richer and fuller for everyone’.

This dream became reality for many Americans living in the United States in the 1950s, but are Americans today enjoying the standards of living that their parents and grandparents enjoyed in the post-war years?

After the Second World War, many Americans became richer and their living standards increased as the economy grew. From 1945 to 1973, incomes increased by approximately 3% per year. From the mid-1970s to the mid-1990s, incomes rose very slowly, but then they increased sharply for five years between 1995 and 2000. Overall, incomes have been rising by less and less each year and now the annual increase is almost nothing. However, there is more to living standards than income and spending money.

Job security and unemployment also play a role in the standard of living. Nowadays, factories and offices are closing, which makes jobs less secure. Unemployment, too, is higher than it was in the past. The number of people without a job in the 1950s fell to around 2.5%, but now this figure stands at around 9.5%.

Another measure of the standard of living is the health of the population. Life expectancy is an important measurement of the health in a country. Life expectancy has increased from 68 years in 1950 to 78 today, but the USA is now behind Germany and the United Kingdom (80), France (81) and Japan (82).

One reason for this problem with life expectancy in the United States is obesity, because this has an effect on the general health of the population. In the USA, 35% of adults are obese now, compared with 10% in 1950. This increase is due to the availability and consumption of fast food.

Of course, most Americans own more things than in the post-war years. For example, dishwashers, air conditioning, TVs and phones were only for the richer members of society. Now they can be found in most homes. However, some economists would argue that the standard of living cannot be rising if people are becoming less healthy, or if they cannot afford to retire, or if both parents in a family have to work to pay bills. It seems that although we think we have a better standard of living, this may not be the real picture.
WHILE READING

3 Choose the sentence (a–d) that is the best summary of the article.

a The article discusses the standard of living in the United States compared with other developed countries.
b The article discusses the factors that should be taken into account when evaluating a country’s standard of living.
c The article discusses the standard of living in the United States now compared with the 1950s.
d The article discusses how the American Dream became reality for Americans in the post-war years.

Skimming

When we skim a text, we read it quickly to get a general idea of what the text is about, without needing to understand every word.

4 Read the text again and choose the correct statement.

1 a Incomes rose quickly from 1995 to 2000 but they have been increasing very slowly since then.
b Incomes rose quickly from 1995 to 2000 but they have been decreasing since then.
2 a In the 1950s, people felt secure in their jobs because workplaces weren’t closing.
b In the 1950s, people felt secure in their jobs because of the high unemployment rate.
3 a Life expectancy in the USA is lower than in the United Kingdom, France and Japan but higher than in Germany.
b Life expectancy in the USA is lower than Germany, the United Kingdom, France and Japan.
4 a Obesity rates in the USA have risen from 10% to 35% since 1950.
b Obesity rates in the USA have remained at 35% for over 10 years.
5 a The standard of living in the USA is better than in the 1950s.
b The standard of living in the USA is better than in the 1950s in terms of material wealth, but people work hard to achieve it.

READING BETWEEN THE LINES

5 Work with a partner. Try to answer the questions below.

1 What factors can improve life expectancy?
2 What effect does obesity have on life expectancy?
DISCUSSION

6 Work with a partner. Discuss the questions below.

1 How has life in your country changed over the last 60 years?
2 Is the standard of living better or worse now than in the past? Explain your answer.
3 Has your country been affected by an economic crisis? What happened?

LANGUAGE DEVELOPMENT

ACADEMIC VOCABULARY

1 Use the Glossary on page 197 to find the meanings of the words in the table.

<table>
<thead>
<tr>
<th>noun</th>
<th>adjective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 economy</td>
<td>economic</td>
</tr>
<tr>
<td>2 finance</td>
<td>financial</td>
</tr>
<tr>
<td>3 wealth</td>
<td>wealthy</td>
</tr>
<tr>
<td>4 poverty</td>
<td>poor</td>
</tr>
<tr>
<td>5 manufacturing</td>
<td>manufactured</td>
</tr>
<tr>
<td>6 employment</td>
<td>employed</td>
</tr>
<tr>
<td>7 profession</td>
<td>professional</td>
</tr>
<tr>
<td>8 industry</td>
<td>industrial</td>
</tr>
</tbody>
</table>

2 Complete the sentences (1–8) using either an adjective or a noun from the table in Exercise 1. Each row in the table shows the choices for each sentence.

1 There are major problems with the ____________ at the moment.
2 The company is looking to the banks for ____________ assistance.
3 Several new internet companies have attracted ____________ investors.
4 ____________ is still a big problem in parts of the USA.
5 The UK has a smaller ____________ sector than Germany.
6 ____________ is a big issue for the government because there are not many new jobs.
7 ____________ services like legal or financial advice can be expensive.
8 The local area has a long history of heavy ____________ with its steel works and chemical plants.
SYNONYMS

3 Match the words (1–6) to their synonyms (a–f).

1 purchase   a household
2 income     b pay for
3 employee   c buyer
4 fund       d buy
5 consumer   e worker
6 domestic  f salary

4 Read the sentences (1–10) below and underline the words from Exercise 3. The first two have been done for you as examples.

1 The money each household owes needs to be reduced.
2 We need to decrease the amount of domestic debt.
3 The state is unable to pay for any further medical facilities.
4 Salaries have not increased for years.
5 The employee bonus scheme means you get more money if you work hard.
6 Buyers should make themselves familiar with their rights when they shop online.
7 The government cannot fund any more new hospitals.
8 There has been no real rise in income lately.
9 Consumers should know their rights when they use online retailers.
10 There are incentives for workers who perform well.

5 Now match the sentences that have the same meaning.

CRITICAL THINKING

At the end of this unit, you will write an explanatory paragraph describing a graph. Look at this unit’s Writing task in the box below.

The graphs show the retail price and annual sales of two different types of television. Describe both graphs and explain the data.

Understanding visual information
Before we can describe a graph or table, we need to make sure we can understand the information.
Work with a partner. Look at the graphs above, which show information about CRT TVs and LCD TVs, and answer the questions below.

1. How much did an LCD TV cost:
   a. in 2000?
   b. in 2003?
   c. in 2005?
   d. in 2010?

2. How much did a CRT TV cost:
   a. in 2000?
   b. in 2004?
   c. in 2009?
   d. in 2010?

3. How many LCD TVs were sold:
   a. in 2005?
   b. in 2007?

4. How many CRT TVs were sold:
   a. in 2005?
   b. in 2007?

5. In which year were the most LCD TVs sold?
6. In which year were the fewest CRT TVs sold?

Interpreting visual information

Once we have understood the information, we need to interpret it. This means identifying relationships between the points on the graph (for example, the number of sales). In the case of a comparison between two or more sets of information (in this case, the two different TVs), we also need to identify the relationships between the sets of data.
2 Work with a partner. Look again at the graph and answer the questions below.

1. Why do you think LCD TVs were so much more expensive than CRT TVs when they were first introduced?
2. Why do you think the prices of both types of TV went down over the period from 2000 to 2010?
3. Which product do you think came on to the market first? Why do you think this?
4. Is there a link between the answers to Questions 5 and 6 in Exercise 1?
5. How many LCD TVs do you think were sold in 2011?

GRAMMAR FOR WRITING

1. Match the sentences (1–6) to the graphs (a–f).

   1. Sales of TVs rose sharply and then fell dramatically.
   2. TV sales decreased slightly and then decreased sharply.
   3. The number of TV sales did not change.
   4. Television sales increased slightly and then increased sharply.
   5. At first, the number of TVs sold did not change but later this figure fluctuated.
   6. TV sales fell slightly but did not change after that.

   ![Graphs](a, b, c, d, e, f)

Describing graphs - noun phrases and verb phrases

We can describe data with a verb phrase (a verb and an adverb) or a noun phrase (an article, adjective and a noun).

Verb phrase

Sales of TVs rose sharply and then decreased sharply.

Noun phrase

There was a sharp rise in sales of TVs and then a sharp decrease.
2 Now write the verb phrases (1–5) as noun phrases. The first one has been done for you as an example.

1 rise sharply
2 fall dramatically
3 decrease slightly
4 increase gradually
5 fluctuate considerably

Prepositions and conjunctions

We use prepositions and conjunctions to add data.

Sales increased sharply from 6,000 to 7,000 units between 2005 and 2006.

We use of in a noun phrase to describe the total change.

This was an increase of 1,000 units.

3 Complete the sentences below using the words in bold in the examples above.

1 There was a dramatic fall in sales _____ 50 units, _____ 350 _____ 300.
2 Prices rose sharply _____ around 25,000 _____ well over 50,000 – a rise _____ 100%.
4 Prices fluctuated considerably _____ 2010 _____ 2011.
5 There was a gradual increase in prices _____ £199 _____ £229 in the last six months of the year.

APPROXIMATIONS

4 Which of the words and phrases in the box mean the same? Sort them into three groups.

almost nearly more than roughly less than over about under approximately around

5 Match the phrases (1–7) to the figures (a–g).

1 almost a hundred pounds a £11,156
2 roughly a thousand pounds b £485,134
3 over ten thousand pounds c £240,000
4 more than eleven thousand pounds d £1,014
5 less than a quarter of a million pounds e £10,237
6 roughly half a million pounds f £996,001
7 approximately a million pounds g £99.99
ACADEMIC WRITING SKILLS

WRITING A DESCRIPTION OF A GRAPH

6 Look at the description of a graph below and match the different parts of the paragraph (1–3) to the labels (a–f). Not all the labels are used.

1 The graph shows the sales figures for two types of mobile phone over an eight-year period.

2 In year 1, 4,000 units of phone A were sold. Sales of phones increased sharply for the next three years to reach a peak of 20,000, but decreased slightly in year 5. Sales dropped dramatically in years 6 and 7 to 3,000, as a result of the popularity of phone B. In year 8, only 500 units of phone A were sold. Sales of phone B grew more gradually in years 1 and 2 but then in years 3 to 6, there was a dramatic increase in the sales units for the phone as it became well known, until it peaked at 25,000. There was a slight decrease in year 7 but the number of phones sold fell dramatically in year 8 to only 12,000 units.

3 The graph suggests that sales of phone B will probably drop further in the next year or so.

a Introductory sentence – explains what happened to sales in year one
b Introductory sentence – explains what can be seen on the graph
c Main part of the paragraph – highlights key points
d Main part of the paragraph – explains all the changes
e Concluding sentence – summarizes the changes, predicts what will happen in the future or makes a final comment about the topic of the paragraph
f Concluding sentence – explains the last movements on the graph
The graphs show the retail price and annual sales of two different types of television. Describe both graphs and explain the data.

1 Write a description of the two graphs. Write an introductory sentence to say briefly what the graphs show, a main part about the prices and sales, and a concluding sentence summarizing the changes.
2 Use the task checklist to review your paragraphs for content and structure.

**TASK CHECKLIST**

<table>
<thead>
<tr>
<th>Task</th>
<th>✔️</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is there an introduction for the graphs?</td>
<td></td>
</tr>
<tr>
<td>Have you described the important information in both graphs and given possible reasons for the changes?</td>
<td></td>
</tr>
<tr>
<td>Have you written a concluding sentence or paragraph?</td>
<td></td>
</tr>
</tbody>
</table>

3 Make any necessary changes to your paragraphs.

4 Now use the language checklist to edit paragraphs for language errors which are common to B1 learners.

**LANGUAGE CHECKLIST**

<table>
<thead>
<tr>
<th>Task</th>
<th>✔️</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you checked the grammar, especially the tenses and prepositions?</td>
<td></td>
</tr>
<tr>
<td>Have you varied your language, using noun phrases, verb phrases and synonyms to describe the topic and the changes?</td>
<td></td>
</tr>
<tr>
<td>Do nouns and verbs agree? Do singular nouns have a singular verb? Do plural nouns have a plural verb?</td>
<td></td>
</tr>
</tbody>
</table>

5 Make any necessary changes to your paragraphs.
OBJECTIVES REVIEW

6 Check your objectives.

I can ...

- watch and understand a video about an emerging economy
- skim a text
- write a description of a graph
- write an explanatory paragraph describing a graph

WORDLIST

<table>
<thead>
<tr>
<th>UNIT VOCABULARY</th>
<th>ACADEMIC VOCABULARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>economic growth (n)</td>
<td>decrease (v)</td>
</tr>
<tr>
<td>interest rate (n)</td>
<td>economy (n)</td>
</tr>
<tr>
<td>investment (n)</td>
<td>employment (n)</td>
</tr>
<tr>
<td>investor (n)</td>
<td>fall (n)</td>
</tr>
<tr>
<td>market value (n)</td>
<td>finance (n)</td>
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<td>natural resources (n)</td>
<td>increase (v)</td>
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<tr>
<td>precious metal (n)</td>
<td>industry (n)</td>
</tr>
<tr>
<td>recession (n)</td>
<td>manufacturing (n)</td>
</tr>
<tr>
<td>stocks and shares (n)</td>
<td>poverty (n)</td>
</tr>
<tr>
<td></td>
<td>profession (n)</td>
</tr>
<tr>
<td></td>
<td>rise (v)</td>
</tr>
<tr>
<td></td>
<td>wealth (n)</td>
</tr>
</tbody>
</table>
## LEARNING OBJECTIVES

<table>
<thead>
<tr>
<th>Skill</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watch and listen</td>
<td>Watch and understand a video about the brain</td>
</tr>
<tr>
<td>Reading skills</td>
<td>Preview a text</td>
</tr>
<tr>
<td>Academic writing skills</td>
<td>Write a description of a process</td>
</tr>
<tr>
<td>Writing task</td>
<td>Write a process paragraph</td>
</tr>
</tbody>
</table>
UNLOCK YOUR KNOWLEDGE

How much do you know about the different areas of the brain? Write true (T) or false (F) next to the statements below.

1. The left side of the brain is associated with logic and the right side with creativity.  
2. The brain uses 20% of the oxygen in the body.  
3. Only 10% of the brain is used.  
4. The brain can't feel pain.  
5. The brain is made up of 90% water.  
6. Elephants have larger brains than humans.  
7. Yawning cools down the brain to make it work better.  
8. The brain stops growing at seven years old.
PREPARING TO WATCH

1. Answer the questions below.
   1. What colours are the words below written in?
      yellow  blue  black  red  orange  green  brown
   2. What colours are the words below written in?
      red  yellow  blue  green  purple  black  orange  white
   3. Which was more difficult to answer – Question 1 or Question 2? Why?
   4. What do you think would happen if you lost part of your brain, through an accident or illness?

2. Complete the questions below using the words in the box.

   operation  recovery  organ  liquid  proof  epilepsy  seizures

   1. _______________ is a condition of the brain which causes a person to become unconscious for short periods or to move in a violent and uncontrolled way.
   2. Sudden attacks of uncontrolled movement are called fits or _______________.
   3. The brain is surrounded by _______________.
   4. _______________ of something is a fact that shows something exists or is true.
   5. After an _______________, the patient is taken to the _______________ room.
   6. The brain is an _______________ in the body.
WHILE WATCHING

3 Watch the video and complete the notes using one word for each gap.

- Jody Miller is (1) ________ years old
- has (2) ________ a brain
- after her third birthday (3) ________ took control of her brain
- affected the (4) ________ side of brain
- lost control of the (5) ________ side of body
- seizures might kill Jody: only choice was to (6) ________ out the damaged side
- operation was (7) ________ and careful but a success
- doctors hoped her brain would change and would learn to do (8) ________ for her
- brain changed very (9) ________ and she was able to (10) ________ out of hospital

4 Watch again. Choose the correct word in the sentences below about the brain.

1. The brain weighs one and a half kilos / half a kilo and is the size of a grapefruit / melon.
2. The left / right side of the brain controls / operates the left side of the body.
3. Each half of the brain is split into three / four parts, which control thinking, movement and feeling / feeding.

5 Work with a partner. Try to answer the questions below.

1. Why is Jody living proof of the amazing power of the brain?
2. How do you think Jody’s parents felt before the operation?
3. Why do you think Jody’s brain changed so quickly after the operation?
4. Why was it significant that she could walk out of the hospital?

DISCUSSION

6 Work with a partner. Discuss the questions below.

1. What do you think were the risks that Jody’s parents had to consider when deciding whether to let their daughter have the operation?
2. How can we look after our brains and exercise them?
PREPARING TO READ

1 Work with a partner. Look at the two sets of photographs in the article, which show two different psychology experiments, and answer the questions.

In the first set of photographs:
1 How many of the people playing with the ball have white T-shirts?

In the second set of photographs:
2 What are the men talking about?
3 Are the men in the first photograph the same as those in the third photograph?
4 Do you think the man giving directions has noticed any change?

Previewing

When we first get a text, it is a good idea to look at the title and any photographs to get an idea of what it is about. This can help us to understand the text, especially if it includes difficult vocabulary or complex ideas.

WHILE READING

2 Read the journal and answer the questions.

1 What did Simons and Chabris want to investigate?

2 What did Simons and Levin want to investigate?

3 What did the results of the experiments show?

We usually believe what our brain tells us, but there is some amazing evidence which shows that the brain tricks us. As a result, we think we can see something that is not actually there or we ignore things that actually are there.

Psychologists Daniel Simons and Christopher Chabris have researched this phenomenon, which they call 'change blindness'. Their experiments show how we sometimes just do not see what is in front of our eyes because we are concentrating on watching something else.
The ‘Invisible Gorilla’ experiment is probably their most famous one, and it is described in many psychology textbooks. In this experiment, the participants were shown a video of two groups of people (one group in white T-shirts and one group in black T-shirts) who passed basketballs around in a hallway. Simons and Chabris asked people to count how many times the white team passed the ball. While the two teams were passing their balls around, a person who was dressed up as a gorilla walked through the group and stopped to look at the camera. Simons and Chabris found that approximately half of the research participants did not notice the gorilla.

In another experiment, called the ‘Door Study’, Simons and Daniel Levin investigated whether people noticed when the person that they were talking to changed! Participants in this study were walking across a university campus when they were stopped by someone they didn’t know. The stranger asked for directions and the participant started to give the directions. While the participant was talking to the stranger, two men who were carrying a wooden door walked between the participant and the stranger. At this point, the stranger swapped places with one of the men carrying the door. After that, the participant continued to give the directions and finally, the participant was asked if they had noticed anything change. Once again, about half of those tested did not notice that, when the door was passing by, the stranger had changed places with a man who was taller, thinner and who sounded different. He was also wearing different clothes.

It just goes to show how we can’t always trust our own brains. Even though we may think we know what is going on, we can be blind to large changes in our environment.
3 Complete the table using no more than two words for each answer.

<table>
<thead>
<tr>
<th>experiment</th>
<th>methodology</th>
<th>results</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) _________</td>
<td>Participants in the experiment watch two teams of people throw a ball around. They have to _________ the number of times the _________ is passed by one of the teams. While this is happening, a _________ walks in front of the camera.</td>
<td>(5) _________ of the participants do not notice the change.</td>
</tr>
<tr>
<td>(6) _________</td>
<td>A stranger asks the participant for _________ . While they are talking, two people carrying a _________ walk between them and the _________ changes places with one of the people. The ‘new’ stranger and the participant then continue talking.</td>
<td>(10) _________ of the participants do not notice that they are talking to someone _________ .</td>
</tr>
</tbody>
</table>

READING BETWEEN THE LINES

4 Try to answer the questions below.

1. What does the writer mean by *participants*?
2. Why do you think people didn’t notice that the ‘strangers’ changed places in the second experiment?

DISCUSSION

5 Work with a partner. Discuss the questions below.

1. Why do you think humans have developed change blindness?
2. Is it important for science lessons in schools to be fun? Why? / Why not?
PREPARING TO READ

1. Scan the newspaper article and underline these words each time you find them: brain, technology and robotic arm.

2. Now look at the words you underlined and answer the questions.
   1. Which paragraphs are about the brain?
   2. Which paragraphs are about technology?
   3. Which paragraphs are about the robotic arm?
   4. Which paragraph does not have the word brain in it? What is this paragraph about?

MIND CONTROL

A. Imagine looking at something and being able to move it just by using your brain! That is exactly what the new technology called BrainGate can do – with the help of a robotic arm, anyway.

B. BrainGate is the idea of Professor John Donoghue and his team of researchers at the Brown Institute for Brain Science, in Providence, Rhode Island, USA, who investigate how humans change thoughts in the brain into movements. BrainGate is attached directly to the brain. First of all, gold wires are put into the part of the brain that controls movement. These are then connected to a small computer chip which is just a few millimetres in size. When the person thinks about different movements, this creates electrical signals, which are picked up by the chip. After this, the signals that are created by the brain are sent back to a computer, which changes the signals into movements. Finally, the computer uses the robotic arm to carry out these movements. BrainGate can already be used to write an e-mail, operate the TV remote control or even play computer games, just by brain power.

C. The technology is still in the early stages of development but it has already cost millions of dollars to develop and when it is available for use, it will probably cost thousands of dollars per person. There are still many challenges ahead for Donoghue and his team. They are currently planning a mini wireless version of the device, which will allow people to be connected to the computer at all times. Donoghue also dreams of using this technology to help disabled people who can’t move their arms and legs. He plans to connect the brain device directly to their own paralysed limbs. This will mean that the person can control their own body again, without relying on a robotic arm. In the near future, he would like to see disabled people feed themselves again and maybe even stand up using BrainGate.

D. Clearly, this research could change the lives of disabled people but they are not the only ones who are interested in it. The military think it could be very useful, too. It is easy to understand why scientists might be worried about how thought-controlled machines could be used by the military.
WHILE READING

3 Complete the sentences below about the BrainGate technology. Use no more than three words in each answer.

1 BrainGate was invented by ____________ .
2 Metal wires are put into the part of the brain which ____________ .
3 When the user thinks of movements, electrical signals are produced and the ____________ changes these signals into movements.
4 The movements are carried out by ____________ .
5 Donoghue and his team will face a lot of ____________ .
6 Governments and the military are also ____________ in the technology.

4 Read the article again and write true (T), false (F) or does not say (DNS) next to the statements below.

1 Researchers at the Brown Institute for Brain Science are investigating how movement is controlled by thinking. ____________
2 BrainGate works by reading brain signals and sending the information to a computer chip, which changes the signals into movement. ____________
3 A person with BrainGate can use the robotic arm to make coffee and a sandwich. ____________
4 When the technology is available for use, it is likely to cost around $1,000 per person. ____________
5 There is now also a wireless version of BrainGate. ____________
6 Donoghue says it will be possible to make the perfect soldier using this technology. ____________

READING BETWEEN THE LINES

5 Work with a partner. Try to answer the questions below.

1 How might this technology be used by the military?
2 Why do you think scientists are concerned that the military are interested in this equipment?

DISCUSSION

6 Work with a partner. Discuss the question below.

Do the potential benefits of BrainGate outweigh the risk that people might abuse the technology? Why / Why not?
1 Match the nouns (1–10) to their definitions (a–j).

<table>
<thead>
<tr>
<th>nouns</th>
<th>definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 limb</td>
<td>a the treatment of injuries or illness by cutting open the body and repairing it</td>
</tr>
<tr>
<td>2 medication</td>
<td>b an unwanted effect of a drug that happens in addition to the main effect</td>
</tr>
<tr>
<td>3 infectious disease</td>
<td>c the movement of an organ from one body to another</td>
</tr>
<tr>
<td>4 vaccination</td>
<td>d medicine or drugs used to treat an illness</td>
</tr>
<tr>
<td>5 surgery</td>
<td>e medical care to try to make a patient healthy</td>
</tr>
<tr>
<td>6 transplant</td>
<td>f something that makes someone with illness healthy again</td>
</tr>
<tr>
<td>7 disorder</td>
<td>g an injection of a substance that prevents people from getting a disease</td>
</tr>
<tr>
<td>8 cure</td>
<td>h an illness that is passed from person to person</td>
</tr>
<tr>
<td>9 treatment</td>
<td>i an arm or leg</td>
</tr>
<tr>
<td>10 side-effect</td>
<td>j an illness affecting the function of the mind or body</td>
</tr>
</tbody>
</table>
2 Complete the sentences using the nouns in Exercise 1.

1. Stress is a kind of mental ________________.
2. Brain ________________ is a very dangerous procedure.
3. Simple things like washing hands can prevent the spread of an ________________.
4. Exercise is sometimes seen as a ________________ for depression or sadness.
5. One ________________ of aspirin is stomach bleeding in some patients.
6. People who lose a ________________ in an accident can be given an artificial arm or leg.
7. There is no ________________ for some kinds of cancer.
8. Children often receive a ________________ against influenza.
9. Most ________________ is given in the form of pills or liquids.
10. People who receive a human heart ________________ can live for 30 years after the operation.

3 Work with a partner. Try to answer the questions below.

1. What are the main organs in the human body?
2. How can we control infectious diseases?
3. What is the difference between a treatment and a cure?
4. What are the problems with transplant surgery?

**Academic verbs**

When we describe a process in academic English, we use a range of academic verbs.

4 Use the Glossary on page 198 to check the meaning of the verbs in the box.

recover  carry out  care  complain  advise  confirm  appear

5 Put the sentences in order to describe the treatment of a patient.

a. The patient recovers from the operation at home.  
b. A surgeon arrives to carry out the operation.  
c. Nurses care for the patient on the recovery ward.  
d. The patient complains of terrible stomach pain.  
e. The patient is transferred to a hospital.  
f. The hospital doctor advises that the patient has their appendix removed.  
g. The hospital doctor confirms that the appendix is diseased.  
h. The family doctor notices the patient appears very ill and requires emergency treatment.
CRITICAL THINKING

At the end of this unit, you will write process paragraphs. Look at this unit's Writing task in the box below.

Write a four-paragraph description of this flow chart, explaining how the body responds to changes in temperature.

1. Look at the flow chart and match the sentence halves. Use the Wordlist on page 198 to check the meaning of the words.

   1. The hypothalamus is an area of the brain which
   2. Metabolism means
   3. The hypothalamus receives
   4. You have less blood near the skin when you are
   5. You shiver when your muscles
   6. You have more blood near the skin when you are

   a. chemical reactions in the body that makes fuel from food.
   b. hot.
   c. cold.
   d. signals from heat sensors in the skin.
   e. contract and relax.
   f. controls body temperature.
2 Answer the questions about the diagram.

1 Where is the hypothalamus?
2 How does the hypothalamus sense if it is too hot or cold?
3 Why does the hypothalamus need feedback when the body gains or loses heat?
4 What do you think happens if the temperature is too hot or cold for this system to work?

WRITING

GRAMMAR FOR WRITING

Passive

We make the passive by moving the topic of the paragraph to the start of the sentence, adding the correct form of be and changing the main verb to the past participle. We add the subject at the end with by or remove it if we don’t need it.

The Brown Institute of Brain Science owns BrainGate. BrainGate is owned by the Brown Institute of Brain Science.

1 Think back to Reading 2. Answer the questions below.

1 Which of the two sentences in the box was used in the article?
   a Scientists attach BrainGate directly to the brain.
   b BrainGate is attached directly to the brain.

2 What is the topic of the entire paragraph, scientists or BrainGate?
3 How many of the sentences in the box are in the present tense?

2 Find six more examples of the passive in paragraph B of Reading 2 on page 183.
3 Change the verbs in the sentences (1–6) into the passive with be and the past participle to complete the sentences.

1 BrainGate ________________ (invent) by Professor John Donoghue.
2 People’s brains can ________________ (damage) by epilepsy.
3 Language ________________ (produce) in two major areas of the brain.
4 The brain can ________________ (train) to overcome some hearing loss.
5 Powerful chemicals ________________ (release) by the brain when you are stressed.
6 Shivering ________________ (increase) in response to a low body temperature.

4 The topic of this unit is the brain. Change the sentences below and use the passive so that the brain is the topic, at the beginning of each sentence.

1 You can fool the brain with simple tricks.

2 People can train the brain to relearn skills after an injury.

3 Forty billion nerve cells make up the brain.

4 Epilepsy interrupts the working of the brain.

5 You can damage your brain in an accident or through disease.

6 Playing music can promote brain development.

ACADEMIC WRITING SKILLS

Writing a description of a process

When we describe a process, we need to show the reader the sequence of events in that process. To do this, we use sequencing words and phrases.

to begin with
to start with
first of all
then
the first stage/step is
next
after that
finally
following that

1 Read the description of the diagram below and complete it using the words in the box.

The diagram (1) _______________ how the brain controls the amount of water in the body. (2) _______________ of all, when the body gets hot, water is lost in sweat. (3) _______________ that the hypothalamus in the brain detects that there is not enough water in the blood. (4) _______________ the hypothalamus causes the pituitary gland near the brain to release a large amount of a chemical called ADH. The next (5) _______________ is when the kidneys remove water from the urine and keep it in the body. (6) _______________ , when the body has too much water, the process works the other way. To (7) _______________ with, the hypothalamus detects that the blood is too watery, (8) _______________ the pituitary gland releases less ADH, and (9) _______________ the kidneys lose more water and the water level in the body returns to normal. (10) _______________ the diagram shows how complex actions are controlled by the brain, glands and kidneys automatically, without our knowledge.
1 Answer the Writing task using information from the Critical thinking section on page 187. Make notes in the space below, then write four paragraphs describing the flow chart.

1 Introduction
2 Say how the body responds to a high temperature.
3 Say how the body responds to a low temperature.
4 Conclusion
2 Use the task checklist to review your paragraphs for content and structure.

**TASK CHECKLIST**

- Have you introduced the topic by saying what the flow chart shows?
- Have you joined the sentences using sequencing phrases?
- Have you used all the information from the diagram?

3 Make any necessary changes to your paragraphs.

4 Now use the language checklist to edit your paragraphs for language errors which are common to B1 learners.

**LANGUAGE CHECKLIST**

- Have you used the passive correctly?
- Have you used a range of academic verbs?
- Have you used medical language correctly?

5 Make any necessary changes to your paragraphs.
OBJECTIVES REVIEW

6 Check your objectives.

I can …

watch and understand a video about the brain
very well
not very well

preview a text
very well
not very well

write a description of a process
very well
not very well

write a process paragraph
very well
not very well

WORDLIST

UNIT VOCABULARY | ACADEMIC VOCABULARY
--- | ---
cure (n) | advise (v)
disorder (n) | appear (v)
epilepsy (n) | care (n)
liquid (n) | carry out (v)
medication (n) | complain (v)
operation (n) | confirm (v)
proof (n) | recover (v)
recovery (n) |  
seizure (n) |  
side-effect (n) |  
surgery (n) |  
treatment (n) |  
vaccination (n) |  

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Pronunciation</th>
<th>Part of speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>aggressive</td>
<td>/əˈɡresɪv/</td>
<td>(adj)</td>
<td>behaving in an angry and violent way towards another person</td>
</tr>
<tr>
<td>attack</td>
<td>/əˈtæk/</td>
<td>(n)</td>
<td>a violent act intended to hurt or damage someone or something</td>
</tr>
<tr>
<td>common</td>
<td>/ˈkɒmən/</td>
<td>(adj)</td>
<td>happening often or existing in large numbers</td>
</tr>
<tr>
<td>cruel</td>
<td>/ˈkrʊəl/</td>
<td>(adj)</td>
<td>extremely unkind and unpleasant and causing pain to people or animals intentionally</td>
</tr>
<tr>
<td>endangered</td>
<td>/ɪnˈdendʒəd/</td>
<td>(adj)</td>
<td>animals and plants which may soon disappear from the world because there are very few left alive</td>
</tr>
<tr>
<td>extinction</td>
<td>/ɪkˈstɪŋkʃən/</td>
<td>(n)</td>
<td>when a type of animal no longer exists</td>
</tr>
<tr>
<td>familiar</td>
<td>/fəˈmɪliə/</td>
<td>(adj)</td>
<td>easy to recognize because of being seen, met, heard, etc. before</td>
</tr>
<tr>
<td>fatal</td>
<td>/ˈfeɪtəl/</td>
<td>(adj)</td>
<td>a fatal illness or accident causes death</td>
</tr>
<tr>
<td>habitat</td>
<td>/ˈhæbɪtæt/</td>
<td>(n)</td>
<td>the natural environment of an animal or plant</td>
</tr>
<tr>
<td>healthy</td>
<td>/ˈhelθi/</td>
<td>(adj)</td>
<td>physically strong and well</td>
</tr>
<tr>
<td>hunt</td>
<td>/hʌnt/</td>
<td>(v)</td>
<td>to chase and kill wild animals</td>
</tr>
<tr>
<td>hunting</td>
<td>/ˈhʌntɪŋ/</td>
<td>(n)</td>
<td>the sport of chasing and killing animals</td>
</tr>
<tr>
<td>overfishing</td>
<td>/əʊvə ˈfɪʃɪŋ/</td>
<td>(n)</td>
<td>catching so many fish in a part of the sea that there are not many fish left there</td>
</tr>
<tr>
<td>weak</td>
<td>/wik/</td>
<td>(adj)</td>
<td>not physically strong</td>
</tr>
<tr>
<td>bride</td>
<td>/braɪd/</td>
<td>(n)</td>
<td>a woman who is getting married</td>
</tr>
<tr>
<td>brief</td>
<td>/brɪf/</td>
<td>(adj)</td>
<td>lasting only a short time or using only a few words</td>
</tr>
<tr>
<td>certain</td>
<td>/ˈsɜːtən/</td>
<td>(adj)</td>
<td>completely sure of something, or knowing without doubt that something is true</td>
</tr>
<tr>
<td>engagement ring</td>
<td>/ɪŋɡeɪdʒmənt rɪŋ/</td>
<td>(n)</td>
<td>a ring usually given by a man to a woman to demonstrate their engagement</td>
</tr>
<tr>
<td>fiancé</td>
<td>/fiˈɑ̃nseɪ/</td>
<td>(n)</td>
<td>the man who someone is engaged to be married to</td>
</tr>
<tr>
<td>fiancée</td>
<td>/fiˈɑ̃nseɪ/</td>
<td>(n)</td>
<td>the woman who someone is engaged to be married to</td>
</tr>
<tr>
<td>groom</td>
<td>/ɡrʊm/</td>
<td>(n)</td>
<td>a man who is getting married</td>
</tr>
<tr>
<td>important</td>
<td>/ɪmˈpɔːtənt/</td>
<td>(adj)</td>
<td>having a lot of power, influence or effect</td>
</tr>
<tr>
<td>legal requirement</td>
<td>/ˈlɪɡəl rɪˈkwaiərənt/</td>
<td>(n)</td>
<td>something you are required to do by law</td>
</tr>
<tr>
<td>marriage certificate</td>
<td>/ˈmærɪdʒ saˈtɪfɪkət/</td>
<td>(n)</td>
<td>an official document which records that two people are married</td>
</tr>
<tr>
<td>obvious</td>
<td>/ˈɒbviəs/</td>
<td>(adj)</td>
<td>easy to understand or see</td>
</tr>
<tr>
<td>punctual</td>
<td>/ˈpʌŋktʃuəl/</td>
<td>(adj)</td>
<td>arriving at the right time and not too late</td>
</tr>
<tr>
<td>reception</td>
<td>/riˈsepʃən/</td>
<td>(n)</td>
<td>a formal party that is given to celebrate a special event or to welcome someone</td>
</tr>
<tr>
<td>registry office</td>
<td>/ˈredʒɪstri ˈɒfɪs/</td>
<td>(n)</td>
<td>in Britain, a place where births, deaths, and marriages are officially recorded and where you can get married</td>
</tr>
<tr>
<td>separate</td>
<td>/ˈseprət/</td>
<td>(adj)</td>
<td>different or new</td>
</tr>
<tr>
<td>serious</td>
<td>/ˈstɪriəs/</td>
<td>(adj)</td>
<td>a serious problem or situation is bad and makes people worry</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Pronunciation</td>
<td>Part of speech</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>---------------</td>
<td>----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>tend</td>
<td>/tend/</td>
<td>(v)</td>
<td>to look after someone or something</td>
</tr>
<tr>
<td>wedding ceremony</td>
<td>/'wedîŋ 'serîmən/</td>
<td>(n)</td>
<td>the social event where two people get married</td>
</tr>
<tr>
<td>wedding list</td>
<td>/'wedîŋ 'lɪst/</td>
<td>(n)</td>
<td>a list of presents that a couple who are about to get married have asked to receive</td>
</tr>
<tr>
<td>ancient</td>
<td>/'entʃənt/</td>
<td>(adj)</td>
<td>from a long time ago</td>
</tr>
<tr>
<td>archaeologist</td>
<td>/ɑːkiˈɒlədʒɪst/</td>
<td>(n)</td>
<td>someone who studies ancient cultures by looking for and examining their buildings, tools, and other objects</td>
</tr>
<tr>
<td>archaeology</td>
<td>/ɑːkiˈɒlədʒi/</td>
<td>(n)</td>
<td>the study of ancient cultures by looking for and examining their buildings, tools, and other objects</td>
</tr>
<tr>
<td>artefact</td>
<td>/ˈaːtɪfækt/</td>
<td>(n)</td>
<td>an object, especially something very old of historical interest</td>
</tr>
<tr>
<td>compulsory</td>
<td>/kəm'pɔːlsəri/</td>
<td>(adj)</td>
<td>If something is compulsory, you must do it because of a rule or law</td>
</tr>
<tr>
<td>display</td>
<td>/ˈdiːsplei/</td>
<td>(v)</td>
<td>to arrange something somewhere so that people can see it</td>
</tr>
<tr>
<td>document</td>
<td>/ˈdɒkjəment/</td>
<td>(n)</td>
<td>a piece of paper with official information on it</td>
</tr>
<tr>
<td>economic</td>
<td>/ɪkənˈɒmɪk/</td>
<td>(adj)</td>
<td>relating to trade, industry and money</td>
</tr>
<tr>
<td>excavation</td>
<td>/ekskə'veɪʃən/</td>
<td>(n)</td>
<td>when earth is removed covering very old objects buried in the ground in order to discover things about the past</td>
</tr>
<tr>
<td>exhibit</td>
<td>/ɪɡ/'zɪbɪt/</td>
<td>(n)</td>
<td>an object such as a painting that is shown to the public</td>
</tr>
<tr>
<td>exhibition</td>
<td>/ɪk'sɪbɪʃən/</td>
<td>(n)</td>
<td>when objects such as paintings are shown to the public</td>
</tr>
<tr>
<td>field</td>
<td>/ˈfild/</td>
<td>(n)</td>
<td>an area of study or activity</td>
</tr>
<tr>
<td>financial</td>
<td>/faɪ'næntʃəl/</td>
<td>(adj)</td>
<td>relating to money or how money is managed</td>
</tr>
<tr>
<td>fossil</td>
<td>/ˈfɒsəl/</td>
<td>(n)</td>
<td>part of an animal or plant from thousands of years ago, preserved in rock</td>
</tr>
<tr>
<td>hieroglyphics</td>
<td>/haɪərəʊˈɡlɪfɪks/</td>
<td>(n)</td>
<td>a system of writing which uses pictures instead of words, especially used in ancient Egypt</td>
</tr>
<tr>
<td>knight</td>
<td>/naɪt/</td>
<td>(n)</td>
<td>a man of high social rank who fought as a soldier on a horse in the past</td>
</tr>
<tr>
<td>natural history</td>
<td>/ˈnætʃərəl 'hɪstəri/</td>
<td>(n)</td>
<td>the study of animals and plants</td>
</tr>
<tr>
<td>period</td>
<td>/pərɪədi/</td>
<td>(n)</td>
<td>a length of time</td>
</tr>
<tr>
<td>research</td>
<td>/rɪ'sɜːtʃ/</td>
<td>(v)</td>
<td>to study a subject in detail or to try to find information about a subject</td>
</tr>
<tr>
<td>sword</td>
<td>/sɔːd/</td>
<td>(n)</td>
<td>a weapon with a long sharp metal blade and a handle</td>
</tr>
<tr>
<td>tuition</td>
<td>/tʃuˈɪʃən/</td>
<td>(n)</td>
<td>the teaching of one person or of a small group of people</td>
</tr>
<tr>
<td>attempt</td>
<td>/ə'tempt/</td>
<td>(v)</td>
<td>to try to do something, especially something difficult</td>
</tr>
<tr>
<td>bus lane</td>
<td>/ˈbʌs leɪn/</td>
<td>(n)</td>
<td>a special part of the road on which only buses are allowed to travel</td>
</tr>
<tr>
<td>carbon-neutral</td>
<td>/kaɪbən 'njuːtərəl/</td>
<td>(adj)</td>
<td>not producing carbon emissions</td>
</tr>
<tr>
<td>congestion charge</td>
<td>/ˈkɒndʒestʃən tʃaɪdʒ/</td>
<td>(n)</td>
<td>the amount of money you have to pay each day to drive into a city centre in order to reduce traffic</td>
</tr>
<tr>
<td>consider</td>
<td>/kən' sıdə/</td>
<td>(v)</td>
<td>to think carefully about something, often before you decide what to do</td>
</tr>
<tr>
<td>convince</td>
<td>/kən'veɪnts/</td>
<td>(v)</td>
<td>to persuade someone or make them certain</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Pronunciation</td>
<td>Part of speech</td>
<td>Definition</td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>----------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>issue</td>
<td>/ˈɪʃu/</td>
<td>(n)</td>
<td>a subject or problem which people are thinking and talking about</td>
</tr>
<tr>
<td>major</td>
<td>/ˈmeɪdʒə/</td>
<td>(adj)</td>
<td>more important, bigger or more serious than others of the same type</td>
</tr>
<tr>
<td>outskirts</td>
<td>/ˈautskərts/</td>
<td>(n)</td>
<td>the outer area of a city or town</td>
</tr>
<tr>
<td>prevent</td>
<td>/prɪˈvent/</td>
<td>(v)</td>
<td>to stop something from happening or someone from doing something</td>
</tr>
<tr>
<td>public transport</td>
<td>/ˈpʌblɪk træntˈspɔːt/</td>
<td>(n)</td>
<td>a system of vehicles such as buses and trains which operate at regular times on fixed routes and are used by the public</td>
</tr>
<tr>
<td>realize</td>
<td>/ˈrɪəlaɪz/</td>
<td>(v)</td>
<td>to understand a situation</td>
</tr>
<tr>
<td>require</td>
<td>/rɪˈkwaiə/</td>
<td>(v)</td>
<td>to need or demand something</td>
</tr>
<tr>
<td>road rage</td>
<td>/ˈrəʊd rɛɪdʒ/</td>
<td>(n)</td>
<td>anger and violence between drivers</td>
</tr>
<tr>
<td>run</td>
<td>/rʌn/</td>
<td>(v)</td>
<td>to organize or control something</td>
</tr>
<tr>
<td>rush hour</td>
<td>/rʌʃ aʊə/</td>
<td>(n)</td>
<td>the time when a lot of people are travelling to or from work and so roads and trains are very busy</td>
</tr>
<tr>
<td>select</td>
<td>/sɪˈlekt/</td>
<td>(v)</td>
<td>to choose someone or something from a group</td>
</tr>
<tr>
<td>traffic congestion</td>
<td>/ˈtræfɪk kændʒəstʃən/</td>
<td>(n)</td>
<td>roads and towns where there is too much traffic and movement is made difficult</td>
</tr>
<tr>
<td>vandalism</td>
<td>/ˈvændəlɪzm/</td>
<td>(n)</td>
<td>the crime of intentionally damaging things in public places</td>
</tr>
<tr>
<td>vehicle</td>
<td>/ˈvɪəkəl/</td>
<td>(n)</td>
<td>something such as a car or bus that takes people from one place to another, especially using roads</td>
</tr>
</tbody>
</table>

**UNIT 5**

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Pronunciation</th>
<th>Part of speech</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>annual</td>
<td>/ˈænjuəl/</td>
<td>(adj)</td>
<td>happening once every year, or relating to a period of one year</td>
</tr>
<tr>
<td>area</td>
<td>/ˈeəriə/</td>
<td>(n)</td>
<td>a part of a building or piece of land used for a particular purpose</td>
</tr>
<tr>
<td>biodiversity</td>
<td>/bətəˈdɒdərˈvɜːsəti/</td>
<td>(n)</td>
<td>the number and types of plants and animals that exist in a particular area</td>
</tr>
<tr>
<td>cause</td>
<td>/kɔːz/</td>
<td>(v)</td>
<td>to make something happen, especially something bad</td>
</tr>
<tr>
<td>challenge</td>
<td>/ˈtʃælɪndʒ/</td>
<td>(n)</td>
<td>something that is difficult and that tests someone's ability or determination</td>
</tr>
<tr>
<td>climate change</td>
<td>/ˈklæimat ˈtʃiəndʒ/</td>
<td>(n)</td>
<td>the way the Earth's weather is changing</td>
</tr>
<tr>
<td>consequence</td>
<td>/ˈkɒnsɪkwənts/</td>
<td>(n)</td>
<td>the result of a particular action or situation, especially a bad result</td>
</tr>
<tr>
<td>decade</td>
<td>/ˈdekeɪd/</td>
<td>(n)</td>
<td>a period of ten years, especially a period such as 1860 to 1869, or 1990 to 1999</td>
</tr>
<tr>
<td>deforestation</td>
<td>/diˈfɔːrɪstʃən/</td>
<td>(n)</td>
<td>when all the trees in a large area are cut down</td>
</tr>
<tr>
<td>drought</td>
<td>/draʊt/</td>
<td>(n)</td>
<td>a long period when there is no rain and people do not have enough water</td>
</tr>
<tr>
<td>effect</td>
<td>/ɪˈfekt/</td>
<td>(n)</td>
<td>the result of a particular influence</td>
</tr>
<tr>
<td>emission</td>
<td>/ɪˈmɪʃən/</td>
<td>(n)</td>
<td>when gas, heat, light, etc. is sent out into the air, or an amount of gas, heat, light, etc. that is sent out</td>
</tr>
<tr>
<td>erosion</td>
<td>/ɪˈrəʊʒən/</td>
<td>(n)</td>
<td>when soil, stone, etc. is gradually damaged and removed by the sea, rain, or wind</td>
</tr>
<tr>
<td>flood</td>
<td>/flʌd/</td>
<td>(n)</td>
<td>a large amount of water covering an area that is usually dry</td>
</tr>
<tr>
<td>fossil fuel</td>
<td>/ˈfɒsəl fjuəl/</td>
<td>(n)</td>
<td>fuels such as gas, coal and oil that were formed underground from plant and animal remains millions of years ago</td>
</tr>
<tr>
<td>glacier</td>
<td>/ˈɡlæsiə/</td>
<td>(n)</td>
<td>a large mass of ice that moves very slowly, usually down a slope or valley</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Pronunciation</td>
<td>Part of speech</td>
<td>Definition</td>
</tr>
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<td>-----------------------</td>
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<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>global warming</td>
<td>/ˈɡləʊbəl ˈwɔːmɪŋ/</td>
<td>(n)</td>
<td>a gradual increase in world temperatures caused by polluting gases</td>
</tr>
<tr>
<td>graze</td>
<td>/ɡreɪz/</td>
<td>(v)</td>
<td>when cows or other animals graze, they eat grass</td>
</tr>
<tr>
<td>greenhouse gas</td>
<td>/ˈɡrinhaus ˈɡæs/</td>
<td>(n)</td>
<td>a gas that causes the greenhouse effect, especially carbon dioxide</td>
</tr>
<tr>
<td>issue</td>
<td>/ˈɪʃu/</td>
<td>(n)</td>
<td>a subject or problem which people are thinking and talking about</td>
</tr>
<tr>
<td>predict</td>
<td>/prɪˈdɪkt/</td>
<td>(v)</td>
<td>to say that an event or action will happen in the future, especially as a result of knowledge or experience</td>
</tr>
<tr>
<td>submerge</td>
<td>/səbˈmɜːrdʒ/</td>
<td>(v)</td>
<td>to cause something to be under the surface of water, or to move below the surface of water</td>
</tr>
<tr>
<td>subsistence farming</td>
<td>/səbˈsɪstənts fəˈmɪŋ/</td>
<td>(n)</td>
<td>farming that provides enough food for the farmer and their family to live on but not enough for them to sell</td>
</tr>
<tr>
<td>environment</td>
<td>/ɪnvəˈtərənmənt/</td>
<td>(n)</td>
<td>the air, land and water where people, animals and plants live</td>
</tr>
<tr>
<td>trend</td>
<td>/ˈtrend/</td>
<td>(n)</td>
<td>a general development or change in a situation or in the way that people are behaving</td>
</tr>
<tr>
<td>balanced diet</td>
<td>/ˈbæləntst daɪət/</td>
<td>(n)</td>
<td>a combination of the correct types and amounts of food</td>
</tr>
<tr>
<td>calorie</td>
<td>/ˈkæləri/</td>
<td>(n)</td>
<td>a unit for measuring the amount of energy food provides</td>
</tr>
<tr>
<td>education</td>
<td>/edʒʊˈkeɪʃən/</td>
<td>(n)</td>
<td>the process of teaching or learning in a school or college, or the knowledge that you get from this</td>
</tr>
<tr>
<td>encourage</td>
<td>/ɪnˈkʌrɪdʒ/</td>
<td>(v)</td>
<td>to make someone more likely to do something, or to make something more likely to happen</td>
</tr>
<tr>
<td>evidence</td>
<td>/ˈevidənts/</td>
<td>(n)</td>
<td>something that makes you believe that something is true or exists</td>
</tr>
<tr>
<td>exercise</td>
<td>/ˈɛksəsaɪz/</td>
<td>(n)</td>
<td>physical activity that you do to make your body strong and healthy</td>
</tr>
<tr>
<td>government</td>
<td>/ˈɡʌvənmənt/</td>
<td>(n)</td>
<td>the group of people who officially control a country</td>
</tr>
<tr>
<td>heart disease</td>
<td>/ˈhɑːt dɪˈziz/</td>
<td>(n)</td>
<td>a medical condition affecting the heart</td>
</tr>
<tr>
<td>individual</td>
<td>/ɪndɪˈvɪdʒuəl/</td>
<td>(n)</td>
<td>a person, especially when considered separately and not as part of a group</td>
</tr>
<tr>
<td>injure</td>
<td>/ˈɪndʒə/</td>
<td>(v)</td>
<td>to hurt a person, animal or part of your body</td>
</tr>
<tr>
<td>involve</td>
<td>/ɪnˈvɒlv/</td>
<td>(v)</td>
<td>if a situation or activity involves something, that thing is a necessary part of it</td>
</tr>
<tr>
<td>junk food</td>
<td>/ˈdʒʌŋk fud/</td>
<td>(n)</td>
<td>food which is unhealthy but which is quick and easy to eat</td>
</tr>
<tr>
<td>life expectancy</td>
<td>/ˈlaɪf ɪkspˈektəntsi/</td>
<td>(n)</td>
<td>the number of years that someone is likely to live</td>
</tr>
<tr>
<td>obesity</td>
<td>/əʊˈbɪsəti/</td>
<td>(n)</td>
<td>the state of being extremely fat</td>
</tr>
<tr>
<td>provide</td>
<td>/prəʊˈvaɪd/</td>
<td>(v)</td>
<td>to give someone something that they need</td>
</tr>
<tr>
<td>realize</td>
<td>/rɪˈzaɪl/</td>
<td>(v)</td>
<td>to notice or understand something that you did not notice or understand before</td>
</tr>
<tr>
<td>reduce</td>
<td>/rɪˈdʒuːs/</td>
<td>(v)</td>
<td>to make something less</td>
</tr>
<tr>
<td>self-esteem</td>
<td>/ˈsɛlf ɪˈstim/</td>
<td>(n)</td>
<td>confidence in yourself and a belief in your qualities and abilities</td>
</tr>
<tr>
<td>solve</td>
<td>/ˈsɒlv/</td>
<td>(v)</td>
<td>to find the answer to something</td>
</tr>
<tr>
<td>suffer</td>
<td>/ˈsʌfə/</td>
<td>(v)</td>
<td>to experience something bad</td>
</tr>
<tr>
<td>advantage</td>
<td>/ədˈvaːntɪdʒ/</td>
<td>(n)</td>
<td>something good about a situation that helps you</td>
</tr>
<tr>
<td>benefit</td>
<td>/ˈbenɪfɪt/</td>
<td>(n)</td>
<td>something that helps you or gives you an advantage</td>
</tr>
<tr>
<td>biofuel</td>
<td>/ˈbaɪəfl fjuəl/</td>
<td>(n)</td>
<td>fuel produced from plant material</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Pronunciation</td>
<td>Part of speech</td>
<td>Definition</td>
</tr>
<tr>
<td>------------------------------------</td>
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<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>centre of gravity</td>
<td>/ˈsentər əv ɡrævəti/</td>
<td>(n)</td>
<td>the point in an object where its weight is balanced</td>
</tr>
<tr>
<td>concern</td>
<td>/kənˈsɜːrn/</td>
<td>(n)</td>
<td>when you feel worried or nervous about something, or something that makes you feel worried</td>
</tr>
<tr>
<td>definitely</td>
<td>/ˈdefɪnətli/</td>
<td>(adv)</td>
<td>without any doubt</td>
</tr>
<tr>
<td>disability</td>
<td>/dɪsəˈbɪləti/</td>
<td>(n)</td>
<td>an illness, injury or condition that makes it difficult for someone to do the things that other people do</td>
</tr>
<tr>
<td>disadvantage</td>
<td>/dɪsəˈventɪdʒɪz/</td>
<td>(n)</td>
<td>something which makes a situation more difficult, or makes you less likely to succeed</td>
</tr>
<tr>
<td>discovery</td>
<td>/ˈdɪskrəvəri/</td>
<td>(n)</td>
<td>when someone discovers something</td>
</tr>
<tr>
<td>genetic modification</td>
<td>/dʒənətɪk ˈmɒdɪfɪˈkeɪʃən/</td>
<td>(n)</td>
<td>when biological cells are changed in order to make an animal or plant healthier or more useful to humans</td>
</tr>
<tr>
<td>gesture</td>
<td>/ˈdʒestʃə/</td>
<td>(n)</td>
<td>a movement you make with your hand, arm, or head to express what you are thinking or feeling</td>
</tr>
<tr>
<td>innovation</td>
<td>/ˌmæʊvərɪˈfən/</td>
<td>(n)</td>
<td>a new idea or method that is being tried for the first time, or the use of such ideas or methods</td>
</tr>
<tr>
<td>possibly</td>
<td>/ˈprɒsəbli/</td>
<td>(adv)</td>
<td>something is not certain</td>
</tr>
<tr>
<td>probably</td>
<td>/ˈprɒbəbli/</td>
<td>(adv)</td>
<td>mean that something is very likely</td>
</tr>
<tr>
<td>scientific</td>
<td>/saɪəntˈɪfɪk/</td>
<td>(adj)</td>
<td>relating to science, or using the organized methods of science</td>
</tr>
<tr>
<td>UNIT 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>accommodate</td>
<td>/əˈkɒmədeɪt/</td>
<td>(v)</td>
<td>to do what someone needs, often by providing them with something</td>
</tr>
<tr>
<td>approach</td>
<td>/əˈprəʊtʃ/</td>
<td>(n)</td>
<td>a way of doing something</td>
</tr>
<tr>
<td>area</td>
<td>/ˈeəriə/</td>
<td>(n)</td>
<td>a part of a building or piece of land used for a particular purpose</td>
</tr>
<tr>
<td>artificial fibres</td>
<td>/ɑːtɪˈfɪʃəl ˈfɑːrbəz/</td>
<td>(n)</td>
<td>man-made thread-like materials from plants which can be made into cloth</td>
</tr>
<tr>
<td>beauty products</td>
<td>/ˈbjʊti ˈprɒdʌkts/</td>
<td>(n)</td>
<td>soap, make-up and creams used to make people more beautiful</td>
</tr>
<tr>
<td>brief</td>
<td>/ˈbrɪf/</td>
<td>(adj)</td>
<td>lasting only a short time or using only a few words</td>
</tr>
<tr>
<td>casual clothes</td>
<td>/ˈkæʒjuəl ˈkləʊdz/</td>
<td>(n)</td>
<td>ordinary clothes worn when not working</td>
</tr>
<tr>
<td>consumption</td>
<td>/kənˈsʌmpʃən/</td>
<td>(n)</td>
<td>the amount of something that someone uses, eats, or drinks</td>
</tr>
<tr>
<td>drama</td>
<td>/ˈdramə/</td>
<td>(n)</td>
<td>an event or situation, especially an unexpected one, in which there is worry or excitement and usually a lot of action</td>
</tr>
<tr>
<td>employee</td>
<td>/ɪmˈpləʊi/</td>
<td>(n)</td>
<td>someone who is paid to work for someone else</td>
</tr>
<tr>
<td>goal</td>
<td>/ɡoʊl/</td>
<td>(n)</td>
<td>an aim or purpose</td>
</tr>
<tr>
<td>manufacturing plant</td>
<td>/ˈmæŋɡəˈfektʃərɪŋ/ˈplɑːnt</td>
<td>(n)</td>
<td>a factory or a building where goods are produced in large numbers</td>
</tr>
<tr>
<td>multinational company</td>
<td>/məltiˈnæʃənal ˈkæmpənɪ/</td>
<td>(n)</td>
<td>a business that operates in, produces goods in, or sells its products in several different countries</td>
</tr>
<tr>
<td>natural fibres</td>
<td>/ˈnætərəl ˈfɑːrbəz/</td>
<td>(n)</td>
<td>thread-like materials from plants which can be made into cloth</td>
</tr>
<tr>
<td>relax</td>
<td>/rɪˈlæks/</td>
<td>(v)</td>
<td>to become happy and comfortable because nothing is worrying you, or to make someone do this</td>
</tr>
<tr>
<td>textile</td>
<td>/ˈtekstəl/</td>
<td>(n)</td>
<td>a cloth made by hand or machine</td>
</tr>
<tr>
<td>volume</td>
<td>/ˈvɒljəm/</td>
<td>(n)</td>
<td>the number or amount of something, especially when it is large</td>
</tr>
</tbody>
</table>
**GLOSSARY**

<table>
<thead>
<tr>
<th>Vocabulary</th>
<th>Pronunciation</th>
<th>Part of speech</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td><strong>UNIT 9</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>decrease</td>
<td>/drˈkris/</td>
<td>(v)</td>
<td>to become less, or to make something become less</td>
</tr>
<tr>
<td>economic growth</td>
<td>/ɪkənˈɒmɪk grəʊθ/</td>
<td>(n)</td>
<td>an increase in the economy of a country or an area</td>
</tr>
<tr>
<td>economy</td>
<td>/ɪkˈɒnəmi/</td>
<td>(n)</td>
<td>the system by which a country produces and uses goods and money</td>
</tr>
<tr>
<td>employment</td>
<td>/ɪmˈplɔɪmənt/</td>
<td>(n)</td>
<td>when someone is paid to work for a company or organization</td>
</tr>
<tr>
<td>fall</td>
<td>/fɔːl/</td>
<td>(n)</td>
<td>when the size, amount or strength of something gets lower</td>
</tr>
<tr>
<td>finance</td>
<td>/ˈfaɪnænts/</td>
<td>(n)</td>
<td>the control of how large amounts of money should be spent</td>
</tr>
<tr>
<td>increase</td>
<td>/ɪnˈkris/</td>
<td>(v)</td>
<td>to get bigger or to make something bigger in amount or size</td>
</tr>
<tr>
<td>industry</td>
<td>/ˈɪndəstri/</td>
<td>(n)</td>
<td>the people and activities involved in one type of business</td>
</tr>
<tr>
<td>interest rate</td>
<td>/ˈɪntrəst rɛts/</td>
<td>(n)</td>
<td>the interest percent that a bank charges you when you borrow money, or the interest it pays you when you keep money in an account</td>
</tr>
<tr>
<td>investment</td>
<td>/ɪnˈvestmənt/</td>
<td>(n)</td>
<td>the money that you put in a bank, business, etc. in order to make a profit, or the act of doing this</td>
</tr>
<tr>
<td>investor</td>
<td>/ɪnˈvestə/</td>
<td>(n)</td>
<td>a person who puts money into a bank, business, etc. in order to make a profit</td>
</tr>
<tr>
<td>manufacturing</td>
<td>/mænjərˈAktʃərn/</td>
<td>(n)</td>
<td>the business of producing goods in large numbers</td>
</tr>
<tr>
<td>market value</td>
<td>/ˈmaːrkt vælju/</td>
<td>(n)</td>
<td>the price that something could be sold for at a particular time</td>
</tr>
<tr>
<td>natural resources</td>
<td>/ˈneɪtʃərəl rɪˈzɔːsɪz/</td>
<td>(n)</td>
<td>things such as minerals, forests, coal, etc. which exist in a place and can be used by people</td>
</tr>
<tr>
<td>poverty</td>
<td>/ˈpɒvəti/</td>
<td>(n)</td>
<td>the condition of being extremely poor</td>
</tr>
<tr>
<td>precious metal</td>
<td>/prəfəs meˈtəl/</td>
<td>(n)</td>
<td>a metal like gold or silver that is valuable and usually rare</td>
</tr>
<tr>
<td>profession</td>
<td>/prəfˈʃən/</td>
<td>(n)</td>
<td>a type of work that needs special training or education</td>
</tr>
<tr>
<td>recession</td>
<td>/rɪˈseʃən/</td>
<td>(n)</td>
<td>a period when the economy of a country is not successful and conditions for business are bad</td>
</tr>
<tr>
<td>rise</td>
<td>/raɪz/</td>
<td>(v)</td>
<td>to increase in level</td>
</tr>
<tr>
<td>stocks and shares</td>
<td>/ˈstɒks ænd ˈʃeəz/</td>
<td>(n)</td>
<td>financial investments in a company or a supply of goods</td>
</tr>
<tr>
<td>wealth</td>
<td>/ˈwelθ/</td>
<td>(n)</td>
<td>a large amount of money or valuable possessions that someone has</td>
</tr>
<tr>
<td><strong>UNIT 10</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>advise</td>
<td>/ədˈvaɪz/</td>
<td>(v)</td>
<td>to make a suggestion about what you think someone should do or how they should do something</td>
</tr>
<tr>
<td>appear</td>
<td>/əˈpɪə/</td>
<td>(v)</td>
<td>to seem</td>
</tr>
<tr>
<td>care</td>
<td>/keə/</td>
<td>(n)</td>
<td>the process of protecting and looking after someone or something</td>
</tr>
<tr>
<td>carry out</td>
<td>/kærˈɪ əut/</td>
<td>(n)</td>
<td>to do or complete something</td>
</tr>
<tr>
<td>complain</td>
<td>/kəmˈpleɪn/</td>
<td>(v)</td>
<td>to say that something is wrong or that you are annoyed about something</td>
</tr>
<tr>
<td>confirm</td>
<td>/kənˈfɜːm/</td>
<td>(v)</td>
<td>to say or show that something is true</td>
</tr>
<tr>
<td>cure</td>
<td>/kjʊə/</td>
<td>(n)</td>
<td>something that makes someone with an illness healthy again</td>
</tr>
<tr>
<td>disorder</td>
<td>/dɪˈsɔːda/</td>
<td>(n)</td>
<td>an illness or medical condition</td>
</tr>
<tr>
<td>epilepsy</td>
<td>/ˈepɪlepsi/</td>
<td>(n)</td>
<td>a brain disease which can make someone become unconscious and have fits</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>Pronunciation</td>
<td>Part of speech</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------</td>
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<td>----------------</td>
<td>------------</td>
</tr>
<tr>
<td>liquid</td>
<td>/ˈlkwɪd/</td>
<td>(n)</td>
<td>a substance, such as water, that is not solid or a gas and that can be poured easily</td>
</tr>
<tr>
<td>medication</td>
<td>/meɪdɪˈkeɪʃən/</td>
<td>(n)</td>
<td>medicine that is used to treat an illness</td>
</tr>
<tr>
<td>operation</td>
<td>/ˈɒpərəʃən/</td>
<td>(n)</td>
<td>when a doctor cuts someone's body to remove or repair part of it</td>
</tr>
<tr>
<td>proof</td>
<td>/pruf/</td>
<td>(n)</td>
<td>a fact or a piece of information that shows something exists or is true</td>
</tr>
<tr>
<td>recover</td>
<td>/rɪˈkʌvər/</td>
<td>(v)</td>
<td>to become healthy or happy again after an illness, injury, or period of sadness</td>
</tr>
<tr>
<td>recovery</td>
<td>/rɪˈkʌvəri/</td>
<td>(n)</td>
<td>when you feel better or happier again after an illness, injury, or period of sadness</td>
</tr>
<tr>
<td>seizure</td>
<td>/ˈziːə/</td>
<td>(n)</td>
<td>a sudden attack of an illness</td>
</tr>
<tr>
<td>side-effect</td>
<td>/ˈsaɪd ɪˈfekt/</td>
<td>(n)</td>
<td>another effect that a drug has on your body in addition to the main effect for which the doctor has given you the drug</td>
</tr>
<tr>
<td>surgery</td>
<td>/ˈsɜːrdʒəri/</td>
<td>(n)</td>
<td>when a doctor cuts your body open and repairs or removes something</td>
</tr>
<tr>
<td>treatment</td>
<td>/ˈtrɪtmənt/</td>
<td>(n)</td>
<td>the use of drugs, exercises, etc. to cure a person of an illness or injury</td>
</tr>
<tr>
<td>vaccination</td>
<td>/vækʃəˈneɪʃən/</td>
<td>(n)</td>
<td>an injection that protects you against a disease</td>
</tr>
</tbody>
</table>
UNIT 1 SHARKS

Narrator: The great white shark is known for its size. The largest sharks can grow to six metres in length and over 2,000 kilograms in weight. Great white sharks are meat-eaters and prey on large sea creatures like tuna, seals and even whales. Great whites have also been known to attack boats. This researcher is lucky to escape with his life when a shark bites into his boat. Three people are killed on average each year by great white sharks.

This is False Bay, South Africa, one of the best places in the world to see a great white. The sharks come to hunt the 60,000 seals that live here. In order to find fish, the seals have to cross the deep water of the bay – this is where the sharks wait. Great whites are expert hunters and take prey by surprise from below. They wait underneath the seals and then swim up and crash into them at 40 kilometres per hour, killing them with one bite.

These scientists are trying to find out how sharks choose what to attack. Will a shark attack something that looks like food? See how the sharks react when researchers put carpet in the shape of a seal in the water. At high speeds the shark can’t tell the difference.

Can a shark choose between a plant and a fish? When scientists put tuna and seaweed in the water, the shark bites into both. Even though sharks eat meat, if a plant looks like an animal, the shark attacks.

Will a shark prefer to eat a human or a fish? When the shark has a choice between humans and tuna, it is the fish that attracts the shark’s attention. Great white sharks clearly prefer fish to humans.

The research these scientists are doing shows that great white sharks are dangerous hunters which will attack anything that looks and acts like a fish. Unfortunately, that means humans can also get bitten by mistake.

UNIT 2 CUSTOMS

Narrator: Dagestan is a land of towering mountains, rushing rivers and ancient stone villages. Dagestan is an amazing mix of ethnic and cultural diversity. About thirty-five separate groups live side by side in this republic, which is the size of Scotland or the UAE.

Dagestan is the southernmost region of the Russian Federation, where the people speak an amazing 12 languages. Traditions are respected all over Dagestan and particularly in the rural areas, where little has changed for generations.

These women are making traditional Dagestani carpets. Everything is done by hand, with designs that are hundreds of years
old. All the materials are local, from the wool used to make thread, to the dyes made from local roots and vegetables. The carpets are sold around the world and can be seen in many major museums.

Respecting the elderly members of the community is very important in Dagestani culture. Older people are local leaders in the special system of family networks in Dagestan.

The population is growing fast in Dagestan. People have large families. Even though many Dagestanis now live outside the country, it is common for people to return to their family home when they get older. Most Dagestanis say they would like to be buried in their home village in the mountains, as their families have done for hundreds of years.

UNIT 3 ARCHAEOLOGY

Narrator: Wonderful artwork, ancient writing, and huge stone monuments. These are the remains of ancient Egyptian civilization which have amazed the world for centuries.

Egyptology was born in 1799, when the ancient Egyptian writing system – hieroglyphics – was first translated. Today, the archaeological season in Egypt starts in October, when a small number of archaeologists are allowed to start excavations. It is illegal to excavate or remove artefacts without permission, and security is tight.

These are the tombs of the ancient kings of Egypt. Down the dark passages, there are many clues about ancient Egyptian society. Complicated rituals surrounded death, and fantastic treasure was buried for use in the afterlife. Hidden underground, these painted tombs and fragile artefacts have been preserved by the dry air of the desert.

Before any discoveries can be made, there is always a large amount of earth and sand to move first. In the ancient city of Thebes, a team of archaeologists work to remove the sand that has hidden a tomb for two and a half thousand years. It is a time-consuming task but the site is so delicate, heavy machinery is not allowed and the earth must be moved by hand.

On the other side of the river Nile, in the Valley of the Kings, another team of archaeologists use the latest X-ray equipment to examine a mummy. The equipment can show the age, gender and cause of death of the mummy without damaging the fragile remains. The excavation is examined very closely. Every new artefact must be carefully recorded and nothing can be moved until it is photographed and preserved by experts. Every year, archaeologists continue to look for more evidence of this advanced culture under the hot Egyptian sun.
**UNIT 4 INDIAN TRANSPORT**

**Narrator:** For a country with a population of 1.2 billion, there are only 13 million cars in India. Some traditional forms of transport have been in use in India for centuries. Water taxis take thousands of passengers along the river Ganges every day. The wooden boats they use are handed from father to son, and the boat men repair them themselves.

Ox carts have been traditionally used for transport, especially in rural India. In recent years, some cities have banned the movement of ox carts and other slow-moving vehicles on the main roads because of traffic problems.

Bicycles are a common mode of travel in much of India. More people can now afford to own a bicycle than ever before. In 2005, more than 40% of Indian households owned a bicycle. But for long journeys, public transport is essential and India’s public transport systems are among the most heavily used in the world.

Railways were first introduced to India in 1853. By 1947, there were 42 rail systems. In 1951, the systems were nationalized as one unit, becoming one of the largest networks in the world. With 65,000 kilometres of rail routes and 7,500 stations, the railway network in India is the fourth biggest in the world after Russia, China and the USA. Indian trains carry over 30 million passengers and 2.8 million tonnes of freight daily.

Indian Railways are the world’s biggest employer, with over 1.4 million staff. Generally, Indian Railways are very efficient, but trains do run late, and sometimes it is hours rather than minutes. However, at the moment, they are a much better option than a traffic jam.

**UNIT 5 GLOBAL WARMING**

**Narrator:** The frozen glaciers of Alaska have remained unchanged for millions of years. But now the ice is melting and the impact on our environment will be huge. These ice sheets start life as snow, turn to glaciers, and eventually crash into the sea. A single glacier can move up to a metre every hour.

An astonishing 20,000 trillion tonnes of ice move across Alaska every day. Alaska’s 100,000 glaciers are under threat of disappearing because they are very sensitive to the effects of global warming. To understand why, adventurer Will Gadd is going where few have gone before: to follow one of the melt streams running through the glacier.

These fast rivers of freezing water are formed as glaciers melt, and they are an important measure of its health. Every glacier is in balance. The amount of snow falling in winter must equal the amount that melts in the summer. If that balance changes, the glacier will disappear. Right now, that’s what’s happening. These glaciers are melting faster than they are growing.
Alaskan glaciers have been here for over three million years. They are currently losing ice at the rate of 80 billion tonnes a year. It’s the end of the road for this glacier as it tumbles off the mountains and into the sea.

Alaska’s glaciers are retreating at an increasing rate. Every year, 19 trillion tonnes of melt water are pouring away and not being replenished. As the glaciers melt away, it’s the rest of the world that’s affected. Alaskan glaciers are melting so fast, they are accounting for ten percent of the world’s rising sea levels. It’s the most dramatic transformation this area has undergone since the ice age and shows how global warming is changing our environment. It’s hard to believe all this could soon be gone.

UNIT 6 CYCLING

Narrator: The world’s top road cyclists manage to ride for over three and a half thousand kilometres, at an average speed of 40 kilometres per hour, in each race. How do they manage this amazing physical achievement?

Teams who compete at the highest level in the Tour de France put their success down to training. The riders in the team treat their training for any sport as if it is a job. For example, they set goals for each day’s training and, like a regular job, they stop when they reach these goals. This means even though they might cycle 700 kilometres a week, they don’t train too hard and get injured before their race.

The way they train means that they are much fitter than a normal person. The best riders extract twice as much oxygen from each breath as an average healthy person, so they are able to generate twice as much energy. Riders like this train their hearts to pump nine gallons of blood to their muscles per minute, whereas you or I could only manage five.

The team of riders is built entirely around helping the team leader win the race. The team work together to make sure that the leader is fresh to cycle fastest at the end of the race.

The team’s job is to block the wind that he rides into. They ride in a V-shape, so that the leader can save a quarter of the energy he would normally spend riding into the wind. In a side wind, the team ride in a wing shape to protect him.

The team also make sure that their equipment and food is the most advanced. Modern bicycles use space technology and weigh 1.3 kilograms. A wind tunnel is used to analyze a rider’s position on the bike and reduce drag. To get the most energy for the race, cyclists train their body to burn fat by not eating too many carbohydrates, but as they start to race, they eat a lot more. During a race, a cyclist
can consume up to 4,000 calories per day in carbohydrates alone.

This kind of preparation is the key to winning a race that can last up to three weeks. Even the smallest aspect of a rider’s performance could be the difference between winning and losing.

UNIT 7 ROBOTS

Narrator: Robots are very different from the Hollywood version. They are widely used today in factories, in space, and deep under water for jobs which are too dirty, boring or dangerous for humans to do.

Meet ASIMO. In 1986, the Honda automotive company wanted to see if it could make a humanoid robot that could act like we do, to help in the home, play football, balance on one foot, and even dance. Over the years there were some problems but soon the researchers managed to get a robot that could walk on uneven surfaces, and shift its centre of gravity like we do to climb stairs. More recently, ASIMO was improved so it could turn round and run at six kilometres per hour, using its upper body to control movement.

ASIMO is designed to be people-friendly. It is hoped that robots like this could be used to help elderly people in their home. Honda are also using this technology to create mobility aids for people with disabilities. It can also push a cart and open and close doors. ASIMO can even shake hands and recognize gestures. It stands 120 centimetres tall, so that it can look into adult faces when they are sitting down. It can hold two kilograms in its hands and carry a tray without dropping the contents.

So, where next for this kind of robot? Well, while ASIMO is physically impressive, it is still controlled by a human. Researchers in the USA are working on robots that can learn about the world around them, and respond to human touch and voice. The robots are even learning to recognize objects, people and vocabulary.

Soon the descendants of these robots may be serving you drinks or helping with jobs at home and at work.

UNIT 8 MISSONI FASHION

Narrator: Milan is in the Lombardy region in the north of Italy. It is Italy’s second biggest city and one of the great fashion capitals of the world. Like London, Paris and New York, twice a year Milan has Fashion Week.

The fashion industry is worth six billion dollars a year. Angela Missoni is a fashion designer. Her label, Missoni, is one of the most famous, but it has not been easy to be a successful fashion label. The Missoni label was started in 1953 in a one-bedroom flat by Angela’s parents, Ottavio and Rosita.
Angela runs the business with her brothers, Vittorio and Luca.

Eight hundred people work in Missoni’s factories, helping to produce the label’s popular collections. Their company now makes more than 250 million dollars a year.

Angela is busy preparing for Milan Fashion Week. Milan Fashion Week has started. Critics, journalists and buyers come to the city from around the world.

Angela is making last-minute preparations. She has to choose which dresses to include in the show. Finally, the show starts. Fashion Week is a great success.

UNIT 9 RUSSIA’S ECONOMIC SUCCESS

Narrator: When the Soviet Union fell in 1991, Russia’s economy suffered major difficulties. For the next decade, the country went from financial crisis to financial crisis. Foreign investors stayed away, and there was a rapid decline in the value of the Russian currency, the rouble.

Since then, the Russian economy has grown at an average of seven percent a year, and the country has one of the strongest stock markets in the world. Global investment banks describe Russia’s economic performance as ‘remarkable’.

So how did Russia turn a failing economy into a financial powerhouse? The oil wealth created a lot of very rich people. These people invested in industries after the fall of the Soviet Union, and now Russia has over one hundred billionaires and Moscow has more than any other city in the world. But it’s not only the rich in Russia who are benefitting from the oil. Retail sales are growing, and multinational companies are now competing to invest in Russia.

New shopping malls are now spreading beyond Moscow to the rest of Russia. However, there is a problem with relying on natural resources for economic growth. The oil is running out fast. It is predicted that the oil will only last for another 30 to 40 years. However, Russian oil has restarted an economy which was in crisis and brought wealth and economic stability to the country.

UNIT 10 THE BRAIN

Narrator: This organ – one and a half kilograms of fat, the size of a grapefruit – holds all the secrets of what makes us human. It is the most complicated object in the known universe.

Young Jody Miller is living proof of the brain’s amazing abilities. She has a normal life as a nine-year-old school girl. You would never guess that she only has half a brain.
Jody’s first three years were normal but a few weeks after her third birthday, something started to go wrong. Epilepsy took control of her brain.

They found that she was suffering from storms of electricity in her right brain. Seizures happened all the time, and she lost control of the left side of her body. Doctors became worried that the epileptic seizures might kill Jody. The doctors and Jody’s parents were left with one choice: to take out the damaged side of her brain.

Our brains are made of two different sides, each split into four parts. Parts on both sides control thinking, movement and feeling. The right side controls the left side of the body, and the left side controls the right. Jody would lose all of the right side of her brain. The space would then fill up with liquid.

The operation was slow and careful but it was a success. Doctors hoped that Jody’s brain would change shape, and the left side of the brain would learn to do everything for Jody. Her brain started to change very quickly and she was able to walk out of the hospital. Jody’s recovery is proof of the amazing power of the brain.
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