

# Homework - Unit 4 - Lesson 4

## Reading & Listening

### Summary completion

(Academic Reading, General Training Reading and Listening Modules)

A summary is usually of one part of the passage, but may be of the whole text.

In the Listening Module the questions follow the order of information in the passage. In the Reading Modules they may not.

The summary is worded differently from the passage, but the ideas are the same.

If you have to choose words from the passage, you will be told the maximum number for each answer.

If you have to choose words from a box, there will be more words than spaces, and they are usually different from ones in the passage.

Words must be spelt correctly to gain marks.

### Advice

#### Reading Modules

- Skim the whole passage before you start working on any of the tasks.
- Read the instructions. If the answers come from the passage, check the maximum number of words for each space. Read the heading (if there is one) and the summary. Consider what information is likely to fit each space. Think about both the *meaning* and the *grammar*.
- Read the first gapped sentence. Find the relevant part of the passage – the heading will help you – and look for something that means the same. Find the words (in the passage or box) that fit the question. Copy them exactly. Continue with the next space.

#### Listening Module

- You will be given time to read the summary before you listen. Consider what information is likely to fit each space. Think about both the *meaning* and the *grammar*.
- Listen for each answer in turn. If you miss one, go on to the next question or you may miss that too.

#### All modules

- Check that your answers fit both the meaning and the grammar, that the spelling is correct, and that you haven't written more than the maximum number of words.

### Reading

- 1 This passage is similar to those in the Academic Reading Module, but is only about 350 words. The task is typical of both Reading modules.

## The Little Ice Age

Western Europe experienced a general cooling of the climate after the year 1150 and a very cold climate between 1560 and 1850 that brought dire consequences to its peoples. The period from 1150 to 1850 is sometimes called the Little Ice Age.

During this time, the cooler air of the Arctic began to spread southward. Together with other changes in the atmosphere over the North Atlantic, this directed a higher number of storms into northern Europe. The sea level seems to have been increased by ice melt during the preceding Medieval Warm Period (from about 900 to 1150), contributing to the flooding which caused the loss of hundreds of thousands of lives. Additionally, hail wiped out farmland and killed great numbers of livestock over much of Europe, due to very cold air during the warmer months. Glaciers in many parts of Europe began to advance, destroying farmland and causing massive flooding.

The climate change of the Little Ice Age had a serious impact on agriculture, as it reduced the growing season by up to two months. That is enough to affect almost any type of food production, especially crops highly adapted to use the full-season warm climatic periods. Varieties of seeds that can withstand extreme cold or warmth, wetness or dryness, were not available in the past. The impact on agricultural output was significant, with poor harvests leading to high food prices and famines. In one of the worst famines, millions of people died in France and neighbouring countries in 1693. Food prices reached a peak in the year 1816 – 'the year without a summer'.

The cooler climate during the Little Ice Age had a huge impact on the health of Europeans. Malnutrition led to a weakened immunity to a variety of illnesses, including bubonic plague – the Black Death – which killed a third of the population of Europe in the late 1340s. Cool, wet summers led to outbreaks of an illness called St Anthony's Fire, which caused terrible suffering, hallucinations and even death. This was due to a fungus which develops in grain stored in cool, damp conditions. Used to make bread, the grain passed the illness to whole villages.

Complete the summary below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

### The Impact of the Little Ice Age

The increase in cold air affecting Europe led to more frequent **0** *storms* in the north of the continent.

The sea level rose because of **1** ..... caused earlier, and this led to **2** ..... in which many people died. Animals and crops were destroyed by **3** ..... in the summer. As the climate cooled, **4** ..... spread, causing great destruction.

In agriculture, the Little Ice Age led to a shorter **5** ....., which had a particular impact on **6** ..... that need long periods of warmth. A further problem was that **7** ..... were more vulnerable than those of today. In consequence, **8** ..... were poor. Large numbers of people died in the **9** ..... that occurred in several countries. In addition, **10** ..... reduced many people's immunity to diseases. One illness, St Anthony's Fire, was caused by a **11** ..... that could grow in bread.

## Listening

2  This passage is similar to those in Part 4 of the Listening Module.

Complete the summary below.

Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer.

### Audio

#### The Polar Front Jet Stream


The Polar Front Jet Stream is a wind at a height of up to **1** ..... kilometres above the earth's surface. It moves at approximately **2** ..... km per hour during the winter. The direction of movement is caused by the earth's **3** ..... The jet stream is formed where cold polar air meets warm **4** ..... air.

It was first identified by **5** ..... in the 1940s. Planes benefit in terms of both **6** ..... but **7** ..... is difficult.

Forecasters use jet streams to predict where depressions will form, and whether the British Isles will have potentially destructive **8** ..... or only **9** .....

Global warming may move the jet stream to the **10** ..... in the summer, creating **11** ..... conditions in the British Isles.

## Audio

3  This passage is also similar to those in Part 4 of the Listening Module.

Complete the summary below using words from the box.

disease	drought	dust	floods	hunger
ice	lava	migration	night	riots
storms	sunlight	temperatures	snow	

The eruption of Mount Tambora in 1815 filled the air with **1** ..... The amount of **2** ..... was reduced. The effects on the weather of 1816 included **3** ..... in places where it was a rare occurrence, and **4** ..... that severely damaged crops. Many Europeans suffered from **5** ....., and there were serious **6** ..... in many towns. In the USA there was considerable **7** ..... from affected areas to the more fertile Midwest.



Mount Tambora today

# Reading & Vocabulary

## The fruits of nature

### Vocabulary 1: Lifecycles and processes

Wordlist on page 213 of the Student's Book.

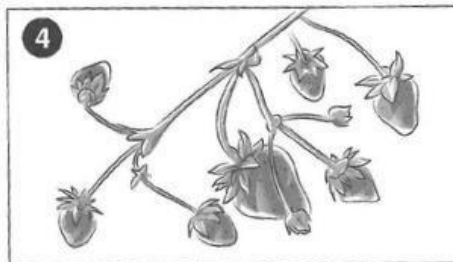
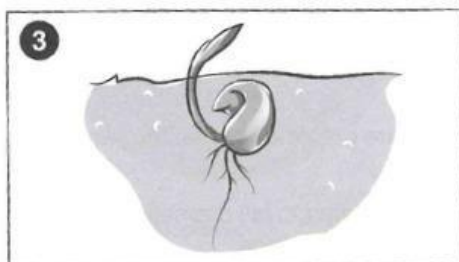
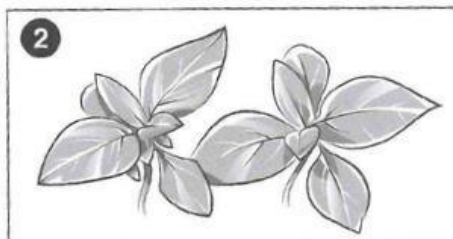
- 1 Read the four texts **a-d** and match them to the four processes shown in the diagrams **1-4**.

**a** Seeds require three factors to germinate. Firstly, they need water to swell up and for the embryo to start growing. Next, they need oxygen so that energy can be released for germination. Lastly, the process is significantly enhanced as the temperature rises.

**c** Green plants absorb energy from the sun using chlorophyll in their leaves. The energy is used to react carbon dioxide with water to make a sugar called glucose. The glucose is used for respiration (the process of how plants 'breathe'), or it is changed into starch and stored. Oxygen is produced during this process.

**b** Frog spawn is made of thousands of floating eggs. Frogs lay so many eggs because, unlike some animals, they do not look after their eggs once laid and many get eaten by other animals. Around two weeks after being laid, a head and tail will develop inside the egg. Once out of the egg, the tadpole's back legs and then finally the front legs grow. Soon after, the tail disappears.

**d** It is possible for plants to reproduce without flowers or fertilisation. Plants such as strawberries and potatoes use tubers or runners to produce new plants. New plants produced in this way are identical to each other and are called 'a clone'.



- 2 Underline the words that helped you in exercise 1.

## READING PASSAGE

You should spend about 20 minutes on Questions 1–14, which are based on the Reading Passage below.

### A brief history of chocolate

**A** It's hard to pin down exactly when chocolate was born, but it's clear that it was cherished from the start. For several centuries, in pre-modern Latin America, cacao beans were considered valuable enough to use as currency. One bean could be traded for a tamale (a traditional dish), while 100 beans could purchase a good turkey hen, according to a 16th-century Aztec document.



**B** Sweetened chocolate didn't appear until Europeans discovered the Americas and sampled the native cuisine. Legend has it that the Aztec king Montezuma welcomed the Spanish explorer Hernando Cortes with a banquet that included drinking chocolate, having tragically mistaken him for a reincarnated god instead of a conquering invader. Chocolate didn't suit the foreigners' taste buds at first – one described it in his writings as 'a bitter drink for pigs' – but once mixed with honey or cane sugar, it quickly became popular throughout Spain.

**C** By the 17th century, chocolate was a fashionable drink throughout Europe, believed to have nutritious and medicinal properties. But it remained largely a privilege of the rich until the invention of the steam engine made mass production possible in the late 1700s. In 1828, a Dutch chemist found a way to make powdered chocolate by removing about half the natural fat (cacao butter) from chocolate liquor, pulverizing what remained and treating the mixture with alkaline salts to cut the bitter taste. His product became known as 'Dutch cocoa,' and it soon led to the creation of solid chocolate.

**D** The creation of the first modern chocolate bar is credited to Joseph Fry, who in 1847 discovered that he could make a moldable chocolate paste by adding melted cacao butter back into Dutch cocoa. By 1868, a little company called Cadbury was marketing boxes of chocolate candies in England. Milk chocolate hit the market a few years later, pioneered by another name that may ring a bell – Nestlé.

**E** Chocolate begins with the cacao tree, which grows within 20° north and south of the Equator and thrives on a mix of hot temperatures, rain, and shade.

Each tree bears oval fruits, or pods, which are about 5–12 inches long. Each pod contains 30–50 seeds, and it's these seeds the world knows as cacao (or cocoa) beans. The tree, pod, and bean/seed are typically referred to as 'cacao', while the word 'cocoa' is reserved for the bean after it has been fermented, dried, and roasted.

**F** Cacao pods are ripe when they turn a vibrant yellow/orange colour. Hanging from the trunk, and largest branches, on small stems, the ripening pods are typically harvested twice per year, though they can be harvested continually. After being chopped off, the pods are opened and their seeds are removed. Each seed is about the size of an olive. The seeds (or 'beans') grow in five columns surrounded by a white pulp or pith.

**G** Beans are cleaned by hand, with the *baba* (sweet pulp of the inside of the bean) left on to help develop flavour. Exposed to light, the cream-coloured beans turn a purplish colour. Then they're ready for fermentation via one of two ways: the 'heap method' is popular in Africa, where beans are heaped in piles on the ground; and in Latin America, a system of cascading boxes is favoured. In both methods, beans are covered with banana leaves. During the 2–9 days of fermentation, beans begin to take on colour and some of the flavours you would recognise as 'chocolate'.

**H** Fermented beans must be carefully dried. They are placed either on wooden boards or bamboo mats for anywhere from 7 to 14 days under the hot sun, and are continually raked and turned over for consistent drying. Once dried, the beans are graded, packed into sacks, bundled, and checked for quality. They are then shipped and traded on the international market.

**I** Beans are cleaned, then roasted at low temperatures to develop flavour. Shells are separated from the nibs by a process called winnowing. Nibs are finely ground into cocoa mass or cocoa liquor, which is solid at room temperature. Placed under extremely high pressure, this paste yields two products: cocoa powder and cocoa butter.

**J** Cocoa mass can simply be combined with more cocoa butter and sweetener to make chocolate. The first steps are to mix, grind, and knead the various raw ingredients into a paste – a process known as conching. The chocolate is now finished and ready for final processing. To be delivered to a chocolatier, it must first be put into blocks or drops. This method requires 'tempering' – whereby chocolate is slowly brought to a certain temperature. During the tempering process, the cocoa butter reaches its most stable form; this gives well-tempered chocolate its 'snap,' shiny surface, and smoothness.

**Questions 1-5**

The Reading Passage has ten paragraphs, **A-J**.

Which paragraph contains the following information?

- 1 the original companies and people involved in making today's chocolate
- 2 the time when the fruit is picked
- 3 the changes made to chocolate by Spain
- 4 getting the two key products from the bean
- 5 when the colour and the taste first develop

**Questions 6-8**

Do the following statements agree with the information given in the Reading Passage?

Write:

- TRUE** if the statement agrees with the information
- FALSE** if the statement contradicts the information
- NOT GIVEN** if there is no information on this

- 6 Cacao beans were once used as money.
- 7 The Spanish stole cocoa from the Aztecs.
- 8 The Dutch added sugar to make chocolate sweet.

**Questions 9-14**

Complete the flow-chart below.

Choose **NO MORE THAN TWO WORDS** from the passage for each answer.

**Stages in the production of chocolate**

cacao trees grown near **9** ..... in hot wet climate



after harvesting, **10** ..... taken out



after fermentation, beans **11** ..... for one or two weeks



enhance the taste = beans are **12** ..... in a cool heat



cocoa powder and butter extracted, then the ingredients go through **13** .....



finally, the chocolate is heated in a process called **14** .....

## Language focus: Transitive and intransitive verbs

**G** Grammar reference on page 223, and Wordlist on page 214, of the Student's Book.

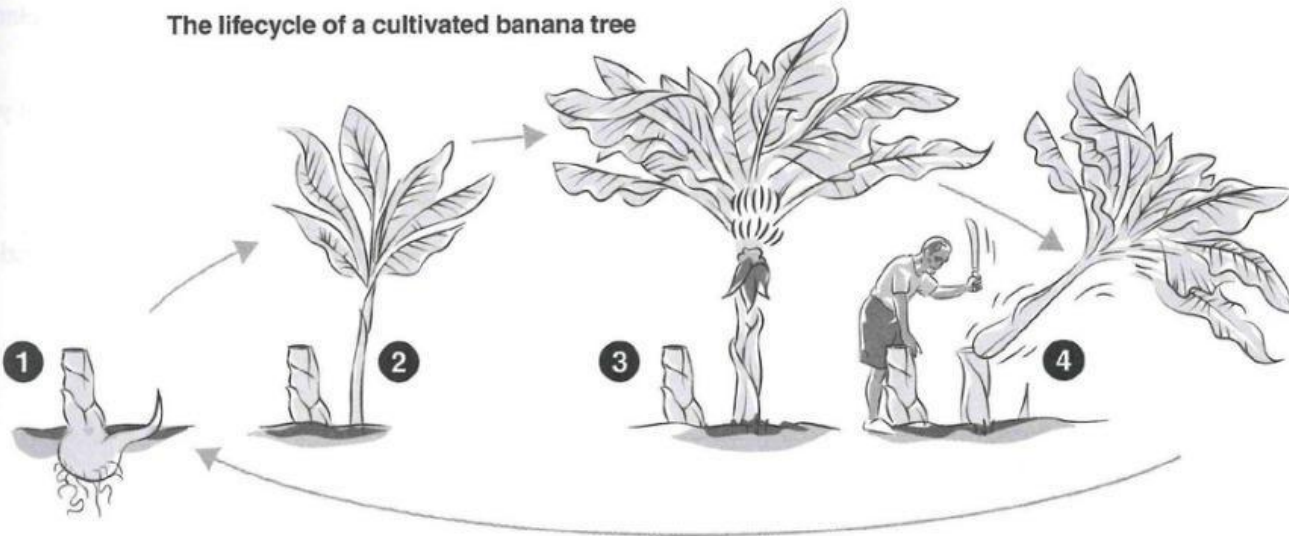
- 1 Complete sentences 1–6 with words from the box. Change the form if necessary. Decide whether the verbs are being used transitively or intransitively.

make    collect    crush    occur    rise    emerge

- The first plants \_\_\_\_\_ from the ground in May and June.
  - The press \_\_\_\_\_ the fruit to create the juice.
  - The sun \_\_\_\_\_ at 7 every day.
  - It \_\_\_\_\_ from recycled plastic.
  - Bees \_\_\_\_\_ nectar for their hive.
  - A full moon \_\_\_\_\_ once a month.
- 2 Complete the text with words from the box. More than one answer may be possible, and you may use any word more than once. Change the form as necessary.

produce    grow    cross-pollination    bear  
cultivate    sprout    ripen    prune

### The lifecycle of a cultivated banana tree



Modern banana trees aren't actually trees – they are very large herb plants that 1 \_\_\_\_\_ from wild banana trees. Thousands of years ago 2 \_\_\_\_\_ of the first banana trees produced an edible fruit. The fruit (or bananas) that the tree 3 \_\_\_\_\_ are essentially berries with a protective skin.

Banana trees don't grow from seed. Instead, shoots 4 \_\_\_\_\_ horizontally from the underground root stem. On modern banana plantations usually only one shoot is allowed to grow to form a stalk, which 5 \_\_\_\_\_ up to six leaves that can be nine feet long and two feet wide. The new tree takes about nine months to 6 \_\_\_\_\_ a bunch of bananas. Plenty of sunshine and water will cause the fruit to 7 \_\_\_\_\_.

The mature tree then dies and is chopped down. However one sucker is allowed to 8 \_\_\_\_\_, while all the others will be 9 \_\_\_\_\_ to ensure there is room for next year's crop.

**3** Cross out the noun that does not collocate with each verb on the left.

- |                    |                   |                   |                   |
|--------------------|-------------------|-------------------|-------------------|
| <b>1</b> prune     | <b>a</b> branches | <b>b</b> trees    | <b>c</b> buds     |
| <b>2</b> plant     | <b>a</b> trees    | <b>b</b> branches | <b>c</b> seeds    |
| <b>3</b> pollinate | <b>a</b> flowers  | <b>b</b> trees    | <b>c</b> buds     |
| <b>4</b> become    | <b>a</b> saplings | <b>b</b> flowers  | <b>c</b> seeds    |
| <b>5</b> gather    | <b>a</b> fruit    | <b>b</b> trees    | <b>c</b> flowers  |
| <b>6</b> harvest   | <b>a</b> seeds    | <b>b</b> saplings | <b>c</b> fruit    |
| <b>7</b> sprout    | <b>a</b> buds     | <b>b</b> seeds    | <b>c</b> saplings |
| <b>8</b> bear      | <b>a</b> flowers  | <b>b</b> fruit    | <b>c</b> trees    |

# Grammar & Listening

## 13 The Planet

Modal perfect for deduction in the past | Modal verbs for past ability, obligations, recommendations or regrets

### Modal perfect for deduction in the past

Modal perfect with **must / mustn't** is used *from the speaker's point of view to express a strong likelihood in the past.*

*must / mustn't + have + past participle OR must / mustn't + have + been + past participle*

The prime minister mustn't have kept his promise about increasing alternative energy forms, as I've seen nothing in the news about it. (I think it was likely he didn't keep his promise.)

*Note: Mustn't can be replaced by couldn't for the same meaning.*

Modal perfect with **may / might / could** is used *to express probability in the past.*

*may / might / could + have + past participle (ALSO may / might / could + have + been + V-ing)*

A curb on the use of fossil fuels might have curtailed the pollution problem. (It was probable.)

*Note: Modal verbs for deduction (may / might / could + V) can also be used in the present, but it is unlikely that you will see this in an IELTS exam.*

### Modal verbs for past ability or obligations

**Could** is used:

#### 1 To express past ability

I could swim 100 metres, but I can't now.

#### 2 To say that something was allowed

People could travel without a passport 200 years ago. (It was allowed.)

**Could not (couldn't)** is used:

#### 1 To express past inability

I couldn't complete my essay on global warming.

#### 2 To say that something was not allowed

He couldn't go into the monkey enclosure. (It was not allowed.)

**Had to** is used to express a strong objective obligation in the past.

People had to travel to Australia on a ship before air travel was invented. (It was necessary.)

**Didn't have to** is used to express that something was not an obligation.

I didn't have to go to work when I was a child.

Note: *Must* cannot be used to express an obligation or a choice in the past.

## Modal verbs for past recommendations or regrets

**Should / Should not (Shouldn't)** is used to express a recommendation or regret in the past.  
*should/shouldn't + have + past participle (ALSO should/shouldn't + have + been + V-ing)*

We should have gone on that Eco tourism trip. I'm sorry that we didn't. (We didn't go and I regret it.)  
We shouldn't have gone on that Eco tourism trip. It was expensive and dull. (We went and I regret it.)

**Ought to** is also used to express a recommendation or regret in the past.  
*ought to + have + past participle (ALSO ought to + have + been + V-ing)*

We ought to have thought more about the planet before using so much fuel.

Note: This construction is less common in the negative.

## Practice exercises

- 1 Decide on an appropriate modal verb and the correct form of the verb in brackets to finish each sentence. There may be more than one correct answer.
  - 1 When fossil fuels were discovered, people \_\_\_\_\_ (*know*) the negative effects they would eventually cause as no research had been done on them.
  - 2 In early civilisations, people \_\_\_\_\_ (*hunt*) for their own meat.
  - 3 People \_\_\_\_\_ (*take*) more care of endangered species. Over a hundred species have become extinct in the last 50 years and it's a terrible shame.
  - 4 It \_\_\_\_\_ (*be*) difficult to survive in the days before modern medicine and hygiene standards.
  - 5 A new lizard has been discovered in the rainforests of Sumatra. Some experts say they \_\_\_\_\_ (*inhabit*) the deeper rainforests for up to a million years.
  - 6 People \_\_\_\_\_ (*travel*) across borders quite easily in the past. Nowadays there are many more immigration rules.
  - 7 Before organised forms of rule such as kingdoms or governments, people \_\_\_\_\_ (*pay*) taxes.
  - 8 Resentment among the citizens \_\_\_\_\_ (*develop*) for a long time before the overthrow of the Empire, because popular support for a revolt had been growing for decades.

**Listening exam tip:** In the IELTS Listening Section 3, you often need to understand if the speakers agree or disagree with each other. Modal verbs can be used to distract you from the correct answer because they are often about probability, belief, and expectation.

2 Complete the spaces in the following text using the options in the box.

didn't have to  
might have

shouldn't have  
had to

could  
couldn't have

### Life During the Ice Age

During the Ice Age in Europe, approximately 15,000 years ago, the winter weather was bleak. However, modern humans found ingenious methods for managing this extreme cold. In fact, these humans (1) \_\_\_\_\_ been the first to develop a range of skills and technological advances that are still with us today! Due to the freezing temperatures, these humans (2) \_\_\_\_\_ create things that could protect them from the environment. Early Europeans used the skin and bones from wild animals to make clothing and shelter.

Thankfully, they (3) \_\_\_\_\_ worry so much about their food. They (4) \_\_\_\_\_ kill their food effectively as they had developed sophisticated tools. When food was abundant, they buried supplies in the permafrost, an ancient form of deep-freezing. The unfortunate thing about their hunting and survival skills was that they slaughtered many of the animals to extinction. All we now have to remember them is by the cave paintings. Perhaps it could be argued that they (5) \_\_\_\_\_ killed these animals, but we cannot say what we would have done in the same situation.

Although life (6) \_\_\_\_\_ been easy for these people, they managed to survive and introduce art, language, and behaviours that characterise people today; we owe a lot to their developments.



3

21

Audio

Decide on a correct modal verb and complete each gap in the conversation. Then listen and check your answers.

**Kelly:** Hi, everyone. So, let's get started on our essay. Mark, have you done the research from last week?

**Mark:** Well, yes and no. I was trying to follow up on the suggestions from the lecture, and I searched the library for books and journals. But I (1) \_\_\_\_\_ find anything relevant to our topic.

**Louise:** Well, maybe you were too late. We got the essay title two weeks ago, so other students (2) \_\_\_\_\_ taken out all the books already.

**Mark:** Yes, I guess so.

**Kelly:** It doesn't sound likely to me. All the books (3) \_\_\_\_\_ been taken out – there are lots of books about astronomy in the main library.

**Mark:** Well, there was one book, but I (4) \_\_\_\_\_ borrow it because it's a reference-only book.

**Kelly:** Mm. We (5) \_\_\_\_\_ started this project earlier. What are we going to do now?

**Louise:** The other students (6) \_\_\_\_\_ been very keen to start! Well, don't worry. Why don't we just reserve the books we want? I've found some articles we can start reading now, and then we'll be more focused for when the other students return the books we need.



4 Listen to three students preparing a presentation and complete the notes below.

Expedition details

*Problem:* Originally setting the camp up at the (1) \_\_\_\_\_ but the explorers couldn't because of the (2) \_\_\_\_\_ season.

*Solution:* Setting the camp up at the (3) \_\_\_\_\_.

*Discoveries:* New (4) \_\_\_\_\_ on the lower slopes of the peak.

Halfway up the mountain (5) \_\_\_\_\_ were found and identified correctly due to (6) \_\_\_\_\_ equipment.

*Timescale:* Arrived at the top of the mountain within (7) \_\_\_\_\_.

Audio

**Exam practice: Listening – completing a table**

**Exam tip:** When completing a table, look at the headings in the table and try to predict what information you are looking for. The numbers on the answer spaces will tell you what order the information will be presented in.



Listen to three students talking about their essays and complete the table. Write **NO MORE THAN THREE WORDS AND/OR A NUMBER** for each answer:

Audio

	Andrew	Penny	Terry
TOPIC	Interesting subject choice	Should have made it 1 _____	Agrees with 2 _____
WORK FOCUS ISSUES	Difficult to find 3 _____ on statistics	Concentrated on plate movement	Not 4 _____ on future predictions
RESEARCH FINDINGS	Earthquakes could have been predicted	The Earth is 5 _____	Needs to refocus