

that his plotting abilities are dependent on his iron control of his feelings. The difference is that Gosling conveyed that stoicism by being, well, stoic, whereas Pitt conveys it by going on and on about how stoic he is, both in the voice-overs that recur throughout, and the psych-evaluation reports he recites to his computer whenever he is about to go on another mission. The setting may be the near future, but roles such as that one are out of date.

If you overlook some of the soppy psycho-babble, though, *Ad Astra* is a rewarding combination of pulpy B-movie and ominous, atmospheric drama.

What follows is, essentially, a Buck Rogers-style yarn, complete with crash-landings, shoot-outs, zero-gravity brawls, a savage predator hiding in a seemingly abandoned craft, and a car chase on the Moon. It's rollicking stuff, but Gray keeps the mood sombre and the science just about plausible. Reminiscent of both *2001: A Space Odyssey* and Tarkovsky's *Solaris*, the film is at its most captivating when it shows how dark and desolate existence can be as you move farther away from the sun. Once you're in space, you are in a truly alien environment, even if you don't meet any aliens. It is enjoyable action movie, but, weighed down as it is by emotional baggage, it doesn't quite get to the stars.

"Twilight". ... turned into a big-event movie / will most likely hit a box office artery / the most entertaining teen film / a new twist on the time-honoured nice-girl-bad-boy storyline.

A new film, an adaptation of the bestselling young-adult novel by Stephenie Meyer. Director Catherine Hardwicke nails the teen emotions and relationships, and she stays surprisingly faithful to the novel. An outrageous story of young love played absolutely straight, and actually better and more convincingly acted than many of the ponderous grown-up "relationship" movies we have to sit through.

*permutation strings woodwinds brass
Luglio*

perfect environment

semi-rural area within 30 minutes from the town
neither hectic nor sleepy

safe neighbourhood residential area w/ developed infrastructure

from where you can commute
to work in a vibrant city

detached / semi-detached house with a garden &
some green landscapes

out of his price bracket - more than he can afford

building society

250 th. pounds

50% of the price deposit on the mortgage

5 - 6-7 times salary

not repayments
back up extremely
high

14 afternoon

15 feeding yesterday

Cold snap / head wave
around freezing

sleet - over a frozen
slush - spray

simultaneously / concurrently
one after the other

sequentially / in given order

segregate

to sift - to put sht through the grid
fixed - organized

heat tray

hard / soft boiled egg
 runny yolk ~~stygian~~
~~demok~~
 curds
 minced meat
 whole
 tender cake

Tastes	Textures	Verbs	Verbs
mild sourish	soft	slice	fry
bland sourish	smooth (no lumps)	dice	roast
strong	tender	chop	bake
sour	creamy	grate	grill
sweet	hard	mince	boil
honeyed	tough	peel	simmer
salty	crunchy	squeeze	stew
bitter	crispy	mix	dress
hot	chewy	stir	roll flat
peppery	sticky	blend	spread
spicy	flaky	whisk	crumble
(cinnamon, ginger, and paprika are spices)	fluffy (about dough)	beat	scramble
	thick		mash
savoury	thin		warm up
rich	watery		preheat

Imagine you are going to open a new restaurant. Discuss and decide on the following aspects.

Three-course meal in a restaurant consists of first course or starter in the UK (appetizer in the US), followed by the "plat principal" (the main course), and then dessert [di'zɜ:t] or cheese.

Who are your target consumers? ~~students / young ppl /~~ who like ~~italian food~~

What cuisine [kwi'zi:n] will you serve? ~~steak~~

What is your favorite recipe ['resipi]? ~~pasta with mushrooms~~

Will you have any specialties, ~~(or a daily menu, or takeaway?)~~

Which do you prefer buffet ['bufer] or à la carte [ə'lɑ:kɔ:t] in general? ~~diverse atmosphere~~

What type of atmosphere will you try to generate? How? ~~nice italian charm~~

Will there be any entertainment? ~~maybe music~~

What decor will you have? [deikɔ:(r), AM deikɔ:t] ~~wood, some glass things~~

Where will your restaurant be located? ~~near campus~~

How will you advertise? ~~internet~~

What prices will you charge? ~~reasonable~~

What are you going to call your restaurant? ~~benemerito~~

c the past and the present?

► page 118 Speaking hypothetically

3 Complete these sentences by putting the verb in brackets into the correct conditional form.

- 1 Children were allowed to view the fossils provided that they them. (*not touch*)
- 2 The climbers knew that if the rocks were, someone could get hurt. (*fall*)
- 3 Had there not been a storm, the divers the shipwreck. (*reach*)
- 4 If we a good scientist on the committee, we might not have made so many mistakes. (*have*)
- 5 Were it not for the aerial photos they took, they the ancient city's remains. (*never find*)
- 6 The site to the public on condition that visitor numbers were restricted. (*open*)
- 7 I wouldn't have walked around the ruins unless I it was safe! (*know*)
- 8 The walkers wouldn't have spotted the fossil had it for the exceptionally low tide. (*not be*)

4 Work in small groups. Complete these sentences.

- 1 Were it not for the bad weather, ...
- 2 Wouldn't it be amazing if ...
- 3 If I were to change my career plans, ...
- 4 Had it not been for my parents, ...
- 5 Provided that I save some money, ...
- 6 As a young teenager, I knew I wouldn't be allowed to go out unless ...

60 Unit 5

30 Conversely, at high tide, the waves sometimes reached half-way up the cliff wall, beating on it with some force.

7 b Meanwhile, the overhanging cliff at the top cracked, creating a dangerous area beneath it.

5 c This meant that stones and boulders fell into the sea, and the cliff slowly retreated, exposing previously buried rock at low tide.

last d Clearly, the fossils would have remained buried and the coastline unchanged if it had not been for the action of the sea.

10 e The diagram shows the changes that took place in a cliff face as a result of coastal erosion, and how this led to the discovery of fossils.

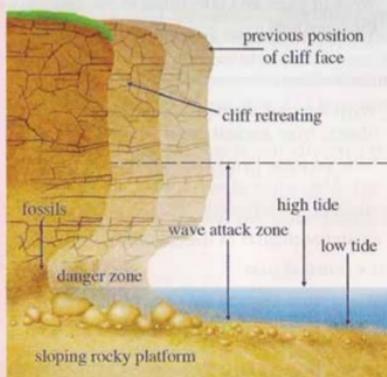
6 f As the waves hit the lower part of the cliff more frequently, this area eroded more quickly and became a hollow in the cliff wall where fossils could be found.

4 g Eventually, the power of these waves loosened and wore away the rock.

26 h At one time, the cliff stood much further out and, at low tide, the sea water did not touch the base of the rock.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Cliff erosion and fossil exposure



2 Re-order the sentences on page 61 so that they produce a sample answer for the task in Exercise 1. Then divide the answer into paragraphs.

- 4 The wind will travel across the beach. This carries the sand to different parts of the coast.
- 5 Large rocks are thrown against the cliff wall. This produces a bed of pebbles and small stones.

6 Work in pairs. Look at this Writing task. Quickly note down some vocabulary you could use to describe the key stages.

The diagrams below show the stages in the erosion of a headland.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Erosion of a headland

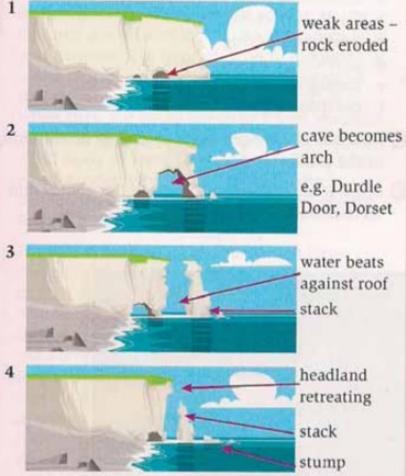


- 6 Work in pairs. Look at this Writing task. Quickly note down some vocabulary you could use to describe the key stages.

The diagrams below show the stages in the erosion of a headland.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant.

Erosion of a headland



- 7 Write your answer to the task in at least 150 words.

Exam advice Writing Task 1

- Describe key stages in the process in a logical order, making comparisons where appropriate.
- Use suitable words and phrases to structure and link the process clearly.
- Remember to include an overview summarising the main features of the process.
- Vary your vocabulary and use your own words as far as possible (e.g. do not lift long phrases from the task instructions).

Stepping back in time 61

The diagram illustrates the process of erosion of a headland in its four major steps. **How the headland**

Initially the cliff stands further in the water, and some weak areas of eroded rock are formed. As the time goes by, the caves exposed to the waves become arches that are called **steers**, **larses** or **durdles**. **wear away**

With the water beating against the root of the **steer**, the latter cracks and eventually falls apart, separating the column called **stack** from the cliff. The process continues and as a result the headland retreats. Having been separated from it, the **stack** also continues to be shattered by the erosion, the stones from it falling into the water and creating **stumps**.

... the fish gradually gets covered over ...
... so once the fish gets buried ...
... it gets heavier and heavier until it becomes hard rock ...
... during that time, the bone in the skeleton is replaced ...
... the rock may lift and eventually be above sea level.

Meanwhile, the surface of the rock wears away?

slowly, over a period of time
up to the time that
from the moment when
while something else is happening
over that period
in the end, especially after a long time
immediately after

Page 121 Using sequencers when describing processes

Choose the correct opinion in *italics* to complete these paragraphs about underwater archaeology.

Underwater archaeology is most successful in *as* where the currents are not strong enough to move a shipwreck. 1 *Once / Until* the depth of the water has been measured, a site plan can be drawn. 2 *Whilst / As* doing this, divers swim around the shipwreck locating artefacts. 3 *Meanwhile / Gradually*, they also assess the site for ease of access and potential hazards.

In the next stage, divers use special tools to *gradually / once* remove silt and sediment from the area of investigation. It is a long process, but *eventually / during that time* the artefacts are ready to be taken up to the surface and transported to laboratories, where they will be carefully examined, *not 6 as soon as / until* all the water has been removed.

Work in small groups.

Should people be allowed to keep ancient artefacts that they find, or should the artefacts be put in museums as part of the nation's heritage? Why?

Unit 5

involves?

- 2 What skills and abilities do you think an archaeologist needs?
- 3 Why might someone decide to become an archaeologist?

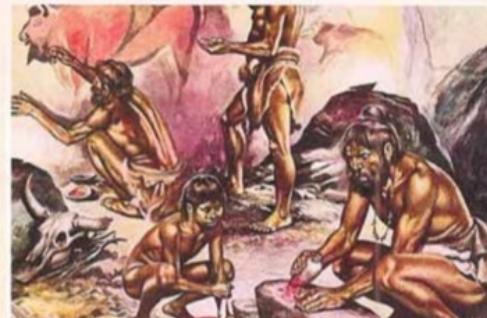
2 Work in pairs.

- 1 Read the title and subheading and discuss how they are connected.
- 2 Skim the passage, then say which of these statements best summarises the content.
 - a How Homo sapiens eliminated other human species
 - b Why Homo sapiens survived when other species died out

Last man standing

Some 50,000 years ago, *Homo sapiens* beat other hominids to become the only surviving species. Kate Ravilious reveals how we did it.

A Today, there are over seven billion people living on Earth. No other species has exerted as much influence over the planet as us. But turn the clock back 80,000 years and we were one of a number of species roaming the Earth. Our own species, *Homo sapiens* [Latin for 'wise man'], was most successful in Africa. In western Eurasia, the Neanderthals dominated, while *Homo erectus* *may have lived in Indonesia*. Meanwhile, an unusual finger bone and tooth, discovered in Denisova cave in Siberia in 2008, have led scientists to believe that yet another human population – the Denisovans – *may also have been widespread across Asia*. Somewhere along the line, these other human species died out, leaving *Homo sapiens* as the sole survivor. So what made us the winners in the battle for survival?



B Some 74,000 years ago, the Toba 'supervolcano' on the Indonesian island of Sumatra erupted. The scale of the event was so great that ash from the eruption was flung as far as eastern India, more than 2,000 kilometres away. Oxford archaeologist Mike Petraglia and his team have uncovered thousands of stone tools buried underneath the Toba ash. The mix of hand axes and spear tips have led Petraglia to speculate that Homo sapiens and Homo erectus were both living in eastern India prior to the Toba eruption. Based on careful examination of the tools and dating of the sediment layers where they were found, Petraglia and his team suggest that Homo sapiens arrived in eastern India around 78,000 years ago, migrating out of Africa and across Arabia during a favourable climate period. After their arrival, the simple tools belonging to Homo erectus seemed to lessen in number and eventually disappear completely. 'We think that Homo sapiens had a more efficient hunting technology, which could have given them the edge,' says Petraglia. 'Whether the eruption of Toba also played a role in the extinction of the Homo erectus-like species is unclear to us.'

C Some 45,000 years later, another fight for survival took place. This time, the location was Europe and the protagonists were another species, the Neanderthals. They were a highly successful species that dominated the European landscape for 300,000 years. Yet within just a few thousand years of the arrival of Homo sapiens, their numbers plummeted. They eventually disappeared from the landscape around 30,000 years ago, with their last known refuge being southern Iberia, including Gibraltar. Initially, Homo sapiens and Neanderthals lived alongside each other and had no reason to compete. But then Europe's climate swung into a cold, inhospitable, dry phase. 'Neanderthal and Homo sapiens populations had to retreat to refugia (pockets of habitable land). This heightened competition between the two groups,' explains Chris Stringer, anthropologist at the Natural History Museum in London.

D Both species were strong and stockier than the average human today, but Neanderthals were particularly robust. 'Their skeletons show that they had broad shoulders and thick necks,' says Stringer. 'Homo sapiens, on the other hand, had longer forearms, which undoubtedly enabled them to throw a spear from some distance, with less danger and using relatively little energy,' explains Stringer. This long-range ability may have given Homo sapiens an advantage in hunting. When it came to keeping warm, Homo sapiens had another skill: weaving and sewing. Archaeologists have uncovered simple needles fashioned from ivory and bone alongside Homo sapiens, dating as

far back as 35,000 years ago. 'Using this technology, we could use animal skins to make ourselves tents, warm clothes and fur boots,' says Stringer. In contrast, Neanderthals never seemed to master sewing skills, instead relying on pinning skins together with thorns.

E A thirst for exploration provided Homo sapiens with another significant advantage over Neanderthals. Objects such as shell beads and flint tools, discovered many miles from their source, show that our ancestors travelled over large distances, in order to barter and exchange useful materials, and share ideas and knowledge. By contrast, Neanderthals tended to keep themselves to themselves, living in small groups. They misdirected their energies by only gathering resources from their immediate surroundings and perhaps failing to discover new technologies outside their territory.

F Some of these differences in behaviour may have emerged because the two species thought in different ways. By comparing skull shapes, archaeologists have shown that Homo sapiens had a more developed temporal lobe – the regions at the side of the brain, associated with listening, language and long-term memory. 'We think that Homo sapiens had a significantly more complex language than Neanderthals and were able to comprehend and discuss concepts such as the distant past and future,' says Stringer. Penny Spikins, an archaeologist at the University of York, has recently suggested that Homo sapiens may also have had a greater diversity of brain types than Neanderthals. 'Our research indicates that high-precision tools, new hunting technologies and the development of symbolic communication may all have come about because they were willing to include people with "different" minds and specialised roles in their society,' she explains. 'We see similar kinds of injuries on male and female Neanderthal skeletons, implying there was no such division of labour,' says Spikins.

G Thus by around 30,000 years ago, many talents and traits were well established in Homo sapiens societies but still absent from Neanderthal communities. Stringer thinks that the Neanderthals were just living in the wrong place at the wrong time. 'They had to compete with Homo sapiens during a phase of very unstable climate across Europe. During each rapid climate fluctuation, they may have suffered greater losses of people than Homo sapiens, and thus were slowly worn down,' he says. 'If the climate had remained stable throughout, they might still be here.'

adapted from Focus Magazine

- 3 Work in pairs. Read Questions 1–5 and underline the key ideas that tell you what information you need to read for.

Questions 1–5

The Reading passage has seven paragraphs, A–G.

Which paragraph contains the following information?

- 1 a comparison of a range of physical features of Neanderthals and Homo sapiens D
- 2 reference to items that were once used for trade E
- 3 mention of evidence for the existence of a previously unknown human species F
- 4 mention of the part played by ill fortune in the downfall of Neanderthal society G
- 5 reference to the final geographical location of Neanderthals C

- 4 Now answer Questions 1–5 by reading each paragraph of the article carefully to see whether it contains the information for any of the five questions.

Exam advice Matching information

- Underline the key ideas in each question.
- Start with Paragraph A and decide if it contains information which matches a question. If there is no match, go on to the next paragraph.

5 Work in pairs.

- 1 Read Questions 6–9 below and quickly check what information you need.
- 2 Underline words in the questions which will help you to find the right place in the passage.
- 3 Answer Questions 6–9.

Questions 6–9

Complete the sentences below. Choose **NO MORE THAN THREE WORDS** from the passage for each answer.

the sediment layers

- 6 Analysis of stone tools and has enabled Petraglia's team to put forward an arrival date for Homo sapiens in eastern India.

7 Homo sapiens used both to make sewing implements.

- 8 The territorial nature of Neanderthals may have limited their ability to acquire resources and new technologies *new shapes*
- 9 Archaeologists examined grave shapes in order to get an insight into Neanderthal and Homo sapiens' capacity for language and thought.

Ivory and bone

Exam advice Sentence completion

- Underline the key ideas in each question and scan the passage for the right place.
- Read that section of the passage carefully and choose your answer.

6 Look at Questions 10–13.

- 1 Underline the key ideas in the questions.
- 2 Scan the passage for the name of each researcher and underline it.
- 3 Answer Questions 10–13 by reading around each name to decide whether what the researcher said at that point matches any of the statements.

Questions 10–13

Look at the following statements and the list of researchers, A–C, below.

Match each statement with the correct researcher.

- 10 No evidence can be found to suggest that Neanderthal communities allocated tasks to different members. C
- 11 Homo sapiens may have been able to plan ahead. B
- 12 Scientists cannot be sure whether a sudden natural disaster contributed to the loss of a human species. A
- 13 Environmental conditions restricted the areas where Homo sapiens and Neanderthals could live. D

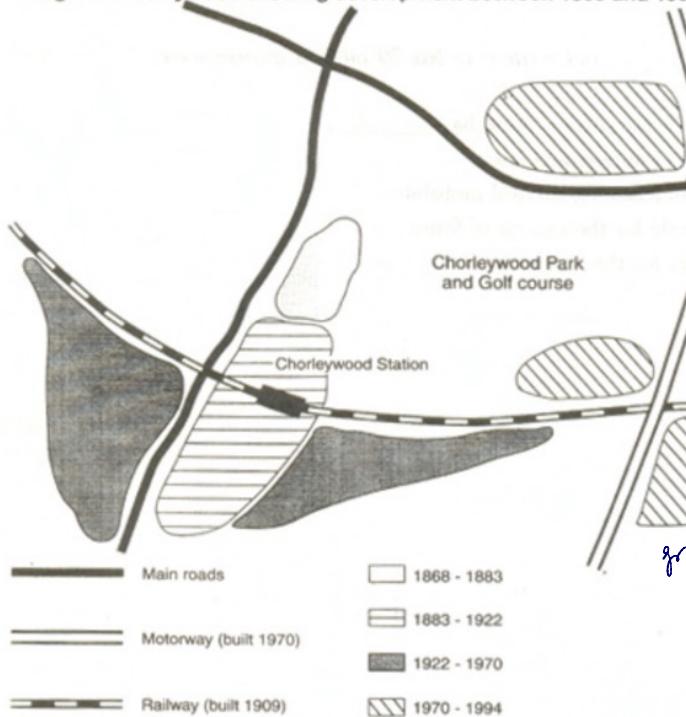
List of Researchers

- A Mike Petraglia
B Chris Stringer
C Penny Spikins

Chorleywood is a village near London whose population has increased steadily since the middle of the 19th century. The map below shows the development of the village.

Write a report for a university lecturer describing the development of the village.

Village of Chorleywood showing development between 1868 and 1994



① 24 stages like this until 1883, when it stretches to the south almost 3 times in size.

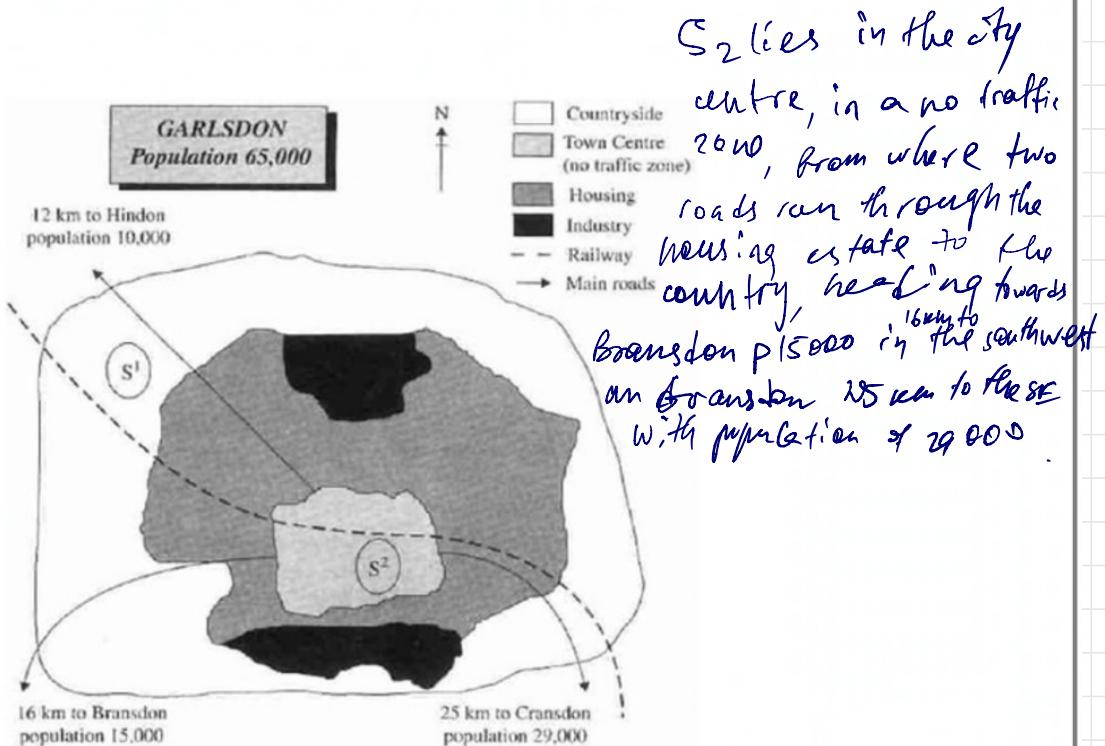
② in 1909 a railway is built through the upper part of it, becoming the Chorleywood station.

③ in 1922 another two large areas are added, growing from

④ the story begins in 1868 century when there were two main roads crossing at the north. To the one that runs from north towards the south a small village was adjusted in the east.

The map below is of the town of Garlsdon. A new supermarket (S) is planned for the town. The map shows two possible sites for the supermarket.

Summarise the information by selecting and reporting the main features, and make comparisons where relevant. You should write at least 150 words.



(From Cambridge IELTS 5)

The town of Garlsdon with population of 65 000 divided into 4 areas, countryside, industry, housing and the city centre, featuring railway and 3 main roads. S¹. In the country, close to the housing estate and the northern (industrial) site. Between the railway that goes from the northwest to the southeast and a road running to Hindon, 12 km away

Reading Section 3

1 Work in small groups. You are going to read a passage about an international charity called the Earth and Space Foundation. First discuss this question.

What are the advantages of international collaboration in space exploration?

2 Quickly glance through this section to see what types of questions you will have to answer.

3 Before you deal with the questions, spend two minutes skimming the passage to get an overview of the type of passage and its contents. When you have finished, compare your ideas with a partner.

The Earth and Space Foundation



The community that focuses its efforts on the exploration of space has largely been different from the community focused on the study and protection of the Earth's environment, despite the fact that both fields of interest involve what might be referred to as 'scientific exploration'. The reason for this dichotomous existence is chiefly historical. The exploration of the Earth has been occurring over many centuries, and the institutions created to do it are often very different from those founded in the second part of the 20th century to explore space. This separation is also caused by the fact that space exploration has attracted experts from mainly non-biological disciplines – primarily engineers and physicists – but the study of Earth and its environment is a domain heavily populated by biologists.

The separation between the two communities is often reflected in attitudes. In the environmental community, it is not uncommon for space exploration to be regarded as a waste of money, distracting governments from solving major environmental problems here at home. In the space exploration community, it is not uncommon for environmentalists to be regarded as introspective people who divert attention from the more expansive visions of the exploration of space – the 'new frontier'. These perceptions can also be negative in consequence because the full potential of both communities can be realised better when they work together to solve problems. For example, those involved in space exploration can provide the satellites to monitor the Earth's fragile environments, and environmentalists can provide information on the survival of life in extreme environments.

In the sense that Earth and space exploration both stem from the same human drive to understand our environment and our place within it, there is no reason for the split to exist. A more accurate view of Earth and space exploration is to see them as a continuum of exploration with many interconnected and mutually beneficial links. The Earth and Space Foundation, a registered charity, was established for the purposes of fostering such links through field research and by direct practical action.

Projects that have been supported by the Foundation include environmental projects using technologies resulting from space exploration: satellite communications, GPS, remote sensing, advanced materials and power sources. For example, in places where people are faced with destruction of the forests on which their livelihood depends, rather than rejecting economic progress and trying to save the forests on their intrinsic merit, another approach is to enhance the value of the forests – although these schemes must be carefully assessed to be successful. In the past, the Foundation provided a grant to a group of expeditions that used remote sensing to plan eco-tourism routes in the forests of Guatemala, thus providing capital to the local communities through the tourist trade. This novel approach is now making the protection of the forests a sensible economic decision.

The Foundation funds expeditions making astronomical observations from remote, difficult-to-access Earth locations, archaeological field projects studying the development of early civilisations that made significant contributions to astronomy and space sciences, and field expeditions studying the way in which views of the astronomical environment shaped the nature of past civilisations. A part of Syria – 'the Fertile Crescent' – was the birthplace of astronomy, accountancy, animal domestication and many other fundamental developments of human civilisation. The Foundation helped fund a large archaeology project by the Society for Syrian Archaeology at the University of California, Los Angeles, in collaboration with the Syrian government that used GPS and satellite imagery to locate mounds,

or 'tels', containing artefacts and remnants of early civilisations. These collections are being used to build a better picture of the nature of the civilisations that gave birth to astronomy.

Field research also applies the Earth's environmental and biological resources to the human exploration and settlement of space. This may include the use of remote environments on Earth, as well as physiological and psychological studies in harsh environments. In one research project, the Foundation provided a grant to an international caving expedition to study the psychology of explorers subjected to long-term isolation in caves in Mexico. The psychometric tests on the cavers were used to enhance US astronaut selection criteria by the NASA Johnson Space Center.

Space-like environments on Earth help us understand how to operate in the space environment or help us characterise extraterrestrial environments for future scientific research. In the Arctic, a 24-kilometre-wide impact crater formed by an asteroid or comet 23 million years ago has become home to a Mars-analogue programme. The Foundation helped fund the NASA Haughton-Mars Project to use this crater to test communications and exploration technologies in preparation for the human exploration of Mars. The crater, which sits in high Arctic permafrost, provides an excellent replica of the physical processes occurring on Mars, a permafrosted, impact-altered planet. Geologists and biologists can work at the site to help understand how impact craters shape the geological characteristics and possibly biological potential of Mars.

In addition to its fieldwork and scientific activities, the Foundation has awarded programmes. These include a series of awards for the future human exploration of Mars, a location with a diverse set of exploration challenges. The awards will honour a number of 'firsts' on Mars that include landing on the surface, undertaking an overland expedition to the Martian South Pole, undertaking an overland expedition to the Martian North Pole, climbing Olympus Mons, the highest mountain in the solar system, and descending to the bottom of Valles Marineris, the deepest canyon on Mars. The Foundation will offer awards for expeditions further out in the solar system once these Mars awards have been claimed. Together, they demonstrate that the programme really has no boundary in what it could eventually support, and they provide longevity for the objectives of the Foundation.

adapted from Fostering links between environmental and space exploration: The Earth and Space Foundation, Cockell, C., White, D., Messier, D. and Dale Stokes, M., Elsevier Science Ltd, 2002

4 Work in pairs. Quickly look at Questions 1–9. You worked on 'Yes / No / Not Given' and multiple-choice questions in Units 3 and 6.

- 1 What are the best techniques for dealing with these tasks in the exam?
- 2 How long should you spend on each of them?
- 3 Check your answers by reading the Exam advice on pages 32 and 65.
- 4 Now try to answer Questions 1–9 in the time you decided on above.

Questions 1–5

Do the following statements agree with the views of the writer in the reading passage?

Write

YES if the statement agrees with the views of the writer

NO if the statement contradicts the views of the writer

NOT GIVEN if it is impossible to say what the writer thinks about this

- 1 Activities related to environmental protection and space exploration have a common theme. *true*
- 2 It is unclear why space exploration evolved in a different way from environmental studies on Earth. *false*
- 3 Governments tend to allocate more money to environmental projects than space exploration. *ng*
- 4 Unfortunately, the environmental and space exploration communities have little to offer each other in terms of resources. *false*
- 5 The Earth and Space Foundation was set up later than it was originally intended. *ng*



Questions 6–9

Choose the correct letter, **A**, **B**, **C** or **D**.

- 6 What was the significance of the 'novel approach' adopted in the Guatemala project?

- A** It minimised the need to protect the forests.
- B** It reduced the impact of tourists on the forests.
- C** It showed that preserving the forests can be profitable.
- D** It gave the Foundation greater control over the forests.

- 7 GPS and satellite imagery were used in the Syrian project to

- A** help archaeologists find ancient items.
- B** explore land that is hard to reach.
- C** reduce the impact of archaeological activity.
- D** evaluate some early astronomical theories.

- 8 One of the purposes of the Foundation's awards is to

- A** attract non-scientists to its work.
- B** establish priorities for Mars exploration.
- C** offer financial incentives for space exploration.

- D** establish the long-term continuity of its activities.

- 9 What is the writer's purpose in the passage?

- A** to persuade people to support the Foundation
- B** to explain the nature of the Foundation's work
- C** to show how views on the Foundation have changed
- D** to reject earlier criticisms of the Foundation's work

- 3 Check your answers by reading the Exam advice on page 34.

- 4 Answer Questions 10–14 in the time you decided.

Questions 10–14

Complete the summary using the words, **A**–**I**, below.

Field research: Applying the Earth's environment to the settlement of space

Some studies have looked at how humans function in 10 ... situations. In one project, it was decided to review cave explorers in Mexico who tolerate 11 ... periods on their own.

It is also possible to prepare for space exploration by studying environments on Earth that are 12 ... to those on Mars. A huge crater in the Arctic is the 13 ... place to test the technologies needed to explore Mars and gather other relevant 14 ... information.

A comparable	D ideal	G scientific
B extreme	E unexpected	H extended
C connected	F beneficial	I individual

- 6 Find these five phrases in the passage. What do they refer to, and which questions did they help you answer?

- 1 both fields of interest
- 2 this dichotomous existence
- 3 both communities
- 4 These collections
- 5 Together, they demonstrate

- 7 Work in small groups.

- 1 Why do you think Mars has become an important focus for space exploration?
- 2 If scientists found life on other planets, how would this change the way we see the world and ourselves?

5 Work in pairs.

- 1 Quickly look at Questions 10–14.
- 2 Decide on the best techniques for dealing with this task in the exam, and how long the task should take you.