Cambridge	Cambridge Assessment International General C		ation
IGCSE	Cambridge international Ceneral C		
CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	
ENGLISH AS	A SECOND LANGUAGE		0510/12
Paper 1 Read	ng and Writing (Core)		February/March 2019
			1 hour 30 minutes
Candidates an	swer on the Question Paper.		
No Additional N	laterials are required.		
READ THESE	INSTRUCTIONS FIRST		

Write your centre number, candidate number and name in the spaces at the top of this page. Write in dark blue or black pen. Do not use staples, paper clips, glue or correction fluid. DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions. Dictionaries are **not** allowed.

9517276831

The number of marks is given in brackets [] at the end of each question or part question.

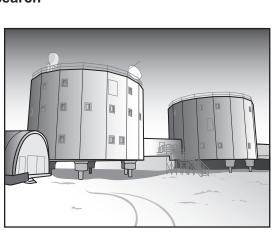
This document consists of 13 printed pages and 3 blank pages.

Read the article about Dr Sarah Hilton, a researcher working in Antarctica, and then answer the following questions.

Antarctic space research

Nobody knows what it's like to live on Mars, but the scientist Dr Sarah Hilton does have some idea. She's spending a year at the Concordia research base in Antarctica, where the special conditions found there are helping her learn about what life on Mars might be like for future astronauts.

The region has an average temperature of minus 50 °C. The sun vanishes completely for four months in winter, with temperatures dropping to minus 80 °C. The base is so far from civilisation that it's the only place on Earth where you get the same feeling of remoteness that astronauts experience. In fact, it takes longer to get to Antarctica than to the International Space Station 400 kilometres above us!



Sarah is part of a team of 13 scientists who are living and working at the base. During summer, Concordia is home to up to 60 visiting scientists. But in winter, a crew of only 10 is left to run the base, so everyone has several roles: the chef is also a fireman; the plumber is trained as a medical assistant.

When asked why she applied, Sarah says: 'I've always been fascinated by Antarctica. I'd already experienced working in constant daylight at the North Pole, which had a negative effect on my body's ability to tell day from night. But sleeping in 24-hour darkness in Antarctica is totally different. Also, you immediately notice the flat landscape and strong winds here.' Sarah's main job is monitoring the effects of these conditions on health, as previous studies found that people working in Antarctica share many physical challenges with those working in space. Results on Earth can give clues about possible problems astronauts might face.

Sarah has discovered that although the freezing cold and lack of sunlight make conditions very uncomfortable, she was surprised to find that living with strangers is harder than anything else. Her team is of mixed experience and cultural background, including a French scientist, an Italian physicist and some Spanish astronomers. Although English is used when discussing research, there is a multicultural atmosphere, with Spanish being the most common language used in social situations.

Sarah started off trying to make friends with everyone because like being in space, communicating with people back home can be difficult. She soon realised, however, that having just a few close friends has made her feel more positive, and has also enabled her to focus more on work. She produces research which predicts how people might perform on future missions to the Moon, Mars and beyond. One study that Sarah hopes will be useful is to measure people's eyesight during their visit, as, just like the conditions in space, everyone at the base has only artificial light for many months.

Considering this difficult environment, everyday life at the base is well-managed, with the team kept occupied. While most prefer reading books, or using the games consoles provided, Sarah enjoys taking photos to record her trip when she isn't working. The food at the base is good, even if most of it is preserved – for example, vegetables and meat come in tins. Sarah admits to missing things like salad, although she made sure she brought plenty of chocolate, her favourite treat, with her on the trip. Team members' personal items are important, and Sarah regrets not having her favourite shampoo, which she wasn't allowed to bring with her. This is because the base in Antarctica reuses its water through the same special recycling system that is used on the International Space Station, and it can't cope with the chemicals found in many washing products.

And Sarah's future? She says, 'I'd love to go to Mars if I could, but I don't think it's very likely!'

3

1	What is the coldest the weather can get where Sarah is working?	[1]
2	How many members of staff remain to manage the base after the summer?	
3	Which job does the cook at the base also do?	[1]
4	What environmental factor meant that Sarah had difficulty sleeping in a previous job?	[1]
5	What is the biggest challenge that Sarah has to deal with at the base?	[1]
6	Which language do the scientists speak when they are not working?	[1]
7	What has helped to make Sarah's life at the base easier?	[1]
8	What does Sarah like doing while at the base?	[1]
9	What particular food does Sarah wish she could eat while at the base?	
	[Tota	

Read the article about three people (A–C) who are reviewing computer games that they've played. Then answer Question 10 (a)–(h).

Computer game reviews

A Tom

In *Rune Island*, a brother and sister start out on a remote island. The aim of the game is to follow clues and solve puzzles to reach the highest point of the island, where a mysterious scientist awaits. You can play either as the boy or girl throughout, and as each character has special abilities, it's worth changing between the two as you play. During the game, you climb things, push objects around and even use sunlight to activate switches that open doors. To start with, it's nothing more than a gentle game with some nice music, but as time goes on, you get more involved in the action. I really love puzzle games, and I assumed I'd feel the same about *Rune Island*. I like it, but it rarely offers anything tricky, although there were a few tasks that left me feeling satisfied when I'd solved them. You can only climb certain rocks, marked by their colour, and while this shows you where to go, it means you won't bother to explore the other areas much, which is a shame.

B Lionel

In *Farspace*, you choose which character you want to be, and try to escape from a distant planet. One of the fun things about difficult games is advancing through a hard level. Unfortunately, in *Farspace*, you need more than skill, as all too often, success is based on chance. At any point you might meet an enemy that seems impossible to beat – and if you don't win, you have to start again. One tip is to listen to the soundtrack, as the style of the music is often a clue to what might be around the corner. You might get lucky and find some items to help, but then you don't know which character can use them. As you can't change characters mid-game, you have to start again to find out. The characters look great, and although you won't be exploring the surrounding landscape – the game is based in the city – the stunning video-clips remind you that you're in another world.

C Lizzie

Snowscape is an extreme winter-sports game in the mountains of Switzerland. Open 'map view' and you fly around a realistic 3D model of the mountains and find somewhere to land. To start snowboarding, skiing or paragliding, just bring up a menu, choose the sport, and you're off, straight into the action. There are various events that you can repeat to improve your skill, like races and time trials – so many, in fact, that I spent more time deciding what to do next, rather than enjoying the game. My favourite event is one that marks a distant point, maybe the peak of a mountain, then simply asks you to reach it. Here the freedom of being able to switch sports really works. It's exciting not to be limited to following a particular path, and you soon find out which sport is best for travelling through forests and valleys and over peaks to reach your goal.

10 For each question, write the correct letter A, B or C on the line.

Which reviewer

(a)	mentions that they enjoy choosing their own routes through the game?	[1]
(b)	recommends that players try out the skills that different characters possess?	[1]
(c)	explains how the music can help players make progress?	[1]
(d)	suggests that there are too many things to choose from in the game?	[1]
(e)	says that the game becomes more interesting the longer you play it?	[1]
(f)	mentions that changing between the different options in the game is quick?	[1]
(g)	says that just being good at the game is not enough to complete it?	[1]
(h)	feels that the level of the challenges in the game is often not hard enough?	[1]
		[Total: 8]

Read the article about making energy from the sea, and then complete the notes.

Wave power: creating energy from the sea

Wave power is a source of energy that is created from the movement of the waves in the sea as they roll towards the shore then back out again. This regular movement means it is easy to predict how much energy will be produced. Equipment to collect the energy from the waves is already in place along many coastal regions including the United States, Canada, Scotland and Australia.

At a time when we understand that the remaining supplies of fossil fuels such as coal are very low in some places, it is good to know that wave power will never run out. The seas which have been a constant feature of our planet for billions of years are a vital part of our lives. While there is no doubt that we have a need for power, we must protect our planet from destructive human activities. In contrast to the way that fossil fuels are produced, no harmful waste is created in the process of obtaining energy from the waves. There are some problems, however. As parts of the equipment use chemicals to keep them running smoothly, there is always the possibility that these chemicals might spill into the water nearby and cause pollution.

For countries which have coastlines, major coastal cities are often important destinations for large cargo ships and recreational boats. As wave-power equipment is often situated just off the coastline, it can cause disruption to shipping, so governments and private companies that want to invest in wave power must consider the needs of those they may be disturbing. In addition, they have to take into account the fact that the energy produced by the waves can only be used in urban areas close to the sea.

Wave-power generators are large machines that may be unpleasant to look at for people living in coastal regions. They may be found in places that rely on holidaymakers, which could therefore have a damaging effect on the local tourist economy. Being situated close to the land could also be a problem in terms of noise from the machinery. Fortunately, the noise they make is covered by the natural sound of the waves, which is actually louder than the equipment.

Those who choose to invest in wave power do so in the knowledge that, unlike the situation with fossil fuels, wave power causes minimal damage to the Earth. While it can't be denied that to some extent the machinery can disturb the creatures that live on the seabed, for many people, this is preferable to something like coal mining. Here, the extraction process can cause considerable damage to the landscape. Furthermore, the construction and management of wave-power sites can provide opportunities for creating 'green jobs' in the local community. Most people would consider this as a positive step.

Anyone who is interested in using waves to create power must examine both sides of the argument. What is certain is that traditional methods of fuelling the planet need to change, in response to both global climate conditions and the availability of the fuels we have relied on for years.

You are going to give a talk about wave power to your class. Prepare some notes to use as the basis for your talk.

Make short notes under each heading.

11	Benefits of wave power:	
	•	
	•	
	•	
	• [4]	
12	Disadvantages of wave power:	
	•	
	•	
	• [3]	

[Total: 7]

13 Read the article about the Golden Gate Bridge in San Francisco, USA.

Write a summary about the reasons why some people did not want the bridge AND the challenges in building it.

Your summary should be about 80 words long (and no more than 90 words long). You should use your own words as far as possible.

You will receive up to 6 marks for the content of your summary and up to 6 marks for the style and accuracy of your language.

The Golden Gate Bridge

In 1933, construction started on what is now one of America's most famous structures: the Golden Gate Bridge in the city of San Francisco. Despite opposition from city officials who were unhappy with the cost of the project, it was completed in 1937. Since opening to the public, it has proved hugely popular. This is in contrast to the initial concern that the bridge was unnecessary, as not enough vehicles would use it.



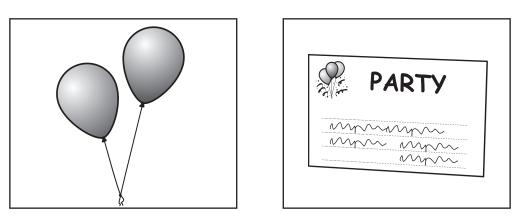
The bridge's name comes from the Golden Gate Strait, the area of water where the San Francisco Bay opens into the Pacific Ocean. The beauty of this region encouraged a group of nature-lovers, who described the area as one of 'nature's perfect pictures', to write to the local newspaper. They claimed that building a bridge would spoil the view. The bridge crosses the Golden Gate Strait to connect the northern part of San Francisco to Marin County, California. Before its construction, the only way to travel between these two areas was by ferry boat, and the ferry operators were naturally very unhappy about the effect the bridge would have on their businesses.

Although people objected to the bridge, plans were made, and construction started. Some members of the engineering community believed that the construction would be very complicated because of the width of the bay. They were also concerned about the sea conditions due to the strong movements of tides through the bay, and the fact that workers would have to cope with working in the heavy winds in Golden Gate Strait.

Constructing a bridge of this size was never going to be straightforward, and engineers had to design new construction machinery. However, despite the difficulties, the Golden Gate Bridge was completed and thousands came to celebrate. The plan was to make money by charging cars to cross the bridge, and when it first opened, the cost was 50 cents each way. Today, more than 41 million vehicles use it each year.

9

[Total: 12]



14 You are planning a special party, and want some help from your friend.

Write an email to your friend about the party.

In your email, you should:

- say what the party is for
- describe the plans you have already made
- explain how your friend can help.

The pictures above may give you some ideas, and you can also use some ideas of your own.

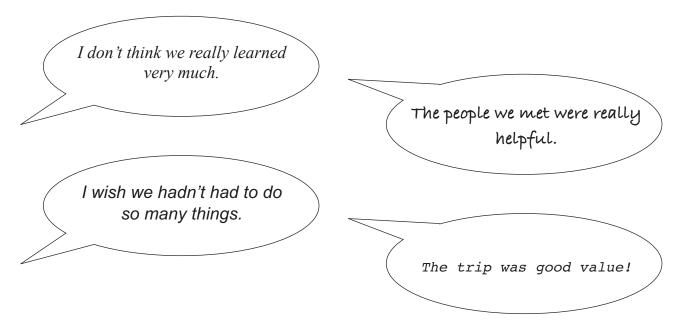
Your email should be between 100 and 150 words long.

You will receive up to 6 marks for the content of your email, and up to 6 marks for the language used.

11

15 You recently went on a school trip. Your teacher has asked you to write a report about the trip and make suggestions for next year.

Here are some comments from your classmates:



Write a report for your teacher, giving your views.

The comments above may give you some ideas, and you can also use some ideas of your own.

Your report should be between 100 and 150 words long.

You will receive up to 6 marks for the content of your report, and up to 6 marks for the language used.

13

BLANK PAGE

BLANK PAGE

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.