

1. SUMMARY COMPLETION WITHOUT OPTIONS

1.1. TASK DESCRIPTION

- You complete the summary by writing the required number of words from the passage in each gap.
- The summary reports the main ideas from the passage, but the information may not be presented in the same order.
- The summary usually relates to one section of the passage, but may also report the meaning of the whole passage.
- The wording of the summary is not exactly the same as the wording in the passage, but it contains the same information.
- You write the words **IN THE SAME FORM** as you see them in the passage (e.g. singular/ plural) – you don't need to change them in any way.

1.2. STRATEGIES

- Read the instructions carefully to see how many words you can write, and whether you are told which paragraph(s) the summary comes from
- Read the summary heading (if there is one) to help you find the right place in the passage
- Read through the summary to get an idea of what it is about and how much of the passage it covers
- Decide what type of information is needed to complete each gap, e.g. a name, a number or a specific term
- Note any grammatical clues, e.g. articles or prepositions, which may help you find the answer
- Underline or highlight the key words around the gap
- Read the passage and decide where the answer to the first question comes from.
- Decide exactly which words or numbers you should write as your answer.
- Read above and below this part to find the rest of the answers.
- Answers usually **BUT NOT ALWAYS** come in order

1.3. SAMPLE TASK

EXERCISE 1

GOLD BUGS

A Medieval alchemists found, in the end, that they could not create gold. Modern geochemists have a similar problem. They find it hard to understand how natural gold deposits form. There is much handwaving about gold-rich fluids from deep in the earth, and chemical precipitation, but the physics does not add up. The answer may be that what is happening is not geochemical at all, but biochemical. And a casual experiment conducted by a bacteriologist may hold the key.

B Derek Lovley, of the University of Massachusetts, has been studying 'metal-eating' bacteria for two decades. These bacteria make their living by converting the dissolved ions of metallic

READING OTHER COMPLETION QUESTIONS

elements from one electrical state to another. This reduction releases energy, which the bacteria extract for their own purposes.

C Unsurprisingly, such bacteria tend to prefer common metals such as iron and manganese for lunch, though some species are able to subsist on such exotica as uranium. Dr Lovley decided to put some of his bacteria into a solution of gold chloride. He was fully prepared for nothing to happen, as gold compounds are generally toxic to bacteria. Instead, the test tube containing the solution turned a beautiful shade of purple, the colour of metallic gold when it is dispersed very finely in water.

Complete the summary below with words taken from the reading passage. Choose **ONE OR TWO WORDS AND/OR A NUMBER** for each answer.

SUMMARY

Even today, scientists are unable to work out how gold is made. Recently, however, they have considered that the process may be 1..... An experiment was carried out using bacteria that create their own 2..... using metal. The types of metal these organisms usually feed on are either 3..... or..... However, when the bacteria were added to a test tube of 4..... solution, it changed 5..... indicating the presence of gold compounds.

2. SUMMARY COMPLETION WITH OPTIONS

2.1. TASK DESCRIPTION

- You complete the gaps in the summary by choosing the correct answer from a box of options.
- The options are often labeled (for i.e. **A-F**)
- The options are usually single words but they may be short phrases.
- There will be some extra words in the box that you do not need to use.
- The summary may cover the ideas in the whole passage or may be based on a section of the passage only.
- Write **THE LETTER** that labels the option, **NOT THE WORDS**.

2.2. STRATEGIES

- Before you look at the passage, read the summary and underline the main words and ideas.
- Think about the type of information that is missing in each gap based on the grammar surrounding it. For i.e. are you looking for a name, a number, a specific term or something else?
- Read the passage and find the main words and ideas you underlined in the summary.
- The summary usually relates to one section of the passage, but may also report the meaning of the whole passage.
- Go through the summary gap by gap, and read the relevant sections of the passage.
- A number of words from the box will fit each gap logically and grammatically, but remember that you have to choose **THE ONE THAT REPORTS THE MEANING OF THE PASSAGE** exactly.
- Options are usually synonyms that paraphrase the ideas in the text, so be careful not to choose words just because they appear in the passage.

READING SUMMARY COMPLETION

3

2.3. SAMPLE TASK

EXERCISE 2

KEY CONSIDERATIONS

A Research shows that, when choosing a home, most people are keen to find somewhere that is in the right place: that is close to work or study or has easy access to public transport. Property consultants agree that, cost aside, aspects such as the number or size of the rooms, or the furniture (if the property is furnished), play a secondary role.

B In the same way, the medical care in hospitals and the hospital record on this are far more important to patients than things like whether the latest drugs are being used or whether the number of nurses and doctors is considered exemplary.

Complete the summary using the list of words, A-I, below.

SUMMARY

Studies indicate that people generally focus on the 1.....of housing, rather than on the physical 2.....or the 3..... . This general 4.....also applies to medical treatment. Patients note the quality of care, rather than focusing on the level of 5.....at the hospital.

- A. way
- B. features
- C. contents
- D. staffing
- E. movement
- F. location
- G. principle
- H. prices
- I. pieces

SKILL-BUILDING EXERCISES

EXERCISE 3

THE FUTURE OF VIRTUAL REALITY

A For the next ten years, various aspects of society could be going through enormous change as Virtual Reality (VR) technology moves towards fully operational and interactive implementation of its potential. To what extent VR establishes itself as an integral part of our lives, and how quickly it is likely to move from niche technology to common usage throughout society, is currently under discussion. However, many experts are of the opinion that VR may well have become sufficiently developed for it to form an essential part of life by 2030 (if not

READING OTHER COMPLETION QUESTIONS

sooner). Over 40 million people currently own VR headsets, and this figure is expected to double over the next three years. By 2025, we may well have reached the point at which almost 200 million users own a VR viewing device, the Head Mounted Display (HMD), more commonly known as a VR headset.

B The ultimate aim of these headsets is to generate a 360-degree, 3D virtual world, enabling the viewer to enjoy what they are watching without the physical limits of a TV, computer or cinema screen. There are two LCD displays, one for each eye, which display images being sent by the computer or some such device (via an HDMI cable) or on the screen of a smartphone inserted into the front of the headset. Lenses, set inside the HMD between the user's eyes and the LCD displays, are necessary to counteract the natural differences between what one human eye and the other simultaneously see.

C These lenses enable two 2D images of the display to be viewed, thus creating a tailored picture for each eye. These combine to create the illusion of 'real life' in 3D. The HMD also uses 'head tracking', a system that follows the principle of aircraft flight, tracking three measurements known as pitch, yaw and roll (or movement along the x, y and z axes). It means that when the user tilts their head up, down, or to the side, VR follows these motions and allows them to 'see' all around them.

D With such technology in place, one of the most notable sectors in which VR is likely to have far-reaching effects will be the games industry. In this field, traditional games are in development even now with far greater scope for creativity than ever before. Role Playing Games (RPGs), in which a gamer plays the part of a character from a first-person viewpoint, moving through an entirely imagined, graphically rendered world, are nothing new. However, VR games designers will be able to add to this existing appeal by enabling the user to look all around themselves at a fully immersive world, one in which the flow of the narrative can more easily be controlled by the gamer, rather than the creator.

E Despite this, games designers currently appear to be more attracted to the untapped potential of new approaches to their end product. For example, games may become less about employing motor skills, such as swift reflexes or hand-eye coordination. Instead, the aim may be to enjoy the experience of a VR world in a more unhurried way, with traditional game mechanics (e.g. accumulating points, moving through a series of levels) running alongside as a secondary concern.

F Other fields are similarly going to find their landscapes greatly altered. Educators, for one, will be presented with a vast array of new opportunities through which to pass on knowledge. Within the next five to ten years, teachers may become able to move completely away from the course book or flat screen – even the classroom itself – and into an immersive world of instruction and learning. By way of example, history students could be taken into the epicentre of the world's greatest battles and conflicts, experiencing and understanding the machinations of victory first-hand. Medical students may be provided with the opportunity to travel through the human body as if they were themselves the size of a blood cell, building their comprehension of how veins and arteries, or nerve systems, are interconnected. Music students will be able to watch a VR orchestra perform their new

READING SUMMARY COMPLETION

composition in a venue of their choice, whether that be the local concert hall or even the Sydney Opera House.

G

Current HMDs do not allow for any dialogue to take place between the user and the simulated people they encounter in the VR world. However, this is unlikely to be the case forever; a student of Mandarin should one day be able to 'walk' the streets of Beijing, conversing with the local native-speakers, and practising the regional pronunciation. Similarly, by the year 2021, the concept of travel may have undergone a profound transformation. Parts of the world currently inaccessible to most people, whether because the expense of flying is too great or because those places are too remote to be easily reached, will become open to visitors in the form of exact VR replicas of the original cities, rainforests, beaches and so on. Not only is this bound to please avid travellers, it could also appease the concerned environmentalist; the number of commercial flights operating each day might well decrease as people opt for VR vacations.

H

Despite its potential to change life as we know it today, it is also possible that VR will ultimately fail to catch on, and HMDs will be consigned to history in the same way as were CDs, MiniDisc players and Personal Digital Assistants (PDAs). After all, even the technology that today seems improbable will at some point become outdated. If this does indeed occur, the most likely cause of its failure will be that the vast majority of computers and consoles available for the home market lack the required processing power. One potentially disastrous side effect of underpowered hardware is that latency issues - when what the viewer sees on the display fails to catch up with the movement of their head can cause motion sickness in the HMD wearer. Even the most devoted VR enthusiast may be unwilling to accept this as the consequence of their interest in new technologies.

3.1. *Read the summary completion task (3.2.) and answer the following questions (do not try to complete the summary yet)*

1. What do you notice about the options in the box you have to choose from?
2. Use the following questions to help you locate which parts of the reading text you need to focus on to complete the gaps.
 - a. What does the title of the summary tell you?
 - b. Which parts of the summary can you use to scan the passage and locate the information quickly?
 - c. In which paragraph of the reading text does it talk about HMDs as part of our lives?
 - d. In which paragraph of the reading text are CDs and PDAs mentioned in connection with HMDs?

3.2. *Complete the summary using the list of words, A-J, below. Write the correct letter, A-J.*

READING OTHER COMPLETION QUESTIONS

VR: How popular can it become?

There is some debate as to whether VR will become something used in a 1.....way, rather than predominantly in niche areas of technology. On the other hand, experts say it is 2.....that by 2030, HMDs will have become part of our everyday lives. On the other, it is also possible that they will go the same way as other 3.....technologies, such as CDs or PDAs. This is because most home consoles and computers are 4.....of coping with the VR software. Thus, even enthusiastic users are likely to be 5.....to endure the resultant physical side-effects.

A. mainstream	C. unable	E. outmoded	G. incapable	I. conceivable
B. interactive	D. reluctant	F. operational	H. essential	J. functioning

3.3. Check the answers to **3.2.** Mark them *S* (same word as appears in the text) or *P* (paraphrase or synonym of the word/ idea in the text)

3.4. Complete the summary below. Choose **NO MORE THAN TWO WORDS** from the passage for each answer

Applications of VR

The influence and effects of VR technology will be 6..... This will be the most noticeable in one particular 7..... – Video Games. Since games designers and developers are increasingly able to use their 8.....in new ways, the conventional mechanics and concerns of game playing may become 9..... . Further changes are likely to happen away from this field as well: teachers will be able to enter an 10.....that enables learning to take place away from typical classroom setting; music students could theoretically listen to their latest 11.....being played in the Sydney Opera House, while students of Medicines will be able to understand how so many parts of the human body are 12..... . Furthermore, differing approaches to travel may mean that fewer flights are taken, as people “virtually” visit the destinations of their choice. This development is likely to please environmentalists as well as 13.....

EXERCISE 4

HOLOGRAPHICS AND ANIMATION IN MUSIC AND PERFORMANCE

A

For hundreds of years, the more forward-thinking elements of science and technology have stoked imaginations in the world of entertainment. For example, a huge number of science fiction movies were produced over the 20th century, a period during which space exploration became first a possibility, then a reality. Many such films depict situations in which one character (in full bodily form) interacts with a 3D, holographic image of another. Despite the

READING SUMMARY COMPLETION

optimism in some quarters, genuine interaction with holograms in the real world is still as far from becoming a reality as ever. Additionally, there is some doubt as to whether the existing, limited holographic technology is even worth exploring any further. However, what is currently available has begun to be used for entertainment purposes in a wide range of industries.

B The music industry is one. It has sought to take advantage of this technology since its infancy. There have been numerous examples - concerts and events - during which audiences have been able to watch modern vocalists sharing the stage with holographic images of performers who departed this world some time ago. In fact, the technology has been developed to such an advanced stage that it is almost possible to stage an entire concert 'performed' by dead rock stars. Critics have argued that this is exploitative of both audience and musician, pointing out the questionable morality of putting on stage an artist who has no way of refusing to be there.

C On the other hand, it might be argued that, to modern audiences so accustomed to a daily intake of entertainment viewed almost entirely on 2D screens, on-stage animation allows people once again to embrace the excitement of the 3D, live arena. Such shows, its advocates argue, are likely to become commonplace as the world of entertainment expands its horizons. (Great actors could also be resurrected to take their place on the theatre stage, for example.) This is due in no small part to the fact that the on-stage technology making this possible is actually less complex than one might expect, certainly if, rather than a true holographic performance, reflective technology is used instead.

D To achieve this, a laser projector shoots down an image beam that is set up to be exactly perpendicular to the floor. If the angle of projection is greater or less than 90 degrees, even by the tiniest amount, the projection will fail. As the song is being played, the animated image is projected onto a mirrored surface which has been set into the stage floor. This set up means that a 'suspension of disbelief' can be created within the onlooking audience, as it collectively sees the moving image while, at the same time, the transparent foil used to make the screen is invisible, stretched back as it is at an angle of 45 degrees. There is no maximum or minimum height at which projection fails to work, and, after a series of relatively simple calculations, the laser projector can be simply fixed to a lighting rig set up high above the stage.

E The future of holographic performance does appear rather limited, however, particularly in the context of bringing musicians back to life in this way. For one thing, it is impossible to create a new performance from old videotape, and there is a limited amount of original footage of these icons that was shot while they were alive. It is unlikely that a great deal more will be found. Following on from this, the only way to generate an entirely new show would be through Computer-Generated imagery (CGI) and this, for most fans, would defeat the object of the exercise entirely. Finally, most of this past footage was shot on acetate film, which cannot come close to the modern ultra HD technology that is the bare minimum required for a truly lifelike reanimation. Consumers would soon grow tired of these limitations, however much of a novelty the experience might once have been.

READING OTHER COMPLETION QUESTIONS

F

Away from the revival of past performers, it is now possible to film and project ultra HD holographic visuals in real time, in just the same way as they might appear on a 2D screen. In this way, the individual musicians in a group could 'perform' together on the same stage, even though they may be in completely different locations at that moment in time. This has led some people inside the music industry to predict a future of bands touring without needing to leave the rehearsal studio, but any investment of either time or money into this area does seem risky. It would be highly unlikely for any fan to buy a ticket to watch their favourite artists, knowing that the performance they have paid to see is not technically a live show, and the musicians they admire do not wish to be present in the same room as they are.

G

Essentially, then, stage projection of deceased stars of entertainment is a straightforward endeavour, but one limited both in visual appeal and available source material. Real-time, 3D representations of artists are becoming ever more accurate, but have less appeal for audiences than authentic performances do. As is often the case, the will to create something new and exciting for consumers of entertainment is hindered by the technology currently available to it.

Questions 1-5

Complete the summary using **ONE WORD ONLY** from the passage for each gap.

While the music industry has begun to explore potential uses for holographic technology in the context of live performance, critics argue that the staging of a 1.....to include a fake performance from a deceased artist is both exploitative and morally questionable. Despite a belief elsewhere that 3D 2.....in live shows will inevitably become commonplace, it is more likely that the lack of original 3.....will limit how much can be achieved. Additionally, real-time holographic concerts and tours could potentially be staged that allow the artists to remain in a practice 4.....while performing, but it is thought that this is unlikely to hold much 5.....for audiences.

Questions 6 – 9

Label the diagram below

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

READING SUMMARY COMPLETION

9

The projection of on-stage 3D animation

