UNIT 6: SCIENCE AND TECHNOLOGY

A. GRAMMAR & VOCABULARY

Exercise 1: Read the information. Then read the sentences. Choose the correct definitions of the underlined words and phrases. Use the context to help you.

Some words in English have more than one meaning. These words are called homonyms. Homonyms are words that are spelled or pronounced the same but have different meanings. True homonyms are words that are both spelled and pronounced the same. It is important to look at the word in context to work out the meaning. For example:

True homonym: park
1. a large area of land with grass and trees
2. to put a vehicle in a place where it can stay for a period of time

You are only allowed to park there between the hours of 8 p.m. and 6 a.m.
In the sentence above, the context tells us that park means to put a vehicle in a place where it can stay for a period of time.

1. We have seen huge advances in the field of 3-D technology in recent years, with engineers now able to print custom-made surgical tools.
- money paid to a person before they start working on a project
- specially made for a particular person or group
- the development or progress made in a field of study

2. It is evident that the digital divide between rich and poor countries is getting bigger and bigger.
- the different types of technology available to a person
- the gap between those with regular access to technology and those without it
- the process of separating different technologies into groups

3. The company is renowned for its innovative products, which are unlike any other products on the market.
- high-quality
- newly developed and original
- reliable

4. The concept of energy used by a wide variety of scientific disciplines dates back to the seventeenth century.
- a particular area of study or knowledge
- a person who has specialist knowledge in a particular area of study
- the ability to control yourself or other people

5. Even though the group agreed that more funding was needed for the new research project, they were unable to reach a consensus on exactly how the money should be spent.
- a conclusion based on statistical data
- an agreement among a group of people
- a person who makes a decision

6. It wasn't until the discovery was published in the monthly scientific journal that the team received global recognition for all their hard work.
- a formal document used for writing notes about an experiment
- a serious newspaper or magazine that deals with a particular subject
- a written private record of what you have done each day

Exercise 2: Write the noun forms of the verbs. The first one has been done for you.

1 verify	_____
2 accomplish	_____
3 innovate	_____
4 assess	_____
5 justify	_____
6 analyse	_____
7 observe	_____
8 prefer	_____
9 assume	_____

verification

Exercise 3: Read the extracts from a science class. Choose the correct verb forms to complete the sentences.

1 In today's lesson, *I'm explaining / I'm going to explain / I will explain* how an electrical circuit works.
2 Do the experiment carefully and *you are going to see / you'll see / you're seeing* the chemical change from a liquid to a solid.
3 Remember that you *aren't passing / won't pass / wouldn't pass* your exams if you don't start working harder.
4 Do you predict that the ice *is melting / melts / will melt* more quickly in that container?
5 What action do you think *is causing / will cause / will have been causing* the water to change from a liquid into a gas after we have poured it into the container?
6 Tomorrow *I'm going to plan / I'm planning / I will plan* to repeat this experiment, but I'm going to make a few changes to see if we get a different result.
7 By the end of the lesson, *we will complete / we will have been completing / we will have completed* three experiments to show how an electrical circuit works.
8 This time next week, all the students *are doing / do / will be doing* a vocational placement in their chosen industries.

Exercise 4: Read the information. Then complete the sentences. Use the verbs in brackets in the correct form: the future perfect or the future continuous.

Read the following sentences:

This time next week, ***I will be working*** *as an intern for a publishing company.* ***I will have finished the internship*** *by the end of August.*

I will be working is an example of the *future continuous*. We use the future continuous to talk about something that will be in progress at a time in the future. *I will have finished* is an example of the *future perfect*. We use the future perfect to talk about something that will be complete by a particular time in the future.

The following time expressions are commonly used with the future continuous and the future perfect:

Future continuous	Future perfect
this time next week / next month / next year	**by** next week / next month / next year
next week / month / year	**by** the time
in tomorrow's meeting / lecture	**before** I leave university / the conference

1 By the end of the year, he_____(deliver) over 100 lectures on biochemistry.
2 Next week she _____ (conduct) a seminar on advances in space technology for a group of scientists from China.
3 The guest speakers _____ (discuss) the digital divide and its impact on global development in tomorrow's lecture.
4 Most students _____ (complete) the project on nanotechnology by the end of next week.
5 If all goes to plan, I _____ (write) my presentation before the conference begins next Wednesday.
6 Next Tuesday, on his day off from college, he _____ (prepare) his talk on relativity.
7 Even at the start of the advanced course, they _____ (analyse) some very complicated data.
8 We all hope that somebody _____ (discover) a way of preventing climate change by the end of the decade.

Exercise 5: Read the schedule. Then use the information in the schedule to complete the sentences. Use the correct future forms.

Schedule for a visitor, Oliver Smith, attending a conference in Washington, D.C. next week.

	Monday	Tuesday	Wednesday
Morning	9–10 a.m.: Lecture on electric cars 10:30–11:30 a.m.: Lecture on driverless cars	9–10:30 a.m.: Seminar on traffic management 11–12:30 a.m.: Lecture on the future of the bicycle	9–10 a.m.: Guided tour of the transport museum. 10:30–11:30 a.m.: Lecture on flying cars – a dream or reality?
Lunchtime	FREE	FREE	Lunch as guests of the director of the transport museum
Afternoon	2–2:45 p.m.: Giving poster presentation: Fumes in the future	2–4 p.m.: Lecture on alternative sources of energy to power the automobile	2–3 p.m.: Closing remarks by the conference organiser – Where do we go from here?
Evening	Dinner with international colleagues	FREE	*Standby ticket to JFK (ring at 4 p.m. to confirm)*

1 By 11:30 a.m. on Monday, Oliver _____(attend) two lectures on automotive technology.
2 At 2:15 p.m. on Monday, Oliver _____ (give) a poster presentation on the effects of exhaust fumes on the environment.
3 Oliver _____ (have) dinner with his international colleagues on Monday evening.
4 On Tuesday, after the seminar on traffic management, there _____ (be) a lecture on the future of the bicycle.
5 At 2:30 p.m. on Tuesday, Oliver _____ (listen) to a talk on alternative sources of energy to power the automobile.
6 By the end of the conference, Oliver _____ (have) the opportunity to participate in a wide range of events relating to the past and future of transport.
7 The conference _____ (end) on Wednesday after the organiser's closing remarks.
8 If Oliver's flight ticket to JFK Airport is confirmed by the airline, he _____ (return) home on Wednesday evening.

Exercise 6: Read the information. Then complete the table with the verbs in the box.

In English, some verbs are followed by a gerund or infinitive. For example:
He considered moving to the UK after he completed his studies in Germany.
She decided to do an internship in Sweden.
The verb consider is followed by a gerund. The verb decide is followed by an infinitive.
Some verbs are followed by an object and then an infinitive:
He persuaded me to buy a new computer.
It is important to learn the correct form as this will affect your Grammatical Range and Accuracy mark in the IELTS test.

forbid / risk / neglect / propose / approve of / discourage from recall / insist on / instruct / urge/ deny / proceed

verb + infinitive

verb + object + infinitive

verb + gerund

verb + preposition + gerund

Exercise 7: Choose the correct verb forms to complete the sentences.

1 I regretted *being / to be* late for the interview for the lab technician job.
2 He remembers *talking / to talk* about the experiment yesterday.
3 I always remember *locking / to lock* the dangerous chemicals cupboard before I leave the lab.
4 The professor instructed his students *to wear / wearing* gloves while carrying out the experiment.
5 All the equipment needs *cleaning / to clean* after the experiments.
6 I stopped *to work / working* with radioactive materials for health reasons.
7 I can't remember *switching off / to switch off* the lights in the science lab.
8 I tried *doing / to do* the calculation but I couldn't.
9 The group risked *missing / to miss* the deadline if they didn't improve their work rate.
10 The company insisted on *using / to use* the latest edition of the software, despite the reservations of some colleagues.

Exercise 8: Read the information. Then read the sentences and choose the correct definitions.

Some verbs can be followed by either a gerund or an infinitive. Be careful, as the meaning will often change depending on whether the gerund or infinitive is used. For example:
The man stopped talking to his neighbour.
The man stopped to talk to his neighbour.
In the first sentence, the man finished talking to his neighbour. In the second sentence, the man stopped what he was doing to go and talk to his neighbour.

1 I love to start work early.
- It's a habit I love.
- It's an experience I love.

2 I forgot doing the experiment.
- I forgot that I had done the experiment.
- I forgot to do the experiment.

3 He stopped taking notes.
- He is no longer taking notes.
- He stopped doing what he was doing to take notes.

4 They tried to measure the amount of electricity.
- They experimented with measuring the electricity.
- They tried to measure the electricity but didn't succeed.

5 I remembered watching a film about space technology last year.
- I didn't forget to watch the film.
- I recalled the film from my memory.

6 I won't forget to complete my notes.
- Completing my notes is so important for me that I won't forget the experience.
- I'll remember to complete my notes.

Exercise 9: Read the information. Then combine the sentences. Use the words in brackets. Remember, some of these sentences require punctuation to be marked as correct. The first one has been done for you.

Despite and although are both used to show contrast. While they are both similar in meaning, there is a difference in the way they are used. Despite is used before a noun or gerund. For example:
We had a great time at the science fair, despite the terrible weather.
Despite having a cold, David went to work.
Despite can also be used before the fact that. For example:
Despite the fact that there were a lot of changes in the company, people were happy with the new structure.
Although is used before the subject and the verb. For example:
Although the design of the new car was good, it wasn't environmentally friendly.

1 We were exhausted from our trip / we continued working on the presentation. (although)
Although we were exhausted from our trip, we continued working on the presentation.

2 He still enjoys working on the new research project / the long hours and complicated work. (despite)
He still enjoys _____ .

3 He has studied nanotechnology for several years / he still feels he has huge gaps in his knowledge. (although)_____in his knowledge.

4 They informed us that all the tests had been carried out / scientists were still working on them when we arrived. (although) _____ on them when we arrived.

5 She has impressive scientific qualifications / she hasn't been able to find a job in space technology. (despite) _____a job in space technology.

6 We had been very careful in all our clinical research / we couldn't conclusively prove that excessive use of chewing gum has a negative effect on digestion.
(although)_____that excessive use of chewing gum has a negative effect on digestion.

Exercise 10: Put the words in the correct order to make sentences with participle clauses. The first one has been done for you.

1

Being of the opinion / that / stem cells / will revolutionise / medicine over the next decade, / many scientists / are / enthusiastic / about the new / developments / in the cells / .

2

At an impressive rate / has since / initially launched / about two decades ago, / expanded / computer-assisted translation / .

3

The scientific equipment / been repaired / damaged / on display / during its installation, / has since / .

4

Are / intensifying / into this aspect of the universe / being convinced / there are / that / planets / that could sustain life, / their research / many / astronomers / .

5

Over 300 years ago, / published / today / Isaac Newton's Principia / accepted / widely / is still / .

6

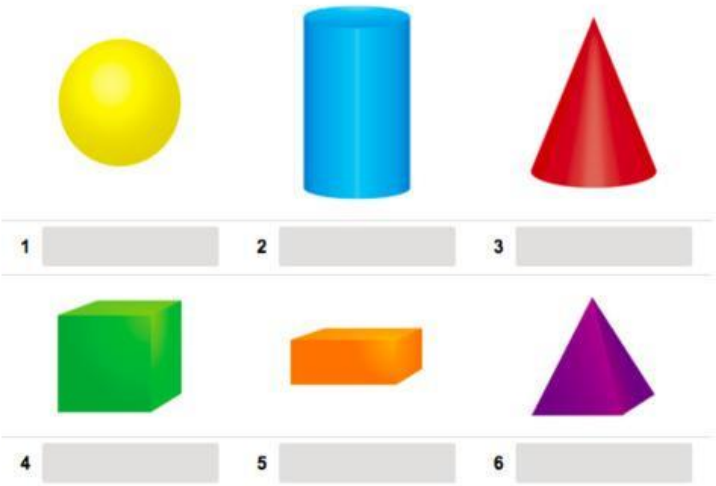
Believing that / to maintain close contact / online / some students think / that / is the best way of maintaining friendships / than in real life, / it is easier / social networking

B. READING

Exercise 1: Read the information. Then label the shapes with the words in the box.

In the IELTS Reading test, you might need to read about something and use the information to label a diagram. Knowing vocabulary for describing shapes can help you to do this successfully.

cone | cube | cylinder | pyramid | rectangular prism | sphere



Exercise 2: Complete the table with the correct nouns and adjectives.

noun	adjective
circle	_____
_____	rectangular
square	_____

_____	spherical
oblong	_____
_____	conical
cylinder	_____

Exercise 3: Read the first sentences. Then choose the correct answers to complete the definitions of the words in bold.

1 The Earth's **gravity** is much stronger than the moon's, meaning that an object would effectively be lighter if it was on the moon than it is when on Earth.
Gravity is *the ability to fly slowly / the force that attracts things to each other .*

2 Meteoroids are often referred to as 'shooting stars' when they burn up on entering the Earth's atmosphere.
Meteoroids are *flying pieces of rock in space / other planets*

3 The Earth's **orbit** of the sun takes 365 and a quarter days.
Orbit is *a circular journey in space around a central point / the distance from a point in space*.

4 Spacecraft returning to Earth re-enter the Earth's **atmosphere** at an altitude of approximately 120 km.
Atmosphere means *the feeling or mood in a place / they layer of gases above the Earth's surface.*

5 Tim Peake is the British **astronaut** who in 2015–16 spent six months aboard the International Space Station.
The best definition of astronaut is *a person who works and travels on a spacecraft / someone who has been to the moon*

6 The International Space Station is comprised of 15 separate **modules**, including five made by Russia.
A module is *a place where a spacecraft takes off from the Earth / a unit of spacecraft that can be detached*.

Exercise 4: Read the information. Then complete the table to form collocations. Use the words in the box.

Collocations are words that often go together. These can be noun + noun (e.g. *space travel*), adjective + noun (e.g. *lunar landings*), etc.

research | scientific | solar | space

	scientist
	proposal
	and development

	exploration
	station
	rocket

	breakthrough
	expertise
	research

	energy
	system
	panel

Exercise 5: Complete the sentences about summary completion tasks in the IELTS Reading test. Use the phrases in the box.

are grammatically correct	be a paraphrase	be found in the text
be in the same order	choose from a list of words	
write more than the maximum number of words		

1. In a summary completion task, you have to e ither write the words in the gaps or _____

2. When you're writing the words in the gaps, r emember that the words you need to write ca n always _____

3. It's important that you don't _____ specified in the instructions.

4. Always check that the words you write _____ within the sentence.

5. Remember that the notes you read and com plete will probably _____ of the text.

6. The information in the text and in the questi ons will always _____

Exercise 6: Look at how an IELTS candidate has attempted a summary completion task. The candidate has made a mistake with each answer. What are the mistakes? Choose the correct answers.

Questions 1–4 Complete the notes below. Write **NO MORE THAN TWO WORDS** for each answer.

The Mercator projection

Mapmakers have always faced a challenge – how to make a flat map of the spherical Earth? There will always be some **1** *distortion to a certain extent*.
Gerardus Mercator (1512–1594) had the idea of showing the map as a **2** *cylindrical*.
Maps of the Earth created in this way are known as the Mercator projection.
They are most accurate when close to the **3** *the equator*.
Several of the Earth's **4** *island* are shown at the wrong size.

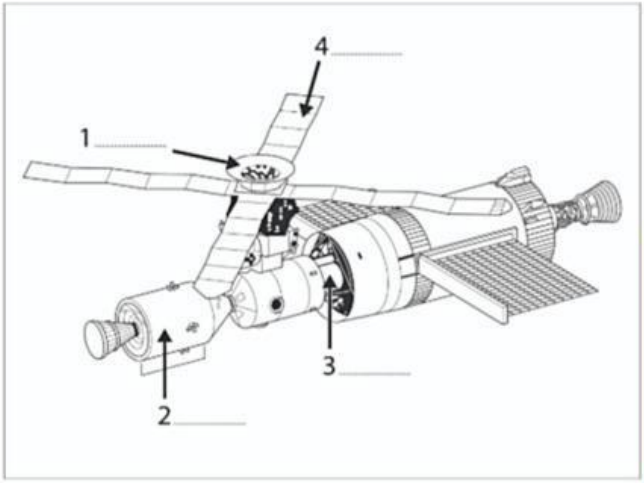
Answer 1
- ♦ problem with singular / plural
- ♦ repetition of words in notes
- ♦ wrong part of speech

Answer 2
- ♦ too many words written
- ♦ problem with singular / plural
- ♦ too many words written

Answer 3
- ♦ repetition of words in notes
- ♦ problem with singular / plural
- ♦ repetition of words in notes
- ♦ wrong part of speech
- ♦ repetition of words in notes

Answer 4
- ♦ wrong part of speech
- ♦ too many words written
- ♦ problem with singular / plural
- ♦ too many words written
- ♦ wrong part of speech

Exercise 7: Read the information. Then look quickly at the labelling task and scan the passage. Choose the <u>four</u> paragraphs that contain the information you need to label the diagram.



In the next exercises, you will practise an IELTS-style reading task. You will read about a space station from the 1970s and do first a summary completion task and then a task in which you must label the different parts of the space station.

You don't actually need to label the diagram in this exercise – you will do that later.

The Skylab space station

A The USA sent its Skylab space station into orbit in 1973 from the Kennedy Space Center in Florida. It wasn't the world's first space station – that had been Salyut 1, which was launched by the Soviet Union on 1 April 1971. However, Salyut travelled alone and empty, controlled remotely back on the Earth. No space station had been manned until Skylab, with its crew of three astronauts. Skylab too launched without its crew, who were transported to the space station once it was in orbit in the Apollo Command / Service Module. The crew members spent up to 84 days aboard Skylab. A limiting factor was pure logistics in terms of how many supplies it was feasible for the crew to bring with them, given the restricted space available while in transit on the Apollo Command / Service Module.

B Key objectives of the Skylab mission included the study of space and an investigation into how people could live and work there for extended periods. Additionally, the astronauts were to examine the Earth's surface (both land and oceans). However, the primary goal of the mission was solar research. In fact, solar science was significantly advanced by the powerful telescope on board, and the telescope's observation of the sun was unprecedented. The astronauts had an intense programme of experiments to carry out, and the data from these was scrutinised following Skylab's return to Earth.

C The life cycle of Skylab began after a period of massive expenditure on space rockets, moon capsules and service modules, many of which were still in serviceable condition on return to Earth, and so the decision was taken to reuse leftover components from these to forge the space station. Many of these were from the Apollo moon missions. For example, the Orbital Workshop (the thickest end of the space station) was made from two tanks that had been used for storing liquid hydrogen and liquid oxygen; the former was reconfigured to become a living and working facility, and the latter was used for storing waste products that had accumulated on the mission – unlike in other spacecraft, these were not recycled or dumped into space.

D At the opposite extremity of the space station was the Service Module, whose conical point would dock with the rest of the space station. In actual fact, Skylab was so designed to allow for more than one module

to dock simultaneously; this was the contingency plan in the event of any major mishap that meant that the astronauts needed rescuing.

E Skylab itself was essentially cylindrical in form, except for the Apollo Telescope Mount, which stuck out at a right angle from the main body of Skylab. This allowed for observation of the Earth and stars without atmospheric interference. This was instrumental in the collection of many thousands of photographs that were taken and subsequently analysed.

F Radiating out from a central point were the solar array panels, arranged in a cross-like formation and looking almost like a windmill. These were designed in order to achieve optimum alignment.

G The Airlock Module, with a length of 5.4 metres and a width of 2.1 metres, was used by the astronauts to exit the space station and perform spacewalks. It allowed the astronauts to access the exterior and perform any necessary maintenance. This was the cylindrical section with the smallest radius, dwarfed by the bulk of the substantially wider body of the Orbital Workshop and its attachments.

H Overall, the Skylab mission proved a success, though it was not without its setbacks. Just 63 seconds after lift-off, a micrometeoroid shield worked loose and became separated due to atmospheric drag, which compromised the space station's usability and effectively cut off the majority of its electrical power. The first crew members were due to occupy the space station the following day, but their launch was delayed by ten days to allow for changes to be planned and put in place. The damage to the shield caused Skylab's internal temperature to rise to a dangerously high 52 degrees, but a three-and-a-half-hour spacewalk and the adept use of a pair of wire cutters attached to an eight-metre-long pole allowed the crew to cut a metal strap and bring the temperature back down to acceptable levels, rendering the space station habitable. This was the first time that a repair of this magnitude had been carried out in space.

I Much attention was paid by NASA to ensuring that Skylab would be comfortably habitable for the astronauts. Whereas previous missions had been brief and undertaken in spacecraft with small volumes, Skylab was to be lived in for months at a time. With this in mind, NASA sent a scientist to the *Ben Franklin* submarine in the Gulf Stream in July–August 1969 to learn how a team of six people could live in an enclosed space for a four-week period. Skylab offered what a subsequent study would call 'a highly satisfactory living and working environment for the crews'. Sitting by its large window with a view of the Earth became the most popular way for the crew to relax in orbit.

J Skylab orbited the Earth from 1973 until 1979. However, its decaying orbit meant that it would inevitably crash back down to Earth. Controllers in Florida endeavoured to minimise the risk of any debris from the space station landing in populated areas. NASA's target was a spot 810 miles off the coast of South Africa in the Indian Ocean. Many people reported seeing brightly coloured flares in the sky on 11 July 1979 as large pieces of the space station broke up in the Earth's atmosphere. Skylab did not in fact burn up as NASA had anticipated, and pieces of debris reached the Earth in Australia, but without any major mishaps.

- ○ Paragraph A
- ○ Paragraph B
- ○ Paragraph C
- ○ Paragraph D
- ○ Paragraph E
- ○ Paragraph F
- ○ Paragraph G
- ○ Paragraph H
- ○ Paragraph I
- ○ Paragraph J

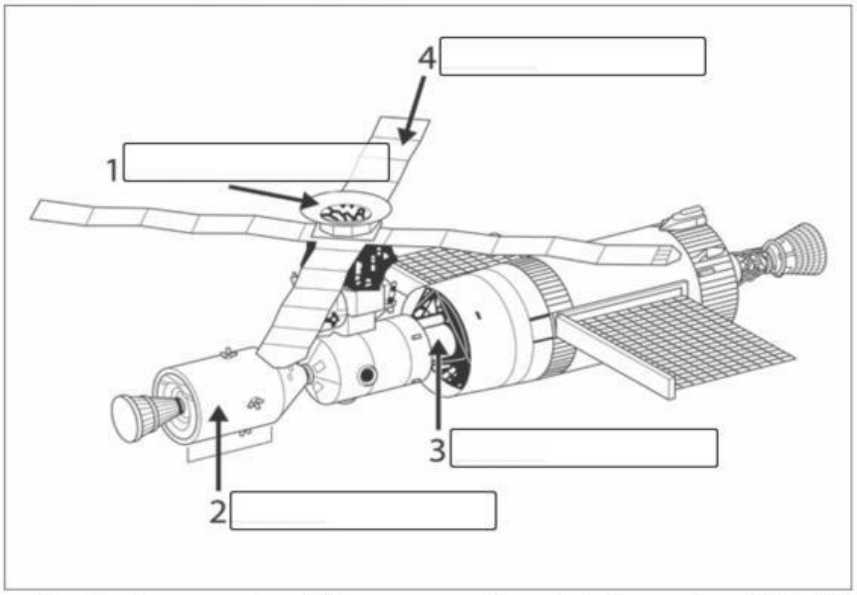
Exercise 8: Read the information. Then read the first three paragraphs of the passage "The Skylab space station" again. Complete the notes. Write NO MORE THAN TWO WORDS from the passage for each answer.

Make sure that you only write one or two words in each gap. As a general rule, try to answer with just one word if possible.

- Time spent by astronauts in orbit depended on the availability of _____ on Skylab.
- The main purpose of Skylab was to study the _____ .
- Skylab was constructed from _____ pieces of hardware.
- In the Orbital Workshop, _____ were kept in an old oxygen tank.

Exercise 9: Read paragraphs D, E, F and G of the passage. Use the information in the passage to label the space station. Use the phrases in the box.

Airlock Module | Apollo Telescope Mount | Command Module | Orbital Workshop | Service Module | Solar Array Panels



Exercise 10: Read the final paragraphs of the passage. Complete the notes. Write NO MORE THAN TWO WORDS from the passage for each answer.

- An accident during take-off meant that the space station had hardly any _____.
- Astronauts performed repairs to correct the _____ inside the space station.
- The living conditions in a _____ were studied to inform the design of a space station that would be easy to live in.
- NASA had intended the spaceship to fall into the sea near _____.

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 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.

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.

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.

A appeal	B event	C rehearsal	D animation	E screens
F footage	G concert	H artists	I innovation	J studio

Questions 6–9

Label the diagram below.

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

The projection of on-stage 3D animation