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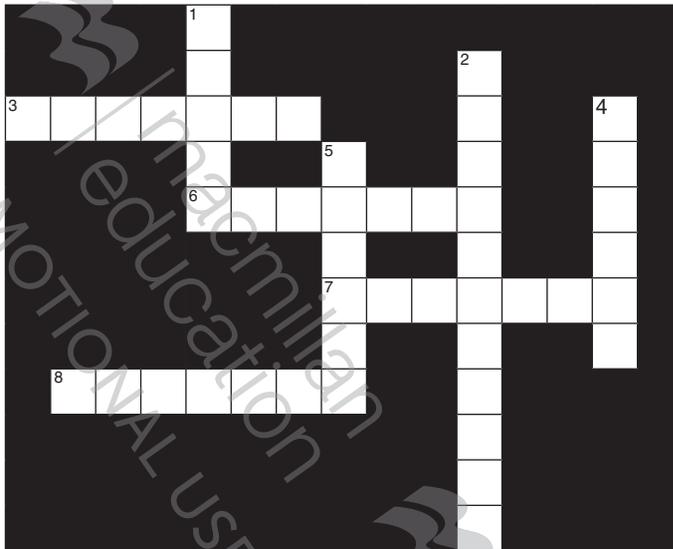
Technology—now and then

Vocabulary 1

Wordlist on page 212 of the coursebook.

Verbs of cause and effect

- 1 Complete the crossword with a verb from the coursebook that means the same as 1–8 below:



Down

- 1 to form something in a particular way
- 2 to become worse
- 4 to help something develop over time
- 5 to have a negative effect

Across

- 3 make someone interested in something
- 6 to improve something or make it more attractive
- 7 to succeed in your aim
- 8 to support something

- 2 Complete the sentences using the noun form of the verb in brackets. Decide whether the nouns are plural or singular.

- 1 There was a lot of media interest in the new invention, which was part of its _____ (attract).
- 2 There was a rapid _____ (deteriorate) in the sales of bicycles after the widespread availability of cars.
- 3 The _____ (promote) of new inventions in the media is the best way of letting people know of their existence.
- 4 It is important to try and limit the _____ (destroy) done to the environment.
- 5 The invention of the telephone was one of the greatest _____ (achieve) of its time.
- 6 The _____ (shape) of our future depends on our actions in the present.
- 7 New research links the use of technology to the _____ (foster) of knowledge in children.
- 8 Significant _____ (enhance) have been made to the processing speed of the latest PC.

Listening

IELTS Section 2

1.2 SECTION 2 Questions 11–20

Questions 11–15

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

- 11 Humans have long been using the stars to
- A navigate rivers.
 - B draw sea maps.
 - C sail long distances.
- 12 The building constructed by the first Europeans at the observatory was
- A a village.
 - B a windmill.
 - C a fort.
- 13 In the cloakroom, people are advised not to leave
- A coats.
 - B expensive items.
 - C bags.
- 14 The museum does not allow visitors to stay after
- A 5.30.
 - B 5.15.
 - C 4.30.
- 15 The family ticket allows entrance to
- A four adults only.
 - B three adults and three children.
 - C two adults and two children.

Questions 16–20

Which attraction matches the questions?

Choose **FIVE** answers from the box and write the correct letter, **A–F**, next to questions 16–20.

ATTRACTIONS

- | | |
|----------|-------------------|
| A | Powerhouse |
| B | Soundhouse |
| C | Discovery Centre |
| D | Lace Study Centre |
| E | Vector lab |
| F | Observatory |

- 16 Which of the tickets gives people a discount?
- 17 Which of the venues is located near the recreation area for children?
- 18 Which part should people visit if they are interested in clothes?
- 19 Which part offers an unusual service for a museum?
- 20 Which place houses all of the alterations mentioned?

Reading

IELTS Reading Passage

You should spend about 20 minutes on **Questions 1–13**, which are based on the reading passage below.

FROM man's first steps to the year '0' was a period like no other in the history of invention. Never again would man's survival be so dependent on his ability to invent ways to solve fundamental problems. And never again would man's technological creativity be the most significant factor in his evolution and the establishing of civilization.

By the time modern man (homo sapiens or 'man-the-wise') appeared, probably somewhere in Africa between 100,000 and 250,000 years ago, his forefathers, the early hominids, had already invented stone tools. It is possible that they had also manufactured crude canoes and shelters. However, it would take many more years and a succession of vital inventions for man to evolve from a primitive, nomadic hunter-gatherer to the highly technologically literate citizen of the time of the Roman Empire.

We like to think that we are currently living through a period when technology has an unparalleled hold on society, but it is nothing compared with that of the ancient world, when invention and technology were the most powerful forces shaping civilization. Throughout the ancient world, technology was the one factor that made all the other changes – social, political and cultural – possible. Without the inventions of ink and papyrus, many of man's ideas would not have spread as fast nor as widely. Without weapons and, later, the wheel, armies would not have conquered new territories as quickly.

The single largest step in early man's social evolution came around 10,000 years ago with the invention of animal husbandry and agriculture. This enabled him to progress from living in nomadic communities to settling in villages and small towns. The progress was brought about by a combination of climatic change and man's invention of more efficient hunting tools, of a means of controlling and utilising fire to clear undergrowth and of ways of building lasting shelters. It led to a massive growth in population, which in turn triggered a further rapid increase in technological innovation.

Most of this change took place in the eastern Mediterranean, where the climate and the annual flooding of fertile soils favoured the development of agriculture and later of

cities such as Babylon. By around 6500 BCE, Jericho is believed to have been the largest city in the world, with a population of 2,500.

Four thousand years later, the urban revolution had brought about a momentous cultural transition that in turn generated new needs. These were met by a quantum leap in technological innovation and the establishment of craftsmen and scientists. For the first time, manufacturing became established as man invented ways of making textiles, firing ceramics, producing metalwork and processing foodstuffs. This prompted barter methods to evolve into more sophisticated trading arrangements, culminating in the invention of tokens or early money.

With these technological changes came a corresponding increase in the complexity of the social and political organization of human groups, which in turn necessitated the invention of written language, first to keep track of trading arrangements, then to communicate and record events, processes, philosophies and, of course, inventions.

The history of invention is littered with inventions that had little or no purpose and never caught on, but this was still a period of invention for necessity's sake. It would be some time before an invention would be greeted with questions as to its role – and even longer until Michael Faraday would retort, 'What use is a baby?' when asked what use his dynamo had.

It was also a period when science and technology's symbiotic relationship was reversed. Technology, now often the application of scientific discovery and observation, predated science and in this period was empirical and handed down through the generations. By the time the city states were flowering in the early centuries BCE, scientist-inventors began to emerge. Figures such as Hero, Strato, Ctesibius and Philon used observations and measurements of the physical and natural world to devise inventions. However, they were all minnows when compared with Archimedes. Here was a man of the calibre that the world would not see again until Sir Isaac Newton in the 17th century. The inventor had truly arrived.

Questions 1–7

Do the following statements agree with the information given in the reading passage?

Write:

TRUE if the statement agrees with the information

FALSE if the statement contradicts the information

NOT GIVEN if there is no information on this

- 1 Man was more creative when civilizations were growing.
- 2 Before the arrival of modern man there were no tools.
- 3 Technology nowadays does not drive our society as much as it did in ancient civilizations.
- 4 If ink and papyrus had not been invented, ideas wouldn't have been disseminated easily.
- 5 The cultivation of crops and the rearing of animals was by far the biggest achievement of early man.
- 6 An increase in population led to more advances in the technology of early man.
- 7 Jericho was the world's first large city.

Questions 8–12

Classify the following events according to whether the reader states that they occurred during

- A** the early evolution of nomadic man
 - B** the early urban period
 - C** the period of the urban revolution
- 8 The recording of a wide range of human activity.
 - 9 The possible production of the first boats.
 - 10 Food production as a process.
 - 11 The ability to construct stronger buildings.
 - 12 The use of tokens.

Question 13

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

Which of the following is the most suitable title for the reading passage?

- A** The importance of science and technology
- B** Why man evolved from the apes
- C** How technology made civilization possible
- D** How philosophers changed the world

Language focus 1

 Grammar reference on page 220 of the coursebook.

Past simple and present perfect

- 1 Transform the verb in brackets into the correct form of past simple or present perfect. Put it into the active or passive form.
 - 1 Armies _____ (not be able) to travel long distances before the invention of the wheel.
 - 2 Man's evolution _____ (be) a long and complicated process.
 - 3 Sir Isaac Newton _____ (invent) the reflecting telescope in 1672.
 - 4 Science _____ (teach) in schools now for many years.
 - 5 Many inventions in the past _____ (have) no particular use at all.
 - 6 Man _____ (think) that the Earth was flat in early Mesopotamian times.
 - 7 The discovery of penicillin _____ (help) to end many preventable deaths.
 - 8 Technology and invention _____ (have) a massive impact on our lives.
- 2 Look at the following text about how a family's life has changed since they bought a computer. Find and correct the mistakes. The first has been done for you. There are ten more.

Our lives *have* changed completely since we bought a computer. I became used to doing everything on it from our weekly shop to contacting friends and family. For example, I speak to my best friend who lives in Vietnam at least once a week for the past year; it's an appointment I don't miss. My wife didn't used it as much as I have, although she was had some classes. However, our children had received the most benefit from being able to use the Internet for their homework. They are getting older now so it's getting more difficult to help. Take last week for example, they have asked me who invent the computer and when. I'm sure I haven't learned such things when I have been at school! By the way, it was a Swiss man called Konrad Zuse, though it wasn't until 1941 that it has become fully functional and ready for programming. Who would have guessed? Not me, that's for sure!

Word building

Qualifying adjectives

- 1 Read the sentences below and underline the most suitable option.
 - 1 If you miss a phone call, it's better if it is about something important/unimportant.
 - 2 I find his music very inspiring/uninspiring.
 - 3 It can be safe/dangerous if you don't keep a copy of important documents.
 - 4 If you have a problem, it's better if it's a major/minor one.
 - 5 Not finding a job can be motivating/demotivating.
 - 6 Working together is often more constructive/destructive than working alone.
 - 7 Young people find new technology very appealing/unappealing.
 - 8 Education teaches us worthless/invaluable skills.
 - 9 Abstract art is often labelled as ordinary/bizarre.
 - 10 Leaving parts of the environment untouched is detrimental/beneficial for wildlife.

- 2 Complete the sentences below using an appropriate adjective from exercise 1. There may be more than one possible answer.

Example:

Early man used basic tools to catch dangerous animals.

- 1 Ideas written down on paper was _____ for later generations as it allowed them to build on other people's ideas.
- 2 It's difficult to imagine why some _____ inventions were ever created.
- 3 Some technologies, like the use of asbestos in buildings, are simply _____ to our health.
- 4 The thought of not having access to the internet is _____ to me.
- 5 By far the most _____ invention of the 19th century was electricity.
- 6 _____ people sometimes achieve extraordinary things.
- 7 Criticisms can be very _____ if they are listened to.
- 8 Past inventors have played a _____ role in shaping our present.
- 9 It is important for lessons to be _____ so that children want to learn more.
- 10 Hearing about success stories from the past can be _____ for the young.

Language focus 2

-  Grammar reference on page 220 of the coursebook.

Habit in the past

- 1 Read the sentences below about how a person spent their summers. Decide which of them can use *would* instead of *used to* by adding a tick [✓] if it is possible and a cross if not [X].

- 1 My brothers and I used to go to our grandparent's in the summer.
- 2 They used to have a farm out in the countryside.
- 3 They used to pick us up at the station.
- 4 We used to play in their big garden.
- 5 I used to enjoy chasing rabbits.
- 6 My grandmother used to cook delicious meals for us every night.
- 7 My grandfather used to teach us how to fish.
- 8 I used to hate it when it was time to leave so I used to cry.

**Adverbs of frequency**

- 2 Rewrite the sentences about a person's time at school so that the meaning stays the same. Use the adverb and verb given in brackets with *used to* or in the past simple.

Example:

I never missed my favourite TV programme. (always/watch)

I always used to watch/watched my favourite TV programme.

- 1 I hated science classes. (hardly ever/enjoy)
- 2 I did my homework. (always/do)
- 3 I seldom went to sports lessons. (regularly/attend)
- 4 I frequently had my lunch outdoors. (occasionally/eat)
- 5 I didn't spend a lot of time in the library. (seldom/go)

Vocabulary 2

Change the words in the list to the correct form to fill the gaps. An example has been done for you.

a mob wrld :-O

The use of mobile phones has now overtaken the use of *traditional* landlines. While most people see the benefits of **1** in mobile communication, not everyone is happy with their increasing **2** For example, some people believe that they intrude on the **3** of those who do not wish to listen to other people's conversations while travelling on public transport. However, others complain that if you have one, bosses expect employees to be **4** at all times of day and night. In spite of this, their widespread **5** and falling cost means that not only are they **6** , but increasingly they are seen as a **7** item. The **8** of mobile technology has also led to functions such as **9** text, which saves users the time and energy of putting in letters individually. In addition, a new reduced form of 'text **10** ' has led to the creation of words forms such as 'l8r' for 'later' and 'BTW' for 'by the way'. Whatever your opinion, the mobile **11** looks set to continue.

Example: *tradition*

- 1 advancement
- 2 popular
- 3 private
- 4 contact
- 5 available
- 6 convenience
- 7 fashionable
- 8 sophisticated
- 9 prediction
- 10 literate
- 11 revolve

Writing

IELTS Task 2

- 1 Read the following Task 2 question and underline the key words and phrases.

WRITING TASK 2

You should spend about 40 minutes on this task.

Write about the following topic:

Advances in technology have meant that machines are increasingly used to do jobs that were previously done by humans. The benefits far outweigh the disadvantages. To what extent do you agree or disagree?

Give reasons for your answer and include any relevant examples from your own knowledge or experience.

Write at least 250 words.

- 2 Decide if each of the following arguments are an advantage (+) or a disadvantage (-). Add some examples of your own.

Argument	Examples
They save us time which we can use to do other things.	
People are becoming less and less active which leads to health problems such as obesity.	
They take jobs away from real people.	
They also create jobs both on the side of inventing and design, to manufacturing and sales.	

- 3 Read the sample answer below and find the words which are used to introduce a–f below.
- a examples
 - b reasons
 - c results
 - d additional information
 - e purpose
 - f contrast

We are living in an age of fast-paced development. Thanks to technological advancements, new inventions are constantly being produced that are supposed to help us. However, machines are now often chosen over humans as they are more cost-effective. In spite of this, I completely agree that there are more advantages than disadvantages.

The main argument against using machines is that they take away jobs from humans. Examples include more cash machines and less staff in banks. In factories, fewer people are required as the production line becomes more mechanised. Businesses take these measures because ultimately machines save companies money. In addition, not only do increased technology and mechanization replace jobs in the workplace but also in our daily lives. For instance, in the past we would visit our neighbours and friends, whereas nowadays people either jump in their car or simply pick up the phone. As a result, we have become less active and problems linked to this, such as obesity, are on the increase.

However, it has not all been negative. First of all, we have more free time available from household chores thanks to inventions like washing machines, vacuum cleaners and dishwashers. This means we should have more time available for leisure activities and seeing friends and family. Moreover, technology does not only take jobs away from people but the whole process from design to production and sales actually creates jobs. In order to do these jobs, people need training which leads to more jobs in education and people having more highly specialised careers.

To conclude, although we may do less than in the past, technology has given us the potential to reach new heights that would not have previously been possible. We cannot turn back time so we should concentrate our efforts on ensuring that we all receive a higher level of specialization in the workplace whilst not letting ourselves become less healthy and active.

- 4 Are the examples used different or the same as yours? Remember, there is never just one right way to answer an essay question.