



UNIT 11: SCIENCE AND TECHNOLOGY

PART I. THEORY

A. VOCABULARY

No	Words	Type	Pronunciation	Meaning
1.	science	(n)	/'saɪəns/	khoa học
2.	scientific	(adj)	/'saɪəntɪfɪk/	thuộc khoa học
3.	scientist	(n)	/'saɪəntɪst/	nhà khoa học
4.	face-to-face	(adj)	/feɪs tə 'feɪs/	trực tiếp, mặt đối mặt
5.	screen	(n)	/skri:n/	màn hình
6.	computer screen		/kəm'pjʊ:tə(r)skri:n/	màn hình máy tính
7.	breakout	(n)	/'breɪkɔ:t/	sự đột phá
8.	breakout room		/'breɪkɔ:t ru:m/	phòng học chia nhỏ, chia nhóm
9.	lens	(n)	/lenz/	thấu kính
10.	contact lens		/'kɒntækt lenz/	kính áp tròng
11.	brilliant	(adj)	/'brɪlɪənt/	rực rỡ, xuất sắc
12.	invent	(v)	/ɪn'vent/	phát minh
13.	invention	(n)	/ɪn'venʃn/	sự phát minh
14.	inventor	(n)	/ɪn'ventə(r)/	nhà phát minh
15.	feedback	(n)	/'fi:dbæk/	sự phản hồi
16.	epidemic	(n)	/'epɪ'demɪk/	dịch bệnh
17.	mark	(n, v)	/mɑ:k/	điểm, chấm điểm
18.	recognize	(n)	/rekəɡnaɪz/	nhận biết
19.	recognition	(n)	/,rekəɡ'nɪʃn/	sự nhận biết
20.	face recognition	(n)	/feɪs,rekəɡ'nɪʃn/	sự nhận biết khuôn mặt



21.	digital	(adj)	/'didʒɪtl/	kỹ thuật số
22.	digital communication		/'didʒɪtl kə,mju:ni'keɪʃn/	truyền thông kỹ thuật số
23.	scan	(v)	/skæn/	quét
24.	scanner	(n)	/'skænə(r)/	máy quét
25.	fingerprint	(n)	/'fɪŋgəprɪnt/	vân tay, dấu tay
26.	fingerprint scanner		/'fɪŋgəprɪnt// /'skænə(r) /	máy quét dấu vân tay
27.	experiment	(n)	/ɪk'spɛrɪmənt/	thử nghiệm
28.	track	(v)	/træk/	theo dõi
29.	eye tracking		/aɪ 'trækɪŋ/	theo dõi mắt
30.	discover	(v)	/dɪ'skʌvə(r)/	phát hiện, khám phá
31.	create	(v)	/kri'eɪt/	tạo, sáng tạo
32.	creator	(n)	/kri'eɪtə(r)/	nhà sáng tạo
33.	creative	(adj)	/kri'eɪtɪv/	sáng tạo
34.	develop	(v)	/dɪ'veləp/	phát triển
35.	development	(n)	/dɪ'veləpmənt/	sự phát triển
36.	element	(n)	/'elɪmənt/	thành phần
37.	chemical	(adj)	/'kemɪkl/	nguyên tố thuộc về hoá học
38.	chemical element		/'kemɪkl 'elɪmənt/	nguyên tố hoá học
39.	chemistry	(n)	/'kemɪstri/	hóa học, ngành hoá học
40.	chemist	(n)	/'kemɪst/	nhà hoá học
41.	biometric	(adj)	/,baɪəu'metrɪk/	thuộc về sinh trắc
42.	biometrics	(n)	/,baɪəu'metrɪks/	sinh trắc học học phần điện tử
43.	nano learning	(n)	/nænəu'li:niŋ/	học nano
44.	application	(n)	/,æpli'keɪʃn/	ứng dụng
45.	platform	(n)	/'plætfo:m/	nền tảng



46.	truancy	(n)	/'tru:ənsi/	sự trốn học
47.	cheat	(v)	/tʃi:t/	lừa dối, gian lận
48.	cheating	(n)	/tʃi:tiŋ/	sự lừa dối, sự gian lận
49.	attend	(v)	/ə'tend/	tham dự, có mặt
50.	attendance	(n)	/ə'tendəns/	sự tham dự, sự có mặt vắng mặt
51.	absent	(adj)	/'æbsənt/	vắng mặt
52.	absence	(n)	/'æbsəns/	sự vắng mặt
53.	solution	(n)	/sə'lu:ʃn/	giải pháp, đáp án
54.	effort	(n)	/'efət/	sự nỗ lực
55.	effortless	(adj)	/'efətləs/	dễ dàng, không khó khăn

*******Note:**

- Một số cụm từ để thông báo tin vui:

Great news for you... = Tin vui dành cho bạn đây...

I'm pleased to inform you that... = Tôi rất vui mừng thông báo cho bạn biết rằng ...

I have a bit of good news to tell you... = Tôi có một tin vui muốn báo cho bạn biết....

- Một số cụm từ để đón nhận tin vui:

Great! = Tuyệt quá!

Wow! That sounds exciting! = Ô! Nghe tuyệt quá!

I'm so happy for you! = Tôi rất mừng cho bạn!

Example

I have a bit of good news to tell you. My father will buy me a tablet next week.

Wow! That sounds exciting!

📌 Word form

Verb	Noun	Adjective	Adverb
invent	invention inventor		
predict	prediction	predictable	
succeed	success	successful	successfully
support	support	supportive	
	technology technician	technological	technologically

B. GRAMMAR

I. REPORTED SPEECH

1. Reported speech (Câu tường thuật)

A. ĐỔI NGÔI

- **Ngôi 1:** Đổi cùng ngôi với **chủ ngữ** của mệnh đề chính.

- **Ngôi 2:** Đổi cùng ngôi với **túc từ** của mệnh đề chính.
- **Ngôi 3:** giữ nguyên.

	Ngôi	Chủ từ	Túc từ	Tính từ sở hữu	Đại từ sở hữu	Đại từ phản thân
SỐ ÍT	1	I	me	my	mine	myself
	2	you	you	your	yours	yourself
	3	he	him	his	his	himself
		she	her	her	hers	herself
		it	it	its	its	itself
SỐ NHIỀU	1	we	us	our	ours	ourselves
	2	you	you	your	yours	yourself
	3	they	them	their	theirs	themselves

B. LÙI THÌ

Direct speech (Câu trực tiếp)		Indirect speech (Câu gián tiếp)	
• HTĐ	$V_1 / V_{s(es)}$	→ QKĐ	$V_{2/ed}$
• HTTD	am/ is/ are + V_{-ing}	→ QKTD	was/ were + V_{-ing}
• HTHT	have/ has + $V_{3/ed}$	→ QKHT	had + $V_{3/ed}$
• QKĐ	$V_{2/ed}$	→ QKHT	had + $V_{3/ed}$
• QKTD	was/ were + V_{-ing}	→ QKHTTD	had been + V_{-ing}
• will/ shall		→ would/ should	
• can/ may		→ could/ might	
• must		→ must/ had to	

⚡ Chú ý các trường hợp không lùi thì (NÂNG CAO)

+ Động từ trích dẫn ở hiện tại/ tương lai

Ex: The farmer says, "I hope it will rain tomorrow"

→ The farmer says (that) he hope it will rain the day after.

- Không thay đổi thì **dù động từ ở MĐ chính ở thì QK khi**

+ Thời gian xác định cụ thể

Ex: "I was born in 1980"

→ He said that he was born in 1980

+ Dẫn tả chân lí

Ex: My teacher said: "The Sun rises in the East"

→ My teacher said the Sun rises in the East

+ **Thì quá khứ hoàn thành** (had + $V_{3/ed}$)

C. ĐỔI TRẠNG TỪ

Direct speech (Câu trực tiếp)	Indirect speech (Câu gián tiếp)
1. today / tonight	1. that day / that night
2. - yesterday - last night - last week - the day before yesterday	2. - the day before, the previous day - the night before, the previous night - the week before, the previous week - two days before
3. - tomorrow - tomorrow night - next week (month, ...) - that day after tomorrow	3. - the day after, the next day, the following day - the night after, the next night, the following night - the week after, the following week - in two days' time
4. - now - ago	4. - then - before

5. here	5. there
6. this	6. that
7. these	7. those
8. right now	8. at once

D. CẤU TRÚC CÂU GIÁN TIẾP

Statements (Câu trần thuật)

S + said (that) + S + V (lùi thì)
S + said to + O (that) + S + V (lùi thì)
S + told + O (that) + S + V (lùi thì)

E.g: "I saw her this morning", he said

→ He **said** (that) he had seen her **that** morning.

Mary **said** to Bill, "I **don't like** living **here**."
 → Mary **told** Bill (that) she **didn't like** living **there**.

C. PRONUNCIATION

SENTENCE STRESS

- Trọng âm của câu là một yếu tố rất quan trọng trong khi nói tiếng Anh, nó tạo nên ngữ điệu của câu và đôi khi còn thể hiện ẩn ý của người nói. Trọng âm của câu thường được nhấn vào các từ khoá hay từ mang nội dung chính (content words).

E.g. We **visited** a **famous craft village** in **Ha Noi**.

Trong văn nói thì các loại từ dưới đây sẽ thường được nhấn trọng âm vào.

Từ mang nội dung chính trong câu	Ví dụ
Động từ	sell, give, employ
Danh từ	car, music, table
Tính từ	red, small, beautiful
Trạng từ	quickly, never, why
Trợ từ phủ định	don't, aren't, can't
Đáp án trong câu hỏi dạng đảo	yes, no

Không nhấn trọng âm vào các từ sau

Từ cấu trúc	Ví dụ
Đại từ	he, we, they
Giới từ	on, at, into
Mạo từ	a, an, the
Liên từ	and, but, because
Trợ động từ	do, be, have, can, must

PART II. LANGUAGE

A. PHONETIC

Exercise 1: Underline the stressed words in each of the following sentences.

1. The life cycle of salmon is a closed cycle.
2. It is necessary to protect forests.
3. They made their living by catching fish in the ocean every day.
4. It isn't easy to leave here after such a long time.
5. She is good at Math; besides, she can speak 5 languages fluently.
6. The Japanese eat healthily, so they live for a long time.
7. The Americans often eat fast food, so many of them are overweight.
8. In spring, there are various festivals throughout the country.
9. She never eats junk food because it's bad for her health.
10. I prefer going to the cinema.

Exercise 2: Choose the word (A, B, C, or D) whose underlined part is pronounced differently from the others.

- | | | | |
|------------------|-------------|-------------|-------------|
| 1. A. interact | B. place | C. volcano | D. plane |
| 2. A. fisherman | B. ticket | C. prisoner | D. online |
| 3. A. hotel | B. postcard | C. shore | D. cold |
| 4. A. included | B. called | C. phoned | D. arrived |
| 5. A. much | B. teacher | C. beach | D. brochure |
| 6. A. touch | B. foul | C. account | D. mount |
| 7. A. lose | B. vote | C. control | D. social |
| 8. A. rear | B. bear | C. gear | D. year |
| 9. A. please | B. peace | C. seat | D. spread |
| 10. A. overlooks | B. beliefs | C. towards | D. rights |

Exercise 3: Choose the word (A, B, C, or D) whose main stress is different from the others in the group.

- | | | | |
|--------------------|------------------|------------------|----------------|
| 1. A. comment | B. online | C. discuss | D. breakout |
| 2. A. contact | B. paper | C. classmate | D. enough |
| 3. A. available | B. convenient | C. interaction | D. communicate |
| 4. A. science | B. invent | C. scam1er | D. access |
| 5. A. experiment | B. recognition | C. technology | D. emotional |
| 6. A. platform | B. airport | C. repeat | D. practice |
| 7. A. behave | B. planet | C. cover | D. robot |
| 8. A. application | B. entertainment | C. scientific | D. identity |
| 9. A. visit | B. between | C. language | D. answer |
| 10. A. development | B. information | C. understanding | D. biometric |

B. VOCABULARY - GRAMMAR

Exercise 1: Match the names of occupations with their definitions.

1. chemist	A. a person who has invented something.
2. archaeologist	B. a person who travels to unknown places in orders to find out what is there.
3. software developer	C. a person who works to protect the environment, plants, animals and natural resources.
4. physicist	D. a person who studies the buildings, graves, tools, and other objects of people who lived in the past.
5. explorer	E. a person who builds and creates Computer programs.
6. biologist	F. a scientist who works with Chemicals or studies their reactions.
7. inventor	G. a scientist who studies Physics.
8. conservationist	H. a scientist who studies living things.

Exercise 2: Choose the word/ phrase/ sentence (A, B, C, or D) that best fits the space in each sentences or best answers the question.

- There are a lot of benefits to do _____ researches.
A. scientific B. enormous C. precise D. technical
- To check _____ students now just scan their fingerprints on those machines.
A. attentive B. attention C. attendant D. attendance
- The use of _____ can be seen everywhere as a way for people to check in and check out automatically.
A. biometrics B. websites C. platforms D. networks
- The development of technology has brought about _____ in transportation.
A. breakups B. breakdowns C. break-evens D. breakthroughs
- The identity cards are examined by an electronic _____.
A. network B. skimmer C. printer D. scanner



6. Tom wants to have a larger computer _____ for playing video games.
A. scanner B. screen C. solution D. phone
7. The word that is opposite in meaning to "absence" is _____.
A. growth B. ignorance C. truancy D. presence
8. I like this _____ because it is small and has a large touch screen.
A. telephone B. tablet C. desktop D. mouse
9. To enable students to have more interactions in online classes, our teachers let us work in _____.
A. divided rooms B. breakout rooms C. separated space D. face-to-face
10. Although the students learn online, they receive both _____ and physical support from their teachers and schools.
A. spiritual B. virtual C. material D. offline
11. Sue wants to go to the supermarket to buy some _____ bulbs.
A. precise B. field C. light D. steam
12. Harry and Tom are trying to _____ the problem with the steam engine.
A. support B. solve C. invent D. benefit
13. Science is used in all corners of the world for the _____ of human.
A. quality B. discovery C. benefit D. engine
14. This new cell phone is _____ - it has so many awesome new features.
A. cutting edge B. innovator C. discovery D. advancer
15. We've spoken on the phone but never _____.
A. eye to eye B. door to door C. time to time D. face to face
16. _____ is a method of identifying or verifying the identity of an individual using their face.
A. Face recognition B. Face copier C. Face recognised D. Face scanner
17. _____ is a sensor technology that can detect a person's presence and follow what they are looking at in real-time.
A. Eye location B. Eye recognition C. Eye-tracking D. Eye-finding
18. Generally speaking, most technology has had a _____ effect on our lives.
A. beneficial B. benefice C. benefit D. beneficent
19. They sent some technical _____ to maintain the air conditioner system in the building.
A. designers B. producers C. engineers D. developers
20. It remains to be seen what the _____ impact of this technology will be.
A. long B. long-term C. boring D. relax
21. She said, "I took it home with me." She said that she _____ it home with her.
A. take B. took C. have taken D. had taken
22. Mai said, "My brother works in a company about technology."
Mai said her brother _____ in a company about technology.
A. works B. worked C. is working D. have worked
23. Mr. Long said, "Science is an important subject in schools now."
Mr. Long said that Science was an important subject in schools _____.
A. now B. then C. this D. that
24. The teacher _____ me that I had better devote more time to doing scientific researches.
A. said B. told C. talked D. spoke
25. The teacher said, "Our class is having a meeting with parents this week."
The teacher said that _____ class was having a meeting with parents that week.
A. my B. our C. their D. his
26. They said, "We will develop more robot teachers to support human teachers at schools."
They said that _____ would develop more robot teachers to support human teachers at schools.
A. I B. we C. you D. they
27. He said, "Siri is a voice recognition technology."



He said that Siri _____ a voice recognition technology.

- A. was B. was being C. have been D. will be

28. The director said, "The company will use a machine to check staffs attendance."

The director said that the company _____ a machine to check staffs attendance.

- A. use B. will use C. would use D. would have used

29. Bill said, "I went out with Phong last night."

Bill said that he had gone out with Phong _____.

- A. the night before B. yesterday evening C. the next night D. that night

30. Minh said, "I have never eaten mushrooms."

Minh said that he _____ mushrooms.

- A. had never eaten B. will never eat C. have never eaten D. would never eat

31. She said, "You must connect to the Internet to work online."

She said that I _____ connect to the Internet to work online.

- A. will B. had to C. might D. could

32. Ann said that she _____ there in the evening.

- A. is going to be B. can be C. will be D. was going to be

33. Nam said to me that he _____ to me the Saturday before.

- A. wrote B. has written C. was writing D. had written

34. Ngoc wanted to know what time _____.

- A. does the film begin B. the film began C. did the film begin D. the film begins

35. He asked the children why they _____ too much noise.

- A. not to make B. are making C. were making D. making

Exercise 3: Complete the sentences with the words and phrases from the box.

screen **Isaac Newton** **face-to-face**
attendance **contact lenses** **Nano learning**

- _____
- Our eyes won't be tired if we wear 3D _____
- _____ discovered gravity when an apple fell on him.
- I like _____ classes because I can interact with my classmates.
- She has sore eyes because of looking at the computer _____ all day long.
- Biometrics is an important technology used to check students' _____.

Exercise 4: Circle the correct verbs to complete the sentences.

- Blaise Pascal (**invented/ recognized**) the calculator in 1642.
- Marie Curie and Pierre Curie (**created/ discovered**) radium and polonium.
- Students can still (**interact/ track**) when they are in breakout rooms.
- Robot teachers will be able to (**mark/ develop**) our work and give us feedback.
- Our manager uses Google Meet to (**scan/ make**) video conferences.
- This face recognition screen will (**check / cheat**) if you are a company staff.

Exercise 5: Circle the correct adverbial phrases.

- Alex said that she had to get up early **tomorrow / the day after**.
- John said: "I was not happy with the Internet connection **the day before / yesterday**."
- Hans said that he could read books from the school clouds **every day/ the every day**.
- My sister said: "Can you lend me your iPad **tonight / that night**?"
- Our teacher said that we were reading about Thomas Edison **that day / today**.
- The guard said that I could park my car **there / here**.
- The robot marked and gave us feedback two days **ago / before**.
- The principal said that we wouldn't have robot teachers **next year / the next year**.
- Bella said: "I will work with Sofia **next Sunday / the next Sunday**."

10. Bill told me that his father had bought him a new smartphone **the previous day / yesterday**.

Exercise 6: Write the correct form of the words in brackets in the blanks to complete the sentences.

1. Penicillin is one of the most important of _____ all time. **(invent)**
2. Scientific and _____ advancements have made many important changes throughout history. **(technology)**
3. Uncle John is a skillful and _____ mechanic. **(effort)**
4. _____! happy that you have just won a scholarship this term. **(Congratulate)**
5. Can robots _____ what will happen in the future? **(predictor)**
6. Thomas Edison _____ invented the incandescent light bulb in 1878. **(success)**
7. Marie Curie and Pierre Curie _____ the existence of the elements radium and polonium in 1898. **(discover)**
8. An employee _____ application lets people. **(attend)**
9. Many students find it hard to _____ when learning online, don't they? **(concentration)**
10. Three of these newest _____ elements were named after the places where they were discovered. Their names are Nihonium, Moscovium and Tennessine. **(chemistry)**

Exercise 7: Choose the letter A, B, C, or D to indicate the word(s) CLOSEST in meaning to the underlined word(s) in each of the following sentences:

1. Robots would be able to mark our work and give us **feedback**.
A. pilotless B. driven C. comment D. controlled
2. My grandmother is **familiar with** this new mobile phone.
A. neglect B. distract C. concern D. accustomed to
3. Oil has been **discovered** under the North sea.
A. found B. hidden C. dug D. covered
4. Is there a high rate of **truancy** amongst schoolchildren?
A. arrival B. attendance C. absence D. presence
5. Students seem to be unable to **concentrate** for very long in their classes.
A. focus B. distract C. ignore D. attract

Exercise 8: Choose the letter A, B, C, or D to indicate the word(s) OPPOSITE in meaning to the underlined word(s) in each of the following sentences:

1. It's quite **convenient** when using Google Meet for video conferencing.
A. inconvenient B. helpful C. supporting D. useless
2. 3D contact lenses will be **available**.
A. accessible B. vacant C. unavailable D. offered
3. Do your children feel more **stressed** when learning online?
A. worried B. anxious C. tensed D. relaxed
4. Nano-learning makes students learn effortlessly.
A. uncomplicatedly B. hard C. badly D. challenging
5. Schools can use biometric applications for students who **borrow** books and equipment.
A. receive B. get C. lend D. take

Exercise 9: Change the following statements into the reported speech.

1. Hanna said, "I will meet you outside the post office tomorrow."

→ _____

2. Our teacher told us, "The boiling point of water is 100°C."

→ _____

3. Naomi says, "I will invite you lunch for helping me with the project."
→ _____
4. The girl said, "I have seen you somewhere before."
→ _____
5. Tuan said, "My brother is playing in his room."
→ _____
6. "I like computer programming," said Christ.
→ _____
7. "I have never seen a real robot," said Mark.
→ _____
8. Sinclair said, "I will attend a science conference next week."
→ _____
9. Dent remarked, "You are riding my bicycle."
→ _____
10. "I'm trying to imagine new technologies in the future," Paul said.
→ _____
11. Tom said, "I want to buy a pocket calculator for my father."
→ _____
12. She said, "I once spent a summer in this village."
→ _____
13. The nurse said, "The patient in this room didn't obey your orders, doctor."
→ _____
14. They said to me, "You taught us English last year."
→ _____
15. Mr. Brown said, "Our trip cost us two thousand dollars."
→ _____
16. He said to her, "I can't find my hat anywhere in this room."
→ _____
17. My father said to them, "My secretary is going to finish this job."
→ _____
18. They said, "We can't meet you here either today or tomorrow."
→ _____
19. My mother said, "I think it won't rain tomorrow."
→ _____
20. He said, "Your car has been stolen, John."
→ _____
21. They said, "The river is rising early this year."
→ _____
22. He said, "I'll expect her to come soon."
→ _____
23. Our teacher said, "World War II broke out in 1939."
→ _____
24. The students said, "We'll be sitting for our next exam next Monday."
→ _____
25. He said, "I'm going to finish this work."
→ _____

PART III. SKILLS

A. LISTENING

Exercise 1: Listen to a man talking about Science and choose the correct answer.

1. The speaker thought Science is _____



- A. an interesting subject
C. an important subject
easy subject
- B. Both A & B
D. an important and easy subject
2. In Science lessons, he always works on things and _____
A. does exercise
C. tells a story
- B. does experiments
D. does physical exercises
3. The speaker wants to _____
A. be a pilot
B. have a computer
- C. be a scientist
D. be a biologist
4. We can go to different _____ because of science.
A. place
B. planets
- C. countries
D. world
5. All of _____ can be solved with science.
A. the world's problems
C. important things
- B. the governments
D. better scientists

Exercise 2: Listen to a talk between Tom and Nick about cloning technology. Decide if the statements are true (T) or false (F). Circle T or F. You will listen TWICE.

Statements	True	False
1. Tom read about human cloning technology yesterday.		
2. Nick also knows well about this.		
3. Nick feels this is a terrible technology.		
4. Tom says that this technology can be used for good purposes.		
5. Tom thinks this technology is wonderful because it helps people to have babies.		

B. SPEAKING

Exercise 1: Choose the correct response. Then practice the short exchanges in pairs.

1. A: Do you think new technology will make many workers jobless?
B: a/ Really? I think we'll become lazy and inactive.
b/ I don't think so. We'll have many new industries and new jobs.
2. A: With robots in our house, we become lazy and inactive.
B: a/ Right. We'll have more free time to get exercise, and play sports.
b/ I agree. I'll have no robots in my house.
3. A: My house has been installed the security system with cameras.
B: a/ You'll feel safer when you are away.
b/ New technology will always change.
4. A: Nikola Tesla had crazy ideas. Do you know him?
B: a/ Scientists always have crazy ideas.
b/ He invented alternative currents.
5. A: I think the invention of penicillin is very important because it saves lives.
B: a/ I hope so.
b/ I agree with you.
6. A: Why do we use the escalator instead of the lift?
B: a/ It can move more people.
b/ It's faster than the lift.
7. A: With AI, computers will be more intelligent than humans.
B: a/ But we'll design them.
b/ Computers will become smaller. Right?
8. A: Thomas Edison was a very famous American inventor.
B: a/ Was the internet popular at his time?
b/ Which are his most famous inventions?
9. A: Some scientists made their inventions by chance.

B: a/ You bet. It was the result of hard work.

b/ It was the case of penicillin. Is it right?

10. A: Do you know this game was invented by a ten-year-old boy?

B: a/ Really? Small children are fond of creating new things.

b/ Right. Children are taught to become great inventors at the early age.

Exercise 2: Match the responses to the questions and practice the dialogue with your partner.

A. In the 1980s, Honda began to develop humanoid robots. The most famous of Honda's humanoid robots was Asimo in 2000.

B. In 2006 in the USA. They were used for delivery and photography.

C. It was the 'Da Vinci' surgical robot in 2000. It helped to improve a doctor's precision.

D. It was the 'Shakey' using cameras and sensors. The robot using AI was invented by Stanford University in 1972.

E. In a competition for self-driving cars in the USA in 2004.

F. I like the invention of robots most.

G. It was 'Robert the Robot' for children in the USA in 1954.

H. It was the Unimate, the first industrial robotic arm in 1954.

I. It was the Roomba vacuum cleaning robot in 2002.

1. What invention do you like?

→ _____

2. What was the first 'real' robot?

→ _____

3. What was the first robot that used AI (Artificial Intelligent)?

→ _____

4. What was the first toy robot?

→ _____

5. When did we have the first humanoid robots - resembling the human body in shape?

→ _____

6. When did we have surgical robots?

→ _____

7. When were service robots available?

→ _____

8. When did the first self-driving cars appear?

→ _____

9. When did we have the first drones - small flying machines?

→ _____

C. READING

Exercise 1: Read the following passage and circle the letter A, B, C, or D to indicate the correct word or phrase that best fits each of the numbered blanks.

① Developments in science and technology have brought a number of advantages in education. First, it increases efficiency and motivation for students. Students learn more (1) _____ through visual presentations or videos. They can also feel more motivated to learn in this way. Secondly, digital search and internet (2) _____ have a positive impact on the research habits of learners. Technology has opened doors for learners to access information sources to find (3) _____ to problems by themselves.

Thus, students feel willing to do research on their own. Third, students can access more information when they study. For example, learners who desire to write quality essays can find samples to guide them in their writing process. They can learn the best ways to present and structure their essays. Moreover, (4) _____ in science and technology can increase flexibility for learning.

With online classes, students don't need to (5) _____ lessons at specific times, especially when there is a pandemic or in stormy weather. They can read materials online and complete their assignments when they have time.

(Adapted from: <https://fadmagazine.com>)

- | | | | |
|-------------------|--------------|---------------|----------------|
| 1. A. effectively | B. effect | C. efficiency | D. affected |
| 2. A. utensils | B. tools | C. equipment | D. gadgets |
| 3. A. answers | B. questions | C. solutions | D. options |
| 4. A. growth | B. increase | C. progress | D. development |
| 5. A. come | B. attend | C. learn | D. study |

⊙ Computers are helpful in many ways. First, they are fast. They can work with information even (1) _____ than a person. Second, computers can work with a lot of information at the same time. Third, they can store information for a long time. They do not forget things that the common people do. (2) _____, computers are almost always correct. They are not perfect, but they usually do not make mistakes.

Recently, it is important (3) _____ about computers. There are a number of things to learn. Many companies have computers at work. In addition, most universities (4) _____ day and night courses in Computer Science. Another way to learn is from a book, or from a friend. After a few hours of practice, you can (5) _____ with computers.

- | | | | |
|---------------|------------|-----------------|-----------------|
| 1. A. quickly | B. quicker | C. more quickly | D. most quickly |
| 2. A. Finally | B. Finish | C. Final | D. Finishing |
| 3. A. know | B. knew | C. knowing | D. to know |
| 4. A. have | B. has | C. had | D. having |
| 5. A. do | B. play | C. get | D. work |

Exercise 2: Read the following passage and circle the letter A, B, C, or D to indicate the correct answer to each of the questions.

⊙ Science and technology is changing the world, and the developments in robotics change the world for humanity. We can already talk with Alexa, Siri, Jibo, Tapia and other personal AI assistants. We can not only direct them to do things around like office work at workplaces or deliver pizza, but also have a real conversation with them. Now as machines are getting better at understanding natural languages, its applications are becoming more important to us. They help us to take notes, do translation, or even do teaching jobs. More than that, robots' hands can handle objects and learning, and it teaches itself to perform various tasks. We can expect robotic **limbs** will soon take a big part of the workload off of humanity's shoulders. For example, in factories, they can do assembling work, carry heavy things around. At home, they can do washing dishes and boring household chores. Robots will be ideal for people who are missing limbs or are disabled in some ways.

(Adapted from: <https://techjury.net>)

- Technology changes the world for _____.
A. better human life
B. the benefits of producers
C. the worst
D. workers
- Which robot can't talk?
A. Siri
B. Alexa
C. Robota
D. Tapia
- Which is mentioned as a thing that a speaking robot can do?
A. Nursing
B. Cleaning
C. Taking notes
D. Guiding around
- What does the word **limbs** mean?
A. brains
B. shoulders
C. hearts
D. arms
- The passage is mainly about _____.
A. different types of robots
B. advantages of a robots
C. the role of robots to our home
D. the role of robots in a factory

② From watches and phones to household appliances, everything is getting smarter. Now, thanks to Apple, that's also true of your water bottle.

The HidrateSpark Pro Smart Water Bottle - a mouthful, we know - takes all the guesswork out of tracking your water **intake**. The vacuum-insulated exterior should keep your liquids cold for up to a full day and it has a host of other neat features.

Apple's smart water bottle integrates with your Apple Watch and Apple Health. It takes into account your daily steps and exercise to calculate how much water you need. The LED puck at the bottom of the bottle lights up to remind you when it's time for a drink and tracks how many ounces or millimetres of water you drink throughout the day, using Bluetooth. You can also get a slightly less expensive version, without the insulation, in the form of the HidrateSpark Pro Tritan Plastic Sea Glass.

(Adapted from <https://www.getsurrey.co.uk>)

- How long can the vacuum-insulated exterior keep your liquids cold?
 - Half a day
 - A full week
 - 18 hours
 - Up to 24 hours
- Which of the following A, B, C, or D is closest in meaning to **intake**?
 - consumption
 - confusion
 - assumption
 - introduction
- What can Apple's smart water bottle integrate with?
 - Bluetooth
 - Plastic Sea Glass
 - Apple Watch and Apple Health
 - HidrateSpark
- How many versions of smart water bottles does Apple have?
 - 2
 - 3
 - 4
 - 1
- How can the smart water bottle remind you when it's time for a drink?
 - It takes all the guesswork out of tracking your water intake.
 - It takes into account your daily steps.
 - The LED puck at the bottom of the bottle lights up.
 - It tracks how many ounces or millimetres of water you drink throughout the day.

Exercise 3: Read the passage and then decide whether the sentences are True(T) or False(F)

Today our bookshop would like to introduce you a new book written by J.H. James. The book's title is "Future world". It is all about how new technologies will change our world in 2050. According to the book, the anti-aging drugs will help human live healthy lives over 120 years old. Another advanced technology in health care is 3D printing of human organs and body parts. This will be a good news to diabetes patients because new muscles, bones and even organs will be rebuilt and replace the damaged ones. About the technologies in environment protection, solar power will be the main energy source of the world in 2050. Solar panel will be more popular and help us reduce a large amount of carbon dioxide emission. In addition, a new method of sewage treatment will solve problems of water pollution. Industrial sewage will be treated to become clean water and minerals. There is also some new advanced technology in transportation. Cruise control will reduce the accidents. This device will be very helpful especially for drunk drivers. In the future, a transponder will also be installed in a bicycle and will reduce the crash. Read the book now and we can see that many advanced technologies will bring us a safer and more convenient life.

Statements	T or F
1. "Future world" is the title of the book which is introduced at the bookshop.	
2. 3D printing of human organs will help diabetes patients to build new organs and body parts.	
3. It is written in the book that in 2050, we will primarily use the energy generated from the Sun.	
4. According to the book, in the future, sewage will be treated by the same method as present.	
5. The author mentions cruise control as a device which help to cut down the	



