

UNIT 11: SCIENCE AND TECHNOLOGY

A. PHONETICS

I. Write the prefix *im-* or *un-*, then put the stress on each word.

_____do	_____employed	_____possible	_____practical
easy_____	_____polite	patient_____	_____acceptable
_____limited	_____movable	_____mature	_____decided
_____expected	_____proper	_____moral	_____natural
_____balance	_____important	_____polluted	_____healthy

II. Write the words from the box in the correct part of the table, according to the stress pattern.

unfriendly	unreasonable	uncomfortable	immobile	unhurt
impure	impolite	immaterial	imperfect	unpaid
improbable	unafraid	impersonal	unnecessary	unacceptable
impractical	unavoidable	untidy	uninformed	

oO	
oOo	
ooO	
oOoo	
oOooo	
ooOoo	

III. Fill in the gaps with the words in the box. Then read the sentences aloud.

impossible	uninformed	unavailable	unable	unavoidable
unforeseen	impatient	impolite	untidy	immature

1. I tried to speak to the professor, but he was _____.
2. There are now fears that war is _____.
3. Kevin is so _____. His room is always a mess.
4. He was angry to find that he had been _____.
5. The boys in my class are so _____ - they're always doing silly things.
6. It's _____ to predict the weather around here.
7. I thought she was very _____. She kept interrupting me.
8. I'm sorry I was _____ to attend the meeting.
9. Don't be so _____! The bus will be here soon.
10. Due to _____ circumstances, the play has been cancelled.

B. VOCABULARY AND GRAMMAR

I. 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 order 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

II. Complete the sentences with the words in part I.

1. Christopher Columbus was an Italian _____ who discovered the Americas.
2. Marie Curie was a Polish _____ who discovered the elements polonium and radium.
3. The _____ reconstructed the broken ancient vase from its fragments.
4. As a _____, you'll work to protect and enhance the local environment.
5. Mr. Kaku is a quantum _____, a founder of string field theory.
6. Matt works as a _____ for a Computer manufacturer.
7. Eugenie Clark was an American marine _____ who worked with sharks.
8. Tim Berners-Lee is best known as the _____ of the World Wide Web.

III. Add the suffix -er, -or or -ist to the words, then put them into the correct columns.

art contract translate guitar program journal act
psychology Science create advise speak design direct
pharmacy research invent marine invest develop

-er	-ist	-or

IV. Who invented what? Match the inventors with their inventions.

1. Isaac Newton	a. the Internet
2. Thomas Edison	b. gravity
3. James Watt	c. theory of relativity
4. Alexander Graham Bell	d. the airplane
5. Alexander Fleming	e. Facebook
6. Albert Einstein	f. Windows software
7. Tim Berners-Lee	g. the light bulb
8. The Wright brothers	h. the steam engine
9. Bill Gates	i. penicillin
10. Mark Zuckerberg	j. the telephone

V. Complete the sentences with the words from the box.

technology enormous benefits techniques exploring
incurable underground inventions patent progress

1. In 50 years, homes might be located _____ or on water.
2. The Internet is one of the greatest _____ in human history.
3. Scientists are _____ the possibility of living on Mars.
4. New _____ has made it possible to communicate more easily.
5. Thomas Edison received a _____ for his light bulb in January 1880.
6. Science-based technology has an _____ impact on the human environment.
7. We have made significant _____ in the fight against HIV/AIDS.
8. Modern freezing _____ enable the chickens to be stored for weeks.
9. Robots will bring _____ to the manufacturing workforce.
10. Her cancer has been called _____ after it spread to her lungs.

VI. Choose the correct answer.

1. I _____ my friends for dinner after work tomorrow.
A. meet B. will meet C. am meeting D. will be meeting
2. Hurry up! The conference _____ in twenty minutes.
A. begins B. will be begun C. will begin D. will be beginning
3. In 30 years' time we _____ in flying cars.
A. are travelling B. will be travelling
C. are going to travel D. will be travelled
4. _____ longer in the future thanks to medical tech?
A. Will people live B. Do people live
C. Will people be living D. Are people living
5. Let's meet at ten o'clock tomorrow. - Sorry, I _____ at ten o'clock.
A. am working B. am going to work C. will work D. will be working
6. Good Lord! The engine has stopped. I hope the plane _____ down!
A. doesn't go B. won't go C. won't be gone D. won't be going
7. I'll show them my photos when they _____ round for dinner tomorrow evening.

- A. come B. comes C. are Corning D. will come
8. I'll come over at 8 o'clock tonight. What _____ then?
- A. will you do B. are you doing C. do you do D. will you be doing
9. I haven't made any plans for Easter. I _____ at home.
- A. am staying B. am going to stay
- C. will probably stay D. will be staying
10. We _____ a picnic next weekend. Would you like to come?
- A. have B. are going to have C. will have D. will be having
11. John wants to speak with you. -Please tell him that I _____ him as soon as I'm free.
- A. will call B. am calling C. call D. am going to call
12. It _____ when we reach the mountains. Don't forget to take your anorak jacket.
- A. is snowing B. snows C. will snow D. will be snowing
13. There has been a change to schedule and your flight now _____ at 18.40.
- A. takes off B. will take off C. is taking off D. will be taken off
14. We _____ a press conference about our new discovery on Tuesday.
- A. hold B. will hold C. are holding D. will be holding
15. At this time tomorrow I _____ to Canada, so I won't be able to call you.
- A. am flying B. am going to fly C. will fly D. will be flying

VII. Rewrite these statements as reported speech with tense changes.

1. 'I'm reading a Science book.'
She told me _____
2. "The 8.30 flight to Da Nang will be delayed for 2 hours."
They announced that _____
3. "We have applied a new production Chain."
The CEO of Volkswagen said that _____
4. "The invention of light bulb is very important."
My teacher said that _____
5. "My engineers can assemble 5 car engines a week."
The director said that _____
6. "I hope you will build the airport with lowest cost."
The Prime Minister told foreign investors that _____
7. "We plan to make the City a safer place for everyone."
The local MP said that _____
8. "My family lived in Boston for five years."
Carol said that _____
9. "We may cut down on fossil fuels."
They said that _____
10. "James Watt invented the steam engine in 1769."
Ms. Elena told us that _____

VIII. Rewrite these statements as reported speech. Make all necessary changes.

1. "I can't Chat because I am working now," said John.
2. "My brother wrote this book last year," David said to me.
3. Jane said to us, "I'm having dinner with Rachel tomorrow."
4. "We've worked very hard today and it has paid off," the students said.
5. "I'll see you here next Friday," Tom said to me.
6. "We'll be writing to you later this week," they said to Maria.
7. "I don't know where Bill is living at the moment," said Nicky.
8. "My parents left for London at 5p.m yesterday," Susan said.
9. "I may see you next week before I leave," Nick said to Sarah.
10. "I didn't attend the meeting two days ago," said Matt.

IX. Underline the best option.

1. She said she was seeing her brother *the following day / the previous day*.
2. Mike said he *had had / would have* an accident the day before.
3. She said she *didn't see / hadn't seen* them since the previous week.
4. I met Tom two days ago and he said he was going to London *tomorrow / the next day*.
5. Erica told me she *won't / wouldn't be* back until the following Thursday.
6. John said he had worked for that company *the year before / the year after*.
7. Sam told the police he *didn't know / hadn't known* what had happened.
8. Harry told us he *is / was catching* the first bus to New York the next day.
9. My mother told me that if I *ate / had eaten* too much, I would feel ill.
10. When I rang her this morning, she told me that she was busy *today / that day*.

X. Supply the correct form of the words in brackets.

1. _____ is one of the compulsory subjects in high school. (chemist)
2. The moon landing launched a new era in space _____. (explore)
3. New _____ discoveries are made every day. (Science)
4. Technology is making our kids _____. Children have become less likely to play outside. (active)
5. Everyday life is constantly improving thanks to the ideas of famous _____ past and present. (invent)
6. Science and Technology have enormous effects on economic _____. (develop)
7. I don't like this movie. Its dialogue sounds so _____. (nature)
8. Using computers has a effect on children's learning. (benefit)
9. Wildlife _____ are trying to save the whale from extinction. (conserve)
10. _____ progress has been so rapid over the last few years. (technology)

XI. Fill in each blank with an appropriate preposition.

1. Science and technology are changing our lives _____ every field.
2. Some Chemicals have damaging effect _____ the environment.
3. Is technology the key _____ success in the 21st century?
4. Science and technology bring a lot of benefits _____ people.
5. Engineers need to be good _____ maths and Sciences.
6. Thomas Edison was responsible _____ more than one thousand inventions.
7. It's almost impossible to keep up _____ the latest developments in computing.
8. Will humans live _____ Mars someday?
9. Global communication was transformed by the invention _____ the Internet.
10. Thomas Edison was born _____ 1847 _____ Ohio, USA.

C. SPEAKING

I. Make questions for the underlined words.

1. _____
Robots won't replace teachers because they can't inspire students to do their best.
2. _____
A flying car can fly at a speed of 120 mph.
3. _____
All students will be having their own computers at school by 2030.
4. _____
In the future, we will be able to live on the other planets.
5. _____
Science and technology are the keys to development in many fields.
6. _____
An average person now lives about 70 years.
7. _____
Scientists are exploring the possibility of living on Mars.
8. _____
New industrial robots cost from \$50,000 to \$80,000.
9. _____
The first industrial robot was invented by Dr. Engelberger.
10. _____
Edison made the first public demonstration of his light bulb on December 31, 1879.

II. Complete the dialogue with the appropriate sentences (A - G).

- A. The technology they use in phones these days is amazing.
 B. So, that's a negative too.
 C. Wow, Nick is that a new phone?
 D. Technologies always have both positive and negative aspects.
 E. I totally agree.
 F. Has it got the new high-tech camera?
 G. Yep, that's a positive.

Mike: (1) _____

Nick: Yep, brand new, state-of-the-art!

Mike: (2) _____

Nick: Yeah, the software they use is really advanced. You can take portraits that look just like they're from a much bigger camera.

Mike: I've seen them. (3) _____

Nick: But of course, the impact of technology isn't always positive. Take something as simple as a car. That's a type of technology that's made life easier.

Mike: (4) _____

Nick: But on the negative side, cars cause air pollution.

Mike: Yeah, and if you drive too much instead of walking, you might not get as much exercise. (5) _____

Nick: So are mobile phones. Mobile phones help us to communicate with each other and access information but too much screen time can be harmful, especially to children.

Mike: (6) _____ People nowadays are spending too much time looking at a phone, a Computer or a tablet.

Nick: Social media helps you keep in touch with your friends but it can also spread fake news and encourage bullying.

Mike: You're right. (7) _____

D. READING

I. Complete the passage with the words from the box.

while	through	vision	network
communicate	invented	accessible	much

The Internet is a huge (1) _____ of computers all connected together, but it was the world wide web that made the technology into something that linked information together and made it (2) _____ to everyone.

The world wide web was (3) _____ by Sir Tim Berners-Lee in 1989 – originally he was trying to find a new way for scientists to easily share the data from their experiments. Berners-Lee created the world wide web (4) _____ he was working at CERN, Switzerland. His (5) _____ soon went beyond a network for scientists to share information, in that he wanted it to be a universal and free 'information space' to share knowledge, to (6) _____, and to collaborate.

The world wide web opened up the Internet to everyone, not just scientists. It connected the world in a way that made it (7) _____ easier for people to get information, share, and communicate. It has since allowed people to share their work and thoughts (8) _____ social networking sites, blogs, video sharing, and more.

II. Read the text carefully, then do the tasks.

FUTURE OF TECHNOLOGY

Technology is growing by leaps and bounds. Proper use of technology holds a bright future for us. So, how can technology shape up the future in a better way? Let's take a look!

Clean Energy

Global energy consumption is increasing and we will face a shortage of fossil fuels in the coming decades. However, technology is helping us deal with this problem by developing clean energy. Development in the field of solar power technology has drastically reduced the cost of solar cells. Generation of electricity through wind turbines has also grown rapidly in the recent years. So, in the near future, technology can help us do away with dependence on fossil fuels and embrace clean and green energy Solutions.

Virtual Reality (VR)

Remember Pokemon Go? Well, that was one of the earliest examples of Virtual reality. Tech giants like Google, Facebook, and Nokia are spending a huge amount of money to make VR experience better for the customers. However, with time and further developments, VR can be used for communication through holograms, for interacting with 3-D objects and other useful and educational purposes.

Flying cars

This sounds straight out of a movie, but flying cars might soon be mainstream. Amazon has already started delivering goods with the help of its drones, and Google is working on building its own powerful drones. A couple of start-ups are also working on building flying cars. A flying car for all intents and purposes is a drone that is capable of carrying people. There are already a handful of flying vehicle prototypes: Terrafugia has TF-X; Pal-V has the Pal-V1; I-TEC has the Maverick LSA "Flying Car"; and lastly AeroMobil s.r.o. has the AeroMobil 3.0.

These are just a few of the amazing technologies that we will have in the coming years. And what's next? Teleporting? Anything is possible!

A. Match the words or phrases with their meanings.

1. by leaps and bounds	a. completely accept
2. do away with	b. considered normal and used by most people
3. embrace	c. a company that is just beginning to operate
4. hologram	d. very quickly
5. mainstream	e. an aircraft without a pilot, controlled from the ground
6. drone	f. the first model of something new
7. start-up	g. a three-dimensional image
8. prototype	h. put an end to

B. Choose the correct answers.

- According to the passage, technology can help .
A. create an energy shortage **B.** reduce energy consumption
C. end our dependence on fossil fuels **D.** stop using clean energy
- In the future, Virtual reality can be used for .
A. interacting with 3-D objects **B.** teaching and learning
C. holographic communication **D.** all of the above
- Which statement is true about flying cars?
A. They are just Science Fiction. **B.** They are presently at the prototype stage.

- C. They are produced in large quantities. D. They will be launched in the coming year.
4. In the sentence "There are already a handful of flying vehicle prototypes...", what does "a handful of" mean?
- A. a large number of B. a small number of
C. a great deal of D. an amount of
5. The flying car TF-X has been developed by _____.
- A. Terrafugia B. I-TEC C. AeroMobil D. Pal-V
6. Which of the following statement is NOT true?
- A. Virtual reality technology is now used in video gaming.
B. Solar power and wind are clean energy.
C. Amazon's flying cars are being used for delivery.
D. Technology can bring us a bright future.

E. WRITING

I. Reorder the words to make sentences.

- can/ have/ so that/ the future/ we/ flying / will/ we/ faster and futher/ In/ travel/ cars.

- self-driving/ be/ Experts/ said/ 2025/ that/ on/ cars/ would/ the road/ in.

- in/ be/ chores/ a/ handled/ by/ Will/ household/ robot/ the near future?

- will/ help/ people/ Anti-ageing/ live/ to/ longer/ pills/ be/ invented.

- the way/ we/ impressive/ Modern technology/ communicate/ an/ has/ influence/ had/ on.

- easy/ but/ has/ Technology/ has/ made/ it/ lazy/ made/ life/ us.

- ever/ on/ planet/ you/ another/ of/ dreamed/ living/ Have?

- that/ be/ humans/ Mars/ living/ Scientists/ predict/ could/ on/ 50/ 100/ years/ in/ to.

II. Complete the second sentence so that it has the same meaning to the first one.

- "There were no cell phones a long time ago!"
My grandmother said _____
- Alexander Graham Bell invented the telephone in 1876.
The telephone _____
- Tablets aren't as convenient as smartphones.
Smartphones are much _____
- "I can't come in today, because I'm sick."
Two days ago, Tom phoned me and said _____
- How long have you been working on this project?
When _____
- In spite of the freezing weather, we had a great holiday in Canada.
Even though _____