

LESSON 1

TOPIC: IT IN OUR LIFE. MODERN TRENDS. THE FUTURE OF IT

Icons



Phonetics



Video



Reading



Monologue



Grammar



Homework



Writing



Dialogue



Vocabulary



Listening



Speaking



Polylogue



1. Discuss

1. When you hear "IT", what are your associations?

2. What is IT?

3. What are key elements of information technology?

4. When did it all start?

5. Where can you find IT in our life?



2. Read the text. Where can you find IT in our life?

Nowadays information technology is used in every sphere of life, such as education, communication, business, commerce, medicine, banking etc.

IT has significantly changed the world's communication over time. We don't communicate face to face so much any more. We now often communicate via text messages, email and video conferencing.

Nowadays, almost every household has a computer or a tablet, not to mention smartphones. We now have cloud computing, as well as virtual servers. Staying in the east, you can work in the west and earn a large amount of money.

IT has brought a new dimension in the field of education. Staying at home, we can get any type of information when we need. The most famous

books in the world are available and easily accessible via the Internet. Now every day we are getting new and new information with the help of information technology.

IT is now used in E-banking system. We can perform our banking activities via online, which is really convenient.

IT has introduced the internet system and turned a new era in the field of E-commerce. With extremely busy lifestyles and a lack of time, E-commerce has changed the way we purchase things.

At present, IT has also had a tremendous effect in the field of medicine.

As you can see, the application of IT has definitely changed communication, commerce, business, education as well as the way we lead our lives.



Numbers and measurements

Dates

3rd September
1959

3 September 1959

03/09/1959

3/9/59

the third of September
nineteen fifty-nine

2017	twenty seventeen / two thousand and seventeen
2008	two thousand and eight
1939	nineteen thirty-nine
1901	nineteen o one
1900	nineteen hundred
800 BC	eight hundred BC ('before Christ')
3000 AD	three thousand AD (Anno Domini, which is "in the year of our Lord")

Measurements

75 km	seventy-five kilometers
60 km/h	sixty kilometers per hour
25 mph	twenty-five miles per hour
6 ft	six feet
2 in	two inches
30 cm	thirty centimeters
5 ml	five milliliters
4 tbsp	four tablespoons
2 tsp	two teaspoons
1.2 kg	one point two kilograms
2.5 lbs	two point five pounds/ two and a half pounds
6 oz	six ounces

Decimals

0.25	(nought) point two five
1.834	one point eight three four

Fractions

1/2	one half/ a half
1/4	one quarter/ a quarter
3/4	three quarters
5/6	five sixths

Percentages

1 %	one percent
10.5 %	ten point five percent
100 %	one hundred percent

Temperature

20°C	twenty degrees Celsius
-5°C	minus five degrees Celsius
70°F	seventy degrees Fahrenheit

Numbers for money

£20	twenty pounds (sterling)
\$45	forty-five (American) dollars
€250	two hundred and fifty euros
£50.75	fifty pounds, seventy-five pence ('fifty pounds seventy-five')
€84.61	eighty-four euros, sixty-one cents ('eighty-four, sixty-one')
\$103.25	a hundred and three dollars, twenty-five cents



3. Listen and write the answers

- | | | |
|----------|----------|----------|
| a) _____ | e) _____ | i) _____ |
| b) _____ | f) _____ | j) _____ |
| c) _____ | g) _____ | |
| d) _____ | h) _____ | |

Say numbers and measurements correctly

- | | | |
|-----------|----------|--------------|
| a) 13% | e) 0.357 | i) 2.5 m |
| b) \$6.50 | f) 6,200 | j) 123,456 |
| c) £6.15 | g) 6,280 | k) 456,780 |
| d) 6.5 | h) 2 m | l) 1,230,000 |





4. What are modern trends in Information Technology nowadays?



5. Watch the video about 3D printing. Where can this technology be applied?

https://youtu.be/WUHfe_-wxzM

1.

2.

3.

4.

5.

6.

7.

6. Watch the video about 3D printing again. Complete the gaps

1. This technology is already having _____ on our lives today. There are really _____ to how far 3D printing can take us.
2. The ability to 3D print entire houses _____ in just the past decade.
This company is able to build houses at _____ and _____ of the houses made using traditional methods.
3. Their menu includes all kinds of sweet treats that are made in complex structures previously impossible to _____. This technology is much in its infancy and most meals still need _____.
4. They will have _____ tailored to their specific body and genes, printed out _____ within hours and at very low costs.
5. Solar collectors, mirrors, _____, rotating habitats and orbiting will be made _____ using 3D printers.



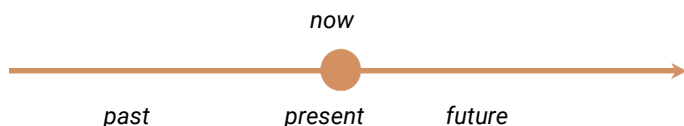
7. Discuss

1. What do you think about using 3D printing in different spheres?

2. Are there more advantages or disadvantages? Why? Give examples.



ENGLISH GRAMMAR TENSES



8 Define the Russian sentences as Past, Present or Future

1. У меня есть 3D-принтер. _____
2. Мы вчера закончили проект. _____
3. В следующем году я начну писать свою компьютерную игру. _____
4. Я буду заниматься переустановкой программ на выходных. _____
5. Я работаю программистом пять лет. _____
6. Этот IT-продукт был выпущен три года назад. _____

9 Which sentence gives a fact? Which sentence shows a process at a definitive time?

1. Я иногда ремонтирую ноутбуки. _____
2. В данный момент он устанавливает драйвер обновления. _____

10 Look at the sentences. Which give a fact (S) and which describe a process (C)?

1. У меня есть ноутбук. _____
2. Мы создали великолепную игру. _____
3. В это же время в следующем году я буду разрабатывать мобильное приложение для изучения языков. _____
4. Я переустанавливаю операционную систему на следующих выходных. _____
5. Смотри! Твой файл не копируется. _____
6. Вчера с 2 до 3 они тестировали новую фичу. _____



So, Past can be Simple or Continuous

Present can be Simple or Continuous

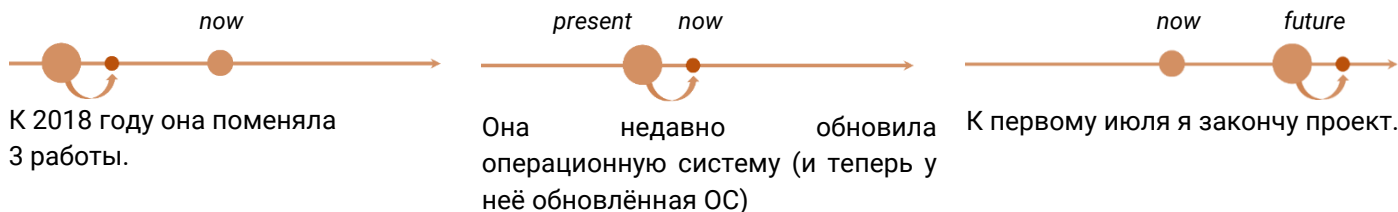
Future can be Simple or Continuous

11 Define the tense (Past/Present/Future) and the aspect (Simple/Continuous)

1. Год назад я поменял данное устройство. _____
2. Ее сын сейчас подключает принтер к ноутбуку! _____
3. Ты будешь устанавливать программу в четверг в 10 утра? _____
4. Весь прошлый год она училась на веб-дизайнера. _____
5. Я посещаю IT-вебинары несколько раз в год. _____
6. В следующем месяце мы получим бонусы. _____



Perfect — предшествование (результат) к прошедшему, настоящему или будущему моменту.



12 Define if the sentences have Perfect or not

1. Вчера я была на IT конференции. _____
2. Вчера к приходу клиента я установила необходимый апдейт. _____



3. Вчера в восемь часов вечера я разрабатывала новый компонент веб-сайта. _____
4. Программа обычно анализирует данные. _____
5. Мы сейчас обсуждаем важный бизнес-проект. _____
6. Мы обсуждаем этот вопрос уже 30 минут. _____
7. Мы уже приняли решение по этому вопросу. _____
8. Завтра к восьми часам он уже будет на встрече. _____
9. Завтра в 20:30 он будет разрабатывать модуль программы. _____
10. Завтра у него будет сложный день. _____

Perfect can also be Simple or Continuous

Active / Passive voice



Я уже выключила компьютер. — Present Perfect Simple
Я уже час тестирую программу. — Present Perfect Continuous

Я разрабатываю веб-сайт. — Active
Веб-сайт разрабатывается мной. — Passive

13 Are these sentences Active or Passive?

1. Вчера эту информацию предоставила компания. _____
2. Эта информация была предоставлена компанией вчера. _____
3. Андрей сейчас выполняет проект. _____
4. Проект сейчас выполняется Андреем. _____
5. Мы отправим этот проект завтра. _____
6. Завтра этот проект будет отправлен. _____



How to name a grammar tense

- | | |
|----------------------------|------------------------|
| 1) Active / Passive | 3) Perfect / — |
| 2) Past / Present / Future | 4) Simple / Continuous |

14 Define the grammar tense of the sentences

1. На прошлой неделе я занималась вычислениями. _____
2. Вчера к пяти часам я уже настроил данную функцию. _____
3. Весь вечер в понедельник мы разговаривали о функционале веб-приложения. _____
4. Он иногда посещает митапы. _____
5. Смотри! Наши играют по локальной сети. _____
6. Уже 10 минут мы общаемся с заказчиками. _____
7. Они программируют на Java с 2010 года. _____
8. К концу следующей недели я уже сдам отчёт о статусе проекта. _____
9. Сегодня в 21.00 программа будет автоматически обновляться. _____
10. Через два дня ему купят PlayStation 5. _____



HOMEWORK

1. Pronounce numbers and measurements correctly

€88	_____	15.5 %	_____
\$20	_____	3/10/20	_____
1.774	_____	5 kg	_____
0.05	_____	2.5 ml	_____



8 in _____
54 cm _____
1/5 _____

-6 °C _____
100 km/h _____

2. Write an essay. What is the future of IT?

3. Make your own sentences in all grammar tenses in Active voice

1. Present Simple _____

2. Present Continuous _____

3. Present Perfect _____

4. Present Perfect Continuous _____

5. Past Simple _____

6. Past Continuous _____

7. Past Perfect (Past Perfect Continuous) _____

8. Future Simple _____

9. Future Continuous _____

10. Future Perfect _____



VOCABULARY. LESSON 1

Vocabulary / Translation

Personal vocabulary

accessible / доступный

artificial intelligence / искусственный интеллект

blockchain / технология блокчейн

cloud computing / облачные вычисления

cybersecurity / информационная безопасность

data / данные, информация, сведения

drone / гудеть, дрон

edge computing / периферийные вычисления

e-banking / электронный банкинг

e-commerce / электронная коммерция

IoT (The Internet of things) / интернет вещей

manipulate / манипулировать, воздействовать

quantum computing / квантовые вычисления

release / освободить, опубликовать, выпустить

retrieve / извлекать, вернуть, восстанавливать

security / защита, безопасность, охрана

store / магазин, запас, хранение, хранить

tablet / таблетка, планшет

transmit / отправлять, передавать

virtual reality / виртуальная реальность

3D printing / 3D печать

5G / технология 5G





4. What are modern trends in Information Technology nowadays?



Artificial Intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence. In other words, it is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings.

Some examples from our daily lives where Artificial Intelligence finds a place:

- | | |
|---|---|
| 1 Travel & Navigation (maps for navigation, a taxi-hire service like Uber) | 8 Smart Input (predicting words, phrases, and emoticons based on your regular usage and style of writing, the auto-completion text based on the sentence you are typing) |
| 2 Smartphone Apps | 9 Security & surveillance (face recognition, object and location recognition) |
| 3 Social Media Feeds (Facebook, Twitter, Instagram) | 10 Finance services (detecting any fraudulent activity, analyzing the investment trends of customers, providing customer services) |
| 4 Advertisements (targeted advertising) | |
| 5 Smart Cars (Tesla) | |
| 6 Music and Video Streaming (recommendations and suggested playlists) | |
| 7 Smart Home (smart-voice assistants, thermostat devices to adjust the temperature automatically, automatic switching on/off the lights based on human presence, smart speakers, changing the color of the light based on the time of the day) | |



4. What are modern trends in Information Technology nowadays?



Blockchain is a type of shared database that differs from a typical database in the way it stores information; blockchains store data in blocks that are then linked together via cryptography. Blockchain technology allows for peer-to-peer transactions, meaning you can send funds directly to another person without going through a bank or credit company.

Cybersecurity is the application of technologies, processes and controls to protect systems, networks, programs, devices and data from digital attacks. These cyber attacks are usually aimed at accessing, changing, or destroying sensitive information; extorting money from users; or interrupting normal business processes.

Drones is an unmanned aircraft, more formally known as unmanned aerial vehicles (UAV). They have many functions, ranging from monitoring climate change to carrying out search operations after natural disasters, photography, filming, and delivering goods. But their most well-known and controversial use is by the military for reconnaissance, surveillance and targeted attacks.



4. What are modern trends in Information Technology nowadays?



Edge Computing is the modern, distributed computing architecture that brings data storage and computation closer to the data source. This helps save bandwidth and improve the response time. Simply put, it involves fewer processes running in the cloud. It also moves those computing processes to edge devices, such as IoT devices, edge servers, or users' computers.

Internet of Things (IoT) is a massive network of physical devices embedded with sensors, software, electronics, and network which allows the devices to exchange or collect data and perform certain actions. Simply put, IoT is made up of two words: Internet & Things. Things – physical devices, appliances, gadgets, etc. Internet – through which these devices are connected. IoT aims at extending internet connectivity beyond computers and smartphones to other devices people use at home or for business. This technology allows devices to get controlled across network infrastructure remotely.



4. What are modern trends in Information Technology nowadays?



Quantum Computing is an area of computing focused on developing computer technology based on the principles of quantum theory, which explains the behavior of energy and material on the atomic and subatomic levels. Classical computers used today can only encode information in bits that take the value of 1 or 0 – restricting their ability. Quantum computers use qubits, which can be 1 or 0 at the same time.

Virtual Reality (VR) & Augmented Reality (AR) add digital elements to a live view often by using the camera on a smartphone.

VR is a simulated experience that can be similar to or completely different from the real world. Applications of VR include entertainment (particularly video games), education (such as medical or military training) and business (such as virtual meetings).

AR is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information. Advanced AR technologies add computer vision, incorporate AR cameras into smartphone applications and provide object recognition.



4. What are modern trends in Information Technology nowadays?



- 3D (three-dimensional) printing is a process that creates a physical object from a digital design. The process works by laying down thin layers of material in the form of liquid or powdered plastic, metal or cement, and then fusing the layers together. 3D printing creates objects that range in shape, size, rigidity and color.
- 5G is the fifth generation of cellular technology. It is designed to increase speed, reduce latency, and improve flexibility of wireless services. 5G technology has a theoretical peak speed of 20GBps, while the peak speed of 4G is only 1Gbps.