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КАФЕДРА ИНОСТРАННЫХ ЯЗЫКОВ

# **SIMPLE ENGLISH FOR SECURITY SPECIALISTS**

## **INFORMATION SECURITY OF AUTOMATED SYSTEMS**

Учебно-методическое пособие для практической работы

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Министерство образования и науки Российской Федерации, Федеральное государственное бюджетное образовательное учреждение высшего профессионального образования «Томский государственный университет систем управления и радиоэлектроники», Кафедра Иностранных языков. Томск : ТУСУР, 2016. 22 с.

Настоящее пособие для практической работы может быть использовано для практической работы студентов 1 и 2 курса ТУСУР, обучающихся по учебному пособию «Simple English for Security Specialists. Information Security of Automated Systems» (авторы Ёлкина Д.М., Потапова Т.Н.). Пособие содержит адаптированные тексты для чтения и перевода, а также упражнения для развития навыков чтения на английском языке.

Пособие для практической работы «Simple English for Security Specialists. Information Security of Automated Systems» размещено в электронном виде на образовательном портале ТУСУР.

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## UNIT 1 I LIVE AND STUDY

### 1 Read and translate the information about the capital of the Russian Federation.

#### Moscow

Moscow is the capital and the largest city of Russia with over 12 million residents. It is the capital of the Central Federal District and Moscow Region. Moscow is a major political, economic, cultural, and scientific centre in Russia and Eastern Europe, as well as the largest city on the European continent. Moscow is located on the Moskva River in the Central Federal District of European Russia.



The city is well known for its unique architecture which consists of many historic buildings such as Saint Basil's Cathedral with its brightly coloured *domes*. Moscow is the centre of Russian culture. There are many different museums, academic and political institutions and theatres. Moscow is also the site of the Moscow Kremlin, a *medieval city fortress* that is today the residence of the Russian president. The Moscow Kremlin and Red Square are also one of several *World Heritage Sites* in the city. Both chambers of the Russian parliament (the State Duma and *the Federation Council*) also sit in the city.

The capital of Russia has four international airports, nine railway terminals, numerous trams, and one of the deepest underground metro systems in the world, the Moscow Metro, the fourth-largest in the world. Primary industries in Moscow include the chemical, metallurgical, food, textile, furniture, energy production, software development and machinery industries.

The capital of Russia is a major education centre. There are about 1,700 secondary general schools and 90 colleges in Moscow. Besides these, there are over 200 institutions of higher education. Lomonosov Moscow State University is one of the leading universities in the country. It was founded in 1755. The university has about 35,000 undergraduate and 5,000 postgraduate students, 41 faculties and over 300 departments.

Moscow is a very green city. There are about 100 parks and 20 gardens in it. There are also a lot of green zones. Moscow has a large number of various sports facilities. It is home to 63 stadiums. Luzhniki Stadium is the largest and the fourth-biggest in Europe. Moscow was *the host city* of the 1980 Summer Olympics.

Abridged from <https://en.wikipedia.org/wiki/Moscow>

#### Notes

*dome* – купол

*medieval* – средневековый

*fortress* – крепость

*World Heritage Sites* – объекты всемирного наследия ЮНЕСКО

*the Federation Council* – Совет Федерации

*the host city* – город, принимающий Олимпийские игры, столица Олимпиады

## 2 Read the words and phrases and match them to their Russian equivalents.

1 as well as	a образовательный центр
2 unique	b металлургический
3 several	с кроме
4 numerous	d разработка программного обеспечения
5 primary	e кафедра
6 metallurgical	f сооружение
7 furniture	g а также
8 software development	h основной; важнейший
9 education centre	i мебель
10 besides	j уникальный
11 department	к несколько
12 facility	l многочисленный


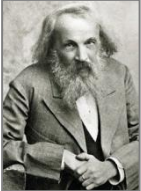


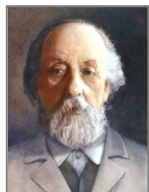


## 3 Complete the sentences about Moscow.

- 1 Moscow is the \_\_\_\_\_ and the largest \_\_\_\_\_ of Russia with over 12 million \_\_\_\_\_.
- 2 Moscow is \_\_\_\_\_ on the Moskva \_\_\_\_\_ in the Central \_\_\_\_\_ District of European Russia.
- 3 The city is well known for its unique \_\_\_\_\_ which consists of many historic \_\_\_\_\_.
- 4 There are many different \_\_\_\_\_, academic and political \_\_\_\_\_ and theatres.
- 5 The Moscow \_\_\_\_\_ and Red \_\_\_\_\_ are one of several World Heritage \_\_\_\_\_ in the city.
- 6 The capital of Russia has four \_\_\_\_\_ airports and nine \_\_\_\_\_ terminals.
- 7 There are about 1,700 \_\_\_\_\_, 90 \_\_\_\_\_ and over 200 institutions of \_\_\_\_\_ in Moscow.
- 8 Lomonosov Moscow State \_\_\_\_\_ has about 35,000 \_\_\_\_\_ and 5,000 \_\_\_\_\_ students, 41 \_\_\_\_\_ and over 300 departments.
- 9 Moscow is \_\_\_\_\_ to 63 \_\_\_\_\_.

## 4 Correct the statements.

- 1 Moscow is the capital of the Siberian Federal District and Moscow Region.
- 2 Moscow is the third-largest city on the European continent.
- 3 The City of Moscow is located on the Volga.
- 4 Red Square is the residence of the President of the Russian Federation.
- 5 The State Duma and the Federation Council make up the Government of Russia.
- 6 The Moscow Metro is the largest in the world.
- 7 Lomonosov Moscow State University was founded in 1878.
- 8 There are about 20 parks and gardens in Moscow.
- 9 Luzhniki is the biggest stadium in Europe.
- 10 Moscow was the host city of the 2014 Winter Olympic Games.

**5 Match the information about the famous Russian people to their photos.**

 <p><i>Mikhail Lomonosov</i></p>	<p>A Russian chemist and inventor. He formulated the Periodic Law, created his own version of the periodic table of elements, and used it to correct the properties of some already discovered elements and also to predict the properties of eight elements yet to be discovered. (1834-1907)</p>
 <p><i>Dmitri Mendeleev</i></p>	<p>A Russian Soviet pilot and cosmonaut. He was the first man to travel into outer space, when his Vostok spacecraft completed an orbit of the Earth on 12 April 1961. (1934-1968)</p>
 <p><i>Aleksandr Stoletov</i></p>	<p>The leading Soviet rocket engineer and spacecraft designer in the Space Race between the United States and the Soviet Union during the 1950s and 1960s. He is considered as the father of practical astronautics. (1907-1966)</p>
 <p><i>Aleksandr Popov</i></p>	<p>A Russian physicist, founder of electrical engineering, and professor at Moscow University. His major contributions include pioneer work in the field of ferromagnetism and discovery of the laws and principles of the outer photoelectric effect. (1839-1896)</p>
 <p><i>Konstantin Tsiolkovsky</i></p>	<p>A Russian scientist and writer. He discovered the atmosphere of Venus and the Law of Mass Conservation in chemical reactions. His spheres of science were natural science, chemistry, physics, mineralogy, history, art, philology, optical devices, and others. (1711-1765)</p>
 <p><i>Sergei Korolev</i></p>	<p>A Russian research scientist in aeronautics and astronautics who pioneered rocket and space research and the development and use of wind tunnels for aerodynamic studies. He was also among the first to work out the theoretical problems of rocket travel in space. (1857-1935)</p>
 <p><i>Yuri Gagarin</i></p>	<p>A Russian physicist and electrical engineer, famous for the invention of radio. He invented a radio receiver, a lightning detector, in 1895. (1859-1906)</p>

## UNIT 2 English-speaking countries

### 1 Read and translate the information about the University of Oxford.



#### Oxford University

The University of Oxford is the oldest university in the English-speaking world. It is over 800 years old. Among the famous *Oxonians* are 26 British Prime Ministers, at least 30 international leaders, 50 *Nobel Prize* winners, and 120 Olympic medal winners.

Today, Oxford is a modern research university. It is in the top ten globally in life sciences, physical sciences, social sciences and the arts and humanities. Oxford is very competitive: it receives, *on average*, around five applications for each available place. Students from families with *low income* receive financial support from the university.

There are over 22,000 students at Oxford, including about 12,000 undergraduates and 10,000 postgraduates. Today more than a third of Oxford students and more than 40 percent of its *academic staff* are citizens of foreign countries. Students come to Oxford from over 140 countries and territories. The largest groups of international students come from the USA, China, Germany, Canada, India, Italy, Australia, France, Singapore and Ireland.

Graduate students make up around 47% of the total number of students at Oxford. 5% of all the UK's graduate research students are studying at Oxford University. 62% of Oxford current graduate students come from outside the United Kingdom. Oxford offers more than 300 different graduate degree programmes.

Today's Oxford students have access to a range of international experiences, including *internships* around the world, courses with study abroad components, and *substantial support* from the university for independent research abroad.

Oxford University Press (OUP) is the world's largest university press and has offices in 70 countries and nearly 7,000 employees worldwide. More than one in five people who learn English across the world do so with an Oxford University Press resource. The University, including the colleges and Oxford University Press, is the largest employer in *Oxfordshire*. It supports around 17,000 jobs. Oxfordshire is one of Europe's leading centres of enterprise, innovation and knowledge.

Abridged from <http://www.ox.ac.uk/>

#### Notes

*Oxonian* – студент или бывший студент Оксфордского университета

*Nobel Prize* – Нобелевская премия

*on average* – в среднем

*low income* – низкий уровень дохода

*academic staff* – профессорско-преподавательский состав

*internship* – стажировка, учебная практика

*substantial support* – существенная (материальная) поддержка

*Oxfordshire* – Оксфордшир (*графство Англии*)

**2 In the text, find the English equivalents of the following words.**

1	конкурирующий; конкурентоспособный	c _ _ _ _ _
2	среди	a _ _ _ _
3	получать	r _ _ _ _ _
4	около, приблизительно	a _ _ _ _ _
5	заявление	a _ _ _ _ _
6	доступный; имеющийся в наличии	a _ _ _ _ _
7	составлять	m _ _ _ _ _
8	общий, суммарный	t _ _ _ _
9	вне, за пределами	o _ _ _ _ _
10	доступ	a _ _ _ _ _
11	ряд	r _ _ _ _
12	опыт работы; квалификация	e _ _ _ _ _
13	за границей	a _ _ _ _ _
14	независимый	i _ _ _ _ _
15	почти	n _ _ _ _ _
16	служащий, сотрудник	e _ _ _ _ _
17	работодатель	e _ _ _ _ _
18	предпринимательство	e _ _ _ _ _

**3 Complete the sentences about Oxford.**

- The University of Oxford is the oldest \_\_\_\_\_ in the English-speaking \_\_\_\_\_.
- Among the \_\_\_\_\_ Oxonians are 26 British Prime \_\_\_\_\_ and 50 \_\_\_\_\_ winners.
- Today, Oxford is a modern \_\_\_\_\_ university.
- Students from \_\_\_\_\_ with low income receive \_\_\_\_\_ support from the university.
- There are over 22,000 \_\_\_\_\_ at Oxford, including about 12,000 \_\_\_\_\_ and 10,000 \_\_\_\_\_.
- Students come to Oxford from over 140 \_\_\_\_\_ and territories.
- Graduate \_\_\_\_\_ make up around 47% of the total \_\_\_\_\_ of students at \_\_\_\_\_.
- About 60% of Oxford \_\_\_\_\_ graduate students come from outside \_\_\_\_\_.

**4 Are the statements TRUE or FALSE? Correct the false statements.**

- Among the famous Oxonians are 20 Olympic medal winners.
- Oxford is in the top ten universities of the world.
- Oxford University receives, on average, around seven applications for each available place.
- Students come to Oxford only from the UK.
- Today more than 40% of Oxford academic staff are citizens of foreign countries.
- Oxford offers more than 300 different graduate degree programmes.
- Oxford students have no access to international experiences.
- Oxford University Press has offices only in Oxfordshire.



## 5 Read and translate the information about Harvard University.

### Harvard University



Harvard University is one of the leading universities in the world. It is also the oldest institution of higher education in the United States. It was established in 1636. The university's motto is *Veritas* (Latin for "truth").

Harvard University has 11 principal academic units – 10 faculties and *the Radcliffe Institute for Advanced Study*. The 10 faculties *oversee* schools and divisions that offer courses and award academic degrees. Harvard's *faculty* has about 2,400 members. They come from across the country and all over the world and include notable scholars: biologists, *cognitive scientists*, physicists, chemists, computer scientists, economists and others.

Harvard is a *founding member* of the Association of American Universities. It is a research university with high research activity and a comprehensive doctoral programme across the arts, sciences, engineering, and medicine.

Harvard has around 21,000 students. About 6,700 of them study at Harvard College and over 14,000 are graduate and professional students. Among the famous Harvard *alumni* are 47 Nobel Laureates, 32 heads of state, 48 *Pulitzer Prize* winners. There are more than 323,000 living alumni, over 271,000 in the US and nearly 52,000 in 201 other countries.

Students come from all 50 states and from over 80 countries; from cities, suburbs, small towns and farms; from public and private schools; and from every ethnic and religious background. More than 60 percent of Harvard students receive scholarship aid, and the average grant in 2015 is \$46,000.

Harvard University has 400 official student organizations including *extracurricular*, *co-curricular* and athletic opportunities. The Harvard Library is the largest academic library in the world. It includes 18.9 million volumes, 174,000 serial titles, around 400 million manuscript items, 10 million photographs, 56 million archived web pages, and 5.4 terabytes of digital archives and manuscripts.

Abridged from <http://www.harvard.edu/>

### Notes

*the Radcliffe Institute for Advanced Study* – Рэдклиффский институт

*oversee* – контролировать

перспективных исследований

*faculty* – US профессорско-преподавательский состав

*cognitive scientist* – учёный-когнитивист

*founding member* – член-учредитель, основатель

*alumni* – выпускники (sg *alumnus*)

*Pulitzer Prize* – Пулитцеровская премия

*extracurricular* – внепрограммный; факультативный

*co-curricular* – программный

**6 Read the words and match them to their Russian equivalents.**

1 motto	a видный, знаменитый
2 principal	b средний
3 division	c лауреат
4 notable	d книга, том
5 scholar	e пригород, окраина
6 comprehensive	f подразделение
7 laureate	g помощь
8 suburb	h отдельный предмет, единица
9 background	i манускрипт, рукопись
10 aid	j девиз, лозунг
11 average	k истоки, корни
12 volume	l учёный
13 manuscript	m главный, основной
14 item	n комплексный, всесторонний

**7 Choose the correct variant and complete the following sentences.**

- Harvard University was established in ... .  
A the 16th century                      B the 17th century                      C the 18th century
- Veritas* is the Latin for ... .  
A “truth”                                      B “victory”                                      C “knowledge”
- Among Harvard faculty members are notable ... .  
A actors                                      B politicians                                      C scholars
- There are around ... students at Harvard.  
A 11,000                                      B 21,000                                      C 31,000
- Harvard University has 400 official student ... .  
A divisions                                      B faculties                                      C organizations

**8 Complete the sentences about Harvard University. Use English equivalents instead of the Russian words and phrases in brackets.**

- Harvard University is one of the (*ведущих университетов*) in the world.
- It is also the oldest (*высшее учебное заведение*) in the United States.
- The 10 faculties oversee schools and divisions that (*предлагают курсы*) and (*присуждают учёные степени*).
- Harvard is a founding member of the Association of (*американских университетов*).
- Harvard is a (*исследовательский университет*).
- Among the (*знаменитых выпускников Гарварда*) are 47 Nobel Laureates, 32 (*глав государств*), 48 Pulitzer Prize winners.
- (*Студенты Гарварда*) come from all 50 (*штатов*) and from (*более*) 80 (*стран*).

## UNIT 3 MODERN DEVICES

### 1 Read and translate the information about the role of computers in our lives.

#### Computers in Modern Life



Today the majority of us *cannot* imagine life without computers. Computers make people's lives easier and more comfortable: they give opportunities to millions of people to keep in touch while they are in different parts of the world. Today people drive computerized cars and work for employers from other countries even without seeing them. 'Facebook', 'Twitter', 'computers', 'smartphones'

and 'tablets' are some of the words almost everyone recognizes.

*No matter* what job you want to do, you *must* know how to use the computer and do various tasks in almost any operating system like Windows, Mac OS X, or even Linux sometimes. You must know how to use an *office suite* and maybe even more programs and applications, depending on your job. Computers are irreplaceable for business people and those who need them for work, for students to study and housewives to *entertain themselves*, but what about using computers by young school boys and girls?

Many people believe that their access to computer and the Internet *should be limited*. It *does no harm* if from time to time they play various games or chat with their friends online, but often it happens so that children start to search for their homework on the Internet and it becomes a bad habit. Instead of trying to cope with the task using their knowledge or information in textbooks, they prefer to find ready answers. It certainly has negative influence on their progress in studies.

Computers also affect young people's health. First of all, those who spend a lot of time in front of the screens of their computers suffer from lack of physical activity. Such children often have *habit scoliosis* and problems with their eyes.

To *sum up*, computers are very important in our day to-day-life, but if you want to *get benefit* from them without harm to your health and activities, you need to use them wisely.

*Adapted and abridged from <http://www.computerimportance.com/>*

#### Notes

*cannot* – не могут

*no matter* – неважно

*must* – должен, нужно

*office suite* /swi:t/ – офисный пакет (программного обеспечения, приложений)

*entertain yourself* – развлекаться

*should be limited* – должен быть ограничен, следует ограничить

*do no harm* – не причинять вреда

*habit scoliosis* – сколиоз, обусловленный нарушением осанки

*sum up* – резюмировать, подводить итог

*get benefit* – извлекать выгоду (*from* – из)

## 2 Read the words and phrases and match them to their Russian equivalents.

1 majority	a незаменимый
2 imagine	b здоровье
3 keep in touch	с справиться с
4 almost	d страдать от
5 recognize	e воздействовать, влиять на
6 irreplaceable	f искать что-либо
7 housewife	g привычка
8 from time to time	h переписываться, болтать в интернете
9 chat	i почти
10 search for sth.	j благоразумно, мудро
11 habit	к большинство
12 cope with	l узнавать
13 affect	m быть в контакте, поддерживать связь
14 health	n домохозяйка
15 in front of	о воображать, представлять себе
16 suffer from	р перед
17 wisely	q время от времени

## 3 Choose the best word or phrase to complete the sentences.

- 1 Computers make people's lives more difficult / comfortable.
- 2 'Facebook', 'Twitter', 'computers', 'smartphones' and 'tablets' are some of the words almost nobody knows / everyone recognizes.
- 3 No matter what job you want to do, you must know how to use the computer / tablet.
- 4 It often happens so that using the Internet for homework has positive / negative influence on young people's progress in studies.
- 5 Computers affect / do no harm to young people's health.
- 6 Children who spend a lot of time in front of the screens of their computers often have problems with their ears / eyes.

## 4 Complete the following sentences with verbs.

- 1 Today the majority of us cannot \_\_\_\_\_ life without computers.
- 2 Computers \_\_\_\_\_ opportunities to millions of people to \_\_\_\_\_ in touch while they \_\_\_\_\_ in different parts of the world.
- 3 Today people \_\_\_\_\_ computerized cars and \_\_\_\_\_ for employers from other countries even without seeing them.
- 4 No matter what job you want to \_\_\_\_\_, you must know how to \_\_\_\_\_ the computer and \_\_\_\_\_ various tasks in almost any operating system.
- 5 Computers \_\_\_\_\_ irreplaceable for business people and those who \_\_\_\_\_ them for work, for students to \_\_\_\_\_ and housewives to \_\_\_\_\_ themselves.

## 5 Read and translate the article on using mobile phones.

### We now spend more time looking at our PHONE than with our partner

We now spend more time on our smartphones than with our partner, according to a new study. The average smartphone user tends to spend two hours (119 minutes) a day using their gadget. Yet, the amount of time we spend with our *other halves* per day is just 97 minutes – a third less – on average.

The study by mobile phone provider O2 looked at exactly what we use our phones for and how much time each activity takes each day. Brits now spend 24 minutes every day browsing the internet – longer than anything else. Next comes checking various social networks (16 mins), then listening to music (15 mins) and playing games (13 mins). Surprisingly, using our smartphone to make calls (13 mins) and send texts (11 mins) are the fifth and sixth most used functions on our mobiles.

*What's more*, the research shows we are replacing many household objects as our smartphones do the same job. 57 per cent of us admit we have no use for an alarm clock anymore. Half of us no longer wear a watch as we rely on our mobile to tell the time, and 46 per cent use only their phone to take photographs. More *bold moves* include *ditching* a laptop *in favour of* using a smartphone (25 per cent) and discarding a games console for a handset (12 per cent). The 'Mobile Life' report, which *was carried* by O2 and electronics company Samsung, *involved* 2,000 adults.



Adapted and abridged from <http://www.dailymail.co.uk/sciencetech/>

### Notes

*other half* (pl *halves*) – разг. (вторая) половина (жена или муж)

*Brits* – разг. британцы

*what's more* – к тому же; более того

*bold move* – смелый шаг

*ditch* – разг. бросать, отделяться от

*in favour of* – ради кого-либо/чего-либо

*was carried* – был сделан (*by* – кем-либо)

*involve* – вовлекать, включать

**6 In the text, find the English equivalents of the following words.**

1	(новое) приспособление, устройство	g _ _ _ _ _
2	кроме того, к тому же	y _ _
3	количество (с неисчисл. сущ.)	a _ _ _ _ _
4	в точности; точно	e _ _ _ _ _
5	удивительно	s _ _ _ _ _
6	самый	m _ _ _
7	домашний, бытовой	h _ _ _ _ _
8	так как	a _
9	допускать, соглашаться; признавать	a _ _ _ _
10	полагаться, надеяться на	r _ _ _ _ _
11	избавляться, отказываться от	d _ _ _ _ _
12	телефонная трубка	h _ _ _ _ _
13	взрослый	a _ _ _ _

**7 Complete the sentences below with prepositions.**

- We now spend more time \_\_\_\_\_ our smartphones than \_\_\_\_\_ our partner, according \_\_\_\_\_ a new study.
- The amount \_\_\_\_\_ time we spend \_\_\_\_\_ our other halves \_\_\_\_\_ day is just 97 minutes \_\_\_\_\_ average.
- The study \_\_\_\_\_ mobile phone provider O2 looked \_\_\_\_\_ exactly what we use our phones \_\_\_\_\_.
- Next comes checking various social networks (16 mins), then listening \_\_\_\_\_ music (15 mins) and playing games (13 mins).
- Using our smartphone to make calls (13 mins) and send texts (11 mins) are the fifth and sixth most used functions \_\_\_\_\_ our mobiles.
- 57 per cent \_\_\_\_\_ us admit we have no use \_\_\_\_\_ an alarm clock anymore.
- Half \_\_\_\_\_ us no longer wear a watch as we rely \_\_\_\_\_ our mobile to tell the time.
- More bold moves include ditching a laptop \_\_\_\_\_ favour \_\_\_\_\_ using a smartphone (25 per cent) and discarding a games console \_\_\_\_\_ a handset (12 per cent).

**8 Are the statements TRUE or FALSE? Correct the false statements.**

- According to the research by mobile phone provider O2, British people spend more time on their smartphones than with their partner.
- The British do not browse the Internet on their phones.
- The average smartphone user spends four hours a day using their gadget.
- The most used functions on the mobiles are making calls and sending texts.
- British people check various social networks only on their home computers.
- Half of the British wear a watch as they do not rely on their mobile to tell the time.
- 46 per cent of the British use only their phone to take photographs.
- The report by O2 and Samsung involved 2,000 teenagers.

## UNIT 4 COMMUNICATION

### 1 Answer the following questions.

1. What means of communication do you know?
2. What means of communication did people use a century ago? Two centuries ago?
3. How do you communicate now?
4. What are the four main media?

### 2 Look through the text quickly and compare your answers.

### 3 Match the words from two columns to make phrases. Translate the phrases.

means	decisions
speak	a message
send	of information
communication	satellite
an ordinary	the TV
big amount	of communication
to make	thing
to turn on	to each other

### Means of communication and media

A few **centuries** ago people knew only a few **kinds** of **communication**. They could speak to each other; they sent their **message** from one place to another by smoke signals; they used mail. Later, they also had some newspapers. The first expansion of **media** was when the radio and television **appeared**. The second and the biggest boom started in 1960s when the first communication **satellite** flew into orbit.

There are 4 **main** media: Newspapers, TV, Radio and the Internet. Today's people take this as an ordinary **thing** and we don't **realise** that we nearly can't live without it. Media are very **important** for us. They give us big amount of information, so big that we can't remember all the information that we get. They help us to understand things and if you have lots of information you are able to **make** your own **decisions**. Media are connected with education. They are very good teachers. They **influence** us **greatly**. They can help other people, for example to make charities.

Our world is very huge and sending a message from America to Asia a hundred years ago was nearly impossible or it took a lot of time. Nowadays you can send a message in a few seconds and it is very **simple**. The media make the world much smaller – particularly the TV and the Internet. When you **turn** on the TV or a computer you can see the whole world as if it is in the next village. When you **surf the Internet**, you can **get** any **information** you need. You can learn the culture and habits of other nationalities; you can see what they are doing right now.

Adapted from: <http://celebritygossipblogs.concertcesariaevora.info/975/mass-media-means-of-communication-otzka-z-anglitiny/>

#### 4 Decide if the following sentences are True(T) or False(F).

1. People knew a lot of kinds of communication long time ago.
2. Before radio and television people used smoke signals, sent letters, read newspapers.
3. When the radio and television appeared it was the first expansion of media.
4. There are only two main types of media.
5. Media is absolutely unimportant for people.
6. Media have no influence on people.
7. Nowadays you need hours to send a message by the Internet.
8. On TV you can see the whole world when you sit on your sofa.
9. When you surf the Internet, you can get any information you need.

#### 5 Answer the questions to the text.

1. How did people communicate a few centuries ago?
2. When was the first expansion of media?
3. What are the main media?
4. Are media important for people? Why?
5. Is it fast to send a message today?
6. What kind of information can you get from the Internet?

#### 6 Translate the following sentences into English.

1. Иногда нелегко принимать решение.
2. Интернет дает большое количество информации.
3. Отправь мне сообщение по электронной почте.
4. Мы говорим друг с другом каждый день.
5. Мобильный телефон – это важное средство связи.
6. Каждый студент любит бродить по сети.
7. В настоящее время мы используем спутники связи.
8. В настоящее время компьютер это обычная (привычная) вещь для нас.
9. Каждый вечер я включаю телевизор и смотрю фильм.
10. Я послал тебе сообщение, включи свой компьютер.

#### 7 Complete the sentences with the correct word or phrase.

a. kind	b. thing	c. simple	d. important	e. century	f. main	g. realise
h. appear	i. get information	j. influence				

1. Every year new models of cell phones ... in the market.
2. New technologies ... our life greatly.
3. This question in the test is not ....
4. On the Internet you can ... that you need.



5. In the ... building of our university there is a students' club.
6. What ... of music is your favourite?
7. Nowadays computer is a very ... means of communication.
8. Our ... can be called "the age of information".
9. Scientists plan some projects and then ... them.
10. To be a hardworking student is not an easy....

## UNIT 5 THE INTERNET

### 1 Do you know these terms related to the Internet? Translate them into Russian:

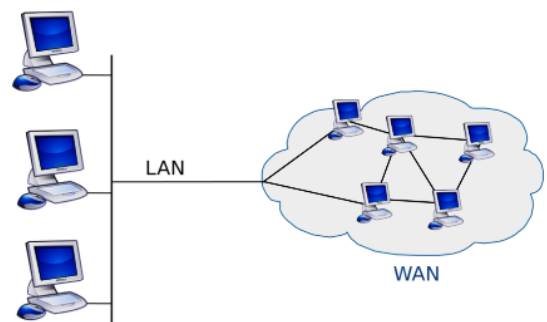
browser	virtual
resources	hyperlinks
location	specially formatted
fundamental	websites
specialized software	technologies
a server	online
a webpage	a client

### 2 Decide if the following sentences are True or False.

1. In the Internet you can only find information but can't do anything else.
2. The Internet is not the largest computer network.
3. LANs usually include home networks and office networks.
4. A WAN usually consists of two or more LANs.
5. A server is a computer that "serves" only one computer in a network.
6. A client doesn't communicate with the server.
7. The Internet is absolutely the same as the WWW.
8. All web browsers can read HTML files.
9. The WWW was created in 2000.

### 3 Answer the questions to the text.

1. What for did people use the Internet in the early days?
2. What does the Internet connect?
3. What is a network?
4. What are the two main types of networks?
5. How does a server "serve"?
6. What does your browser need to display a webpage?
7. How does a computer act in peer-to-peer networks?
8. What is the difference between the Internet and the WWW?
9. What are the HTML files?
10. Why did the foundation of the Internet begin?
11. How many Blu-ray discs would we need to store all of the information that's available on the Internet



## **The Internet**

The Internet is an integral part of our everyday lives. But if you are new to the online experience, it may be a bit overwhelming. You may ask yourself: "What exactly is the Internet, and how does it work?"

In this lesson, we will give a brief overview of the Internet, and we will talk about some fundamental concepts such as networks, servers, and clients.

### **The Internet today**

In the early days, most people just used the Internet to search for information. Today's Internet is a constantly evolving tool that not only contains an amazing variety of information but that also provides new ways of accessing, interacting, and connecting with people and content. As a result, new terms are constantly appearing.

### **What is the Internet?**

The Internet is the largest computer network in the world, connecting millions of computers. A network is a group of two or more computer systems linked together.

There are two main types of computer networks:

**Local Area Network (LAN):** A LAN is two or more connected computers sharing certain resources in a relatively small geographic location, often in the same building. Examples include home networks and office networks.

**Wide Area Network (WAN):** A WAN typically consists of two or more LANs. The computers are farther apart and are linked by telephone lines, dedicated telephone lines, or radio waves. The Internet is the largest Wide Area Network (WAN) in existence.

### **Servers and clients**

You may have heard someone say something like "The server is down" or "We're having problems with the e-mail server." A server is a computer that "serves" many different computers in a network by running specialized software and storing information. For example, webpages are stored on servers.

When you access a webpage, your computer is acting as a client. A client runs familiar software such as web browsers or email software, and it communicates with the server to get the information it requires.

In order for your browser to display a webpage, it requests data from the server where the page is stored. The server processes the request, and then sends the data to your browser, where it is displayed.

In peer-to-peer (P2P) networks, each computer acts as both a server and a client. Examples of P2P software include Skype and Bit Torrent.

### **The World Wide Web**

When most people think of the Internet, the first thing they think about is the World Wide Web. Nowadays, the terms "Internet" and "World Wide Web" are often used interchangeably – but they're actually not the same thing.

The Internet is the physical network of computers all over the world.

The World Wide Web is a virtual network of websites connected by hyperlinks (or "links"). Websites are stored on servers on the Internet, so the World Wide Web is a part of the Internet.

## **HTML**

The backbone of the World Wide Web is made of HTML files, which are specially formatted documents that can contain links, as well as images and other media. All web browsers can read HTML files. In addition to HTML, it's common for websites to use technologies like CSS (Cascading Style Sheets) and JavaScript to do more advanced things.

## **URL**

To get to a webpage, you can type the URL (Uniform Resource Locator) into a browser. The URL, also known as the web address, tells the browser exactly where to find the page. However, most of the time people get to a webpage by following a link from a different page or by searching for the page using a search engine.

The World Wide Web was created in 1989 by Tim Berners-Lee, a software engineer. Before then, computers could communicate over the Internet, but there were no webpages.

### **Did you know?**

The foundation of the Internet began in 1969, when the U.S. Department of Defence created ARPAnet, a project to allow military personnel to communicate with each other in an emergency.

By 2012, the number of Internet users worldwide reached 2.4 billion—about one-third of the world's population.

To store all of the information that's available on the Internet, you would need more than 1 billion DVDs or 200 million Blu-ray discs.

*Adapted from:* <http://www.gcflearnfree.org/internet101/1>

### **4 Put the words into the right order.**

1. an integral part / of our / is / the Internet / lives / every day
2. network / in the world / the Internet / the largest / is / computer
3. a computer / a server / that / many / in a network / is / 'serves' / different computers
4. stored / webpages / on / are / servers
5. formatted / HTML files / specially / documents / are
6. browsers / HTML files / read / all / web / can  
a webpage / type / you / to get to / can / a browser / into / the URL

## 5 Complete the table

verb	translation	noun	translation
link	связывать, соединять		
process	обрабатывать	1. – 2. –	
		requirement	требование
connect	соединять; объединять		
		storage	хранилище;
serve	служить, обслуживать	1. – 2. –	
		format	формат, форма, вид
		experience	опыт
access	иметь (получить) доступ,		
		foundation	основание; основа
vary	менять(ся), изменять(ся)		

## 6 Complete the sentences with the words from the table above. Use the right part of speech in the right form.

7. – There is a great ... of animals on our planet Earth.
  - In shops all over the city you can find a ... of new models of computers.
  - In different shops prices on this new model of a cell phone can ... .
8. – With your mobile you can get ... to the Internet through Wi-Fi easily.
  - There was a note on the laboratory door: ‘No ...’.
9. – When my brother was 19 he ... in the Russian Army.
  - This bus line ... a large district.
  - Tourists were satisfied with the ... of this hotel.
  - A server is a computer that "... many different computers in a network by running specialized software and storing information.
10. – You can ... your files on your computer as well as on the Internet.
  - Websites are ... on servers on the Internet.
  - To complete massively complex tasks your computer should have enough of ...
11. – The engineer ... much time to do this work professionally.
  - The client communicates with the server to get the information that it ... .
  - To take part in this project you must meet all the ....
12. – To build a house is a long and hard ... .
  - Computer is a clever machine which can ... information.
13. – When you are looking for a job, the first question at the job interview will be about your previous ....
  - She has 15 years ... in the job.
  - Sam has never ... this way of working. Everything was new for him.

– If you are new to the online ... , it may be a bit overwhelming.

**7 Complete the sentences with the right word from the box. All the words are given in the right form.**

run      available      provides      store      hyperlinks      require      variety
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1. The World Wide Web is a virtual network of websites connected by ... .
2. When you keep information or things somewhere – you ... them.
3. It ... much time and effort to do the high-quality work.
4. My uncle is not very rich, but he ... his own business.
5. In this specialized shop you can find a great ... of new models of laptops.
6. The mobile phone you are calling is not ... at the moment. Try again later.
7. Our company ... the best service for our clients all over the world.

**8 Match the words with their definitions.**

1. data	a. information made available by a website or other electronic medium
2. common	b. a number of interconnected computers, machines, or operations
3. content	c. the knowledge or skill acquired by a period of practical experience of something, especially that gained in a particular profession
4. experience	d. a category of people or things having common characteristics
5. network	e. the things that are held or included in something
6. type	f. a code or instruction which connects one part of a program or an element in a list to another
7. link	g. ordinary; of ordinary qualities; without special rank or position