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INFORMATION TECHNOLOGY

*Учебное пособие по грамматике
английского языка и чтению*

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Пособие состоит из 12 уроков, которые включают в себя упражнения по грамматике и тематические тексты для развития навыков чтения и перевода. выполнение упражнений поможет студентам активизировать знание грамматических форм, употребляемых в специальной литературе.
Предназначено   для работы   студентов I-II курсов технических направлений под руководством преподавателя.

Кафедра иностранных и русского языков.

Оглавление

Предисловие

Учебное пособие предназначено для студентов 1-2 курсов технических направлений, владеющих английским языком в объеме программы средней школы. Целью пособия является развитие навыков и умений читать и переводить английскую научную и научно-популярную литературу.

Пособие состоит из 12 уроков. В состав пособия входят упражнения по основным разделам грамматики и тексты для чтения. Грамматический материал представлен в той последовательности, в какой он изучается на практических занятиях по английскому языку. Упражнения направлены на отработку так называемых «грамматических и лексических трудностей» научного стиля современного английского языка и помогут студентам активизировать знание грамматических форм, употребительных в специальной литературе.

При составлении упражнений использовались материалы из аутентичных учебников и учебных пособий российских издательств по направлениям «Телекоммуникации» и «Информационные Технологии». Тексты для чтения взяты из Интернет источника BBC WebWise.

Unit one

- Глагол *to be*
- Времена английского глагола группы *Simple, Active*
- Построение вопросительного предложения
- Текст «*What is the Internet?*»

Exercises

I   In the following sentences the verb *to be* has different meanings. What are they? Translate the   sentences into Russian.

1. Information technology (IT for short) is the use of modern technology to aid the capture, processing, storage and retrieval, and communication of information, whether in the form of numerical data, text sound, or image.
2. Computer networks are an integral part of any organization these days.
3. A mobile operating system, an organizer, email (or e-mail, E-mail), local storage, and so on are in your smartphone now.
4. Video games are one of the most popular applications of personal computers.
5. VoIP phone calls were just ordinary data packets, indistinguishable from Web and e-mail traffic. Until now.
6. Around the same time in the year 1937, at the Iowa State University, the first electronic digital computer was made.
7. Even when Robert Noyce was running one of the most successful businesses in the Silicon Valley, he dressed informally and his office was a cubicle that looked like everyone else's.
8. Much personal information about individuals is now stored in computer files.
9. The International World-Wide Web conference will be held in May.
10. The old machines are to be replaced.

II   A   Translate the following sentences into Russian. Mind the forms of the predicates.
        B   Speak about social networking sites.

1. The Stanford University survey asked respondents how much time they spent on the Internet, and the answers were interesting, but not unexpected.
2. Internet use comes in various forms, from email to IMs to social networking sites, like Facebook, MySpace, or Bebo.
3. Mark Zuckerberg doesn't deny starting life as a computer hacker: one night early in his second year he hacked into Harvard's students records.
4. In November 2004 Facebook passed the one million users mark.
5. Some people fear that someday we will no longer feel the need to talk to one another face-to-face. How does that help children develop socially?

6. British psychologists warn that social networking sites will change human communication.

7. Isn't it a bit sad that people – not just kids – prefer to communicate by text rather than face-to-face.

8. Is someone you only know online really a 'friend'?

9. What is the point of social media? How useful are they really?

10. In addition to scientific studies, there are many who feel that the benefits of social networking sites far outweigh the possible negative aspects.

III   Change the following sentences into general questions.

1. Several examples demonstrate this idea.

2. At the next lecture you will study amplifier circuits.

3. The device calculated the frequency of electromagnetic waves.

4. The frequency of free oscillations of an open tuned circuit depends upon its capacitance and inductance.

5. In the early days of telephone operators made all the connections by hand.

6. The waves will not cancel each other and a considerable radiation will take place.

7. The detector completely cut off one-half of the wave.

8. In any aerial energy losses take place.

9. Glass fibers are cheaper and lighter than copper wires.

10. The automatic station "Zond-7" maintained stable communication.

IV   Write questions to which the words in bold are the answers. Use *who, what, when, where*.

1. When Scotsman *Alexander Graham Bell* invented *the telephone* in *1876*, it was a revolution in communication.

2. Nowadays, though, *we* increasingly use *Bell's invention* for *emails, faxes and the internet* rather than talking.

3. *The modern mobile phone* is a more complex version of the two-way radio.

4. In the *1940s*, *researchers* began experimenting with the idea of using a number of radio masts to pick up signals from two-way radios.

5. When *a caller* moved too far away from one mast, the next mast picked up *the signal*.

6. *Dr Martin Cooper*, the scientist who invented *the modern mobile handset*, made the first real mobile telephone call in *1973*.

7. *Within a decade*, *mobile phones* became available to the public.

8. *In Britain* the mobile phone quickly became synonymous with the "yuppie", *the new breed of young urban professionals* who carried *the expensive handsets* as status symbols.

9. *Mobile phones* will become more and more advanced.

10. Mobile phones with broadband internet access allow us *to watch TV, download internet files at high speed and send instant video clips to friends.*

V Complete the text below with the correct word or words in the box.

hotspot	machines	built	the Internet	access
touch screens	publicly-available		laptop	offer
buy	join	places		

If you have your own (1) … with you and it's no more than a couple of years old, then there's every chance it will have a Wi-Fi card (2) …in. This means it will detect wireless networks and (3)… them where possible.You could also have one of the new breed of tablet computers. These slim-line (4)… have large (5)… that make swiping your way through the internet easy. And almost every single one can connect to (6)… through Wi-Fi (some also can use a mobile 3G connection). (7)… internet spaces where you can use someone else's Wi-Fi are called 'hotspots'. There are many of these available. You can, for example, join a BT Openzone (8)… , and for a small amount of money you'll get an hour's internet (9)… .You might, however, find it preferable to go to one of the many coffee shops, bars and other (10)… where you can join a hotspot for nothing – as long as you (11)… something. Several membership establishments also (12)… free Wi-Fi to members.

Text for Reading and Discussion

What is the Internet?

The Internet is a global network of computers that works much like the postal system, only at sub-second speeds. Just as the postal service enables people to send one another envelopes containing messages, the Internet enables computers to send one another small packets of digital data. For that to work, they use a common 'language' called TCP/IP (Transmission Control Protocol/Internet Protocol). If you are on the net, you have an IP address.

When you send a letter, you don't need to know about the vans, trains and planes that carry it to its destination, or how many post offices it passes through on the way. Nor do you need to know how your packets of Internet data are transmitted through a variety of cables, routers and host computers on the way to their destination. However, different packets can take different routes, which makes the Internet relatively resilient. The failure of a particular node or host generally makes little or no difference to the rest of the system.

When you put an envelope in the post, it can contain many different types of data: a love letter, an invoice, a photograph, and so on. The Internet's data packets also carry different types of data for different applications. Common types include web pages, email messages, and large files that might be digital videos, music files or computer programs. Today, the web is often used to provide an easy-to-use interface for numerous applications, including email, file transfer, Usenet newsgroups, and messages (Internet Relay Chat). This makes the web and the Internet appear to be the same thing. However, these applications existed before the web was invented, and can still run without it.

Origins of the net. The Internet traces its origins to the ARPAnet, created by the US Defense Department's Advanced Research Projects Agency in the 1960s. Many other networks were developed - some by commercial companies, some in different countries - but they couldn't easily talk to one another. Vint Cerf and Bob Kahn developed TCP/IP, 'A Protocol for Packet Network Interconnection' (in 1974), to connect different networks. The Internet was thus a 'network of networks', although the Internet Protocol (IP) came to dominate networking. At the end of 1969, there were only four computers on ARPAnet, and they were all at US universities. This grew to 5,000 internet hosts in 1986, after which the number of users grew rapidly into the millions and then hundreds of millions.

Global domination. The main reasons for this massive increase were the opening of what had been an academic and government network to commercial users, and its rapid spread from the US to the rest of the world. Allied factors were the huge growth of the personal computer market in the 1980s, the invention of the World Wide Web by Tim Berners-Lee in the early 1990s, and the widespread adoption of broadband in the 2000s. Web browsers have made the Internet easy enough for anyone to use. With relatively cheap personal computers and the benefits of broadband, more than a billion people are using it. Now that Internet access is becoming popular on mobile phones, the next billion users should be online fairly soon.

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capabilities - возможности
to spread - распространяться
to enable – давать возможность
destination – пункт, место назначения
resilient - эластичный
failure – сбой, отказ, выход из строя
particular – отдельный
invoice – счет, фактура
to appear – оказываться
allied – похожий, взаимосвязанный

Unit two

- Времена английского глагола группы *Progressive, Active*
- Многокомпонентные сочетания
- Модальные глаголы и их заменители
- Текст *«How does the web work?»*

Exercises

I Translate the following sentences into Russian. Mind the forms of the predicates.

1. Laptop computers are fast replacing the traditional desktop computers.
2. Technology is reaching very advanced heights and we can only wonder what the future will bring.
3. The automatic station will be maintaining stable communication.
4. Computers are already becoming the most popular method for communication all over the world.
5. Today, the most popular users of the Internet are browsing the World Wide Web and email communication.
6. Soon the hackers of the railroad club were spending days, hours, and nights hacking away at their computer, an IBM 704.
7. They rely on the fact that a person's pulse gets faster when they are nervous or stressed – a strong indicator that they are not telling the truth.
8. Viewers are now watching content on LCD flat screens, PCs, or even mobile phones instead of bulky CRTs.
9. Ransomware is something that is becoming more common. This software locks down your computer or encrypts your data so you can't access it.
10. Fraudsters are always looking for new ways to rip people off so you need to stay ahead of the game.

II Translate the following multi-word combinations into Russian.

A   Computer memory cards, data storage devices, ground control segment, cash memory controller, computer memory units, desktop computer user, bulletin board owner, file compression utility, storage capacity computers, computer memory capacities, core memory technologies.
B   High energy physics community, long range computer network, thin film transistor technology, wireless sensor network architecture, high-speed broadband connection, full-text search functionality, low-level power management, large data storage capacities.
C   Business-oriented programming language, multi-user operating system, single-task operating system, general-purpose operating system, hand-held pointing device (now called the mouse), computer-integrated manufacturing technology.

D   Information security risks managing, cathode-ray display terminal, satellite-based navigation system, six-channel sound system, high quality computer-generated special effects, old-style keyboard-command approach.

III   Translate the following sentences into Russian. Mind modal verbs.

1. Chemists may use computer simulation to design and test molecular models of new drugs.
2. Personal computers can display millions of colors, can produce images far clearer than those of a television set, and can connect to various musical instruments and synthesizers.
3. The laptop may have an edge over the notebook, but that is negligible.
4. Also, confidential information about a company's products or operations can be stolen and sold to an unscrupulous competitors.
5. The operating system must make sure that the requirements of the various users are balanced, and that each of the programs they are using has sufficient and separate resources.
6. Cloud computing providers can have technical problems and that means that your data may not be accessible when you need it.
7. The sound from that telephone could only be transmitted over short distances because the microphone was not very strong.
8. Engineers should consider a great number of circuits with different stages of amplification before they start their work.
9. When you have a lot of files on your computer, you should back them up, for example by uploading them onto a server or by burning them onto a CD-ROM.
10. Protecting your personal data online is a necessary habit you need to adopt.

IV   Translate the following sentences into Russian. Mind the equivalents of modal verbs.

1. The possibilities are endless and we can only wonder if hackers and criminal masterminds will be able to keep up with the advancements in technology. They usually are able to find loopholes and vulnerabilities within systems.
2. If you are unable to work with technology you will be at a serious disadvantage within your life.
3. The number of places through which the data has to travel is really transparent to the user.
4. Microsoft's licensing of the web browser from Mosaic stated that Microsoft was to pay royalty on revenue earned from the sale of Internet Explorer.
5. Furthermore, the programmer may also have to keep track of where in the machine each instruction and each item of data is stored.
6. And this also means they don't have to invest in expensive upgrades as well.

7. Social media are democratic – you don't have to be famous or rich or well - connected to use them.
8. The students were allowed to look at different devices during their excursion.
9. Musicians are able to use computers to create multiple-voice compositions and to play back music with hundreds of variations.
10. The cable is to be used to test the transmission line.

V   Complete the text below with the correct word or words in the box.

online	company	computer	one-way	information	two-way
broadband	satellite dish	increase	cheaper	equipment	

Satellite broadband can be the only method of going (1)… in remote areas. A specialist satellite broadband (2)… will supply and install the (3)… . They will set up a (4)… or modify your existing satellite TV dish. You also need to connect a DVB modem to your (5)… .There are two types of satellite (6)… – one-way and two-way. A (7)… satellite system downloads quickly, but will upload slowly.   (8)… allows you to both send and receive (9)… via the satellite dish, but is much more expensive. It is also very easily slowed down by adverse weather conditions. Once you have set up satellite broadband (for a start-up fee of around £650), monthly usage costs start at around £25, but (10)… steeply with higher usage. One-way broadband is far (11)…to set up.

Text for Reading and Discussion

How does the web work?

The web enables pages to be published on the Internet, but why was it invented and how does it work? We explain how web pages, web servers and web browsers are linked and how 'spiders' play a part in the process.
The web is a system for publishing pages of information on the Internet, and for linking pages together using links. Anyone can publish a page by uploading it to a web server. Anyone can read that page by typing its address into a web browser. This makes it very easy for people to share documents even if they are using what would otherwise be incompatible computers. In fact, that's exactly why Tim Berners-Lee invented the World Wide Web in the early 1990s. The web would be useful but annoying if you had to type the precise address - the URL (uniform resource locator) - for every page you wanted. Fortunately, you don't have to. Web pages can include embedded links or 'hyperlinks', so simply clicking the link will take you to that page. Following a trail of links is called 'web surfing'.

Click on the link. The web is based on the idea of 'hypertext'. This implies that texts can be embedded inside other texts, perhaps to provide fuller explanations or background material. Web pages can also embed multimedia, so that, for example, clicking the word 'cello' could play some cello music. How do you know where to click? Traditionally, links were shown by using underlined blue text, and they changed colour after they'd been clicked. However, icons, images, videos and other items can also be used as links. Today, many people understand the conventions for what sort of things are links, so many web developers let users find them with their mouse pointer. When the pointer turns into a small hand, there's a clickable link. The web is also traversed by 'spiders' (or software robots) that follow links and collect information that can be used by search engines such as Google. Not all web users are human!

Web pages and web servers. Web pages are written in text with Hypertext Markup Language (HTML), then uploaded to a host computer running web server software, such as Apache or Microsoft's IIS (Internet Information Server). The web server sends out pages when they are requested by a web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Google Chrome. The host and client communicate using an agreed 'language' called HTTP (HyperText Transfer Protocol). This is why web page addresses begin with http:// and so on.

Increased sophistication. Today, many web pages are not written in advance, but created dynamically in response to someone's input. This happens with answers to search-engine queries and, for example, on shopping sites where people search for products within specific price ranges. As websites are becoming more sophisticated than static pages, web developers are using many more versatile tools. These include CSS (Cascading Style Sheets), scripting languages such as JavaScript and PHP (Hypertext Preprocessor), and Adobe Flash. The web's inventor, Sir Tim Berners-Lee, is also leading the attempt to develop a 'semantic web' that includes metadata which can be read by other computers. Metadata is data about data, such as whether a string of words is the title of a book. On a semantic web, it would be possible to distinguish between 1984 (a number), 1984 (a date), 1984 (a film starring John Hurt) and Nineteen Eighty-Four (a novel by George Orwell).

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incompatible – несовместимый, не сочетающийся
to annoy – раздражать, донимать, надоедать
precise – точный, определенный
to embed – вставлять, внедрять
trail – дорожка, путь
to imply – предполагать, подразумевать
to traverse –прослеживать, проходить, пересекать
to request - запрашивать
sophisticated – сложный; современный, передовой
versatile – многоцелевой, универсальный, многосторонний
to distinguish – различать, находить отличия
-   .

Unit three

- Глагол *to have*
- Времена английского глагола группы *Perfect, Active*
- Эмфатическая конструкция *it is/was…….that/who*
- Текст «*What do the words in web addresses mean?*»

Exercises

I Translate the following sentences into Russian. Mind the functions of the verb *to have.*

1. You have to compromise on several features which laptops and desktop PCs offer.
2. Also, Internet Explorer has access to most of the Windows operating system's core files and functions.
3. Broadcasting has long used antennas to transmit images and sound using the radio spectrum.
4. And this also means they don't have to invest in expensive upgrades as well.
5. Linux now runs on a wide variety of computer architectures and has spread far and wide.
6. AT&T started working on the MULTICS operating system but had to leave the project as they were failing to meet deadlines.
7. I have always enjoyed working on the Linux platform.
8. At that time they had a new electronic microscope in the laboratory.
9. In the 1980s many computers didn't have hard disks.
10. A person has to write the code, test it to make sure it spreads properly and then release the virus.

II Translate the following sentences into Russian. Mind the forms of the predicates.

1. If we include TV and audio technology within the scope of IT, then IT has already revolutionized much of our home lives.
2. Computer technology has opened a variety of opportunities for people who are creative risk-takers.
3. The information revolution has not only changed the way we live and the technology we use, it has also altered the way we think.
4. Most manufacturers have constructed their notebooks to labor with a keyboard and a mouse, and they as well have a touch pad that can be used to move round the pointer on the monitor.

5. The key advance that had enabled those services was the massive increase in low-cost broadband services into homes.

6. The launch of notebooks has brought transportable offices for everyone.

7. A communication protocol is something you are familiar with if you have ever talked to someone.

8. Company executives are afraid of the bad publicity that would result if the public found out that somebody had misused their computer.

9. The experimental part of the program had achieved several successful launches by November 1975.

10. By the end of the week the scientists will have conducted all the experiments.

III   Match the halves of the sentences to make a story about boo.com.

1. Ernst Malmstem and Kaisa Leander decided to launch boo.com, a website that would create a global fashion community …
2. Clothing companies didn't trust the Internet and …
3. Also, no one was sure that people would buy clothes …
4. On 3d November 1999, the day boo.com was launched, …
5. Worse, a well-known journalist wrote a negative article about boo.com, …
6. Other problems included viruses and a fraud detection system …
7. By March 2000, …
8. While most Internet start-ups run from garages or bedrooms, …
9. Malmstem and Leander, who always travelled first-class, …
10. But boo.com was spending faster than it was earning, …

A …that rejected customers' orders.
B …were reluctant to sell online.
C …and the company was doomed.
D …boo.com had luxurious offices in six of the world's most glamorous and expensive cities.
E …claimed that companies in the fashion industry needed this image.
F … the website had 25,000 hits, but these resulted in only eight actual orders for clothes.
G …explaining how it had taken him eighty-one minutes to order a product.
H … by selling designer clothes all over the world.
I … without trying them on first.
J … half of boo.com's workforce had lost their jobs.

IV Translate the following sentences. Mind emphatic construction
it is/was…..that/who.

1. Many believe that it was Zuse who made the first computer.

2. It was Charles Babbage who thought of building an analytical engine, which was the first mechanical computer which could store programs.

3. It wasn't until 1983 that Martin Alpert stopped practicing medicine and gave his full attention to Tecmar, Inc.

4. As a result, it was the Melissa virus that was the fastest-spreading virus ever seen!

5. It is a worm that usually exploits some sort of security hole in a piece of software or the operating system.

6. It was the Slammer worm that exploited a hole in Microsoft's SQL server and caused mayhem in January 2003.

7. It was the integration with Windows that led to the demise of the then-dominant web browser, Netscape.

8. It was the Apple iPod that revolutionized the way people buy and listen to music.

9. It is personal emailing that make employers keep an eye on their employees.

10. It was the need for large-scale ballistic computations that led to the development of electronic computers.

V Complete the text below with the correct word or words in the box.

capability	device	downloads	speakers	upload
computer	hard drive	compression	create	loss
copy	levels	CD	option	

Numerous websites offer legal MP3 (1)… for a small fee, typically less than £1 per track.

Many people (2)…('rip') their CD collection to their (3)…. Once stored on your (4)…, you can play your music through the (5)… on your computer or through headphones. You can also (6)… your own compilation albums and playlists.

When you rip from a (7)… to your computer's hard drive, you will be able to choose the (8)… of compression. The higher you set the (9)… rate (typically between 48 and 192 Kbps) the smaller the file will be, but with a resulting (10)… in audio quality. You can (11)… MP3 files onto a portable MP3 player - or in the case of iTunes, an iPod or other Apple (12)… . Portable radio/CD players now have the (13)… to play MP3s too. Another (14)… is copying ('burning') music downloads from your computer to a blank CD.

Text for Reading and Discussion

What do the words in web addresses mean?

When you set out in a car to a particular address you usually like to know something about where you're going. On the web, the equivalent is understanding

what web addresses can tell you. In this short guide we'll explain what each component of a web address actually means.

Different components. The first part of every web address – http:// – identifies the address to the computer as a web address. But what we're interested in here is primarily the next portion, the bit that's made up of words separated by dots and begins after the //, usually starting with www, and ending with something like .com or .co.uk. This piece is known as a 'domain name'. Anything after another forward slash (e.g. the 'music' bit of www.bbc.co.uk/music) is a path telling the remote computer which page you're looking for and where to find it. Every device that's connected to the Internet has what's known as an 'IP address' – that is, a number of the form 11.22.33.44. But most people don't find it easy to remember strings of up to 12 numbers, and in the late 1980s the domain name system was invented to assign names to these numbers to make it easier for humans. The domain name part of the address reads from right to left in order of increasing specificity. So the .uk and .com are what's known as top-level domains and cover large sections of the net (there is a single registry for each of these).

The organization name – for example, BBC – is the part you pay for when you register a domain. Top-level domains like .com, .net, and .org are called 'generic' because they are not tied to a specific meaning like a country. Top-level domains that have two letters identifying a country, like .uk (Britain) or .de (Germany), are known as country code top-level domains.

Some common top-level domains. .uk – the country code domain for Britain. Within it, .co.uk means a company, .org.uk means a non-commercial organization, .ac.uk means an educational establishment (such as a university) and .gov.uk means a government agency or department. Parliament is one of a handful of unusual sites that doesn't have an identifier like that – it's just parliament.uk.

- .com – originally intended for multinational commercial companies, .com is the most commonly used top-level domain. Almost all American and multinational organizations are registered in .com, as are many UK organizations.
- .org – originally intended for multinational non-commercial organizations, .org is frequently used by British organizations as well. In general, it's safe to assume that anyone registered in .org is non-commercial.
- .net – originally intended for Internet service providers, .net is now a more or less general-purpose generic top-level domain and used as an alternative when .com is not available.

And finally... One more type of web address you're likely to come across are the very short ones commonly shared on social networking sites like Twitter and Facebook. Usually, these are made up of the domain name – such as bit.ly, tinyurl.com or is.gd – plus a few cryptic letters and numbers. Many URLs are too long and complicated to fit into short messages or type accurately, and the companies that own these domains offer the service of shortening them. Because the site must translate them back into the originals when someone clicks on these links, the shortened URLs will only work as long as the companies stay in business.

to look for – искать

string – ряд, последовательность. цепочка

to assign – устанавливать, предназначать, отводить (что –л. кому л.)

to increase – возрастать, увеличиваться

to cover – покрывать

to intend – планировать, предназначать

to assume – допускать, предполагать

to be available – пригодный, подходящий, доступный

cryptic – скрытый, непонятный

Unit four

- Времена английского глагола группы *Simple, Passive*
- Двойной союз *both……and*
- Текст *"What is URL?"*

Exercises

I Translate the following sentences into Russian. Mind Passive Voice.

1. All the essential data such as system program (BIOS, Basic Input/Output System) is stored in the ROM.
2. Capacities of these computer parts are bridged with the help of cache memory.
3. A hard disk in a computer is also used to store user data such as movies, songs and financial data.
4. Data is accessed from the RAM and is manipulated in the microprocessor.
5. The second advantage of cloud computing is connected to the way that the hardware and software are provided. Cloud computing is basically the delivery of a service rather than a product.
6. The first web servers were all located in European physics laboratories and only a few users had access to the NeXT platform on which the first browser ran.
7. The source code was made available to the users but there were restrictions on the modification and distribution of the software.
8. Actually, the entire procedure can be handled by the operating system.
9. The data in ROM, once written, is accessed whenever needed but will not be replaced.
10. In the future, many of our home devices will be linked together and controlled by a computer.

II Read the following text about the Internet. Use the verbs in brackets in the Passive Voice, Present or Past Simple.

Servers and clients. The Internet is a worldwide network of hundreds of millions of computers linked together. Two basic types of computer (involve) –'servers' and 'clients'. Your office computer is a client, while the information you seek (store) on the servers.

Getting to a web page. Every website in the world (locate) on a host server. When you type in a website address your home computer (connect) to a 'gateway' server. This (operate) by your Internet Service Provider (ISP). Then your request to view a page (pass) on by your ISP to other service. In seconds it (pass) from server to server until it reaches the target host server. Then you can view the web page you requested.

Early days. The first computer network (develop) by the US military during the1950s. It (adapt) by scientists in the 1960s so they could share information. This new system (call) ARPANET.

Going global. Unfortunately, ARPANET was complex and difficult to use. The Internet (revolutionize) in 1991 when the World Wide Web (invent) by Tim Berners-Lee. Now anyone can access information with a click of the mouse! Mosaic, the world's first web browser, (introduce) in 1993. It worked for both PCs and Apple Macs. And from then on, the Internet became truly global.

III   Match the halves of the sentences to make a story about Amazon.com.

1. It was the early 90s, the Internet boom was just beginning …
2. After leaving his job on Wall Street, …
3. Using his garage in Seattle as an office, …
4. The idea was to make the buying of books cheap and easy, …
5. The site had a number of features which made it attractive to potential users: …
6. As a twenty-four hour virtual bookshop, …
7. Gradually, through word-of-mouth …
8. Bezos had originally handled customer orders himself, …
9. By 1998 the net sales were $540 million …

A …Amazon was convenient, cheap and reliable.
B …but soon he realised that the company was growing too fast for one man.
C …and a whole generation of book buyers was hooked.
D …Bezos decided to set up an online bookselling business.
E …fast service, search capabilities, low costs for users.
F… and Jeff Bezos wanted to be a part of this brave, new, forward-thinking community.
G …with more choice than the traditional bookshop could provide.
H …the company grew in popularity.
I … Bezos created Amazon.com.
IV   Translate the following sentences into Russian. Mind correlative conjunction *both…and.*

1. Both laptops and desktop PC's have their own pros and cons.
2. While both private messages and comments are popular on most of the major SNSs, they are not universally available.
3. A company that uses computers extensively offers many opportunities to both dishonest employees and clever outsiders.
4. Spam refers to both the process of sending unsolicited messages via the Internet, and to the messages themselves.
5. These settings are stored in a flash memory device adjacent to the BIOS, which allows for both read and write access.
6. Robert Noyce was a risk taker who was successful both as an engineer and as an entrepreneur.
7. Noyce's contributions to the development of the integrated circuit and the microprocessor earned him both wealth and fame before his death in 1990.
8. However, unlike iPhone OS, Windows Mobile does support both touch screen and physical keyboard configurations.
9. This increasing dependence on both a national and international scale has led us to create systems that can respond immediately to dangers, enabling appropriate actions to be taken.
10. Intel's silicon modulator uses a transistorlike device rather than a diode both to inject and to remove the charges.

V   Complete the text below with the correct word or words in the box.

programmes	choose	play button	TV	later date	up-to-date
method	website	television channels		modern	BBC iPlayer
particular show		older	part	search box	

Missed a favourite TV programme? Want to watch or listen to a (1)…
again? You can with BBC iPlayer. Just click on the (2)… and you're ready to go.
BBC iPlayer is (3)… of bbc.co.uk and it allows you to watch the (4)… on your computer.

You can also catch up with (5)… from the past week that you've missed or want to watch again, by playing them directly using the (6)… or by downloading them to your computer to view at a (7)… .

Just go to the BBC iPlayer (8)… and look for programmes you want to watch. You can browse by channel or by different genres, or try the (9)… to find something interesting. A wide range of BBC TV programmes from the past seven days from most of the (10)… are available to watch or download.

You choose what you want to watch and either play the programme via a (11)… known as 'streaming', or download it to your computer to watch when it suits you.

Hopefully you can just (12)… a programme and hit the play button. If you have an (13)… computer, you may be asked to download 'Flash Player', which will

play the programme. Most (14)… computers and laptops have (15)… software which should be fine.

Text for Reading and Discussion

What is a Uniform Resource Locator (URL)?

Most people use the term 'URL' interchangeably with 'web address', but in fact web addresses are just one type of URL. A URL can refer to any type of name or resource (files, programs, web pages) on the Internet.

The term URL stands for Uniform Resource Locator, and is also sometimes written as URI (for Uniform Resource Identifier). URLs were invented in 1994 by a group of Internet pioneers including Tim Berners-Lee (the inventor of the World Wide Web) and Marc Andreesen (co-author of the first widely-used graphical browser, Mosaic). The aim was to make it possible to share information reliably by giving every file or page a consistent type of address.

What elements make up a URL?

URLs are made up of a number of elements that help point accurately at a specific piece of information. Firstly, they have a protocol, such as 'http' followed by a colon and two forward slashes, that identifies the type of computer program that will be needed to display or process the information being located. Secondly, there's a name made up of numbers or words that identifies the computer or network hosting the information. Thirdly, they have a port number which the sending and receiving computers use to establish a direct connection. This is often omitted, as the commonly-used services have agreed on standard port numbers – e.g. port 80 for web services. Fourthly, there is a path made up of words that identifies the precise location of the information on the host computer or network. And finally, there may also be a question mark followed by a string of words, letters, and/or numbers. You'll typically find these when you've entered a query into a search engine - the URL contains the information the computer needs to conduct the search and find your results.

'Identifiers' and their uses

Most people do not realize that their web browsers can handle many types of URLs that are not web addresses. Some samples of these identifiers and their uses include:
- HTTP - a web address.
- HTTPS - a secured web address which is used for encrypted connections such as those used for financial transactions.

- FTP - 'File Transfer Protocol', a more efficient (and older) way of transferring large files than HTTP.
- FILE - a file on the computer or local network the browser is running on.
- GOPHER - an older but still active type of server that indexes and searches content on the web.

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interchangeably – взаимозаменяемо
reliably – надежно
consistent - последовательный
colon - двоеточие
to establish – устанавливать
to omit – пропускать, не упоминать
e.g. – например
query – вопрос, запрос
to handle – обрабатывать, управлять
sample – пример, образец
to encrypt – шифровать, зашифровывать

Unit five

- Времена английского глагола группы *Progressive, Passive*
- Многозначность слов *ONE* и *THAT*
- Текст *"Webcams"*

Exercises

I. Translate the following sentences into Russian. Mind the forms of the predicates.

1. Facebook and Twitter are integrated into smart phones and tablets and they are also being used more and more by businesses as well as individuals.
2. It's difficult to judge the size of the Internet: people and systems are being added daily.
3. Conventional telephone wires and cables are being replaced by optical fibers.
4. Voice, computer data, even video images are being increasingly integrated into a single digital communication network capable of processing and transmitting virtually any kind of information.
5. At present high-capacity optical transmission systems are being installed between many major cities at a rapid rate.
6. Satellite services are being increasingly adopted to provide business communications, including the transmission of traffic for voice, data and vision.
7. Complex functions are being performed by people using advanced terminals which are intended to be as easy to use as the conventional telephone.

8. Nowadays plans are being developed to transition to a low mass third generation GLONASS-K satellites with a guaranteed lifespan of 10 years.

9. GPS satellite is built to last about 10 years. Replacements are constantly being built and launched into orbit.

10. Things that used to be put into writing are now just being confirmed and recorded electronically.

II   In the following sentences the word *one* has different meanings. What are they? Translate the   sentences into Russian.

1. There was never a perfect computer developed like the one which we are using today.

2. Robert Noyce, a graduate of the Massachusetts Institute of Technology, started working for one of the first computer-related businesses in 1955.

3. In case a backup media is not affordable, one should try and store the files on at least two different media devices.

4. As the data is available only for authorized users, it is possible for hackers to be one, by providing the correct user name and password.

5. In order for one to access the Internet, he must connect via a service provider, called an ISP.

6. If you don't have a file handy or if you want to create one, the File Manager will search your hard drive for an appropriate carrier.

7. Cables have different capacity: a single telephone line like the one leading from your home can handle about 7 kilobytes per second.

8. Profiles are unique pages where one can "type oneself into being".

9. The answer to the question "Who made the first computer in the world?" is not an easy one.

10. It was the first digital computer and the one which could be re-programmed.

III   Translate the following sentences into Russian. Mind the meanings of *that*:
- demonstrative pronoun;
- indefinite pronoun to avoid repeating nouns;
- relative pronoun used as subjects;
- conjunction to introduce a clause.

1. Until the late 1970s, the computer was viewed as a massive machine that was useful to big business and big government but not to the general public.

2. That features helped convince skeptical public that the computer was practical for small business.

3. His first electronics products were medical instruments that he built in his leaving room.

4. The basic principle of quantum computation is that the quantum properties of particles can be used to represent and structure data.

5. In notebook PCs, however, the cooling system is not at par with that of laptops or desktops.

6. And few users read all twelve pagers of every End User License Agreement (EULA) that they accept.

7. The purpose of an operating system is to organize and control hardware and software so that the device it lives in behaves in a flexible but predictable way.

8. This is a very special type of computer memory that is of immense help to the microprocessor in execution of instructions.

9. An exclusion to this dilemma is that it is fairly easy to access memory and the HD.

10. In spite of that the majority of the mobile computers might adjust with more technological evolution.

IV   Write questions to which the words in bold are the answers.

1. ***Pierre Omidyar*** set up ***an online auction company*** which allowed people to show items they wished to sell.

2. ***Other users*** then made ***a bid.***

3. Omidyar wanted to name the site ***Echo Bay Technology Group.***

4. But ***this name*** was already owned by ***a Canadian mining company***, so he shortened the name to eBay.

5. Almost immediately ***eBay*** made a profit.

6. The site sold goods ranging from ***computers to posters to underwear***.

7. ***The growth of eBay*** was phenomenal.

8. It is now the world's most successful online business and ***its users*** consider themselves part of a distinct community.

9. ***150 million*** registered users buy and sell goods worth $1,050 every second.

10. The website is used by ***big companies*** such as Vodaphone and IBM to sell off excess stock.

V   Complete the text below with the correct word or words in the box.

digital	the same	taking	film	run out	online	local shop
guide	files	prints	processing	cost	try	pictures

    (1)… cameras have revolutionized photography – you can look at your photos as soon as you have taken them, delete the ones you don't want, and (2)… again. And you can take as many (3)… as you like, at no extra (4)… . Find out the basics of how to get the best out of your digital camera in this short (5)… .

    Taking pictures with a digital camera is almost exactly (6)… as taking pictures with a (7)… camera - but instead of needing chemical (8)… and printing, digital

photos are (9)… that can be loaded onto a computer, emailed to friends and uploaded to Facebook. If you want (10)… , you can print them out at home or at a (11)… , but most digital pictures live a purely digital life.

The best thing about (12)… photos with a digital camera is that if you didn't get everything right, you can crop and retouch your pictures using computer software (such as Adobe Photoshop) or do it (13)… at a photo-editing site. It's all very liberating, until you start to (14)… of battery power.

Text for Reading and Discussion

Webcams

Various webcams are available for different applications. Perhaps you'd like to get one so you can chat to a friend or relative in another country – or perhaps you want to increase your home security? This article should get you thinking about which one you need and how to go about setting it up. Just about everyone has heard of webcams. They can be used for video conferencing (or phone chatting as the non-technical call it), for security purposes, and have even been placed in radio broadcasters' studios (nobody knows why, someone sitting talking to a microphone is a lousy spectator sport).

Can you see me? First of all, you need to consider what your webcam is for. If it's for chatting to friends then something inexpensive from the nearest catalogue or website will do, assuming your computer doesn't already have a webcam built in. Plug it into the USB slot and run the CD that came with it, if your computer doesn't recognise it immediately. You're now ready to start chatting!

If you wanted to record video chats using Skype (maybe for putting into a video podcast or attaching to a blog), then you'd be well advised to spend a little more money and get something that will take an image with a better resolution. This will improve the quality of the picture and animation you record. But you will need to be as aware of what's behind you, as the camera's focus on your face. An office that looks like a bomb site will, of course, convey the wrong impression.

If you haven't used video conferencing before, beware of eye lines. The camera is best perched on top of your screen, but you'll be looking at the eyes of the person you're talking to - which are actually on the screen and therefore below the camera. This makes it look as though you're talking to each other's noses because you're both looking below the camera. Don't worry, you'll get used to it.

Home security. The other use for a webcam is for home security. You can set it running while you're away and upload the content to a secure website. More sophisticated webcams have the software included and the purchase price includes some web space to make this happen. You can then log on while you're away and check that everything's okay at home, either through a smartphone or a laptop computer. And if someone does break into your home while you're away, you will have their picture on disk.

to consider – принимать во внимание, учитывать
to plug – вставлять
immediately – сразу, немедленно
to convey – передавать, производить
to beware – остерегаться, опасаться
to perch – помещать, размещать
purchase – покупка, приобретение

Unit six

- Времена английского глагола группы *Perfect, Passive*
- Степени сравнения прилагательных
- Двойной союз *the … the*
- Конструкция *as…as*
- Текст "*Netiquette*"

Exercises

I Translate the following sentences into Russian. Mind the forms of the predicates.

1. My new cellular phone has been equipped with a web browser and modern interface.
2. Finally, some record must be kept of where the file of information has been stored.
3. A number of these clues has been identified by researches.
4. Although the mobile phone network has been upgraded to deal with the task of transmitting this kind of data, it was originally made for the transmission of basic phone calls and text messages.
5. All of the corporate sales had been moved to the Web by the end of 2000.
6. The operating system locates the area of RAM that has not been accessed recently and transfers the data in it to the hard disk.
7. Windows Mobile has been criticized for having a user interface which is not optimized for touch input by fingers; instead, it is more usable with a stylus.
8. Like email before it, the way we write in English has been altered by the text message, bringing more abbreviations and more lax approach to language construction.
9. It is reported that an optical equivalent of a transistor has been produced and intensive research on optical electronic computers is underway in many countries around the world.
10. The cost of producing an IMAX movie is the main reason it has never been seriously considered as a pure entertainment medium; most IMAX movies have been documentaries.

II   Translate the following sentences into Russian. Mind the degrees of comparison.

1. 4G is up to 10 times faster than 3G and even allows you to stream movies or live television to your mobile.
2. Notebook computers are relatively cheaper than laptops, as they have lesser features compared to the latter.
3. They have displays that use thin-screen technology that is brighter and give better views at different angles.
4. Opera's security record is not only the best of any available web browser, it is also better than almost any other software in any category.
5. All but the smallest banks now keep their accounts on computer files.
6. The latest LTE (Long Term Evolution) technology can deal with much larger volumes of traffic, but requires new phone masts and new handsets.
7. Companies or individuals can get additional hard disk space by paying a fee for what they use. The fee is normally much, much lower than the cost of buying, installing, and maintaining new hardware.
8. The Zune was more pixilated, so it didn't actually provide better viewing of movies even though the screen was bigger.
9. So, a clear advantage of cloud computing is that it offers a much more efficient use of resources.
10. Cheaper handsets and cheaper calling rates meant that, almost overnight, it seemed that everyone had a mobile phone.

III   Translate the sentences into Russian. Mind double comparison *the…the.*

1. The RAM is the primary memory of any computer system and hence the larger the amount of memory in the RAM of your computer, the better is the performance.
2. "The more elaborate our means of communication, the less we communicate". Joseph Priestley (British political theorist).
3. The higher you set the compression rate, the smaller the file will be, but with a resulting loss in audio quality.
4. The larger the size of the electrodes, the more current capacity they can supply.
5. The more we rely on computers, the more vulnerable we are to hackers and computer viruses.
6. But I just think, the more we use e-mail, the more we need it. It's like an addiction, with people checking their emails every five minutes even in meetings.
7. The value of the line efficiency depends on the load: the greater the load, the lower is the line efficiency.
8. The greater the resistance, the higher are the heating losses in the conducting wires.
9. The higher the value of current, the higher is the temperature of a resistor.
10. The more you know about using computers, the easier it becomes.

IV   Translate the sentences into Russian. Mind the comparative construction *as…as.*

1. The term "laptop" is used to refer to a small portable computer, which is almost as good as the desktop PC in terms of performance.
2. Laptops are also referred to as notebook PCs owing to the fact that they are as small as actual notebooks.
3. There are as many nanometers in an inch as there are inches in 400 miles.
4. The majority of the mobile computers are nevertheless not as strong as desktop PCs, in spite of that this might adjust with more technological evolution.
5. The storage capacity of a single gram of DNA can hold as much information as one trillion compact discs.
6. Built in the garage of Jobs's parents, this first personal typewriter-sized computer was as powerful as a much larger computer, and inexpensive to built.
7. If the Zune was in many ways just as good as the iPod, and for some people was technically superior, why did it fail to gain market share?
8. Technology will always only be as good as the person using it, no matter how advanced the technology is… at least until technology finds its users obsolete.
9. The Internet resources have become as important to you as your telephone and your post office.
10. In 1940s computers were as big as refrigerators.

V   Complete the text below with the correct word or words in the box.

data connection	reception	standalone	costs	Internet radio players
headphones	speaker dock	stereos	connector	powered speakers
choice	connections	audio		Wi-Fi

      Computers and smartphones will connect to the Internet and play your favourite stations just as easily, and if you attach them to a decent (1)… or good (2)… the sound quality should be excellent. Beware if you're using a (3)… other than (4)… and paying per byte, as the (5)… can mount up.
      There are also dedicated (6)… now on the market, which take an Internet feed and play it through existing (7)… or (8)… as long as they have the right (9)… . It will also pick up any (10)… stored on your computer and play it the same way. The (11)… will be as good as your Wi-Fi signal, but no better.
      There are also (12)… Internet radios available, offer ordinary-looking radios which in fact have DAB (Digital Audio Broadcasting) and FM as well as the shiniest new Wi-Fi (13)… for Internet listening, and offer more (14)… of channels than you ever knew existed before.

Text for Reading and Discussion

Netiquette

The word netiquette is a combination of 'net' (from internet) and 'etiquette'. It means respecting other users' views and displaying common courtesy when posting your views to online discussion groups.

As you become involved with online discussion groups, you will find that each group has its own accepted rules of behavior. Many of these have come about because of technical limitations.

For example, on an email discussion list - where not everyone may have seen past messages - it's considered polite to quote from a message you're replying to, so your response has context. It's also considered polite to keep those quotes short and relevant. On a web-based forum, however, where the original messages are visible to all, quoting is often unnecessary.

The basic rules

1. Refrain from personal abuse. You may express robust disagreement with what someone says, but don't call them names or threaten them with personal violence.

2. Don't spam. That is, don't repeatedly post the same advertisement for products or services. Most sites have strict and specific rules about who is allowed to post ads and what kind of ads they are.

3. Write clearly and succinctly. On a site that has many non-native English speakers, avoid using slang they may not understand.

4. Remember that your posts are public. They can be read by your partner, your children, your parents, or your employer.

5. Stay on-topic, especially when you're new. Don't post about football in a hair-care forum or about hair care in a gardening forum!

6. Don't expect other people to do your homework for you. If you're looking for technical help, for example, don't ask questions you could easily answer yourself by reading the manual or online help provided with the product. When you do ask for help, include details of what attempts you've made to solve the problem. It will save time and also show people that you are making an effort to help yourself.

7. Do not post copyrighted material to which you do not own the rights. Sites vary in how strict they are about this, but as well as facing the possibility of legal action by the rights holder, you may also get the site sued.

8. The site's owner, perhaps assisted by one or more moderators, has the final say in enforcing the rules.

Helpful hints

Almost every site has a page for newcomers that describes its rules of good behaviour. Usually this page will appear as the terms and conditions you must agree to when you open your account. However, sites may have additional information. You should read all of it.

Check to see if the site has a FAQ (frequently asked questions) section. FAQs typically include questions that have been asked and answered hundreds of times. If you have any queries about site protocol, you will most likely discover the dos and don'ts here.

Finally, it's always wise to see what the discussion group have been talking about for a week or two before you begin to post your messages. Online, as in real life, it can take a long time to get past a bad first impression.

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courtesy – вежливость, этикет
 accepted – принятый, общепринятый
relevant – уместный, относящийся к делу
to refrain – воздерживаться от (чего-л.), удерживаться
abuse – оскорбление
robust – твердый, здравый
to threaten – грозить, угрожать
advertisement = ad – реклама
succinctly – кратко, лаконично
to avoid – избегать
manual – руководство, справочник
to vary – меняться, варьировать
strict – строгий
to sue – подавать в суд, предъявлять иск
to enforce – вводить в действие

Unit seven

- Времена английского глагола группы *Perfect Progressive*
- Числительное
- Времена английского глагола. Повторение
- Текст *"Facebook"*

Exercises

I   Translate the following sentences into Russian. Mind the forms of the predicates.

1. The field of research which has been attracting man's resources and effort for many centuries is our environment of living nature.

2. I've been interested in social media for a number of years, and recently I have been doing some research into this area.

3. An older acquaintance told me that he had been using Twitter and that after a week he had begun to feel a sense of connectedness.

4. Connecting many computer networks and using common addressing system, the Internet has been growing rapidly since its creation in 1983.

5. Consider the first true calculator, the abacus, which has been performing fast and accurate mathematical operations for over 5,000 years.

6. They need to find out who has been trying to obtain usernames or passwords of other users.

7. They discovered who had been sending bulk emails from our computer.

8. It is vital to determine who has been introducing harmful programs and worms into the computing facility.

9. It is difficult to dismiss the significance of discoveries made by several research groups that have been monitoring Internet crime.

10. Cloud computing and mobile applications are the two paradigms that have been increasing demand for software engineers.

 II   Read the following sentences aloud. Mind numerals.

1. Some countries use the 850 MHz and 1900 MHz bands because the 900 and 1800MHz frequency bands were already allocated.

2. The International Telecommunication Union, which manages the international allocation of radio spectrum, allocated the bands 890-915 MHz for the uplink and 935-960 MHz for the downlink for mobile networks in Europe.

3. The concepts of frequency reuse and handoff were first described in U.S. Patent 4,152,647 issued on May 1, 1979 to Charles A. Gladden and Martin H. Parelman.

4. Each satellite operates in circular 19,100 km orbits at an inclination angle of 64.8 degrees and each satellite completes an orbit in approximately 11 hours 15 minutes.

5. In 1972 Bushnell founded Atari Inc. in California to build Pong games. By 1975 there were 15,000 Pong games in American homes.

6. Receivers capable of showing progressive-scan pictures were announced by Sony. Prices started at around $2,850 for 80cm (32-inch) model.

7. MPEG-2 could support video resolutions of 720x480 and 1280x720 at 60 frames per second with an audio quality equal to conventional CD audio.

8. Satellites used for television signals are generally in either highly elliptical (with inclination of +/- 63.4 degrees and orbital period of about 12 hours) or geostationary orbit 37,000km (22,300 miles) above the earth equator.

9. Eighty entangled qubits (quantum bits) will contain an amazing 151 trillion gigabytes of processing power – around 2.3 trillion times faster than today's currently "fast" 64-bit architecture.

10. This together with the change of numerical aperture to 0.85 is what enables Blu-ray Discs to hold 25GB/50GB.

III   Put the verbs in brackets into the correct tense and voice form. Translate the sentences into Russian.

1. Teenagers (play) computer games for years, but many multimedia applications (combine) education and entertainment and they let them visit virtual worlds or change the ending of film.
2. The encrypted data can only (read) by parties that (give) the necessary key to decrypt the ciphertext back into its original plaintext.
3. Steganography (be) a fascinating and effective method of hiding data that (use) throughout history.
4. When you have finished writing, you have to tell the computer to save what you (write).
5. You probably (see) something on your computer screen that looks like a real folder.
6. A full explanation of how to deal with this awaits another article, but we (take) a short tour of how to handle this problem below.
7. The Internet changes many things. It (have) a dramatic impact on the world of business.
8. For individuals, email (emerge) as the most important new form of personal communication since the invention of the telephone.
9. As technology (advance), this (change) by a distinctive group of engineers and entrepreneurs who (rush) to improve the designs of then current technology and to find ways to make the computer attractive to more people.
10. It is impossible that old prejudices and hostilities should longer exist, while such an instrument (create) for the exchange of thoughts between all the nations of the earth.

IV   Make the following sentences passive. Translate them into Russian.

1. The triode vacuum tube – the original electronic amplifier – powered the development of radio, TV and early digital computers.
2. But tubes were bulky and power-hungry; engineers needed a reliable, small, cheap device.
3. Semiconductors, crystals of nearly pure germanium or silicon, could selectively allow or deny the transmission of electricity.
4. A team of scientists at Bell Labs in New Jersey demonstrated the first semiconductor amplifier, a primitive transistor, on December 23, 1947.
5. American engineers Jack Kilby, Jean Hoerny and Robert Noyce developed the first integrated circuits (ICs) in the late 1950s.
6. Chip-based computers invaded the kitchen, the car, the office, the den.

7. By 1971 Intel had introduced a large-scale IC called a microprocessor.

8. An IBM computer called Deep Blue beat the world's greatest human chess player Garry Kasparov in 1997.

9. Computers will soon be using their superior 'thinking material' to make themselves even smarter.

10. Computers will warn us about threats to our health long before doctors can.

V   Complete the text below with the correct word or words in the box.

password	browse	handy	account	enter	require	log on
locked	access	prompt	poor	slower	screen	strong
reliable option			padlock icon			connected

In the settings menu you can select Wi-Fi if you are in an area where a Wi-Fi signal is (1)… , or you can choose to turn it off. By de-selecting Wi-Fi, you are telling the device to use it's own 3G internet connection.

It is common for Wi-Fi access to be guarded by a (2)… . When you select Wi-Fi your smartphone will be shown a series of "hotspots" that it has detected. Each will have a (3)… beside them but some will be unlocked while others are locked.

The unlocked options are public and can be (4)… to without having to (5)… a password. The (6)… ones will (7)… a password.

In some cases a connection may appear unlocked but then (8)… you to (9)… using a paid for service. You will usually be asked for your bank details in order to set up an (10)… . This can be an expensive way to (11)… mobile web, but if you are in a place with a (12)… signal (such as on a long train journey) it can be the only (13)… .

3G is generally (14)… than a strong Wi-Fi connection, but it is very (15)… to have the Internet wherever and whenever you need to get online.

Whether you have selected to use 3G or Wi-Fi, you can (16)… the Internet by tapping on the Internet browser icon on your tablet's home (17)… .

Text for Reading and Discussion

Facebook

Facebook started in the United States as a way for some college kids to stay in touch when they had left campus - and it's evolved since then to become one of the largest social networks in the world. Here's how you can get involved.

Facebook is a vast, sprawling network and you can make whatever you want of it. You sign up by putting some details, and preferably a photo of yourself, on the Facebook website. Then you're ready to start posting a few updates.

These updates are statements about what you're up to, links to interesting stuff you've seen elsewhere on the web - it's up to you. As word gets around that you're online, you'll find old friends start to get in touch. They may have heard about you being on Facebook or they may have found you after doing a search.

Facebook itself will send notes on people you might know, based on the fact that you went to the same school or college or shared an employer (you only have to put up as much of this sort of information as you want).

Word of caution. Be a little wary about the information you share on Facebook. If you display your town, date of birth, marital status and other personal facts, someone might be able to get enough information to steal your identity (it's unlikely, but be careful).

You might want to go into your profile page (it's easy to find once you've signed up, there's a tab on the homepage) and make sure you're not sharing all of your information with everyone who happens to log on.

Soon you'll be in touch with a lot of people, exchanging views and information on your page (or 'wall' as Facebook calls it) and vice versa. If your friends are online when you log on, you'll find a list of them to one side of the screen and you can send instant messages.

You can also put pictures of yourself up. Want to share holiday snaps with your aunt who lives in Australia? No problem, upload them and share them with her.

There are other things Facebook adds on - you can play games across the Internet, you can tell it which book you're reading at the moment, you can rate films and get recommendations. You can join groups of people with similar interests, you can join Facebook groups representing your favourite TV or radio programmes and chat to like-minded people about them.

It all starts with a simple sign-up to the most basic stuff, which enables you to make announcements and engage with people online. Catching up with old friends, making new ones, sharing an interest with a group of people or sharing your photos with someone the other side of the world.

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to evolve – развиваться
to get involved – вовлекать, привлекать
vast – обширный, громадный
sprawling – расползающийся
preferably – предпочтительно
to be wary – быть осторожным
marital status – семейное положение
to steal – воровать, красть, овладеть
tab – ярлык
vice versa – наоборот
to represent – показывать, представлять
like-minded people – люди с общими интересами
to engage – входить в контакт
to catch up – AmE - общаться

Unit eight

- Инфинитив
- Инфинитивные конструкции
- Текст *"Twitter"*

Exercises

I   Translate the following sentences into Russian. Mind the functions of the Infinitive.

1. To use 4G you need a smartphone handset which has been produced with the capability to pick up the 4G connection.
2. The quantities to be added can simply be given names, such as X and Y.
3. In most instances an application program is written to be executed in conjunction with a particular operating system.
4. The enabling infrastructure and technologies must be in place for industry to take advantage of nanotechnology innovations and discoveries.
5. A program written in assembly language, however, must still specify individually each operation to be carried out by the processor.
6. To understand the kind of tasks done by the operating system, consider the sequence of steps that must be taken to transfer a file of data from the primary memory to disk storage.
7. Ken Thompson, Dennis Ritchier and Brian Kerngham at Bell Labs used the idea on the MULTICS project to develop the first version of Unix.
8. To be "connected to the Internet", a computer must respect the Internet protocol.
9. Security and tools for e-commerce were the most important features soon to be added.
10. To carry out this kind of attack, hackers generally flood a network or the access routers with bogus traffic.

II   Translate the following sentences into Russian. Mind Complex Subject.

1. The Computing Centre is reported to maintain extensive scientific contacts with research organizations.
2. The total societal impact of nanotechnology is expected to be greater than the combined influences that the silicon integrated circuit, computer-aided engineering and man-made polymers have had in this century.
3. The term multimedia is said to date back to 1965 and was used to describe a show by the Exploding Plastic Inevitable.
4. Three-dimensional graphics along with colour and computer animation are supposed to be essential for graphic design, computer-aided engineering and academic research.

5. However, Charles Babbage is known to have conceived the idea of the computer first.

6. It is possible to write a program in this machine language, but the process is tedious and likely to result in many errors.

7. Both the target and impact of potential disasters appear to be highly important for the designer and distributor of the worm.

8. Apple TV, introduced in March 2007, is controversial device that is not expected to bring much income to Apple, rather, to help secure Apple's foothold in the content distribution market.

9. Of course, most virus creators seem to miss the point that they cause real damage to real people with their creations.

10. Opera may be considered to be less vulnerable to exploits than other web browsers as it is deemed less of a target than more popular web browsers.

III   Translate the following sentences into Russian. Mind Complex Object.

1. We know computers to be valuable educational tools.

2. We want you to have access to all the Internet sources, including Telnet and FTP (File Transfer Protocol).

3. In other words, we want you to be able to use a computer that has a full TCP/IP connection with the Internet.

4. They consider Firefox to be much safer to use than Internet Explorer.

5. The programmer watched the mechanic repair the faulty device.

6. Specialists consider electronic auction sales and markets to be other rapidly developing parts of e-commerce.

7. We believe the software industry to see big changes.

8. The company expects the Asia Pacific region to have over 500 million 3G subscribers in the next few years.

9. Most of the British code-breakers thought Enigma to be unbreakable.

10. We believe computer technology to contribute significantly to understanding and managing our rapidly growing society.

IV   Define the Infinitive Construction. Translate the following sentences into Russian.

1. By the mid-1990 the Internet linked millions of computers throughout the world and it is sure to be the most important commercial and popular means of communication nowadays.

2. We believe computer technology to contribute significantly to understanding and managing our rapidly growing society.

3. Most of recently established companies are known to include the electronic commerce in their business as well.

4. The further development of secure electronic transfer of sensitive information is certain to be essential to the continued growth of e-commerce.

5. In some fields new Internet retailers such as the Amazon bookseller company seem to have grown up overnight.

6. We consider digital machines to work directly with numbers in digital form and to be capable of performing exactly the fundamental operations of arithmetic.

7. As a businessman, Noyce co-founded Intel, the first company to introduce the microprocessor. Many people consider his role to be one of the most significant in the Silicon Valley story.

8. We know this company to provide online support to local businesses and individuals.

9. We take telephone calls from people with IT problems who expect us to fix their problem right away.

10. Everyone – from Microsoft and Google to small start-ups - seems to be looking for talented programmers and developers.

V   Complete the text below with the correct word or words in the box.

wireless connection	option		invisible radio waves	free of charge
service	exceed	charged	as well as device limited	outside source
wires or cables			connectivity	mobile web

    All smartphones come with 3G (1)… . Put very simply, 3G is your phone's own Internet connection. It is relatively fast and robust enough to download media (2)… web pages.

    Another (3)… is to use Wi-Fi, which works the same way that a (4)… works in your home or office. It allows you to connect to the Internet without having to use (5)… , using (6)… instead.

    When your mobile connectivity is switched to Wi-Fi mode you are asking the (7)… to find an (8)… to provide an Internet connection, instead of using the phone's 3G connectivity.

    When using the (9)… with a Wi-Fi connection the (10)… is usually (11)… (if you have to pay this will be made clear before you can use it).

    When you are using a 3G connection your use of the mobile web will be (12)… to an amount that you've agreed with your provider, and if you (13)… the limit you'll be (14)… extra. So it's best to use Wi-Fi where you can.

Text for Reading and Discussion

Twitter

Twitter, at its most basic, is a series of short online announcements or 'tweets'. Want to know more? Then read on for our lowdown on this popular social network.

When the inventors of Twitter first came up with the idea, they envisaged a series of announcements – punchy 140-character comments on what members were doing at the time. This element of it is still there, but there's a lot more to it now.
Get tweeting!

To join Twitter is simple. You go to the Twitter website, enter a user name and password and some other details, select a picture to illustrate your 'tweets' and start entering text into a box and hitting "send". That's the most basic form of it.

You might, on the other hand, see that someone else has said something interesting. In that case, you hit the "reply" button, and they will see what you've said, even if they're not deliberately following your account.

The first word they'll see is @theirname and then your text. They might reply to you. If they start following you, and you them, you can exchange private messages – which is useful if you don't have someone's email address.

As the number of people you follow grows, you might want a bit of free software to help you manage all the messages. Tweetdeck, Twhirl and the official Twitter app are all popular programs which run on your computer and grab messages from everyone you're following, all those that mention you specifically and your private messages - and arrange them into easy-to-read columns and categories.
Don't forget...

Twitter happens in real time, 24 hours a day. Expect to miss stuff if it's not sent direct to you. Be succinct – you only have 140 characters (including spaces in between text) to say anything. Try not to repeat yourself, don't use it just to sell goods and services (people soon get tired of the hard sell) and you should soon be picking up new online acquaintances almost daily.

Have fun with it, but like any social media once you've posted your message it could go anywhere - so proceed with a little caution.

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lowdown – разг. – полная информация
to envisage – предусматривать, предвидеть
punchy – колкий, острый, язвительный
deliberately – преднамеренно, умышленно
to grab – хватать, захватывать
acquaintances – знакомые
to proceed – продолжать
caution – осмотрительность, осторожность

Unit nine

- Причастие I, II
- Текст *"How to organize your emails"*

Exercises

I   Translate the following sentences into Russian. Mind Participle I in the function of an adverbial modifier.

1. While working with these pioneers of computer engineering, Robert Noyce learned many things about computers and business management.
2. Martin Alpert became a doctor, but practiced only part time while pursuing his preferred interest in electronics.
3. The name laptop is derived from the fact that it is so small that you can easily place it on your lap when working on it.
4. You should make the list of the features that you need in your computer, and depending on it opt for a laptop or a notebook.
5. Competing with Windows, Linux managed to earn a fair amount of popularity owing to its unique features like being free software and supporting open source development.
6. The users continuously stream information or stay logged on for hours while downloading videos or messages.
7. Computer personnel need to be careful when downloading programs from the Internet, since these could contain a worm.
8. Using innovative accessibility aids, people with disabilities can use the Internet to help overcome barriers that prevent them from leading more productive and fulfilling lives.
9. And also, depending on how the business model develops, it's still not clear whether it makes economic sense for the majority of companies.
10. Satellites placed into orbit are constantly moving, making two complete orbits in less than 24 hours.

II Translate the following sentences into Russian. Mind Participle I in the function of an attribute.

1. The new science dealing with the problems of maximum control governing of processes, known as cybernetics, occupies a leading place among the sciences of the future.
2. Today, there are plenty of new media technologies being used to create the complete multimedia experience.

3. The Internet is a network connecting many computer networks and based on a common addressing system and communications protocol.

4. The Internet has spawned entirely new industries, transformed the existing ones, and become a global cultural phenomenon.

5. After joining a social network site, an individual is asked to fill out forms containing a series of questions.

6. In order for one computer to talk to the other, it sends a signal requesting permission to speak.

7. Although the basic data being transmitted in each of these cases may be virtually identical, each case requires special treatment of the data in regard to data integrity, speed, redundancy, and error correction.

8. Can you imagine robots walking around the world like ordinary people?

9. Their annual sales reached $1 million, and they had 15 engineers working in their living rooms before they moved to a larger building in 1981.

10. In teleportation the object or matter being transported is broken down and immediately recreated somewhere else.

III   Translate the following sentences into Russian. Mind Participle II.

1. Less than a quarter of a century ago, the Internet was an obscure network of large computers used only by a small community of researchers.

2. Things like software, shared resources, and information are supplied to users' computers from a centralized source, via the Internet.

3. With the different types of operating systems in mind, it's time to look at the basic functions provided by an operating system.

4. Smartphones are full of applications designed to send and receive emails, surf the Internet, watch online videos and access social networking sites.

5. MINIX was a Unix-like system released by Andrew Tenenbaum.

6. The use of smart cards containing passwords and users' codes are widespread in the automated banking systems.

7. A program called an assembler recognizes each such mnemonic instruction and translates it into the corresponding binary pattern.

8. It is easy to replace the program loaded in the memory which in turn increased the flexibility of the computer usage.

9. The data in ROM, once written, can be accessed whenever needed but can not be replaced.

10. Jobs insisted that the language used with the computers be "user-friendly" and that the operation be simple enough for the average person to learn in a few minutes.

IV   Use Participle I or Participle II from the verbs in brackets. Translate the sentences into Russian.

1. Cables are a passive infrastructure (lay) down locally by governments and telecoms companies.
2. Cables have different capacity: a single telephone line like the one (lead) from your home can handle about 7 kilobytes per second.
3. The conference (attend) by 1300 people was (hold) in the US in October, (organize) by NCSA and the already (create) International WWW Conference Committee.
4. We may be fond of our mobile phones, but do we really want more of these eyesores (clutter) up our cities and countryside?
5. Hackers and malicious online criminals may spend hours of their time (try) to gain access to vulnerabilities in robots. Can you imagine the future of computers (get) to this level?
6. Notebooks (be) small and (have) relatively less components require less power to operate than what laptops require.
7. Cloud models tend to make sense only when the user needs a (limit) range of services for a short period of time.
8. Once (retrieve), the information is (display) as a label (superimpose) on the image.
9. Technology such as mobile phones, the Internet and emails speeds communication but also creates (isolate) people who interact with machines rather than with other human beings.
10. There is something (call) The Cloud Security Alliance, which is an organization that promotes best practice for security assurances.

V   Complete the text below with the correct word in the box.

Posted	check	slowly	upgrade	app	features	time
indication		charged	comments	suits		confirmation
costs			cases			download

When selecting an app from the store take the (1)… to check it out first. Look at the ratings and (2)… left by other people, they can give you a good (3)… of whether the app (4)… your needs.

If you see a lot of comments (5)… in a short period of time make sure there isn't a fault or other issue with the app before you download.

Some apps will be (6)… for. Typically this is anything from 50p to £5, with most being around the £1 mark. If you are going for a paid for app you should be asked for (7)… before you can (8)… the app.

In most (9)… , the app will download more (10)… if you are using a 3G connection. Use free Wi-Fi if it's available to keep your (11)… down.

Apps sometimes come with an 'upsell'. This means once you've downloaded them you'll be offered an (12)… , extended access or more (13)… , but with a cost attached to them. If the (14)… requires you to supply your payment details (15)… the settings to make sure you don't part with any cash unwittingly.

Text for Reading and Discussion

How to organize your emails

Once you start using email, you will soon find messages clogging up your Inbox. Once you've read them, you might want to organize your email by storing messages, deleting them, archiving them and moving them elsewhere.

It can be useful to think of your email in the same way as paper correspondence. You probably already have a system for organizing that or you would pretty soon be overwhelmed.

Storing messages

You may have box files or folders for different categories of mail such as personal correspondence, bills and so on. Some you bin immediately, others after a time. Perhaps, sometimes, you move a letter from one folder to another. The same applies to email and most email programs will provide an option to create folders for storing mail.

You could create folders based on the category, for a particular person, or for a particular occasion. It is entirely up to you. If you decide you don't need a folder any more you can easily delete it – just remember that its contents will be deleted too.

You can also create sub-folders within folders in the same way.

Moving messages

To move messages from one folder to another – for example, from your Inbox to a folder you have created - you can usually 'drag and drop', or highlight the message and use the menus.

If you are accessing your emails over the Internet, the site will allow you to select a number of emails in your inbox by clicking on them and then choose the option to move them into your chosen folder.

Organizing how you view your mail

You can view the contents of your folders by date, sender or subject. You can also sort them in ascending or descending order.

Online, things are different, and your ability to sort your emails will depend on which webmail site you use. If you cannot find out how to do this easily try accessing the site's help pages.

Archiving

Over time, your folders will grow both in number and size and archiving will help you manage them. Some do this automatically, but with others you will have to archive manually – create your own folders and move messages into it. You could also create a file outside the email program altogether, or store messages on a CD-ROM or memory stick.

Saving

Folders tend to become unstable if they grow too large and it is a good idea to save any large attachments elsewhere. You simply need to open the attachment and save it where you like - then delete the message from the folder to save space.

Deleting

Periodically, it is a good idea to delete unwanted emails to save space. There is also a risk with some email programs and webmail that your allocated space will become full and leave no room for new messages. You can delete emails by dragging them into the 'deleted items' folder or clicking on the delete button. You can delete an entire folder and its contents in the same way.

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to clog – засорять
to overwhelm – заваливать
entirely – полностью
ascending – восходящий
to allocate – распределять; резервировать

Unit ten

- Герундий
- Неличные формы глагола. Повторение
- Текст *"Instant messaging"*

Exercises

I Translate the following sentences into Russian. Mind the Gerund.

1. He started writing the Linux kernel after which, around 250 programmers contributed to the kernel code.
2. Knowing how to find information and use Internet tools is an important skill to have for higher education.
3. A computer programmer in Bangalore or Siberia can use the Internet to work for a software company in Seattle without leaving home.
4. Reading newspapers, magazines and other documents online is more efficient than printing and transporting physically.
5. Yet doing things online is more energy-efficient only if it is genuinely displaces real-world activities.
6. Typing in all upper case is bad as it is the same as SHOUTING. Sending emails with "Hello" and "Thank you" is nice and polite.
7. A sensible way of avoiding system errors is to write code to check that peripherals are present before any data is sent into it.
8. This idea of using a computer mouse to "open" something runs pretty deep in the computer world.
9. By focusing on the documents, you are paying attention to the important items on your disk drive.

10. Crooked computer experts have devised a variety of tricks for getting these expensive programs.

II A Use Participle I, II or Gerund from the verbs in brackets.
    B Translate the sentences into Russian.
    C Make a story about computer worms.

1. Companies have been (warn) of the dangers of (download) programs from the Internet after a Windows-specific computer worm (call) Stuxnet was (discover) in 2010.
2. A computer worm is a kind of (encrypt) software program that enters a computer network (unnotice) inside another program, and then sends copies of itself to other computers on the network.
3. It was first (detect) by a computer firm from Belarus.
4. Once it appears on a computer system, it triggers an instantaneous attack on control and   (monitor) programs.
5. It is particularly (suit) to attacks on large industrial plants, but it can also wipe files and programs.
6. The worm can be (pass) on via the Internet.
7. All companies need to be very careful about (authorise) only (train) staff to download programs.
8. Once present in a company's computer system, the worm is capable of (execute) all commands.
9. Since the whole of the Stuxnet code has not yet been (decrypt), its purpose is not yet (know).
10. Five manufacturing plants in Germany were (find) to be (infect) with the worm.

III   Match the halves of the sentences to make an article about the impact of technology on global stock markets. Mind *-ing* forms.

 1. The period of time between a trade being initiated and its completion is called latency - …
 2. Before technology was introduced, …
 3. After the introduction of automated trading, …
 4. A New York trader for London investments said: 'If our technology gets me information a nanosecond faster than everyone else, …
 5. Each exchange has its own data centre that stores all the historic and current trading data with market information, …
 6. Trading companies are now starting to host their own server equipment at the stock exchanges' data centres, …
 7. For member firms that are connected to Stock Exchanges via 100 megabit IP connectivity, …

8. Watching all this going on in dealer rooms around the world are traders, surrounded by numerous screens showing red and green numbers and banks of phones, …

9. Just one exchange such as London will have more than 100,000 screens …

10. Of course, some dealers may be really putting IP networking technology to good use and have the same data on their laptop screen, …

A … allowing them to receive instructions from their clients to buy and sell, and effect those requests using their computers or calling another trading house.

B … I may be able to sell a stock quickly, a split second before its price drops, or I may be able to buy another stock before its price starts to rise.

C … coming from all over the world.

D … while they are sitting on a beach somewhere in the world, trading virtually.

E … a key parameter for everyone involved in trading.

F … collocating their servers could reduce roundtrip trade execution and market data transmission times by another one and a half milliseconds.

G … the figure went up to a daily average of 59,000 trades.

H … the average number of daily trades at the London Stock Exchange was 20,000.

I … connected directly or indirectly to its data centre and trading systems.

J … providing sub-millisecond access to the trading systems and market data, thereby eliminating network latency.

IV   Look through the following sentences and find Verbals. Translate the sentences into Russian.

1. As WiMAX follows a point-to-multipoint architecture, it is an ideal solution for delivering broadband to places where it would not be viable to establish wired connections.

2. As it is possible to use WiMAX over longer distances, this technology may come in handy in creating city wide networks.

3. This way WiMAX may be a good option for people on the move using gadgets like laptops, iPods and PDAs.

4. The difference from broadband is that here the bandwidth does not have to be divided using wires.

5. WiMAX connectivity can be extended over a radius of up to 50 kilometers.

6. High speed data transfer over a much larger area is made possible by lessening interference using the IEEE 802.16 Air Interface Standard.

7. It also has a comparatively high shared data rate at 70 Mbps, which is good enough to reach about a thousand homes.

8. As WiMAX does not need cables to connect with the receptors, it is possible to establish connection to an entire campus or even city in a matter of a few days.

9. The real potential of WiMAX is in the possibility of bringing diverse services such as telephony, mobile TV and broadband internet under its umbrella.

10.Consumer billing and mutual settlement systems have to be extremely efficient to handle the requirements.

V   Complete the text below with the correct word or words in the box.

Bulletin boards   PC's hard drive   handled   details   share   provide   allow choose   clicking   locating   posting   sending   extra features   use   charge

Most sites make it as easy as possible for people to upload photos and videos. The (1)… vary, but the process is straightforward.

There is usually a button marked 'Upload Photos' and (2)… it gives you one or more blank boxes. You then (3)… a photo for each box by (4)… it on your (5)… . Finally, you click 'Upload' and the photos are uploaded. Video uploads are (6)… in the same way.

Some services can upload groups of photos. Some (7)… you to upload your pictures by (8)… them to a special email address, which is useful if you want to (9)… photos from a mobile phone.

Some services will upload photos that are already online, if you (10)… the image's web address (URL). This is handy if you have an album online and want to (11)… the same pictures on different social networking services. You won't have to upload them twice.

Some sites are designed for (12)… photos to (13)…, blogs, eBay or Twitter. Most sites are free, but some (14)… for (15)… or additional storage space.

Text for Reading and Discussion

Instant messaging

You've just got the hang of email and surfing the net, and suddenly someone asks if they can 'IM' you. You haven't got a clue what they're on about! Don't worry, we can explain all.

The Internet has clearly made near-instantaneous communication a very easy thing to achieve. Voice and video communication is relatively simple and people no longer ask whether you have an email address, they assume you have one and ask what it is.

How it works

Using instant messaging (IM) is simple. Go to whichever IM service you want on the web, and sign up for an account. You can now send instant messages to anyone who is online at the same time. Use a company you trust - ones that have been around as long as, say, Microsoft and AOL, aren't going to abuse your details.

They will allow you to download a piece of 'client' software, which is like a web browser just for IM. It shows you the messages and gives you a box into which you can type your reply.

It then works like an extension of texting on the phone, but with a proper keyboard. Some people actually use it on their phones. People you've allowed to IM you (they have to ask first, you get a little note and have to tick the box to confirm you know them) will be able to see you're at your computer (again, you confirm you're online when you log on).

You can then send messages back and forth. You can either keep the messages or delete them, depending on what it is. If it's a business conversation and you decide something important, you'd better keep it. If it's something trivial, don't worry.

Remember to log off when you leave your PC. It's easy to leave IM on while you nip out for a while. But you'll come back to messages from irate friends who think you're ignoring them because they can see you're there but you're not replying.

Useful tie-ins – and odd hiccups

Frequently, the instant messaging you can get will be tied to other things. Internet phone company Skype offers it, as long as you take a (free) voice and video account as well. Microsoft will give it to you free as part of MSN, AOL offers it to AOL members and anyone else who wants to sign up. Social networking sites such as Facebook also offer messaging services.

The difficulty is that they don't all talk to each other. So, if I was using AOL's AIM, I might need a sort of software bridge to talk to MSN members.

One solution is to sign up to a load and then use something like Adium, which is client software that works across a number of different networks. But seeing as it's just as easy to reply to an email, another option is to consider asking people to contact you by email instead…

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clue – ключ (к разгадке чего-л.)

instantaneous – мгновенный, немедленный

to achieve – достигать

to abuse – злоупотреблять, неправильно употреблять

extension – расширение

to confirm – подтверждать

trivial – незначительный

to nip out – брит., разг.; - смотаться, сгонять (куда –л.)

irate – гневный, сердитый

tie-in – товар в нагрузку; соединение, связь

odd - лишний

hiccups – незначительные трудности, проблемы

Unit eleven

- Условные предложения
- Текст *"Online credit card fraud "*

Exercises

I Translate the following sentences into Russian. Mind Conditional 1.

1. There is a trick called "phishing". The email asks for your password and other information and says, that if you don't do this in 24 hours, your account will close.
2. If you ask a 13-year-old what he wants from social media, he will say he wants to socialize, to chat with his friends.
3. If you are unable to work with technology, you will be at a serious disadvantage within your life.
4. If you install security anti-virus protection, your database will not be destroyed.
5. We will switch to the back-up service if there is a communications outage.
6. The email says that they are closing inactive accounts, and unless I verify my account by return email, it will be terminated.
7. You will not loose your data if you are careful.
8. If we move the satellite dish, we will get a better connection.
9. The other use for a webcam is for home security. If someone does break into your home while you are away, you will have their picture on disk.
10. If you have Microsoft Word installed on your PC, Word will open the file.

II   Translate the following sentences into Russian. Mind Conditional 2 and Conditional 3.

1. You wouldn't have been fired if you had not sent personal emails or used social networking sites during working hours.
2. If boo.com hadn't been spending faster than it had been earning, the company wouldn't have been doomed.
3. As you read an article, the newsreader allows you to perform many different actions. If you were to watch someone reading the news, you would see her/him reading a text on the screen and, from time to time, typing a command.
4. If the worm had done its job, it would have damaged our infrastructure.
 5. One company director would not have lost his company's business accounts if his laptop hadn't accidentally fallen into the bath he was having.
6. If the sender of the information wanted to obscure the message – for purpose of military intelligence, for instance – they would use steganography.
7. If we lost power, our own back-up power systems would start and we wouldn't lose power at all.

8. Our managers would have seen alarms going off in the management centre and they would have isolated and changed your equipment straight away if we had lost power.

9. If you used modern physical security, it would include various means of screening the workrooms and the data transmission channels.

10. If the software had reference security and ensured the inspection of conformity and accuracy of information, computer crimes in this bank would be prevented.

III A   Match the halves of the sentences to make a story about viruses.
     B   Make Conditional 1 sentences about virus protection.

1. Warnings of viruses – whether forwarded by friends or announced over the radio – have now become so common, …
2. Most companies play it safe and install so-called 'firewalls', which screen emails as they enter the system and …
3. You can also buy virus detection software, which can be updated from the Internet to protect PCs from viruses, …
4. I spoke to Alex Jackson, a computer security expert, …
5. The best advice is to be aware of viruses and …
6. If the email has no sender name, or contains attachments from people you don't know, …
7. Often viruses are unknowingly passed on, so you may receive an email from a colleague, …
8. In these cases it's best to contact your colleague and …
9. Of course, computer viruses aren't a new phenomenon: …
10. Nowadays viruses are getting more sophisticated, though, so if your PC is used for emailing, …

A … it's best not to open them.
B … however, neither of these precautions is 100% safe.
C … and asked him what he recommends.
D … in 1988 the 'Morris worm' virus infected nearly 10% of computers that had access to the Internet.
E … it's best to be very careful and not open anything that looks suspicious.
F … prevent suspicious programs from infecting the computer network.
G … but it has an unrelated attachment or an attachment with a strange name.
H … it's difficult to know whether or not to take them seriously.
 I … to check emails carefully before opening them.
 J … ask what the attachment is before opening it.

IV   A   Put the following sentences in the correct order to make an article about the computer distribution company that got its IT security wrong.
    B   Make Conditional 3 sentences about Comptec.

1. Comptec were responsible for advising their clients on aspects of computer hardware and software,   including security and anti-virus protection.
2. Within seconds of an employee opening the attachment on one of his emails, the whole system was down, the main data base was destroyed.
3. They hadn't even installed some of the basic anti-virus software they stocked themselves.
4. Luckily for most of the recipients, they had already installed the correct protection.
5. As a result of this, the system crashed regularly, operational time was slowed, and orders were lost.
6. But it turns out that the company weren't following their own advice.
7. For a start, they didn't have a proper firewall to protect their own servers.
8. It was too late for Comptec however – they went out of business overnight.
9. But the real disaster struck with the latest international 'worm' virus.
10. On top of this, they had a relaxed attitude to staff sending personal emails, and downloading files and programmes from the Internet.

V   Complete the text below with the correct word in the box.

Using   putting   pressing   scanning   editing   saving   drawings   scanner software   photocopies   attempts   image   cases   originals

        Scanning a document or photo can be as simple as (1)… the button to start the scan and (2)… it onto your computer. You can also crop and retouch scans (3)… a picture (4)… program. Read on to find out more about the different options open to you.
        Would you like to keep a computerized copy of some old letters, newspaper articles, photos or (5)… ? If so, a (6)… will do the job and - in some (7)… you will be able to throw the (8)… away. You can also be creative and have fun (9)… objects, which means using the scanner as a camera.
        Scanners usually come with all the (10)… you need. Scanning can be as simple as (11)… a document face down on the glass, pressing a button to begin the scan, and then saving the file onto your PC's hard drive.
        But sometimes you will want to select the area of the original you want to scan, or want to lighten or darken the (12)… . As when making (13)… , it can take three or four (14)… to get the best result.

Text for Reading and Discussion

Online credit card fraud

If ever you fall foul of an online fraudster, the good news is that you should be covered. The bad news, though, is in the small print.

You should be covered for online card fraud as long as any mischief that befalls you is not due to your personal negligence. Under Payment Services Regulations, and the Consumer Credit Act you will not be liable for losses resulting from Internet fraud relating to a debit or credit card unless you have acted fraudulently or negligently.

Take precautions

Customers are advised to use up-to-date anti-virus and spy ware software and a personal firewall on their computers. That sounds clear enough - if you are planning to engage in online commerce, you really should be taking steps to make sure your PC is virus-free and that passwords are not being hacked the moment you type them.

But not even the best anti-viral software will provide 100% protection. The danger is that, sooner or later, one of our financial institutions will try to argue that the fact that someone was defrauded is proof they weren't being careful enough.

Reduce the risk

In the meantime, do all you can to minimize the risk. Don't write passwords down. Don't use the same password for low-level, friendly sites as you do for high-level important transactions. Never give away your PIN or send it out over the net.

Limit your dealings, as far as possible, to reputable sellers and sites that have been recommended to you.

Make sure you are dealing with the website you mean to deal with. Never go to sites by clicking links in unsolicited emails - type the link directly into your browser. A reputable company will not send out emails trying to solicit card details from you, any more than they will phone you up and start quizzing you about your passwords.

Be selective about where you shop

Where possible, only buy from secure websites. A secure site typically displays a locked padlock or unbroken key symbol in your browser. The web address will also start with https, instead of the more familiar http.

Trust your instincts - if something smells fishy, there's a good chance it is. Offers too good to be true, often are.

Hold on to details of your order. Print out the order page, as well as copies of the retailer's terms and conditions, plus any other details you may need.

Finally, if you find yourself making frequent purchases online, consider setting up a card that is for online use only.

Report breaches

If the worst happens and you think your security may have been compromised, close all online accounts immediately, cancel all affected cards and report the matter to the relevant banks and card issuers. Talk to credit bureaus such as Experian and Equifax, asking them to place a note on your record.

Better to be proactive than do the ostrich thing and wait for the consequences of your bad luck – or carelessness - to catch up with you.

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to fall foul of – (idiom) - столкнуться
fraudster – мошенник
to cover – страховать
mischief – ущерб, источник неприятностей
to befall – приключаться, происходить
due to – из-за
negligence – небрежность, халатность
to be liable – ответственный
to result from – происходить в результате
to relate – относиться, иметь отношение (к чему-л.)
transactions – ведение (дела), сделка
dealings – торговые сделки, торговые связи
to deal with – иметь дело
unsolicited emails – спам
to solicit – требовать, запрашивать
 fishy – подозрительный, сомнительный
to do the ostrich thing – прятать голову в песок
consequences – последствия
to catch up - догнать

Unit twelve

- Глагол. Неличные формы глагола. Повторение.
- Текст *“Shopping on a safe website”*

Exercises

I A   Put the verbs in brackets into the correct tense and voice form.
   B   Translate the sentences into Russian.
   C   Tell the class how VoIP phone systems work.

1. VoIP (Voice over Internet Protocol) phone systems (work) by sending data via the Internet in tiny packets.
2. This (call) packet switching. Your voice signal, which is analogue, (convert) into digital data.

3. If you have an IP phone, it (produce) a digital signal so you don't need an adaptor.

4. The sending computer (use) software to compress the digital data, much like MP3 files.

5. The data (divide) into packets, each one 30 milliseconds long.

6. The packets (send) to a router which (decide) the best path through the Internet for each packet.

7. They (travel) by many different paths and (arrive) at different times and some may even (loose).

8. The receiving computer (use) special software to store the packets and put them in the right order.

9. Because the packets are so small, you won't hear the difference if some (loose).

10. The data (convert) back to voice and (play) through your standard phone, IP phone, or PC headphones.

II A   Put the verbs in brackets into the correct tense and voice form.
    B   Find Verbals and define their functions.
    C   Translate the sentences into Russian.
    D   List the things computers can do in the design and production of a car.

1. In the past car designers (work) first on paper. Now everything (do) using Computer-aided design programs.

2. These programs (allow) designers to work in two or three dimensions but most new designs (create) using a solid modeling program which (allow) the model to be viewed from any angle.

3. The models have accurate dimensions and the design files can (send) to rapid modeling devices to produce a prototype.

4. When the design (be) complete, the file (import) into a Computer-aided manufacturing program. Here, all machining operations (plan).

5. The file (send) to a post-processor which (convert) the data into a set of instructions.

6. In complete Computer-integrated manufacturing, computers (control) the assembly line and (monitor) the supply of materials, ordering new supplies when needed.

7. Computers also (permit) changes in a product to be made easily.

8. Orders can (customize) to meet the needs of a particular client.

9. On the assembly line, computer-controlled robots (use) for tasks such as welding and painting.

10. Robots with sensors (check) the finished vehicle for defects.

III A   Translate the following sentences into Russian. Mind Verbals.
    B   Make a story about cloud computing.

1. The idea of cloud computing is similar to Berners-Lee and Cailliau's original business model, revised and expanded to take advantage of the growth of the world wide web.

 2. There are clear advantages and clear economic benefits associated with cloud computing.

 3. Cloud computing allows a computer user to have additional capacity beyond their existing capabilities.

 4. Companies or individuals can get additional hard disk space by paying a fee for what they use.

 5. That fee is normally much, much lower than the cost of buying, installing and maintaining new hardware.

 6. So, as a result, a company can have a sophisticated IT infrastructure with minimal investment.

 7. The second advantage is connected to the way that the hardware and the software are provided.

 8. Things like software, shared resources and information are supplied to users' computers from a centralized source, via the Internet.

 9. Many users, especially businesses, are buying products that are much bigger than they really need.

 10. It's a bit like every street having their own electricity system… in other words, it's very inefficient.

IV   Write questions to which the words in bold are the answers.

1. *The "cloud" and cloud computing* are among the buzz words of the year.

2. *Google* already runs your *email* and hosts your *documents*, and its *App Engine* lets *users* run custom applications.

3. Amazon has a *service* that allows users *to set up virtual servers* on the Internet, and Microsoft is joining *the party* with Windows Azure.

4. At the same time, *the concept of cloud computing* is far from new, and one company that has been in the business since 1999 is *salesforce.com*.

5. The business lets *customers* manage *their sales data* and other information on the Internet.

6*. You* are going to see *this model dominate our industry*.

7*. Marc Benioff* sees the service cloud as the alternative to *call centres and telephone helplines*.

8. He believes that when customers have a problem with *a product or service* they no longer call a helpline*, they* go to *Google*.

9. *Companies like Orange* are already using *the service cloud*.

10. *They* can set up *their own web portal* with links to customer services and other applications.

V Complete the text below with the correct word in the box.

confident	vary	bill	given	position	the difference	easier
the flexibility	complicated	faced	finding	easy	reasons	

Mobile technology gives us the power to do almost all of the things you normally do online, but with (1)… of doing it almost anywhere. And using mobile technology to get online might be (2)… than you think.

There are hundreds of (3)… why you might want to use mobile technology to get online and the chances are you may even have a device that lets you do so.
Although it is a very quick and (4)… thing to do, going online on your mobile phone can get (5)… when you are (6)… with the different options (7)… to you on your device and by your service provider.

It's important to feel (8)… and comfortable about mobile Internet so that you don't end up (9)… yourself with an unexpectedly large (10)… at the end of the month.

The costs that you run up will (11)…depending on whether you are using the mobile web with a 3G or Wi-Fi connection. Once you understand (12)… you'll be in a better (13)… to manage how much you spend.

Text for Reading and Discussion

Shopping on a safe website

When you're shopping online, it's essential to make sure that you're dealing with a reputable business. There are several easy checks you can make that will help protect you against dishonest or unreliable traders and fraudsters.

Online shopping is convenient and can save you money, but it's not quite the same as shopping in the high street. At its best, you can purchase items from trusted, well-established retailers - although, of course, you can't actually inspect the goods. But at its worst, shopping on the web can be more like using your credit card at a car boot sale to buy goods in unmarked sealed cardboard boxes.

Anyone can create a web page, so there's no immediate way for a shopper to tell whether an online shop is genuine at first sight. So there's more to being safe than just ensuring your card transaction is encrypted.

Things to watch out for

Firstly, ask yourself whether the offer is realistic. If it sounds too good to be true, it probably is. Quite a lot of stolen and sub-standard goods get offered at seemingly huge discounts by small traders on auction and free advertisement sites. Online 'sales' of non-existent event tickets are notorious. But even mainstream dealers frequently limit your ability to check what you're buying - photos of goods with

captions like "the item supplied may not be identical to that illustrated" are all too common.

It's a sad fact that many perfectly honest online business owners simply don't understand their legal obligations. But that makes it difficult to distinguish between them and less legitimate traders. You should probably err on the side of caution.

Can you identify the seller from information on the site? The law requires every commercial website to include specific contact details - at least a trading name, a street address or Post Office box number and a phone number or email address, and these must be clearly visible.

A phone number is a bit safer than an email address alone, but beware of sites that only give a mobile number. Consumer sales sites must (by law) also publish some obligatory terms and conditions - particularly about cancellations, returns and refunds. Check them out and make sure they're valid. Check the carriage charges too. If you can't see what they will be until the final stage of the checkout, the seller is not playing by the rules - they should be clearly set out in the terms and conditions.

If the trader has their own website, you can also use a 'WHOIS' service on the web to look up the registration details of the web address - the 'domain name' - of the site. Then check they match the details given on the site. The registration will also show how long the domain name has been registered - sites with registrations only a few days old or ones that are incomplete should be avoided. If the site only gives a PO Box number, you can get the street address (but not the name) of the holder by calling the Royal Mail helpline.

On the web, you get none of the subtle signals - body language, verbal cues - that could tell you at a car boot sale when a trader is not to be trusted. So, provided the statutory details are present on the site and seem in order, it's worth phoning the trader to find out if they sound business-like. It's also worth doing a web search for customer comments in blogs or online communities.

If you're buying via an auction site (such as eBay), it should publish seller ratings and history. These are well worth checking, although there is a recognised scam - sometimes a seller will set up and trade honestly in a small way for some time to gain a good reputation, then will put up a spectacular offer, that turns out to be fraudulent, and disappear. So it's worth doing a web search for the seller as well, in case they also have their own website or there are customer comments.

Check – and check again

Once you're reasonably satisfied that the trader is genuine, you should look at the ordering system. If it takes you to a different site - particularly for making the payment - you should perform the same background checks again.

Then, if everything still checks out, make sure the web address of every page on the ordering site starts with 'https://'. This is most important on the page where you type in your card details. The final 's' before the colon is crucial as it means the data you send and receive on that page is encrypted in transit. A padlock or key symbol at the bottom of the browser window also indicates you're on an encrypted connection - but this is not a perfect guarantee, as the symbol can be faked using JavaScript on a page that doesn't use encryption.

But the encryption, although necessary, is actually less important than knowing you're communicating with the right website. The 'https://' confirms this by sending your web browser an encrypted electronic 'certificate'. If everything is in order, it happens invisibly. But sometimes a warning will pop up. The most common one says the site you're on isn't the site that owns the certificate. This should make you very suspicious. It's a common fault on badly-designed legitimate sites, but it can also indicate a malicious program that might steal your money or card details.

Finally, if a site asks for your card details when you respond to a 'free offer', it's certainly fraudulent. No free offer involves prior payment, and no legitimate trader is permitted to hold your full card details except while they are currently processing a specific purchase.

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huge – огромный
notorious – пользующийся дурной славой
mainstream – основной, господствующий
caption – надпись
legitimate – законный
valid – законный, надежный, действующий
subtle – неуловимый, ловкий, хитрый
genuine – подлинный, неподдельный
crucial – важный, ключевой
to pop up – появляться, возникать
suspicious – подозрительный, недоверчивый
malicious – злоумышленный, со злым умыслом
currently – в настоящее время

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