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и радиоэлектроники»

КАФЕДРА ИНОСТРАННЫХ ЯЗЫКОВ

SIMPLE ENGLISH FOR SECURITY SPECIALISTS

INFORMATION SECURITY OF AUTOMATED SYSTEMS

Учебное пособие

2016

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Министерство образования и науки Российской Федерации, Федеральное государственное бюджетное образовательное учреждение высшего образования «Томский государственный университет систем управления и радиоэлектроники», Кафедра Иностранных языков. Томск : ТУСУР, 2016. 255 с.

Настоящее учебное пособие предназначено для студентов 1 и 2 курсов направления специалитета факультета безопасности ТУСУР очной формы обучения. Пособие составлено в соответствии с целями и задачами дисциплины «Английский язык». Учебное пособие предназначено для студентов с уровнем владения английским языком В1 и рассчитано на 198 часов аудиторных занятий и 234 часа самостоятельной работы.

Учебное пособие содержит шесть блоков. Каждый блок включает в себя шесть уроков. Первые четыре урока каждого блока состоят из следующих разделов: **Vocabulary, Reading, Grammar**. После каждого урока даётся список дополнительных слов и выражений по изучаемой теме **More Words And Phrases To Know**, который может быть использован в качестве лексического справочника или рекомендован студентам к заучиванию. Пятый урок каждого блока **Revision** предназначен для повторения изученного лексического и грамматического материала, совершенствования навыков устной и письменной речи и подготовки к успешному выполнению тестов. Он состоит из **Vocabulary&Reading, Speaking, Writing, Grammar**. Шестой урок **Clip** каждого блока содержит тему страноведческого и общеобразовательного характера, рекомендуемые программой обучения иностранным языкам в техническом вузе. В конце учебного пособия представлены слова и выражения из уроков необходимые для свободного владения в устной и письменной речи.

На усмотрение преподавателя отдельные упражнения могут быть использованы в качестве домашнего задания с целью систематизации знаний и совершенствования навыков и развития умений, полученных в ходе аудиторных занятий.

Учебное пособие «Simple English for Security Specialists . Information Security of Automated Systems» размещено в электронном виде на образовательном портале ТУСУР.

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1a SECURITY

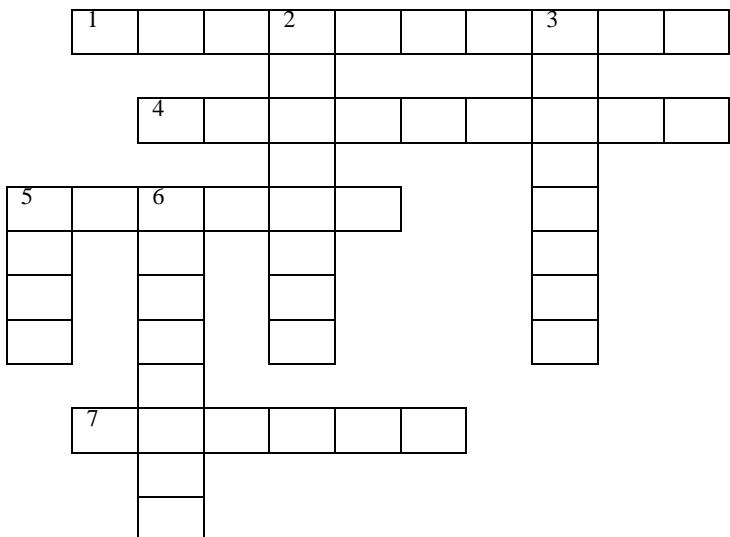
VOCABULARY

1 Read and learn the words and phrases.



security	безопасность, обеспечение безопасности
safety	безопасность, безопасное место
protection	защита
harm	вред
damage	повреждение, ущерб
health	здоровье
property	собственность
data	данные
security category	категория безопасности
information security	информационная безопасность
monetary security	денежная безопасность
describe security measures	описать меры безопасности
terrorist attack	террористическая атака
espionage and theft	шпионаж и воровство
internal security	внутренняя безопасность
economic security	экономическая безопасность
security specialist	специалист по обеспечению безопасности
telecommunication system	телекоммуникационная система
automated system	автоматизированная система
informational and analytical	информационно-аналитическая
security system	система безопасности

2 Use the synonyms to do the crossword.



Across

- 1 expert
- 4 automatized
- 5 harm
- 7 security

Down

- 2 kind (noun)
- 3 inner
- 5 facts
- 6 money

3 Try to guess the meaning of the words. Pay attention to their parts of speech.

n = noun *v = verb* *adj = adjective*

- 1 analytical (*adj*): analyst (*n*), analyse (*v*)
- 2 automated (*adj*): automation (*n*), automate (*v*), automatic (*adj*)
- 3 category (*n*): categorize (*v*), categorical (*adj*)
- 4 economic (*adj*): economy (*n*), economize (*v*)
- 5 espionage (*n*): spy (*n*), spy (*v*)
- 6 informational (*adj*): information (*n*), inform (*v*)
- 7 measure (*n*): measurement (*n*), measure (*v*), measurable (*adj*)
- 8 property (*n*): proper (*adj*)
- 9 safety (*n*): safe (*n*), safe (*adj*)
- 10 security (*n*): secure (*v*), secure (*adj*)
- 11 system (*n*): systematize (*v*), systematic (*adj*)
- 12 theft (*n*): thief (*n*)

4 Fill in the gap with the correct word in *italics*.

attackers / attack

- 1 Usually bad guys _____ good guys.
- 2 The police think he knows her _____.



description / describe

- 3 Roommates _____ him as a shy and quiet student.
- 4 The police are asking a _____ of the jewellery.

health / healthy

- 5 Sue is a normal _____ student.
- 6 Regular exercise is good for your _____.

protection / protect

- 7 It is important to _____ your computer from terrorist attacks.
- 8 This security system doesn't provide any _____ against hackers.

specialist / specializes

- 9 The company _____ in computer security.
- 10 He is a _____ in information security.

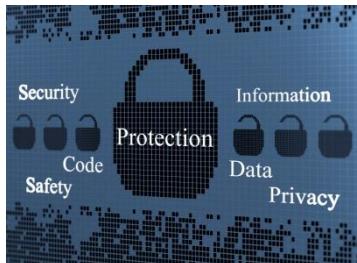
terror / terrorize

- 11 There is a look of _____ on his face.
- 12 Two young men with knives _____ local people.

READING

5 Read and translate the information about security.

Security



Security is **safety** and **protection** from attack, **harm**, or **damage**. Security is for avoiding dangers or losses. In general, security is similar to safety. The difference between security and safety is that security cares more about dangers from the outside than general safety.

It is said that the word ‘security’ has two characteristics.

Negative characteristic is about dangers, risks, and threats. It needs military equipment, armies, or police. Positive characteristic is about opportunities, interests, and profits. It needs education and social activity of talking and doing things together with other people.

In people’s life a lot of valuable and important things need protection: their lives and **health**, their **property** and money, different kinds of **data** and information. Therefore, there are different **security categories**: computer security, internet security, **information security**, mobile security, and others. Together these make up IT (Information Technology) security. There is also physical, national, and **monetary security**.

IT security deals with the protection of computing devices such as computers and smartphones, with both private and public computer networks, including the whole internet.

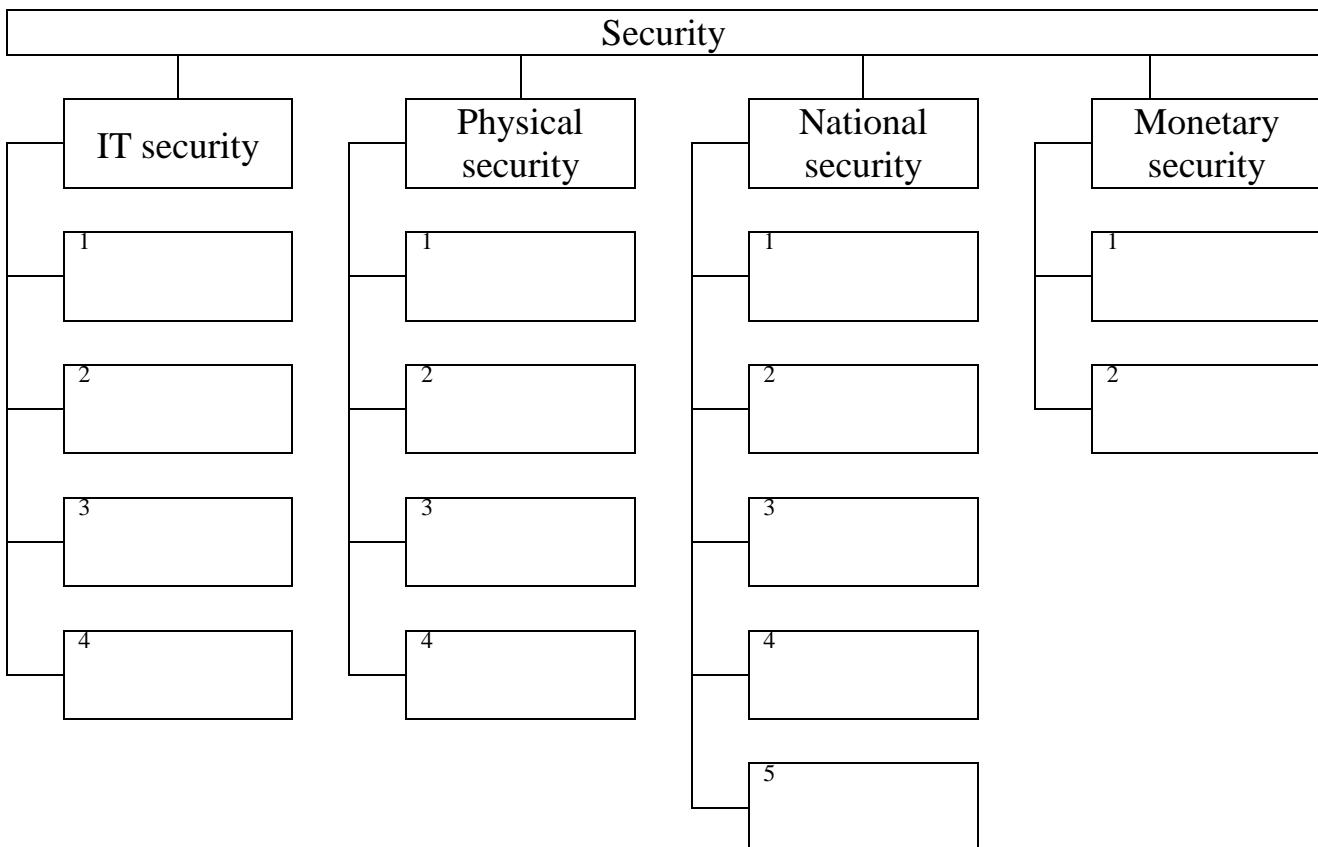
Physical security includes airport, corporate, home, private, and other kinds of security. It **describes security measures** to protect people and their property from damage or harm (such as **terrorist attacks, espionage and theft**). National security consists of military, political, **internal**, environmental, energy and natural resources, and other kinds of security. Monetary security includes social security and **economic security**.

Engineering universities, including TUSUR (or TUCSR – Tomsk State University of Control Systems and Radioelectronics), often have faculties where students can study different branches of security to become **security specialists**, bachelors and masters. For example, the Faculty of Security at TUSUR offers programmes in:

- information security,
- information security of **telecommunication systems**,
- information security of **automated systems**,
- **informational and analytical security systems** and
- economic security.



6 Complete the table. Use the information from the text.



7 Answer the questions.

- 1 What is security?
- 2 What is safety?
- 3 What do people protect?
- 4 What four main security categories do you know?
- 5 What does IT security deal with?
- 6 What does physical security describe?
- 7 Do engineering universities have faculties of security?
- 8 Why do students study different branches of security?
- 9 What programmes does the Faculty of Security offer?
- 10 What do you study?

8 Match the paragraphs with the headings a – f.

- a IT security
- b Security categories
- c Security and safety
- d The Faculty of Security at TUSUR
- e Two characteristics of the word *security*
- f Physical, political and monetary security

GRAMMAR

9 Present Simple. Adverbs of Frequency. Study the information.

Spelling of the third person singular

- Most verbs add *-s* in the third person singular.
work – works spend – spends live – lives
- do – does go – goes have – has* (NOT *haves*)
- If the verb ends in *-s*, *-sh*, or *-ch*, we add *-es*.
pass – passes wash – washes watch – watches
- If the verb ends in a consonant + *-y*, the *y* changes to *i* + *-es*.
study – studies try – tries
If the verb ends in a vowel + *-y*, the *y* does not change.
play – plays

	<i>Positive</i>	<i>Negative</i>	<i>Question</i>	<i>Short answers</i>
I You We They	work	do not work (don't work)	Do {I you we they} work?	Yes, {I you we they} do. No, {I you we they} don't.
He She It	works	does not work (doesn't work)	Does {he she it} work?	Yes, {he she it} does. No, {he she it} doesn't.

We use the present simple:

- to talk about general **facts** that are **always true**, or facts that are **true for a long time**
The Earth goes around the sun. *I work in a bank. I really love my job.*
- for **fixed schedules** or **timetables**
I have my driving test next week. *The train arrives at 20.12.*
- to talk about **regular events** or **habits**

We often use *always*, *usually*, *often*, *sometimes*, *never* and other **adverbs of frequency** for regular events and habits. These adverbs usually come before the main verb (but after *be*). *Sometimes* and *usually* can also come at the beginning of a sentence.

I usually get to university by bus.

I am usually late for my classes.

Usually I get to university by bus.

10 Write the following verbs in the third person singular.

Example: I speak – she **speaks**

- | | |
|-------------------------|-----------------------------|
| 1 I give – he _____ | 8 I begin – Harry _____ |
| 2 we stay – she _____ | 9 they have – Amelia _____ |
| 3 you finish – it _____ | 10 you go – Oliver _____ |
| 4 we buy – he _____ | 11 we use – a dog _____ |
| 5 they pass – it _____ | 12 I do – Jessica _____ |
| 6 you take – she _____ | 13 you teach – Jack _____ |
| 7 we fly – it _____ | 14 they carry – Emily _____ |

11 Put the verb in brackets in the right form. Use the adverb of frequency in the correct place.

Example: Nina (*use*) her laptop. – *often* **Nina often uses her laptop.**

- | | |
|---|---|
| 1 I (<i>work</i>) on my computer in the afternoon. – <i>never</i> |  |
| 2 He (<i>watch</i>) films on his laptop. – <i>sometimes</i> | |
| 3 We (<i>use</i>) free software on our computer. – <i>usually</i> | |
| 4 I (<i>use</i>) my webcam for video calls on the internet. – <i>sometimes</i> | |
| 5 Children (<i>play</i>) computer games at home. – <i>often</i> | |
| 6 She (<i>finish</i>) work late. – <i>sometimes</i> | |
| 7 Max (<i>do</i>) his homework in the evening. – <i>never</i> | |
| 8 I (<i>speak</i>) to my British friends on Skype. – <i>often</i> | |
| 9 My computer (<i>freeze</i>). – <i>sometimes</i> | |
| 10 She (<i>go</i>) to university in the morning. – <i>always</i> | |
| 11 You (<i>arrive late</i>) at meetings. – <i>never</i> | |
| 12 Victor (<i>buy</i>) things for his computer in that shop. – <i>often</i> | |
| 13 Lisa (<i>take</i>) her tablet computer to university. – <i>usually</i> | |
| 14 We (<i>get updates</i>) for our computer and our programmes automatically. – <i>always</i> | |

12 Complete the sentences with the negative form of a verb from the box.

download	make	pay	text	read	use	have
have	know	give		watch	work	take

Example: You **do not have (don't have)** an IP phone.

- 1 I _____ e-books on my smartphone. I use an e-reader for that.
- 2 My laptop _____.
- 3 We _____ telephone calls every day.
- 4 I _____ my desktop computer much.
- 5 They _____ Sandra's mobile number.
- 6 Linda _____ her friends very often.
- 7 I _____ videos on my netbook.



- 8 James _____ paid apps onto his phone. He prefers free apps.
- 9 You _____ your mobile number to strangers.
- 10 I _____ usually _____ photos with my camera.
- 11 You _____ more than 3,000 roubles a month for using a landline phone.
- 12 This phone _____ a touchscreen.

13 Write questions from the words in brackets + do-does. Put the words in the right order. Answer the questions.

Example: you / what / in the evening / do / usually

What do you usually do in the evening?

- 1 you / what / do
- 2 you / social networks / on your phone / check
- 3 TUSUR / in international programmes / take part
- 4 your phone / you / how often / replace
- 5 days / you / how many / a week / study
- 6 tablet computers / your parents / own
- 7 study / economics / TUSUR students
- 8 you / a landline phone / use / how often
- 9 begin / what time / your morning classes
- 10 what / mobile phone colour / prefer / you
- 11 a free Wi-Fi zone / the main building of TUSUR / cover
- 12 your friend / make of laptop / have / what
- 13 usually / where / go / after university / you
- 14 their netbooks / bring / to classes / students
- 15 what places / go to / with your friends / you



14 Write short answers to the following questions.

Example: Do you often use your mobile phone? **Yes, I do. / No, I don't.**

- 1 Do you have a laptop?
- 2 Do all your fellow students know your phone number?
- 3 Does your mobile phone hold two SIM cards?
- 4 Does every supermarket sell robots?
- 5 Does your phone support Google Play?
- 6 Do you often use your mobile to message friends?
- 7 Does your friend own a tablet computer?
- 8 Do you use the alarm clock on your phone?
- 9 Does your mobile have a web browser?
- 10 Do computer stores sell smartphones?
- 11 Does your friend often phone you?
- 12 Does a desktop computer usually have a calculator app?



MORE WORDS AND PHRASES TO KNOW

attacker – нападавший

be for avoiding dangers and losses – означать избежание опасностей и потерь

be similar to – быть похожим на

computing device – вычислительное устройство

corporate – корпоративный

cover – охватывать, покрывать

danger from the outside – опасность извне

dangers, risks, and threats – опасности, риски и угрозы

description – описание

e-book – электронная книга (= книга в электронном формате)

e-reader – электронная книга (= устройство для чтения книг в эл. формате)

freeze – зависать

healthy - здоровый

kind – вид; добрый

in general – обычно, как правило

inner - внутренний

it is said that – говорят, что

make – марка

opportunities, interests, and profits – возможности, интересы и доходы

protect - защищать

replace – заменять

schedule – график, план

specialise in – специализироваться на (*US specialize*)

tablet (computer) – планшетный компьютер

terror – ужас

text – отправлять СМС-сообщение(-я)

the whole internet – весь интернет

timetable – расписание

touchscreen – сенсорный экран

update – обновление

1b INFORMATION

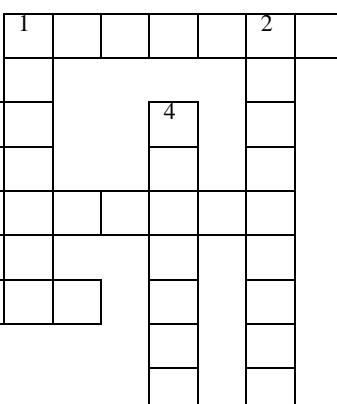
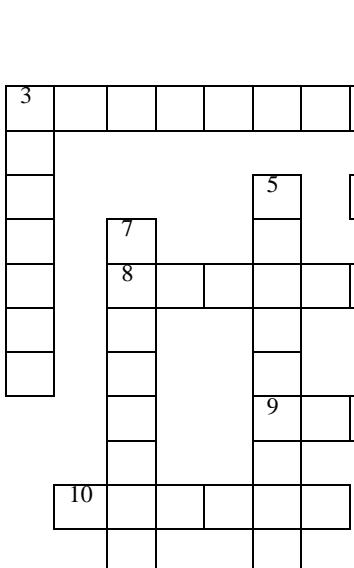
VOCABULARY

1 Read and learn the words and phrases.



perceive	воспринимать
present	представлять
purpose	цель
confidential	секретный
interpret	толковать, интерпретировать
opinion	мнение
review	рецензировать, делать обзор
point of view	точка зрения
current	текущий, нынешний
scholarly	научный
accuracy	точность
completeness	законченность
consistency	последовательность
uniqueness	уникальность
timeliness	своевременность
reliable	надёжность
up-to-date	современный, новейший
outdated	устарелый
essential	необходимый
competitive	конкурентоспособный

2 Translate the words to do the crossword.



Across

- 1 цель
- 3 конкурентоспособный
- 6 необходимый
- 8 современный
- 9 воспринимать
- 10 рецензировать

Down

- 1 представлять
- 2 научный
- 3 текущий
- 4 мнение
- 5 толковать
- 7 устарелый

3 Complete the tables.

Noun	Russian equivalent
1	точность
competitor	3
5	законченность
confidentiality	7
9	последовательность
current	11
essentials	13
15	точка
17	цель
reliability	19
scholar	21
23	своевременность
25	的独特性

Adjective	Russian equivalent
accurate	2
4	конкурентоспособный
complete	6
8	секретный
consistent	10
12	текущий
14	необходимый
pointed	16
purposeful	18
20	надёжный
22	научный
timely	24
unique	26

4 Fill in the gap with the correct word.

- 1 He worries about the _____ of government statistics. *accuracy*
- 2 Kate is giving the police an _____ description of the men. *accurate*
- 3 The list is not _____. *completeness*
- 4 The accuracy and _____ of the information is important to each of us. *complete*
- 5 She is the team's most _____ player. *consistency*
- 6 It is important to show some _____ in your work. *consistent*
- 7 Andy is very _____. You can trust him. *reliability*
- 8 No one believes the _____ of these results. *reliable*
- 9 They try to improve the quality and _____ of medical care. *timeliness*
- 10 The car crash is a _____ example of the dangers of drinking and driving. *timely*
- 11 Everyone's fingerprints are _____. *uniqueness*
- 12 The author has the _____ of his style of writing. *unique*

READING

5 Read and translate about information.

Information



The word ‘information’ is used in many different ways. Originally, it comes from a word that meant to give a form to something. Information is something that people can learn, know about, or understand. For example, a newspaper contains information about the world. This text contains information about ‘Information’.

Information is knowledge or facts about someone or something: a person, object, situation, event, etc. There are different kinds of information.

According to the way of **perceiving**, information can be visual, audial, etc. According to the form of **presenting**, it can be textual, numerical, graphical, acoustic, and video. According to its **purpose**, information can be mass (public), specific, **confidential** (secret), and personal (private).

We can also speak of many other categories of information:

- factual (e.g. in encyclopedias) and analytical (analyzes and **interprets** facts, e.g. in books and articles);
- subjective (one person’s **opinion**) and objective (**reviews** many **points of view**, e.g. in reference books);
- **current** and historical;
- **scholarly** (or academic) and popular (or general interest).

Information needs to be of high quality to be useful. Five characteristics of high quality information are **accuracy**, **completeness**, **consistency**, **timeliness**, and **uniqueness**. High quality information is true, accurate and **reliable**, complete (provides all the necessary facts and details), consistent, unique, and timely (new and **up-to-date**, not **outdated**).

Information is an **essential** part of any organization. If you use information properly, it can make a company **competitive** or can keep a company competitive.

Information in a form that a computer can use is called data. We input information into a database. The science of computer information systems is called informatics. It studies data: the methods of their creation, storage, processing, and transmission.

In computer science, data often means a kind of information that has not been checked. That is why, information can mean data that has been checked and passed tests for what it must be. A person can trust that ‘information’ is correct.

This symbol can often be found at places where there is more information about a topic.



6 In the text, find a word or phrase with a similar meaning.

- 1 mass = p _____
- 2 confidential = s _____
- 3 personal = p _____
- 4 scholarly = a _____
- 5 timely = n ___, u _____
- 6 popular = g _____ i _____

7 Are the statements TRUE or FALSE?

- 1 We have information only about events.
- 2 People get factual information from encyclopedias.
- 3 High quality information is useless.
- 4 Data is a form of information that a computer can't use.
- 5 Information can't be different.
- 6 People get analytical information from books and articles.
- 7 Information is an essential part of any organization.
- 8 A database is a place where people store fruit and vegetables.
- 9 There is one information category.
- 10 People get objective information from reference materials.
- 11 Information can make a company competitive.
- 12 Informatics studies data creation, storage, processing and transmission.



8 Complete the table. Use the information from the text.

Information			
visual	2	6 ()	9
1	numerical	7	10
3	confidential (secret)	11	
4	8 ()		scholarly and popular
5			

GRAMMAR

9 Present Continuous. Study the information.

Spelling of verb + *-ing*

- Most verbs just add *-ing*.
do – doing go – going cry – crying play – playing
- If the verb ends in *-e*, we take off the *-e* and add *-ing*.
move – moving take – taking
- When a one-syllable verb has one vowel and ends in a consonant, we double the consonant.
sit – sitting run – running put – putting

- We use the present continuous to talk about **activities** which are **in progress at or around the moment of speaking** or about **temporary states and events**.
Chris is writing an email.
She's working a lot in London at the moment.
I'm not drinking much coffee these days.
- We also use the present continuous to talk about **plans and arrangements for the future**.
We are moving to Cambridge in July.

		<i>Positive</i>	<i>Negative</i>	
singular	I he she it	am (I'm) (he's) (she's) (it's)	working	am not (I'm not) (he isn't) (she isn't) (it isn't)
plural	we you they	are (we're) (you're) (they're)		
		<i>Question</i>	<i>Short answers</i>	
singular	Am I Is { he she it	working?	Yes, I am . Yes, { he she it } is .	No, I'm not . No, { he she it } isn't .
	Are { we you they		Yes, { we you they } are .	No, { we you they } aren't .

10 Add *-ing* to the verbs.

- a give, take, begin, pay, say
- b listen, write, stay, leave, go
- c come, dine, put, pass, talk
- d work, get, sit, look, forget
- e hurry, study, travel, have, give
- f taste, prefer, bring, offer, add



Add me
as a
friend!

11 Complete the following positive sentences. Use one of these verbs in the present continuous:

live	stay	move	cross	come	sit
have	have	work	watch		try

Example: Look! A little girl is crossing the road.

- 1 Turn off the music, please. I _____ to work.
- 2 You _____ too much TV these days.
- 3 John _____ in hall of residence this year.
- 4 I _____ back tomorrow. See you Sunday.
- 5 Jane _____ late this evening.
- 6 We're here on holiday. We _____ at the Tomsk Hotel.
- 7 'Where's Alice?' 'She _____ an English class at university.'
- 8 Mark and Ann _____ to a new flat next month.
- 9 Michael _____ breakfast now. Can you phone again later?
- 10 'Can you show me the president of the company?' 'He _____ next to the window.'



12 What is happening *at the moment*? Write true (positive or negative) sentences using the Russian prompts.

Example: я / читать английскую газету

I'm not (I am not) reading an English newspaper.

- 1 я / сидеть на стуле
- 2 мои однокурсники и я / покупать телевизор
- 3 мой друг / быть на занятиях
- 4 я / смотреть новости
- 5 мои родители / работать
- 6 я / просматривать интернет
- 7 снег / идти
- 8 я / изучать английский язык
- 9 наш преподаватель / стоять
- 10 я / пользоваться компьютером



13 Write questions from these words. Put the words in order.

A Use *is* or *are*.

Example: David / today / working Is David working today?

- 1 listening / you / to me
- 2 now / you / feeling OK
- 3 English / studying / your brother
- 4 you / a television / for your new flat / choosing
- 5 coming / the bus
- 6 why / looking / that woman / at us
- 7 going / where / your fellow students
- 8 who / Dan / with his report / helping



B Use *is* or *are* + the -ing-form.

Example: what / at the moment / Ann / do What is Ann doing at the moment?

- 1 write / your friend / a text message
- 2 to your mother / speak / your teacher
- 3 watch / you / at the moment / TV
- 4 the film / from your USB flash drive / watch / you
- 5 do / you / or / your homework / computer games / play
- 6 begin / the company / ULTRA HD TVs / to produce
- 7 what / do / those students
- 8 how much / now / spend / the company / on developing



14 Give short answers to the following questions.

Example: Are you sleeping? No, I'm not.

- 1 Is it raining?
- 2 Are you wearing a watch?
- 3 Are you standing at the moment?
- 4 Are you feeling well?
- 5 Is your friend having an English class?
- 6 Are you having a mathematics class?
- 7 Are you watching much television these days?
- 8 Is the dean of your faculty speaking to you now?
- 9 Are you working on a laptop at the moment?
- 10 Are you watching a TV series this month?
- 11 Is your teacher using the internet at the moment?
- 12 Are you learning English?
- 13 Is your neighbor doing a test?
- 14 Are your parents having a holiday now?
- 15 Are you studying to become an engineer?
- 16 Are you working today?



MORE WORDS AND PHRASES TO KNOW

according to – согласно; в соответствии с

arrangement – договорённость

article – статья

be important to – быть важным для

browse the internet – просматривать интернет

creation, storage, processing, and transmission – создание, хранение, обработка и передача

database – база данных

develop – разрабатывать, развивать

encyclopedia - энциклопедия

event - событие

etc (= et cetera) – и так далее

fingerprint – отпечаток пальца

government - правительство

has been checked – был проверен

have classes – быть на занятиях

improve – улучшать(ся); совершенствовать(ся)

input – вводить (информацию, данные)

knowledge – знание

medical care – медицинское обслуживание

numerical – цифровой; числовой

properly – как следует

reference book – справочник

report – доклад

state – состояние

stay – останавливаться, жить; гостить

study the English language / study English – изучать английский язык

syllable – слог

temporary – временный

trust – доверять

worry about – беспокоиться о, волноваться о

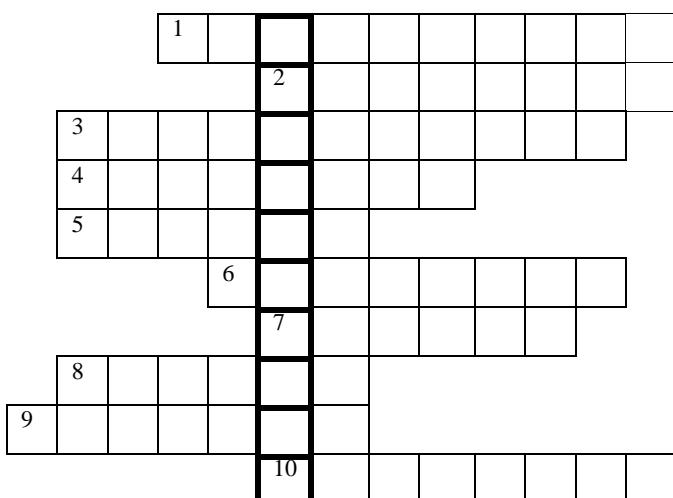
1c INFORMATION SECURITY

VOCABULARY

1 Read and learn the words and phrases.

distribute	распространять
a business and an individual	компания и человек
hold sensitive information on employee	обладать конфиденциальной информацией о служащий
salary	оклад, заработка плата
trade secret	комерческая тайна
unauthorized access	несанкционированный доступ
increase	увеличивать(ся)
take steps	принимать меры
avoid a security breach	избегать нарушения защиты
lead to loss of financial penalty	приводить к потере чего-либо финансовое взыскание (штраф)
expensive lawsuit	дорогостоящий судебный иск
identity theft	кражи личной информации
information assurance	обеспечение защиты информации
update genuine software	обновлять подлинное ПО
antispyware	антишпионское ПО
keep the firewall on	оставлять включённым брандмауэр
backup	резервная копия
observe the rules of	соблюдать правила чего-либо

2 Do the crossword puzzle. Write the terms to the definitions.



- 1 one person
- 2 to get bigger
- 3 it doesn't let somebody collect data without the user's knowledge
- 4 who you are, or what your name is
- 5 money that you earn for your job
- 6 it limits access to a computer network
- 7 an act of breaking security
- 8 an extra copy of computer information
- 9 a punishment for breaking a rule
- 10 a company pays him/her for work

Down – to give something out to people or places

3 Match the words from the two columns to make 13 phrases.



1	update	a	access
2	unauthorized	b	assurance
3	trade	c	firewall on
4	take	d	genuine software
5	observe the	e	individual
6	lead to	f	information on
7	keep the	g	lawsuit
8	information	h	loss of
9	hold sensitive	i	penalty
10	financial	j	rules of
11	expensive	k	secret
12	a business and an	l	security breach
13	avoid a	m	steps

4 Choose the correct variant. Pay attention to the part of speech.

adjective + -ly = adverb

- 1 These days people process the data *electronic / electronically*.
- 2 *Electronic / Electronically* equipment is computers, televisions, and radios.

- 3 ‘Will you be around next week?’ *Possible / Possibly*.’
- 4 They spend every *possible / possibly* moment in the laboratory.

- 5 You are *probable / probably* right.
- 6 The *probable / probably* result of global warming will be an increase in sea levels.

- 7 The television isn’t working *proper / properly*.
- 8 Please put these books in the *proper / properly* place.

- 9 There is a *regular / regularly* bus to the airport.
- 10 They meet *regular / regularly* – usually once a week.

- 11 The two houses are *similar / similarly* in colour.
- 12 The first letter is a page long. Her second letter is *similar / similarly* short.

- 13 Mothers *typical / typically* worry about their children.
- 14 This is a *typical / typically* example of a software bug.

- 15 The money is in its *usual / usually* place.
- 16 I *usual / usually* get home at about six o’clock.

READING

5 Read and translate about information security.

Information security



Information security is about protecting information so that people who should not have access to it cannot **distribute**, see, change, or delete it. Information security has to do with the confidentiality, integrity and availability of data in any form; e.g. electronic, print, or other forms.

Businesses and individuals hold a lot of information. It is usually valuable and important to them.

Typically, businesses **hold sensitive information** on their **employees, salary** information, financial results, business plans, and possibly **trade secrets** and research.

People (individuals) usually hold sensitive personal information on their home computers and perform online functions such as banking, shopping, and social networking.

More and more of this information we store and process electronically and transmit across company networks or the internet. So, the risk of **unauthorized access increases** and we need to protect it.

When you are going to leave your home for study or work, you probably **take steps** to protect it from unauthorized access, damage and theft (e.g. turn off the light, lock the doors, etc.). Similarly, it is important to protect information to **avoid** an information or **security breach**.

For businesses, a security breach usually **leads to loss of reputation and business, big financial penalties and expensive lawsuits**. For individuals, a security breach can lead to **identity theft** and damage to financial history or credit rating.

If we protect the information properly, the wrong people cannot distribute, see, change, or delete it. IT (Information Technology) security specialists typically deal with **information assurance** in organizations.

On home computers, it is important to do the following:

- use and regularly **update genuine software**,
- use antivirus and **antispyware** programs,
- **keep the firewall on**,
- regularly make **backups**,
- know and **observe the rules of** internet communication,
- use secure passwords.

Information security is a stable and important profession. Information security professionals are very stable in their employment; more than 80 percent had no change in employer or employment in the past years.

6 Match the paragraphs with the headings a – h.

- a Businesses
- b Electronic storage and processing
- c Individuals
- d Information security
- e Information security profession
- f IT security specialists
- g Protection of homes and information
- h Protection of home computers
- i Security breaches for businesses and individuals
- j Valuable and important information



7 Match the words from the box to the 12 sentences. Use the information from the text if necessary.

breach	individuals	sensitive	transmit
businesses	protect	specialists	unauthorized
communication	secure	store	valuable

- 1 All of us hold _____ information.
- 2 Information is _____ and important to people.
- 3 _____ hold personal information on their home computers.
- 4 We _____ a lot of information on computer.
- 5 It is important to protect our flats and houses from _____ access.
- 6 People _____ much information over the internet.
- 7 For _____, a security breach can lead to loss of reputation.
- 8 For individuals, a _____ usually leads to identity damage.
- 9 We must _____ information properly.
- 10 IT security _____ usually deal with information.
- 11 People should observe the rules of internet _____.
- 12 On home computers, it is important to use _____ passwords.

8 In the text find and read aloud:

- ✓ one sentence with the adverb ‘electronically’;
- ✓ one sentence with the adverb ‘possibly’;
- ✓ one sentence with the adverb ‘probably’;
- ✓ one sentence with the adverb ‘properly’;
- ✓ one sentence with the adverb ‘similarly’;
- ✓ two sentence with the adverb ‘regularly’;
- ✓ two sentences with the adverb ‘typically’;
- ✓ three sentences with the adverb ‘usually’.



GRAMMAR

9 Present Simple & Present Continuous. Study the information.

We use the present **simple** to talk about **facts** and **permanent activities or states**.

We use the present **continuous** to talk about **activities in progress** and **temporary activities or states**.

Alice works for a computer company.

Philip is working in Japan at the moment.

For **repeated actions** we use the present **simple**.

For **actions around the moment of speaking** we use the present **continuous**.

I work every weekday from nine to five.

I am working every weekend this month.

We do *not* use these verbs in the present continuous:

believe, know, like, love, mean, need, prefer, remember, understand, want.

10 Complete the pairs of sentences with the correct forms of the verbs in brackets. Use present simple or present continuous.

- 1 I (*play*) football with my fellow students on Saturday.
I like sport. I (*play*) football at weekends.
- 2 I usually (*take*) notes during lectures.
'I (*take*) notes of our interview. I hope you don't mind.' 'No, that's OK.'
- 3 I (*not watch*) television. I prefer using my computer in my free time.
I (*not watch*) much television these days.
- 4 We (*study*) programming languages this term.
We (*study*) at the Faculty of Security.
- 5 Lisa (*do*) yoga three times a week.
She (*do*) yoga this year.
- 6 My sister (*live*) with me just now.
She (*live*) in Moscow, Russia.
- 7 My father (*teach*) at a London university this year.
He (*teach*) economics at university.
- 8 This company (*make*) industrial robots.
The company (*make*) a new kind of robots now.
- 9 'What languages (*you / speak*)?' 'Russian and English.'
'What language (*the man / speak*)?' 'I think it's German.'
- 10 (*You / work*) for this company?



Yes, but this week I also (work) for another company in the evenings.

11 Put in **do/does** or **am/is/are**.

- 1 I need a new laptop. Mine _____ not working.
- 2 How often _____ you use your landline phone?
- 3 Look! The robot _____ moving.
- 4 _____ domestic robots move around?
- 5 How much _____ it cost to phone Saint Petersburg?
- 6 ‘Where _____ you come from?’ ‘The US.’
- 7 What _____ you looking at?
- 8 ‘What _____ you doing?’ ‘I _____ studying for an exam.’
- 9 ‘How much _____ a vacuum cleaner?’ ‘I _____ not know.’
- 10 ‘What _____ your brother do?’ ‘He _____ a security specialist.’



12 Complete the sentences using the verbs in brackets.

- 1 Please be quiet. I’m _____ (work).
- 2 What do you usually _____ (do) on weekday evenings?
- 3 I sometimes _____ (have) a business meeting at the restaurant.
- 4 What time does Andrew _____ (finish) classes on Saturday?
- 5 They are _____ (try) to reach David on the phone, but the line is busy.
- 6 What make of laptop are you _____ (use)?
- 7 All robots _____ (have) mechanical construction, electrical components and a computer programming code.
- 8 Does the company _____ (produce) security systems?
- 9 I am _____ (graduate) next month. I _____ (want) to find a job as a security specialist in a big company.
- 10 ‘What’s Rita _____ (do) now?’ ‘She’s _____ (check) emails.’



13 Correct the mistakes. Comment on the mistakes.

Example: It ~~is-snowing~~ a lot in winter. snows **is right**

We do not use the present continuous for general facts that are true all the time.

- 1 I have an English lesson at the moment. Can you call me back later?
- 2 ‘What does he do now?’ ‘He browses the internet on his tablet.’
- 3 How often are you having a holiday?
- 4 Father works late this evening.
- 5 Martin isn’t usually driving to university. He’s usually walking.
- 6 Christopher is a college professor. He is teaching computer science.

- 7 Jane works for a company that is making smartphones.
- 8 Most robots are using electric motors.
- 9 The Shadow Robot Company in London is designing and manufacturing robot hands.
- 10 The Shadow Dexterous Hand is having air muscles.



14 Put the verb in the present simple or present continuous.

Example: Excuse me, do you speak (you / speak) English?

- 1 I _____ (go) to the Dean's office.
_____(you / come) with me?
- 2 We _____ (have) an exam in information security in January.
- 3 The new term _____ (start) in February.
- 4 I _____ (not understand). What _____ (you / mean)?
- 5 What _____ (you / do) tonight?
- 6 She _____ (not watch) television very often.
- 7 Turn off the radio, please. I _____ (not listen) to it.
- 8 What time _____ (Paul / finish) work in the evenings?
- 9 '_____ (your vacuum cleaner / work) OK?' 'Oh yes, fine.'
- 10 He is an engineer. He _____ (design) security systems.
- 11 I _____ (not like) PCs. I _____ (prefer) laptops.
- 12 '_____ (you / know) the manufacturer of this device?'
Yes, but I _____ (not remember) its name.



15 Complete the texts with the verbs from the lists in the present simple or present continuous.

teach have (2) drive leave

It is 7.30 a.m. Tracy Clark is in her kitchen at home. She (1) _____ breakfast. She (2) _____ breakfast at this time every morning. She (3) _____ home at 8.30 a.m. every day and (4) _____ to work. Tracy is a physics teacher. She (5) _____ at the University of Wales.

get spend come love teach

It is 10.00 a.m. now and Tracy is at university. At the moment she (6) _____ her class of twelve students. All the students in her class (7) _____ from Wales. Tracy (8) _____ a lot of time teaching mathematics. She (9) _____ home in the evening. She (10) _____ her job.

MORE WORDS AND PHRASES TO KNOW

break a rule – нарушать правило

break security – взламывать защиту

bug – дефект, ошибка, сбой (*в программе*)

collect – собирать (*данные*)

extra copy – дополнительная копия

global warming – глобальное потепление

limit access to – ограничивать доступ к

possibly – возможно

punishment for – наказание за

similarly – так же, подобным образом, аналогичным образом

availability - доступность

banking – банковские операции

confidentiality - конфиденциальность

credit rating – кредитный рейтинг

employment – работа, служба

integrity – целостность

lock the door – запирать дверь

perform – выполнять (*операцию*), производить (*действие*)

secure password – надёжный пароль

social networking – общение в социальных сетях

turn off the light – выключать свет

air muscles – воздушные, пневматические мускулы

computer science – теория вычислительных систем; информатика

dexterous – ловкий

domestic robot – бытовой робот

industrial robot – промышленный робот

manufacturer – производитель

permanent – постоянный; долговременный

reach - дозвониться

Shadow Dexterous Hand – роботизированная рука

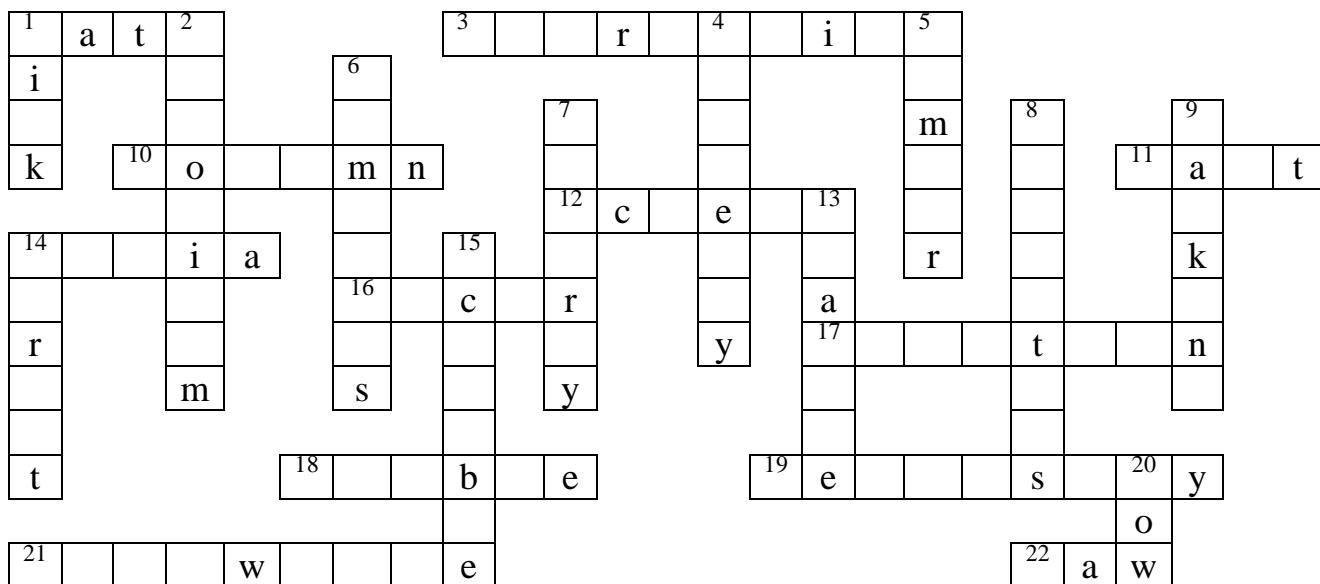
1d DATA SECURITY

VOCABULARY

1 Read and learn the words and phrases.

raw	необработанный
a column and a row	столбец и ряд
intellectual property	интеллектуальная собственность
market analytics	рыночная аналитика
numerous	многочисленный
software solution	программное решение
disk encryption	дисковое шифрование
data masking	маскировка данных
data erasure	стирание данных
a scheme and an algorithm	схема и алгоритм
scramble	перемешивать
enable	давать возможность
recover lost data	восстановить потерянные данные
necessary	необходимый
the last digit	последняя цифра
bank card number	номер банковской карты
overwrite	перезаписывать
destroy	уничтожать
media	средства
occur	происходить

2 Do the crossword puzzle. All the words are different.



3 Complete the sentences.

- 1 Heat _____ vitamin C.
A data erasure **B** destroys **C** numerous
- 2 It is the _____ house on the left.
A data masking **B** last **C** overwrite
- 3 The students sit at desks in _____ for most of the time.
A bank card number **B** occur **C** rows
- 4 The number 57 306 contains five _____.
A digits **B** market analytics **C** scheme
- 5 Add up the numbers in each _____.
A column **B** raw **C** software solution
- 6 It is _____ to buy a new computer.
A intellectual property **B** media **C** necessary
- 7 The software _____ you to create your own DVDs.
A enables **B** recover lost data **C** property
- 8 Firewalls, _____ and other security mechanisms protect the network.
A algorithm **B** disk encryption **C** scramble

4 Complete the table.

Verb	Russian equivalent	un + verb + able = adjective	Russian equivalent
1	избегать	unavoidable	2
believe	3	unbelievable	4
break	5	6	небьющийся
7	изменять	unchangeable	8
control	9	uncontrollable	10
forgive	11	unforgivable	12
13	управлять	ungovernable	14
imagine	15	unimaginable	16
read	17	18	нечитаемый
repeat	19	20	неповторимый
think	21	22	немыслимый
translate	23	untranslatable	24

READING

5 Read and translate the information about data security.

Data security



Data is the **raw** form of information that is stored as **columns and rows** in our databases, network servers, and personal computers. This is a lot of information from personal files and **intellectual property** to **market analytics** and top-secret details. The unauthorized access to this data will lead to **numerous** problems for the organization or the home user.

Data security means protecting data, such as a database, from destructive forces and from the unwanted actions of unauthorized users.

There are different options for securing your data from **software solutions** to hardware mechanisms. Examples of data security technologies include:

- software/hardware **disk encryption**,
- backups,
- **data masking**, and
- **data erasure**.

Disk encryption is a security mechanism that uses mathematical **schemes and algorithms** to **scramble** data into unreadable text. Full disk encryption (FDE) is a technology that **enables** you to encrypt data on a disk or hard disk drive. Full disk encryption is vulnerable, because encryption keys can be stolen.

In the context of computers and computer systems, a backup is a copy of some data. This copy can be used when the original data is changed, or lost. We use backups to **recover lost data** from another source. It is essential to keep a backup of any data in most industries. The process is **necessary** for any important files.

Data masking is the process of masking specific data with random characters or data to protect sensitive information from unauthorized access. This may include masking the data from other users; for example, when you only see the **last** four **digits** of a **bank card number**.

Data erasure (also called data clearing or data wiping) is a method of software-based **overwriting** that completely **destroys** all electronic data on a hard drive or other digital **media**.

In the UK, the Data Protection Act (DPA) is a law. It governs the protection of personal data. The law covers personal data which is facts like your address, telephone number, email address, job history, etc. Data Protection Day is an international holiday. It **occurs** every 28 January.

6 Answer the questions.

- 1 What is data?
- 2 What four examples of data security technologies do you know?
- 3 What is disk encryption?
- 4 What is full disk encryption?
- 5 Why do people use backups?
- 6 What is data masking?
- 7 What is data erasure?
- 8 When do people celebrate Data Protection Day?



7 Are the statements TRUE or FALSE?

- 1 Personal files are a kind of data.
- 2 Top-secret details are a kind of data.
- 3 Unauthorized access can't be dangerous.
- 4 There is only one way to secure data.
- 5 Disk encryption helps people to scramble data into unreadable text.
- 6 Backups are important only for the home user.
- 7 Banks and shops do not use data masking.
- 8 Data erasure destroys all electronic data on digital media.

8 Put the sentences together. Use the information about data security.

- 1 Data is stored
- 2 FDE stands for
- 3 DPA stands for
- 4 Backups are essential
- 5 Data is a lot of information
- 6 The Data Protection Act governs
- 7 People use software solutions and
- 8 We use data masking, data erasure,



- a from intellectual property to market analytics.
- b disk encryption and backups to secure data.
- c hardware mechanisms to secure data.
- d the protection of personal data.
- e the Data Protection Act.
- f as columns and rows.
- g full disk encryption.
- h in most industries.

GRAMMAR

Modal Verbs: Can, Should, Must, Need

We often use modal verbs when we want to express an opinion about a possible fact or to control a possible action.

We use the modal verb **can**:

- 1 to talk about **ability** to do something in the present or future
I can speak English.
- 2 to ask for or give **permission**
Can I open the window?
Students can use calculators during the exam.
- 3 to express **possibility** or **general truths**
We can go to Rome next month.
People can be unfriendly.
- 4 as a question form to make **requests**
Can I have some tea?

Can comes before another verb and we do not use *to* after it.

The negative form of **can** is **can't (cannot)**.

I can't speak English. (ability)
You cannot park there. (prohibition)

We do not use *do/does* in questions with **can**.

Can you speak English?

We use **can/can't** in short answers:

Can you speak English? – Yes, I can. / No, I can't.

9 Complete the sentences with **can/can't**. Comment on the use of **can**.

Example: A bird **can** fly. People **can't** fly.

- 1 Babies ____ write.
- 2 Blind people ____ read.
- 3 A scientific book ____ be interesting.
- 4 You ____ smoke in a classroom.
- 5 Students ____ use calculators in class.
- 6 ____ I have your surname?
- 7 Exams ____ be difficult.
- 8 Lectures ____ be boring.
- 9 You ____ use a mobile phone in public transport in Russia.
- 10 Robots ____ sleep.



11 Machines ____ think like humans.

12 Students ____ study different branches of information security at the TUSUR Faculty of Security.

10 What can and can't you do? Work in pairs. Use the phrases to ask each other questions, give short answers and make positive or negative statements with *can*. Tell about your partner.

Example: Can you speak English?

Yes, I can. I can speak English. Alex can speak English.

- 1 spell your name in English
- 2 write emails in English
- 3 understand German
- 4 speak French
- 5 drive a car
- 6 fly a plane
- 7 use a computer
- 8 repair a computer
- 9 protect your computer from viruses
- 10 protect the information on your computer



We use the modal verb ***should*** to give or ask for **advice**:

*I think you ***should*** tell him about it.*

Should we try again? – Yes, you ***should***. / No, you ***shouldn't***.

The negative form of ***should*** is ***shouldn't*** (***should not***).

*Your son ***shouldn't*** (***should not***) play computer games so much.*

11 Work in pairs. Use the phrases below to give advice to your fellow student. Use *should*** / ***shouldn't***.**

Example: I think you **should** be polite to your parents.

- 1 study hard
- 2 help your fellow students with homework
- 3 miss classes at university
- 4 go to bed after midnight
- 5 eat fast food
- 6 be kind to other people
- 7 get married this year
- 8 use the internet a lot
- 9 play computer games every day



- 10 speak on your mobile phone very much
- 11 protect your smartphone from viruses
- 12 get updates for your computer and your programmes automatically
- 13 observe security rules
- 14 protect your home from theft

We use ***must*** when we think it is **necessary** to do something or to give **strong advice**:

I must talk to you about the new project.

You must go and see that film.

To say it is necessary not to do something (to express **prohibition**), we use the negative form ***mustn't*** (***must not***):

I mustn't be late.

You must not make noise after 11 p.m.

To say it is **not necessary** to do something, we use ***needn't*** (***need not***) or ***don't need to***:

You needn't go there. OR You don't need to go there.

'Must I do this?' 'Yes, you must.' / 'No, you needn't.'

12 Put in ***must*** / ***mustn't*** / ***needn't***.

Example: We have a lot of time. We ***needn't*** hurry.

- 1 You _____ go to the bank. I can lend you some money.
- 2 You _____ tell Jack the news. He has the right to know it.
- 3 You _____ show this letter to anyone else.
- 4 I _____ arrive at the meeting on time.
- 5 You _____ go to university today. It's Sunday.
- 6 You _____ read the book. It is very interesting.
- 7 I _____ pass the exam before 1 February.
- 8 Nina _____ miss so many classes.
- 9 You _____ do your homework today. It is only due next week.
- 10 Keep your documents in a safe place. You _____ lose them.
- 11 You _____ buy a new computer. Yours is okay.
- 12 You _____ protect your personal information. Someone can steal it.



MORE WORDS AND PHRASES TO KNOW

ability – способность

add up – складывать (числа)

advice – совет

be due – подлежать сдаче (о письменной работе и т.п.)

blind – слепой

create – создавать

Data Protection Day (= *Data Privacy Day*) – Международный день защиты персональных данных

destructive force – разрушительная сила

fly a plane – управлять самолётом

full disk encryption (FDE) – полнодисковое шифрование

govern – определять, обуславливать

hardware mechanism – аппаратный механизм

heat – тепло, теплота, нагрев

home user – домашний пользователь

human – человек; человеческий

hurry – торопиться, спешить

make noise – шуметь

network server – сетевой сервер

observe – соблюдать (законы, правила, обычаи); наблюдать

opinion – мнение

permission – разрешение

prohibition – запрет

random -

repair – ремонтировать; чинить

source – источник

surname – фамилия (US last name)

the Data Protection Act (DPA) – Акт о защите данных

top-secret detail – сверхсекретная подробность

unwanted actions of unauthorized users – нежелательные действия несанкционированных пользователей

vulnerable – уязвимый, ранимый

1e CULTURE CLIP: TOMSK

VOCABULARY

1 Read and learn the words and phrases.

be located	находиться, располагаться
bank	берег
govern	управлять
be founded	быть основанным
decree	указ
at the beginning of	в начале
become – became - become	становиться
factory	завод, фабрика
link	соединять
different	другой, различный, разный
commercial and passenger port	коммерческий и пассажирский порт
serve	служить; обслуживать
higher education institution	высшее образовательное учреждение
research institute	научно-исследовательский институт
special economic zone	особая экономическая зона
resident	постоянный житель
rich in	богатый чем-либо
monument	памятник
wooden and stone architecture	деревянная и каменная архитектура
wood carving	резьба по дереву

2 Can you guess what words are here?

- 1 b _ _ k
- 2 l _ _ k
- 3 p _ _ t
- 4 s _ _ _ e
- 5 b _ _ _ _ e
- 6 d _ _ _ _ e
- 7 g _ _ _ _ n
- 8 f _ _ _ _ y
- 9 r _ _ _ _ _ t
- 10 m _ _ _ _ _ t
- 11 d _ _ _ _ _ t
- 12 a _ _ _ _ _ _ e



3 Make 10 expressions from the words. Use each word only once. There are no extra words.

and	and	architecture	at
be	be	beginning	carving
commercial	economic	education	founded
higher	in	institute	institution
located	of	passenger	port
research	rich	special	stone
the	wood	wooden	zone

4 Choose A, B or C to complete the sentences.

READING

5 Read and translate the information about the city of Tomsk.

Tomsk



Tomsk is a Russian city. It is the administrative centre of Tomsk Region (Oblast). Tomsk is one of the largest and oldest cities in Siberia. It **is located** on the **bank** of the Tom River in West Siberia. About 600,000 people live in the city. A mayor and a 33-member Duma **govern** Tomsk.

Tomsk **was founded** under a **decree** from Tsar Boris Godunov in 1604. The first university in Siberia was Tomsk State University. It was founded in 1878. At the beginning of World War II Tomsk **became** the new home for a lot of **factories**.

Tomsk is a small railway centre. Trains **link** Tomsk to **different** towns, cities and countries. There is a **commercial and passenger port** on the Tom River. The international airport **serves** the city. Tomsk also has marshrutkas (fixed-route taxis) and buses, trolleybuses and trams.

Tomsk is an educational, scientific and innovative centre. There are nine **higher education institutions**, fifteen **research institutes**, a **special economic zone** and six business incubators in Tomsk. Every eighth **resident** of the city is a student. The informal name of Tomsk is Siberian Athens.

In Tomsk there are some cinemas and theatres, concert halls and night clubs, museums and churches. The city is **rich in monuments of wooden and stone architecture**. Tomsk has a lot of examples of **wood carving**.

6 Complete the statements. Use only the numbers from the information above.

- 1 Every _____ resident of the city is a student.
- 2 There is _____ special economic zone in Tomsk.
- 3 There are _____ business incubators in Tomsk.
- 4 There are _____ higher education institutions in Tomsk.
- 5 There are _____ research institutes in Tomsk.
- 6 The Duma of the city consists of _____ members.
- 7 Tomsk is _____ years old.
- 8 _____ is the year of the foundation of Tomsk.
- 9 _____ is the year of the foundation of the first university in Siberia.
- 10 _____ people live in Tomsk.

7 Match the paragraphs with the headings A – E.

- A General Information
- B Culture
- C Education and Science
- D History
- E Transport

8 Match the names of the monuments and famous buildings to the pictures.

- a The Drama Theatre
- b The Kinomir Cinema
- c The Big Concert Hall
- d The Memorial of Glory
- e Tomsk State University
- f The Fire Lookout Tower
- g The Monument to Slippers
- h The Monument to the First Teacher of Mine
- i The Monument to the Wooden Rouble
- j The Monument to the Students of Tomsk
- k The Monument to a Child in the Cabbage
- l The Tomsk City Administration Building



1 _____



2 _____



3 _____



4 _____



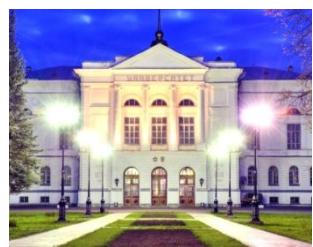
5 _____



6 _____



7 _____



8 _____



9 _____



10 _____



11 _____



12 _____

GRAMMAR

9 Cardinal and Ordinal Numbers. Study the information.

1 – 12	13 – 19	20, 30, ...	21 – 29
1 one			21 twenty-one
2 two		20 twenty	22 twenty-two
3 three	13 thirteen	30 thirty	23 twenty-three
4 four	14 fourteen	40 forty	24 twenty-four
5 five	15 fifteen	50 fifty	25 twenty-five
6 six	16 sixteen	60 sixty	26 twenty-six
7 seven	17 seventeen	70 seventy	27 twenty-seven
8 eight	18 eighteen	80 eighty	28 twenty-eight
9 nine	19 nineteen	90 ninety	29 twenty-nine
10 ten		100 one hundred	
11 eleven			
12 twelve			

1,000 = a thousand 1,000,000 = a million

Hundred, thousand and **million** have **no -s** after a number in the plural.

200 students = two **hundred** students

6,000 kilometres = six **thousand** kilometres

3,000,000 people = three **million** people

We use and to separate **hundred, thousand, million** from numbers smaller than a hundred.

250 books = two **hundred and fifty** books

10 Write the numbers and read them aloud.

Example: two 2 5 five

1 one	13	3
2 six	14	4
3 ten	15	8
4 eleven	16	13
5 twelve	17	15
6 twenty	18	18
7 sixty-eight	19	32
8 seventy-five	20	47
9 ninety-six	21	59
10 four hundred	22	120
11 two thousand and fifteen	23	381
12 five million	24	1,000



11 How much is it?

Example: $8 + 4 = \underline{12}$ (*Eight and four is twelve.*)

$$3 + 4 =$$

$$2 + 4 =$$

$$8 + 3 =$$

$$5 + 10 =$$

$$7 + 2 =$$

$$5 + 3 =$$

$$4 + 7 =$$

$$13 + 6 =$$

$$2 + 6 =$$

$$8 + 1 =$$

$$6 + 6 =$$

$$14 + 2 =$$

$$2 + 3 =$$

$$6 + 4 =$$

$$5 + 7 =$$

$$17 + 2 =$$

$$1 + 2 =$$

$$4 + 4 =$$

$$8 + 5 =$$

$$12 + 8 =$$

$$4 + 3 =$$

$$8 + 2 =$$

$$9 + 3 =$$

$$10 + 7 =$$

12 Do the sums. Write the answer in two ways.

Example: How much is 5 and 15? 20 twenty

- 1 How much is 3 and 9?
- 2 How much is 12 and 7?
- 3 How much is 4 and 14?
- 4 How much is 13 and 1?

- 5 How much is 26 and 7?
- 6 How much is 35 and 63?
- 7 How much is 30 and 13?
- 8 How much is 15 and 50?

- 9 How much is 83 and 64?
- 10 How much is 122 and 298?
- 11 How much is 344 and 579?
- 12 How much is 431 and 675?

Addition	
Subtraction	
Multiplication	
Division	

13 What number comes before and after?

Example: 2 one, two, three

- a 3, 81, 20, 9, 58, 74, 11, 92, 50, 12, 24, 57;
- b 45, 30, 14, 63, 60, 15, 38, 40, 19, 56, 36, 89;
- c 94, 33, 27, 70, 44, 98, 77, 60, 38, 10, 99, 80.

14 Study the information. Say the years in words.

900 nine hundred

793 seven ninety-three

2000 two thousand

1900 nineteen hundred

1924 nineteen twenty-four

2001 two thousand and one

2100 twenty-one hundred

1504 fifteen oh four =
fifteen and four

2010 twenty ten

500	1946	800	1970
1926	2002	1943	2011
962	1725	998	1617
1577	2112	1812	2114
1608	1995	1901	1961

12 Look at the numbers in the table. How do you usually form an ordinal number from a cardinal one? What ordinal numbers are different?

Ordinal numbers							
1st	first	11th	eleventh	20th	twentieth	21st	twenty-first
2nd	second	12th	twelfth	30th	thirtieth	22nd	twenty-second
3rd	third	13th	thirteenth	40th	fortieth	23rd	twenty-third
4th	fourth	14th	fourteenth	50th	fiftieth	24th	twenty-fourth
5th	fifth	15th	fifteenth	60th	sixtieth	25th	twenty-fifth
6th	sixth	16th	sixteenth	70th	seventieth	26th	twenty-sixth
7th	seventh	17th	seventeenth	80th	eightieth	27th	twenty-seventh
8th	eighth	18th	eighteenth	90th	ninetieth	28th	twenty-eighth
9th	ninth	19th	nineteenth	100th	one hundredth	29th	twenty-ninth
10th	tenth						

13 Do you know ABC?

A is the first letter of the ABC.

B is _____.

C is _____.

D is _____.

E is _____.

F is _____.

G is _____.

H is _____.

K is _____.

O is _____.

R is _____.

Z is _____.

13 Write the dates in English. What are these days? Do you know their names in English? Match the dates on the left to the names on the right.

Dates

We use numbers in **dates**.

You write:

20 December(,) 1999

31 May(,) 2003

5 January(,) 2014

You say (in British English):

the twentieth of December, nineteen ninety-nine

the thirty-first of May, two thousand (and) three

the fifth of January, two thousand (and) fourteen/twenty fourteen

Example: 1 January (the first of January) is New Year's Day.

0) 1 января	<i>the first of January</i>	a) New Year's Day
1) 7 января		b) Spring and Labour Day
2) 14 января		c) Defender of the Fatherland Day
3) 25 января		d) Russia Day
4) 14 февраля		e) International Children's Day
5) 23 февраля		f) Knowledge Day
6) 8 марта		g) Unity Day
7) 12 апреля		h) Tatiana Day
8) 1 мая		i) Ivan Kupala Day
9) 9 мая		j) Cosmonautics Day
10) 1 июня		k) Old New Year
11) 12 июня		l) International Women's Day
12) 7 июля		m) Victory Day
13) 1 сентября		n) (Orthodox) Christmas Day
14) 4 ноября		o) Valentine's Day

14 Write the following in two ways:

*Example: The year of the foundation of the first university in Siberia.
1878 / eighteen seventy-eight*

- 1 The number of days in a weekend.
- 2 The number of months in a year.
- 3 The number of days in September.
- 4 The size of your future monthly salary.
- 5 The population of the capital of Russia. (over ...)
- 6 The population of your home town and your country. (about ...)
- 7 This year (the current year).
- 8 The year of the foundation of Tomsk.
- 9 The year of the Winter Olympic Games in Sochi.
- 10 The year of the FIFA World Cup in Russia.
- 11 Today's date.
- 12 New Year's Day.
- 13 New Year's Eve.
- 14 Your date of birth.
- 15 Your friend's date of birth.
- 16 Radio Day (in Russia).



1f REVISION

VOCABULARY AND READING

1 Match the following English words with their Russian equivalents.



- | | | | |
|----|--------------|---|------------------------|
| 1 | destroy | a | точность |
| 2 | uniqueness | b | алгоритм |
| 3 | accuracy | c | антишпионское ПО |
| 4 | scheme | d | резервная копия |
| 5 | property | e | законченность |
| 6 | confidential | f | секретный |
| 7 | timeliness | g | последовательность |
| 8 | backup | h | данные |
| 9 | consistency | i | уничтожать |
| 10 | salary | j | воспринимать |
| 11 | protection | k | собственность |
| 12 | completeness | l | защита |
| 13 | data | m | оклад, заработка плата |
| 14 | perceive | n | схема |
| 15 | antispyware | o | своевременность |
| 16 | algorithm | p | 的独特性 |

2 Match the words to make 16 phrases.



- | | | | |
|----|--------------|---|------------|
| 1 | point of | a | steps |
| 2 | identity | b | analytics |
| 3 | automated | c | lost data |
| 4 | take | d | attack |
| 5 | security | e | specialist |
| 6 | software | f | theft |
| 7 | monetary | g | view |
| 8 | intellectual | h | solution |
| 9 | financial | i | penalty |
| 10 | bank card | j | security |
| 11 | recover | k | number |
| 12 | terrorist | l | and theft |
| 13 | information | m | system |
| 14 | espionage | n | property |
| 15 | market | o | assurance |
| 16 | unauthorized | p | access |

3 Write the prepositions instead of the numbers in brackets.

- a Objective information reviews many points (1) view, for example, in reference books.
- b Typically, businesses hold sensitive information (2) their employees, salary information, financial results, business plans, and possibly trade secrets and research.
- c For businesses, a security breach usually leads (3) loss (4) reputation and business, big financial penalties and expensive lawsuits.
- d On home computers, it is important to do the following: use and regularly update genuine software, use antivirus and antispyware programmes, keep firewall (5), regularly make backups, know and observe the rules (6) internet communication, use secure passwords.

SPEAKING

4 Read and translate the following topics. Discuss them in small groups.

- 1 Security can be different.
- 2 There are a lot of categories of information.
- 3 People hold sensitive information.
- 4 People use different data security technologies.

WRITING

5 Write an essay (10-15 sentences) about the programme (the security category) you study at university. Use the questions if necessary.

- ✓ What do you study?
- ✓ Is it a kind of IT, physical, national or monetary security?
- ✓ What does it deal with?
- ✓ Is it for home users or businesses?
- ✓ How often do people use it?
- ✓ Where do people use it?
- ✓ Do you think it is important?
- ✓ Does it have a future?
- ✓ Where are you going to work after graduating from the university?



GRAMMAR

6 How often do these things happen (*always / usually / often / sometimes / never*)? Make up positive sentences with them. Use the adverbs of frequency.

- 1 I / watch television in the morning
- 2 I / go to the cinema at the weekend
- 3 an exam / begin at 9 a.m.
- 4 I / fall asleep in class
- 5 I / have no classes on a working day
- 6 my teachers / forget my name
- 7 I / lose money
- 8 my friend / change his/her mobile number
- 9 my teacher / phone me
- 10 I / use a landline phone
- 11 my friend / text me
- 12 an old computer / freeze
- 13 I / forget the password to my email account
- 14 I / go to a computer store
- 15 I / lose my USB flash drive

7 Choose the right variant.

- 1 It often *rains / is raining* in autumn.
- 2 Do not go out, it *rains / is raining* heavily.
- 3 They *still discuss / are still discussing* where to go now.
- 4 My elder sister *has / is having* a music lesson. She always *has / is having* a music lesson on Friday.
- 5 Father *reads / is reading* a newspaper. He usually *reads / is reading* something before going to bed.
- 6 Mother *cooks / is cooking* breakfast in the kitchen. She always *cooks / is cooking* in the morning.
- 7 I often *meet / am meeting* you at the corner of this street. *Do you wait / Are you waiting* for anybody?
- 8 *Do you understand / Are you understanding* the use of the Present Simple?
- 9 *Do you usually go / Are you usually going* through the park? – Not usually, it is only today that I *go / am going* here.
- 10 *Do you hear / Are you hearing* anything? – Yes, somebody *knocks / is knocking* at the door.
- 11 Why *do you smile / are you smiling*, Kitty?
- 12 What *do you write / are you writing*? *Do you make / Are you making* notes about the two present tenses?

8 Open the brackets.

- 1 Look, snow still (to fall).
- 2 It often (to rain) in October.
- 3 The sun (to set) late in summer.
- 4 Switch on the light. It (to get) dark.
- 5 Some people (to do) everything with their left hand.
- 6 You can't have the book now because my brother (to read) it.
- 7 I always (to buy) lottery tickets but I seldom (to win).
- 8 You (to understand) the rule?
- 9 I (not to know) what he (to want).
- 10 Cuckoos (not to build) nests. They (to use) the nests of other birds.

9 Write sentences with the modal verbs from the words.

Example: I / late / be / mustn't / . – **I mustn't be late.**

- 1 robots / service / blind / can / people / help / .
- 2 the / leave / we / meeting / early / can / .
- 3 mustn't / in / you / laboratory / smoke / the / .
- 4 you / job / a / should / summer / the / find / for / .
- 5 need / articles / the / to / don't / all / you / read / .
- 6 new / you / me / the / help / with / can / software / ?
- 7 he / the / get / conference / on / must / to / time / .
- 8 should / my / to / the / change / I / password / computer / ?
- 9 you / spend / much / shouldn't / so / time / your / at / computer / .
- 10 20-120 GB / modern / can / of / computers / data / store / read-only memory / in / .

10 Which is right?

- 1 You mustn't / needn't tell anyone about the experiment. It's top secret.
- 2 She can / should speak English quite well.
- 3 You needn't / can stay if you want.
- 4 You must / can finish the article as soon as possible.
- 5 Can / Should you lend me your pen?
- 6 I shouldn't / can't understand the programme – it's too complicated.
- 7 You can / must see the new software – it's fantastic!
- 8 You shouldn't / can't download any suspicious files from the internet.
- 9 You mustn't / should tell anyone your password.
- 10 Jack should / can write a programme in ten minutes.

2a COMPUTER SECURITY

VOCABULARY

1 Read and learn the words and phrases.

prevent	предотвращать
detect	обнаруживать
reliance	уверенность
unintended	непреднамеренный
destruction	уничтожение
intruder	злоумышленник
resource	ресурс
malicious intent	злой умысел
gain	выгода, прибыль; получать, приобретать, извлекать выгоду
accidental	случайный
apply sth to sth	применять что-либо к чему-либо
goal	цель
confidentiality	конфиденциальность
integrity	целостность, честность
availability	доступность
modify	видоизменять
authentication	подлинность
non-repudiation	неотказуемость
accountability	подотчётность
reliability	достоверность



2 Match the words with a similar meaning.



gain
modify
malicious
detect
prevent
accidental
goal
resource
destruction
reliance
unintended
apply

occasional
use
ruin
find
benefit
purpose
evil
change
guard
trust
means
unplanned

3 Complete the ‘stairs’ with words from the list in exercise 1.

1	a		p		y
---	---	--	---	--	---

2	a		i				l
---	---	--	---	--	--	--	---

3	a			l				y
---	---	--	--	---	--	--	--	---

4	a			n				y
---	---	--	--	---	--	--	--	---

5	a			t				n
---	---	--	--	---	--	--	--	---

6	r			o			e
---	---	--	--	---	--	--	---

7	r			a			e
---	---	--	--	---	--	--	---

8	r			b			y
---	---	--	--	---	--	--	---

16	d			e		t
----	---	--	--	---	--	---

17	i		t			t
----	---	--	---	--	--	---

18	p		e			t
----	---	--	---	--	--	---

9	i	n	t		t
---	---	---	---	--	---

19	d			r		t	i	o	n
----	---	--	--	---	--	---	---	---	---

10	i	n	t		r
----	---	---	---	--	---

20			n-		u		t	i	o	n
----	--	--	----	--	---	--	---	---	---	---

11	i	n	t		y
----	---	---	---	--	---

21		u		n		t	i	o	n
----	--	---	--	---	--	---	---	---	---

12	g			n
----	---	--	--	---

22	r			a		l	i	t	y
----	---	--	--	---	--	---	---	---	---

13	g			l
----	---	--	--	---

23	a			l		1	i	t	y
----	---	--	--	---	--	---	---	---	---

14	m		i	y
----	---	--	---	---

24	a			n		1	i	t	y
----	---	--	--	---	--	---	---	---	---

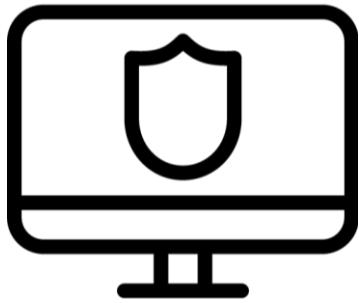
15	m		i	s
----	---	--	---	---

25	c			d		1	i	t	y
----	---	--	--	---	--	---	---	---	---

4 Some nouns and verbs have the same form in English. Read and translate the sentences into Russian. Say which is a noun and which is a verb in each pair of sentences.

noun = verb

- 1 Can you find a *use* for this box?
- 2 Students *use* their computers for study and work.
- 3 She is too shy to ask for *help*.
- 4 My fellow students always *help* me with my English homework.
- 5 Hackers illegally *access* information on computers.
- 6 For security reasons only scientists gain *access* to the area.
- 7 Constant *change* is the law of life.
- 8 I will ask them if they can *change* the time of my interview.
- 9 You will *gain* a lot of experience working there.
- 10 The company wants to realize the maximum financial *gain*.



READING

5 Read and translate the information about computer security.

Computer Security



Computer security, also known as cybersecurity, is a branch of IT (information technology) security which is intended to protect computers. Computer security **prevents** and **detects** unauthorized use of your computer. It includes both different processes and diverse mechanisms.

Computer security is of growing importance due to the increasing **reliance** of computer systems in most modern countries. Computer security helps to protect digital equipment, information and services from **unintended** or unauthorized access, change or **destruction**. **Intruders** can use your computer **resources** with **malicious intent** or for their own **gain**. They can even gain access to your computer **accidentally**.

Computer security is **applied** to both private and public computer networks, even to the whole Internet. As well as we apply it to computing devices such as computers and smartphones, as well as to both private and public computer networks, including the whole internet. Computer security includes physical security to prevent theft of equipment and information security to protect the data on that equipment.

Computer security involves telling computers what they are not to do. This makes computer security unique because most programmes tell computers what they must do. Security takes much of a computer power.

Computer security has three main security **goals**. **Confidentiality**, **integrity**, and **availability** are at the heart of the security. They are also known as CIA.

- ✓ Confidentiality: only authorized users are able to access information; other people cannot acquire information (keeping secrets).
- ✓ Integrity: only authorized users are able to **modify** the data when they need; other people cannot change information (protecting data).
- ✓ Availability: information is available to authorized users when they need it; other people cannot stop the computer from doing its job.

Other security goals include **authentication**, **non-repudiation**, **accountability**, and **reliability**.

Security professionals and home users must remember the following security measures: a firewall, antivirus software, an email scan, passwords, and a lot of others.



6 Match the words to make 6 phrases. Use the information from the text.

protecting	computing	digital	diverse	authorized	keeping
users	devices	equipment	mechanisms	secrets	data

7 Are the statement TRUE or FALSE?

- 1 Information security is a branch of computer security.
- 2 Computer security deals with unauthorized use of computers.
- 3 Computer security is processes and mechanisms.
- 4 Protection of digital services, equipment, and information is the main task for computer security.
- 5 All intruders have the only gain.
- 6 Some intruders do not have a special reason for breaking a computer security.
- 7 Computer security protects the whole Internet.
- 8 Nowadays computer security is important.
- 9 People cannot apply computer security to smartphones.
- 10 Computer security tells computers what they should do.
- 11 Computer security is a unique programme.
- 12 Security measures are useless.



8 Match the security goals with their definitions.

<i>Confidentiality</i>	A must inform B about all A's actions and decisions, excuse for them and suffer punishment in the case of wrong behaviour.
<i>Integrity</i>	The information must be available when an individual needs it. The computing systems store and process the information, the security controls protect it.
<i>Availability</i>	People communicate with real people. People can access true information about other people. Do you really communicate with whom you think you communicate?
<i>Authentication</i>	It is the property that information is not available to unauthorized individuals or processes.
<i>Non-repudiation</i>	People cannot modify information in an unauthorized or undetected manner.
<i>Accountability</i>	Individuals and businesses must follow the conditions and terms of a contract.
<i>Reliability</i>	The existence of information and correction of errors in information that people store and transmit.

GRAMMAR

9 Regular and irregular verbs. Study the information.

Regular verbs

- 1 The normal rule is to add *-ed*.
work – **worked** start – **started**
- 2 If the verb ends in *-e*, add *-d*.
live – **lived** love – **loved**
- 3 If the verb has only one syllable + one vowel + one consonant, double the consonant.
stop – **stopped** plan – **planned**
- 4 If the verb ends in a consonant + *-y*, change the *-y* to *-ied*.
study – **studied** carry – **carried**

There are many common **irregular verbs**.

10 Put regular verbs into the Past Simple form.

- 1 We _____ that device in our laboratory last week. (*test*)
- 2 He _____ foreign articles in his course work. (*use*)
- 3 My friend _____ me yesterday. (*call*)
- 4 The clock _____ three days ago. (*stop*)
- 5 When I was five, I _____ ice-cream. (*like*)
- 6 Students _____ the task 5 minutes ago. (*finish*)
- 7 Last year scientists _____ their innovative idea. (*realize*)
- 8 Alexander G. Bell _____ the telephone. (*invent*)
- 9 Two years ago he _____ to give up smoking. (*try*)
- 10 In 1960s the first communication satellite _____ on the orbit. (*appear*)
- 11 Three months ago I _____ with my parents. (*live*)
- 12 Media _____ our life greatly. (*influence*)

11 Put irregular verbs into the Past Simple form.

- 1 Yesterday Robert _____ in the library. (*be*)
- 2 _____ you at the conference last Wednesday? (*be*)
- 3 _____ John at the lecture ten minutes ago? (*be*)
- 4 We _____ three lessons yesterday. (*have*)
- 5 Richard _____ two mistakes in his test last week. (*make*)
- 6 The teacher _____ us five minutes to revise the words before the dictation. (*give*)

- 7 In 2012 my parents and I _____ to Greece. (*fly*)
 8 When I _____ a schoolboy I _____ part in sport competitions. (*be; take*)
 9 Two days ago Jack _____ a letter to his English penfriend and _____. (*write; send*)
 10 Alex _____ about this meeting and he _____ his groupmates about it. (*know; tell*)

12 Complete the tables.

Base form	Past Simple	Past Participle
	fell	
draw		
	saw	
come		
	began	
be		
	studied	
write		
get		
	went	
bring		
	flew	
ride		
	sold	
live		

Base form	Past Simple	Past Participle
speak		
	knitted	
keep		
	give	
		ran
send		
		swam
sleep		
		thought
wake		
catch		
		made
stay		
		paid
do		

13 Complete the text with a verb from the box in the Past Participle form.

travel	be	meet	hunt	be	have
ride	be	see	live	be	do



My grandfather is 100 years old, and he has (1) _____ a long and interesting life. He has (2) _____ a lot, especially in the Far East. He has (3) _____ the Taj Mahal in India, and the Pyramids in Egypt. He has (4) _____ lions in Africa, and has (5) _____ a camel across the Sahara Desert. He says that the most beautiful place he has (6) _____ to is Kathmandu in Nepal. He has (7) _____ the Queen on several occasions. In 1959 he was a soldier in New Zealand when she came to visit, and in 1972 he went to a garden party at Buckingham Palace.

He has (8) _____ married twice. His first wife died when she was 32. He met his second wife while he was travelling round France by bike. He and his wife, Eleanor, have (9) _____ married for 50 years, and they have (10) _____ in the same cottage in the country since they got married. He says that he has never (11) _____ ill in his life. The secret of good health, according to my grandfather, is exercise. He goes swimming every day. He has (12) _____ this since he was a boy. He also has a glass of whisky every night! Perhaps that is his secret!

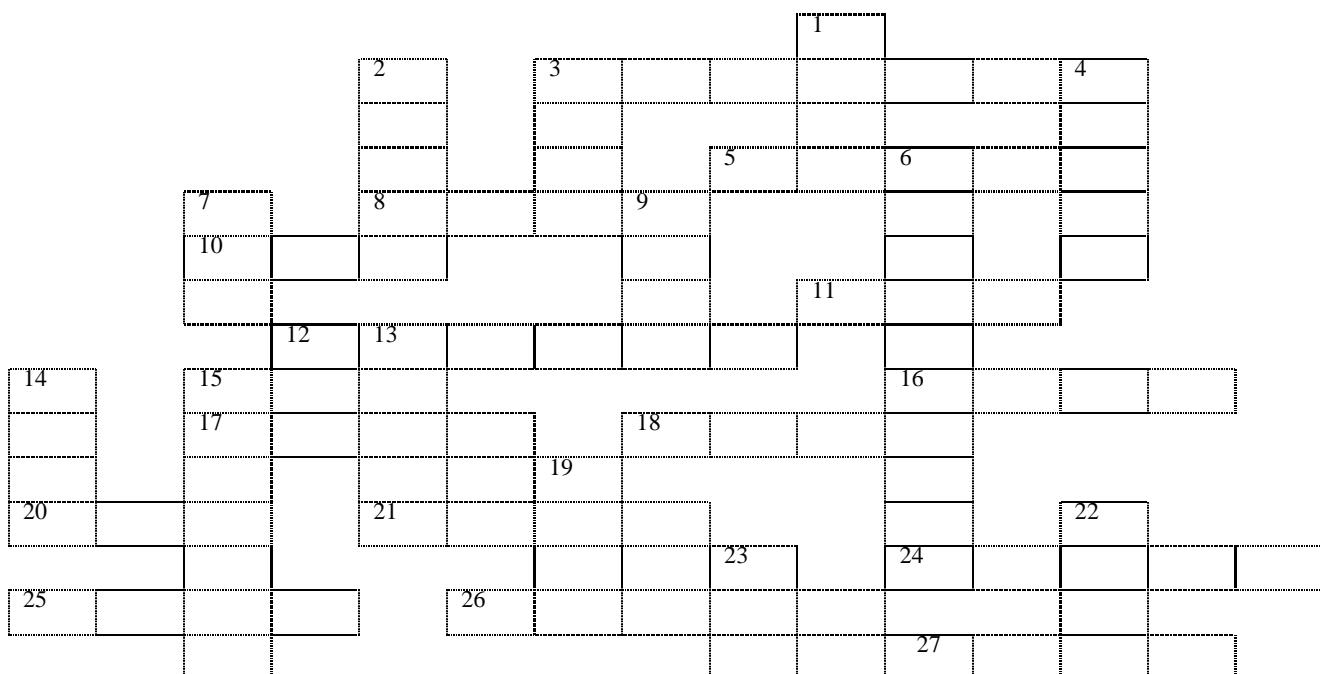
14 Do the crossword puzzle.

Across

- 3 past participle of *bring*
- 5 past participle of *stick*
- 8 past participle of *sing*
- 10 past of *eat*
- 11 past participle of *feed*
- 12 past participle of *shake*
- 16 past participle of *sell*
- 17 past participle of *read*
- 18 past participle of *leave*
- 20 past participle of *meet*
- 21 past of *draw*
- 24 past of *drink*
- 25 past of *fly*
- 26 past participle of *stand*
- 27 past participle of *make*

Down

- 1 past participle of *hurt*
- 2 past of *choose*
- 3 past participle of *be*
- 4 past participle of *take*
- 6 past participle of *understand*
- 7 past participle of *sit*
- 9 past participle of *go*
- 13 past participle of *hear*
- 14 past participle of *swim*
- 15 past participle of *write*
- 19 past of *go*
- 22 past of *pay*
- 23 past of *win*



MORE WORDS AND PHRASES TO KNOW

conditions and terms – условия и сроки (договора)

conference – конференция, совещание

consonant – согласный звук, согласная буква

double – удвоить

email scan – сканирование электронной почты

evil – злой

excuse for – оправдание для чего-либо

existence – существование

experience – опыт

give up smoking – перестать («бросить») курить

greatly – чрезвычайно, очень

guard – сторожить, охранять; караулить

illegally – незаконно

keep a secret – хранить секрет

law – закон

main – основной

maximum financial gain – максимальная финансовая прибыль

means – средство, способ (*pl means*)

occasional – случающийся иногда, нерегулярный

on occasion(s) – иногда, при случае

realize – осуществлять (замысел, мечту), достигать (цели)

ruin – гибель, крушение; разорение, крах

revise – повторять изученный материал

satellite – спутник

security controls – методы, средства обеспечения безопасности

shy – застенчивый, стеснительный

suffer punishment – понести наказание

the Far East – страны восточной Азии, включая Китай, Японию, Индонезию
Северную и Южную Кореи

useless – бесполезный

vowel – гласный звук, гласная буква

2b INTERNET SECURITY & NETWORK SECURITY

VOCABULARY

1 Read and learn the words and phrases.

optical networking technology	оптическая сетевая технология
the World Wide Web (WWW)	Всемирная паутина
a website and a webpage	веб-сайт и веб-страница
HyperText Markup Language (HTML)	язык гипертекстовой разметки
hypertext link	гипертекстовая ссылка
internet security	безопасность работы в интернете
insecure channel for	небезопасный канал для
exchanging information	обмена информацией
intrusion and fraud	вторжение и мошенничество
disrupt computer operation	нарушать работу компьютера
local area network (LAN)	локальная сеть
campus area network (CAN)	кампусная сеть
wide area network (WAN)	глобальная сеть
network security	безопасность сети
denial of service (DoS)	отказ в обслуживании
zero-day attack	уязвимость нулевого дня
data interception and theft	перехват и кражи данных
handle sth	иметь дело с чем-либо
intrusion prevention system (IPS)	система предотвращения вторжений
virtual private network (VPN)	виртуальная частная сеть
remote access	удалённый доступ

2 Match the synonyms.



activity	access
catch	channel
communication	computer
connection	data / information
facts	denial
far	disrupt
help	handle
interrupt	interception
machine	link
manipulate	operation
opportunity/right	private
personal	remote
refusal	service
stealing	theft

3 Use the words to make 12 phrases.

a website	networking	webpage
data	and a	Web
denial	security and network	theft
disrupt	channel for exchanging	technology
HyperText	and	system
insecure	computer	service
internet	interception and	security
intrusion	Wide	operation
intrusion	Markup	network
optical	prevention	Language
the World	of	information
wide	area	fraud

4 Match the terms 1 – 8 with their definitions A – H.

- 1 campus area network (CAN)
- 2 denial of service (DoS)
- 3 HyperText Markup Language (HTML)
- 4 intrusion prevention system (IPS)
- 5 local area network (LAN)
- 6 virtual private network (VPN)
- 7 wide area network (WAN)
- 8 World Wide Web (WWW)



- A It is an information space where documents and other web resources can be accessed via the internet.
- B It is the standard markup language for creating webpages and web applications.
- C It is a computer network that interconnects computers within a limited area such as a residence, school, laboratory or office building.
- D It is a computer network made up of an interconnection of local area networks within a limited geographic area.
- E It consists of several computer networks that connect over the internet.
- F It is an attempt to make a machine or network resource unavailable to its users.
- G It is a device or software application that monitors a network or systems for malicious activity.
- H It is used by some workers to connect using a computer to do work – they can check their work email and see work websites which cannot be seen on the normal internet.

READING

5 Read and translate the information about internet security & network security.



Internet Security & Network Security

The internet is a global system that consists of millions of private, public, academic, business, and government networks. They are linked by electronic, wireless, and **optical networking technologies**. The history of the internet began with the development of electronic computers in the 1950s. Tim Berners-Lee from the UK created **the World Wide Web** (or ‘the Web’) in Switzerland in 1989.

The Web is the part of the internet that contains **websites and webpages**. Webpages are mostly text, images, and links to other web pages. Most webpages are in the **HTML** format. Websites consist of pages that are linked by **hypertext links**. People use web browsers to find and look at websites on the internet.

Internet security is a branch of IT security that is specifically related to the internet. The internet is an **insecure channel for exchanging information**. It leads to a high risk of **intrusion or fraud**. Different threats can **disrupt computer operation**, gather sensitive information, or gain access to private computer systems. We use diverse methods to prevent, detect and remove threats and to protect the transfer of data.

A computer network is a system of interconnected computers. The main types of computer networks are the following:

- **local area networks**: the computers are geographically close together (in the same building);
- **campus area networks**: the computers are within a limited geographic area, such as a campus or military base;
- **wide area networks**: the computers are farther apart. We use telephone lines or radio waves to connect them.

Many **network security** threats today are spread over the internet: spyware and adware, worms and viruses, Trojan horses and **denial of service**, hacker and **zero-day attacks, data interception and theft**. Network security refers to any activities to protect a network. These activities protect the usability, reliability, integrity, and safety of the network and data. Effective network security targets different threats and stops them from entering or spreading on the network.

A system administrator typically **handles** internet security and network security. Security components often include:

- antivirus and antispyware;
- firewall, to block unauthorized access to the network;
- **intrusion prevention systems**, to identify fast-spreading threats;
- **virtual private networks**, to provide secure **remote access**.

6 Answer the following questions.

- 1 What is the internet?
- 2 What does the internet consist of?
- 3 What are networks linked by?
- 4 When did the history of the internet begin?
- 5 Who is the creator of the World Wide Web?
- 6 What is the Web?
- 7 What is a webpage?
- 8 What is a website?

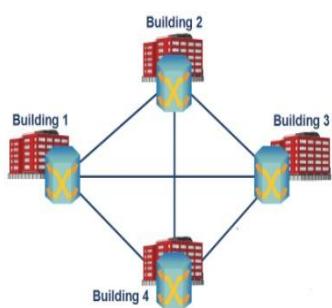


7 Are the statements TRUE or FALSE? Prove your answer.

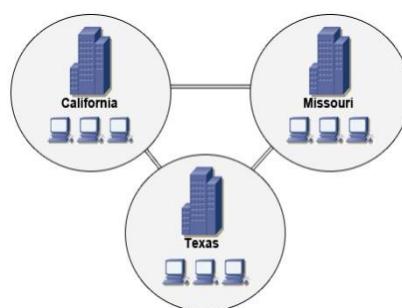
- 1 A LAN means the computers that are in different parts of the world.
- 2 People should update the software.
- 3 Computer security is a branch of internet security.
- 4 Network security helps different threats to enter the network.
- 5 A system of interconnected computers makes up a computer network.
- 6 We use the internet because it is a very secure way of exchanging information.
- 7 To describe the computers that are within a military base we use the term 'CAN'.
- 8 There are Trojan horses as the only network security threat on the internet.
- 9 People use the internet and they don't have any problems like fraud or intrusion.
- 10 VPNs block IPSS.
- 11 A WAN means the computers that are in a wide square area.
- 12 We use malicious software to prevent, detect, and remove viruses and worms, Trojan horses and spyware.
- 13 Protection of integrity, reliability, safety, and usability of the network and data is the main goal of the network security.
- 14 A zero-day attack is an example of many network security threats.

8 Look at the three pictures and say which of them is an example of a LAN, a CAN, and a WAN.

1



2



3



GRAMMAR

9 Past Simple. Study the information.

Be in the Past Simple

<i>Positive</i>	I / He / She / It was lucky.	We / You / They were lucky.
<i>Negative</i>	I / He / She / It wasn't lucky.	We / You / They weren't lucky.
<i>Question</i>	Was I / he / she lucky?	Were we / you / they lucky?
<i>Short answer</i>	Yes, I was . No, I wasn't .	Yes, we were . No, we weren't .

Positive

I / He / We	arrived went	yesterday.
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Negative

I / He / We	didn't (= did not)	arrive go	yesterday.
-------------	---------------------------	---------------------	------------

Question

When	did	I / he / we	arrive go	?
------	------------	-------------	---------------------	---

Short answer

Yes, I did .	No, I didn't .
Yes, he did .	No, he didn't .
Yes, we did .	No, we didn't .

We use the past simple for:

- an action that occurred at a definite time in the past;
They spent their summer holidays in Italy last year.
- actions that happened in the past, one immediately after the other;
She locked the door behind her and took off her shoes.
- Habits or states which are now finished.
Mr Smith worked in a bank when he was younger.

Time expressions we use with the past simple include: *yesterday, ago, last, in 2000.*
I got home about an hour ago.

10 Complete the sentences with **was**, **were**, or **did**.

- I _____ ill. I _____ not go to work yesterday.
- Tom _____ not in his office yesterday. He _____ not go to work.

- 3 A: _____ Mr Smith in his office yesterday?
 B: Yes, he _____.
 A: _____ you talk to him about your project?
 B: Yes, I _____. He answered all my questions. He _____ very helpful.
- 4 A: _____ you at the meeting yesterday?
 B: What meeting?
 A: _____ you forget about the meeting?
 B: Yes, I _____.

11 Put the verbs in brackets into the Past Simple form.

- 1 Tina and I _____ (go) shopping last Monday. We _____ (go / not) shopping yesterday.
- 2 Jane _____ (get up) at 8 o'clock. She _____ (get up / not) at seven o'clock.
- 3 I _____ (go) to bed early last night. I _____ (finish / not) my homework.
- 4 Sue _____ (read) a magazine yesterday evening. She _____ (watch / not) TV.
- 5 The weather _____ (be / not) cold last week, but it _____ (be) cold yesterday.
- 6 It _____ (rain / not) long last Sunday. The rain _____ (stop) after a few minutes.
- 7 I _____ (stay) home last night. I _____ (go / not) to the cinema.
- 8 I _____ (write) a message to my girlfriend yesterday, but she _____ (answer / not).
- 9 Mike ... (come / not) to classes yesterday.
- 10 I _____ (go) to the cinema last night, but I _____ (enjoy / not) the film. It _____ (be / not) very good.

12 Write questions. Give short answers.

Example: I walked yesterday. – **Did you walk yesterday? – Yes, I did.**

- 1 I had a cup of tea this morning.
 2 Olga studied English at school.
 3 It didn't rain last week.
 4 I ate lunch at the cafeteria.
 5 Mike didn't go out last week.
 6 I saw Sam at dinner two days ago.
 7 Alex and I went to a party last night.
 8 We didn't do our homework last night.
 9 I didn't speak English when I was 5.
 10 I bought a new MP3 player three weeks ago.



13 Ask questions to the words in bold. Use question words in brackets.



- 1 I had an exam **two days ago**. (*When*)
- 2 I went **to the park** yesterday afternoon. (*Where*)
- 3 I watched **an interesting film** last night. (*What*)
- 4 The film started **at 7:20**. (*When*)
- 5 I bought my bag **in the city centre**. (*Where*)
- 6 I came to London **five weeks ago**. (*When*)
- 7 I had **three entrance exams**. (*How many exams*)
- 8 I was absent from lessons **because I was sick**. (*Why*)
- 9 I lived **in a hostel** before I found a flat. (*Where*)
- 10 **I took the bus** to the university. (*How*)

14 Correct a mistake in the sentence.

- 1 She didn't saw my grandma.
- 2 The police catched them.
- 3 Many people dieed in the earthquake.
- 4 Did she walked alone?
- 5 Sam and I was best friends.
- 6 He losted his job.
- 7 I goed to my friend yesterday.
- 8 My father tryed to repair his car yesterday afternoon.
- 9 Sarah weren't happy last year.
- 10 She didn't sold her house.

Best Friends!!



15 Fill in the sentences with *in*, *when*, *ago*, or *last*.



- 1 Saturday evening we went out to the concert.
- 2 the afternoon, we went for a walk.
- 3 we got home, we listened to music.
- 4 I bought a car a few weeks .
- 5 I didn't go home weekend because some friends came to stay.
- 6 I found a flat on my own year.
- 7 I saw an accident night.
- 8 I left school three years .
- 9 I was born in Tomsk 2000.
- 10 My parents moved back to Tomsk I was five.
- 11 We got up late Sunday morning.



MORE WORDS AND EXPRESSIONS TO KNOW

accident – несчастный случай

are linked by – соединены посредством (при помощи)

are spread on the internet – распространены по

attempt – попытка

be absent – отсутствовать

building – здание

cannot be seen – не могут быть увиденными

earthquake – землетрясение

helpful – полезный; готовый помочь

go for a walk – ходить; идти пешком; прогуливаться

image – изображение

information space – информационное пространство

interconnection – взаимосвязь

lead to a high risk of – вести к высокому риску

markup language – язык разметки

military base – военная база

on my own – один, одна

radio wave – радиоволна

resource – ресурс

Sir Timothy John Berners-Lee – сэр Тимоти Джон Бернерс-Либ британский учёный, создатель Всемирной паутины

software application – прикладное ПО

specifically – особенно

system administrator – системный администратор

target – направлять, предназначать

unavailable – недоступный

usability – практичность

weather – погода

web application – веб-приложение

web browser – браузер

within a limited geographic area – в пределах ограниченной географической области

2c COMMUNICATIONS SECURITY (COMSEC)

VOCABULARY

1 Read and learn the words and phrases.

communications security (COMSEC)	коммуникационная безопасность
maintain	поддерживать, сохранять
for public use	для общественного пользования
voice	голос
text message	текстовое сообщение
hit a send button	нажать на кнопку «отправить»
advertiser	рекламодатель
treat	обращаться
view	осматривать
compromise	ставить под угрозу
doubt	сомнение
case	случай
by the way	кстати
certain	определённый
privacy policy	политика защиты персональных данных
from time to time	время от времени
make an effort	пытаться
notify	уведомлять
agency	агентство
happen	происходить

2 Make 8 phrases from the words.

a	an	button	by
communications	effort	for	from
hit	make	message	policy
privacy	public	security	send
text	time	time	the
to	use	way	

3 Match the terms with their definitions.

advertiser	agency	case	effort	voice
-------------------	---------------	-------------	---------------	--------------

- a an attempt to do something
- b a company that advertises things

- c a business that provides a service
- d a particular situation or example of something
- e the sounds that you make when you speak or sing

button	communications	doubt	policy	security
f a switch that you press to control a piece of equipment				
g when you are not certain about something, or do not trust someone or something				
h protection of a person, building, organization, or country against threats such as crime or attacks				
i a set of ideas or a plan of what to do in particular situations that has been agreed by a government, business, etc				
j the different ways of sending information between people and places, such as post, telephones, computers, and radio				

certain	compromise	maintain	notify	treat	view
k to watch something					
l to have a harmful effect on something					
m to officially tell someone about something					
n to make a situation or activity continue in the same way					
o to behave towards or deal with someone in a particular way					
p used to refer to a particular person or thing without naming or describing them exactly					

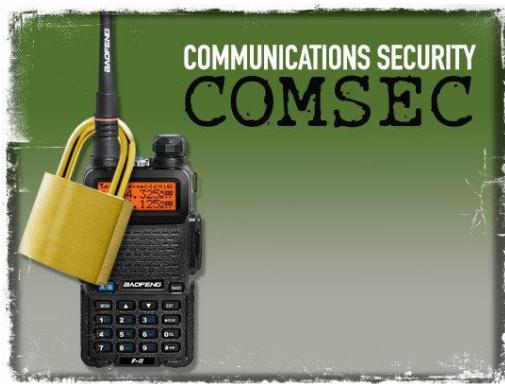
4 Choose the correct word to complete the sentences.

- 1 The army *happened / maintained / notified* order in the region.
- 2 You should *happen / maintain / notify* the police if you are in a real accident.
- 3 What *happens / maintains / notifies* if we can't get enough tickets?
- 4 Jessie has a beautiful singing *treat / view / voice*.
- 5 They were able to *treat / view / voice* the city from a helicopter.
- 6 They *treat / views / voice* her like one of their own children.
- 7 An *advertiser / agency / case* is a person or company that advertises things.
- 8 An *advertisers / agency/ case* is a business that provides a service.
- 9 We usually ask for references, but in your *advertiser / agency / case* it will not be necessary.
- 10 I have some *certain / compromises / doubts* about his ability to do the job.
- 11 Sensational media coverage seriously *certain / compromised / doubt* the trial.
- 12 The museum is only open at *certain / compromise / doubt* times of the day.

READING

5 Read and translate the information about communications security.

Communications Security (COMSEC)



Communications security (or simply COMSEC) prevents unauthorized access to telecommunications. Its goal is to **maintain** the confidentiality, integrity, and availability of information during transmission. This information is not **for public use**.

COMSEC protects classified and unclassified information on military communications network. It includes data, **voice**, and video. It is used for both analogue and digital applications, and both wired and wireless links.

COMSEC also involves some electronic communications such as email, **text messages**, posts on social media websites and using smartphones.

Email. When you **hit the send button**, nobody knows who may have access to the contents. If a person receives it, he/she may distribute it to any number of people. The service provider may scan the email contents. **Advertisers** can target you. Hackers and other people can intercept it as well.

Text message. **Treat** text messages, as you email. Once again think and double check before you hit the send button. When you hit the send button, any number of people can **view** the information. The wrong phone number can also get the information. Think before you send a text message. The information can **compromise** your personal, family, or business's security. If there is any **doubt**, do not send.

Social media. Posting personal information online can be dangerous. Usually we want some information to be only accessible by our 'friends', but in some **cases** other people can view it. Who are your 'friends' **by the way**, do you know? **Certain** social media sites update their **privacy policies from time to time**. They do not **make much of an effort** to **notify** users. This can change who access your information.

Smartphones. Smartphones are not secure for the common user. You must know that every call is intercepted and the contents of the call are possibly stored somewhere. The **agencies** cannot listen to everyone, because there are simply too many calls. However, the information is stored, and if something **happens** later, they may access some calls. Keep your smartphone password protected, so no one can access it.

Stop and think about Who, What, When, and Where, when you communicate with someone.



6 Fill in the gaps. Use the information from the text if necessary.

- 1 COMSEC is used for analogue and _____ applications.
- 2 Smartphones are unsecure for the _____ user.
- 3 COMSEC prevents _____ access to telecommunications.
- 4 Sometimes certain sites _____ their privacy policies.
- 5 COMSEC protects unclassified and _____ information.
- 6 People can receive and distribute the email _____ of other people.
- 7 COMSEC is used for wired and _____ links.
- 8 The basic components of communications security are the confidentiality, _____, and availability of information.

7 Are the statements TRUE or FALSE?

- 1 COMSEC deals with unauthorized access to telecommunications.
- 2 The CIA of information during transmission is the main aim of COMSEC.
- 3 COMSEC protects only classified information.
- 4 Information on military communications network can include voice, video, and data.
- 5 People may distribute your email to other people.
- 6 Advertisers and hackers cannot intercept your email.
- 7 People should be careful when they send text messages.
- 8 People can view your text message when you hit a send button.
- 9 Posting personal information online is safe.
- 10 Social media sites always notify their users about updates.
- 11 Smartphones are secure for all people.
- 12 Agencies listen to every call.



8 Use the text to write the synonyms instead the words *in italics*.

- 1 The *aim* of COMSEC is to maintain the confidentiality, integrity, and availability of information during transmission.
- 2 COMSEC protects classified and unclassified information on *martial* communications network.
- 3 COMSEC on military communications network *involves* data, voice, and video.
- 4 COMSEC *contains* some electronic communications.
- 5 Hackers and other people can *get* the email contents of other people.
- 6 Posting personal information online can be *risky*.
- 7 The agencies cannot listen to every call, *but* the information is stored.
- 8 The contents of all our calls are possibly *kept* somewhere.

GRAMMAR

9 Present Perfect. Study the information.

We form the Present Perfect with **have/has** and **Participle II** of the verb.

Positive	I	have	finished	the course work.
	We / You / They		seen	the film before.
	He / She / It	has	written	the presentation.
Negative	I	have not (haven't)	finished	my course work.
	We / You / They		seen	the film before.
	He / She / It	has not (hasn't)	written	the presentation.
Question	Have	I	finished	the course work?
		we / you / they	seen	the film before?
	Has	he / she / it	written	the presentation?
Short answers	Yes, I have .		No, I haven't .	
	Yes, they have .		No, they haven't .	
	Yes, he has .		No, he hasn't .	

We use the present perfect for:

- an action that happened at an unstated time in the past. The emphasis is on the action; when it occurred is unimportant or unknown.
I have washed the dishes.
Natalie has been to France twice.
- an action which started in the past and continuous up to the present, especially with stative verbs such as *be, have, like, know*, etc.
He has known me for six years.
- a recently completed action.
I have (just/already) finished my essay.
- Personal experiences or changes.
She has put on five kilos.



Time expressions we use with the present perfect are: *just, already, yet, for, since, lately, recently, so far, ever, never*.

Already is used in statements and questions (to suggest surprise).

I have **already** spoken to Ann. Have you finished cooking **already**?

Yet is used with the present perfect in questions and negations.

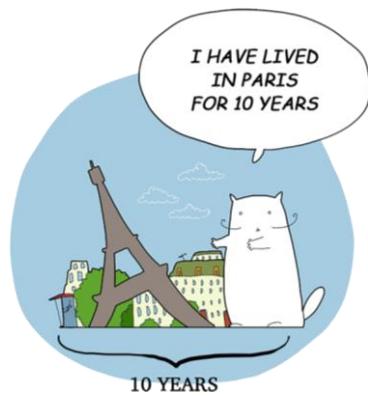
Have you paid the bill **yet**? Steven hasn't finished work **yet**.

10 Open the brackets and put the verbs into the Present Perfect form.

- 1 I _____ (see) this film twice. Let's see another film.
- 2 Pete _____ (lose) his keys. He is not able to come into his flat.
- 3 John works hard. He _____ (write) three reports on Physics since Monday.
- 4 Who is that lady? I _____ (never / see) her before.
- 5 I don't know Jake. I _____ (never / meet) him.
- 6 _____ (you / phone) your mother yet? She asked me to remind you.
- 7 How much of your course work _____ (you / do) yet?
- 8 I'm looking for Sam. _____ (you / see) him?
- 9 _____ (you / hear) about the new album of this rock band? – I _____ (hear) it's very popular.
- 10 [A]Excuse me. _____ (someone / leave) this bag here? [B]I don't know. I _____ (not / notice) it until now.

11 Choose the right variant to complete the sentence.

- 1 I have known you *for / since* you were born.
- 2 Our parents have known each other *for / since* 10 years.
- 3 I have studied English *for / since* the second grade.
- 4 We have been good friends *for / since* many years.
- 5 I have played tennis *for / since* ten years. I have won many competitions.
- 6 We've been awake *for / since* 6 o'clock this morning.
- 7 Sam has lived in Tomsk *for / since* 2013.



12 Fill in the sentences with the right adverb *just, already, or yet*.

- 1 [A]Do you know where Justin is? [B]He has _____ gone. (= *a short period of time ago*)
- 2 [A]Do you know where Justin is? [B]He has _____ gone. (= *a long period of time ago, before you expected*)
- 3 Emily and Jack haven't come _____.
- 4 [A]Are Karl and Sam here? [B]Yes, they have _____ come. (= *a short period of time ago*)
- 5 [A]Have you read this book _____? [B]No, I'm still reading it.
- 6 [A]What time is Jake coming? [B]He has _____ come. (= *a long period of time, before you expected*)
- 7 [A]I haven't read this book _____. [B]You should read it, it's very interesting.
- 8 [A]Where is Richard? [B]I've _____ seen him in the corridor. (= *a short period of time ago*)
- 9 [A]Have you finished your project? [B]No, I haven't. I haven't even started it _____.

- 10 [A]Jake, this is Mary. [B]Yes, I know. We have _____ met. (= *a long period of time, before you expected*)

13 Rewrite the following sentences into the Present Perfect form. Use correct adverbs.

- 1 I am learning a new grammar rule.
- 2 Jane is telling them an interesting story.
- 3 Are you watching the news?
- 4 The students are writing an essay.
- 5 I am writing my course work.
- 6 Pete is not translating an article from English.
- 7 The teacher is explaining the new material.
- 8 We are buying the new equipment for our laboratory.
- 9 Is Susan making a new dress for the graduation ceremony?
- 10 Kate is cleaning her room.
- 11 I am eating my breakfast.



14 Complete the sentences using the Present Perfect (negative) + *today, this morning, this year, this semester* etc. as in the example.

Example: I saw Kate yesterday but I haven't seen her today.

- 1 Cary studied hard last semester but _____.
- 2 It rained a lot last autumn but _____.
- 3 The company earned much money last year but _____.
- 4 Our college basketball team won many games last season but _____.
- 5 I read all the email messages yesterday but _____.
- 6 We won the competition last year but _____.
- 7 Sarah watched a film last week but _____.
- 8 George cooked dinner for his family yesterday but _____.
- 9 We prepared two course projects last term but _____.



15 Correct the following sentences.

- 1 I've lived here since ten years.
- 2 I've studied English for 1998.
- 3 I've known her since a long time.
- 4 I have yet finished my homework.
- 5 You have ever been to Spain.
- 6 Our team hasn't already developed a new project.
- 7 I haven't eaten sushi for I lived in Japan.
- 8 She has been a student since too long.

MORE WORDS AND PHRASES TO KNOW

accessible – доступный

activity – занятие; деятельность; оживление

agreed by a government – согласованный правительством

are stored – хранятся

attempt – попытка

availability – доступность

both... and... – и... и...

competition – состязание, соревнование

confidentiality – конфиденциальность

coverage – репортаж

emphasis – особое внимание

essay – очерк, сочинение

grade – класс (в школе)

graduation ceremony – церемония вручения дипломов

harmful – вредный

helicopter – вертолёт

integrity – честность, принципиальность

is intercepted – перехватывается

is used – используется

look for – искать

military communications network – сеть военных средств связи

occur – случаться, происходить

order – порядок; приказ

particular – конкретный, особенный; особый, заслуживающий внимание

prevent unauthorized access – предотвращать несанкционированный доступ

provide a service – предоставлять услугу

references – рекомендации

statement – утвердительно предложение

stative verb – глагол состояния, статальный глагол, стативный глагол

unstated time – неустановленное время

2d MOBILE SECURITY

VOCABULARY

1 Read and learn the words and phrases.



mobile security	безопасность мобильных устройств
employ	использовать; нанимать
means	средство, способ
arrange	систематизировать
transmit	передавать
broad term	общее понятие
cover	включать в себя
reduce a risk	уменьшить риск
authenticate	удостоверять
restrict access to	ограничивать доступ к
undoubtedly	несомненно
inadvertently	неумышленно
basic advice	основной совет
make sure	удостовериться, убедиться
check the ratings	проверить рейтинг
figure out a reason	понимать причину
permission	разрешение
common sense	здравый смысл
cautious	осмотрительный, осмотрительный
encounter	сталкиваться с

2 Match the four mobile devices to their definitions.

smartphone	tablet	netbook	laptop
A group of four mobile devices: a smartphone, a netbook, a tablet, and a laptop, all showing a world map on their screens, representing various mobile computing devices.			<ul style="list-style-type: none">• It is a computer that is small enough to be carried around and used where you are sitting.• It is a small laptop computer designed mainly for using the internet.• It is a mobile phone that can be used as a small computer and that connects to the internet.• It is a small, flat computer that is controlled by touching the screen or by using a special pen.

3 Choose the correct word to complete the sentences.

means / mobile security

- 1 We had no ... of communication.

permission / the ratings

- 2 He took the smartphone without

encounter / figure out

- 3 I never could ... what she saw in him.

broad term / restrict

- 4 I ... myself to one cup of coffee a day.

basic / cautious

- 5 She is ... about lending money to anyone.

access / advice

- 6 She asked me for ... about mobile security.

transmit / undoubtedly

- 7 It is ... one of the best netbooks of the year.

Inadvertently / Make sure

- 8 ... he's honest before you lend him your laptop.

common sense / cover

- 9 The books ... European history from 1789 – 1914.

reason / reduce a risk

- 10 Is there any particular ... why he doesn't want to come?

employ / security

- 11 Companies ... tactics to persuade us to buy their tablets.

arrange / authenticate

- 12 They used different tests to ... the claim that the skeleton was two million years old.



4 Find the English equivalent to the word or phrase.

- 1 графический ключ
- 2 биометрический считыватель
- 3 личный опознавательный код
- 4 пароль
- 5 сканер отпечатка пальца
- 6 сканер сетчатки глаза

- a personal identification number (PIN)
- b pattern screen lock
- c password
- d fingerprint reader
- e eye scanner
- f biometric reader



READING

5 Read and translate the information about mobile security.

Mobile Security



Nowadays, more and more users and businesses **employ** smartphones, tablets, netbooks, laptops, and other mobile devices as communication tools. People also use them as a **means** of planning and organizing their work and private life. These technologies are the source of new risks. These devices collect and **arrange** much sensitive information. Access to them must be controlled to protect the privacy of the user and the intellectual property of the company.

Mobile security involves protecting both personal and business information. People store and **transmit** it from smartphones, tablets, netbooks, laptops, and other mobile devices. The term mobile security is a **broad** one. It **covers** everything from protecting mobile devices from malware threats to **reducing risks**. Mobile security also deals with securing mobile devices and their data in the case of theft, unauthorized access or accidental loss of the mobile device.

Mobile security refers to the means by which a mobile device can **authenticate** users and protect or **restrict access to** data that is on the device. Mobile security studies the using of passwords, personal identification numbers (PIN), pattern screen locks or more advanced forms of authentication. They consist of fingerprint readers, eye scanners and other forms of biometric readers.

Malware is **undoubtedly** a threat to mobile device owners. It is in apps and updates that you must choose to install. If you are careful and you do a little research, you can avoid **inadvertently** downloading something harmful. There are some **basic pieces of advice** to keep your mobile device safe and secure from malware.

- Avoid unknown sources and do not install apps and games unless you are certain it is safe.
- **Make sure** that you **check the ratings** and read the reviews from other users on each app and game.
- Try to **figure out a reason** why the app or game need each **permission**, and if you cannot, do not install.

If you apply some **common sense** and are a little **cautious**, the risk of downloading malware is minimal. Stay safe with a mobile device and you will never **encounter** any malware problems.



6 Find the paragraphs in the text that tell about these things.

- A Malware
- B Basic advices
- C Staying safe
- D Mobile devices
- E Forms of authentication
- F The meaning of *mobile security*



7 Answer the questions about mobile security.



- 1 What mobile devices do users and businesses employ?
- 2 Why is access to mobile devices important?
- 3 What does mobile security involve?
- 4 Why is the term *mobile security* broad?
- 5 What does mobile security also refer to?
- 6 What forms of authentication do you know?
- 7 What is a threat to mobile devices owners?
- 8 Is it possible to avoid downloading something harmful?
- 9 Why should we avoid unknown sources?
- 10 How can the ratings and downloads of apps or games by other people help?
- 11 Is it possible to stay safe with a mobile device? Why? Why not?
- 12 What advice can you give to avoid malware?

8 Use the information from the text to complete the sentences.

- 1 M _____ s _____ deals with accidental loss of the mobile device.
- 2 Mobile devices collect and a _____ much sensitive information.
- 3 Mobile security is a b _____ t _____.
- 4 Mobile security studies how to r _____ malware r _____.
- 5 You can avoid i _____ downloading harmful if you are careful.
- 6 C _____ t _____ r _____ and read review from other users on each app.
- 7 Apply some c _____ s _____ and be cautious when you employ a mobile device.
- 8 Stay safe with a mobile device and you'll never e _____ malware problems.



GRAMMAR

9 Past Simple & Present Perfect. Study the information.

Past Simple or Present Perfect

The illustration shows two scenes related to basketball. On the left, a player in a blue jersey with the number 81 is dribbling the ball while being guarded by another player in a red jersey. A coach in a grey shirt and purple pants stands nearby, pointing at the player. On the right, two players in basketball uniforms are shown; one is holding a basketball and the other is in a shooting stance.

*Mike **won** many medals when he was an athlete. (He is no longer an athlete. He is a coach. He cannot win another medal.)*

*Ben is an athlete. He **has won** many medals. (He is still an athlete. He may win some more medals.)*

10 Choose the correct variant.

- 1 Maggie **gave** / **has given** me a nice birthday present yesterday.
- 2 Sam **just went** / **has just gone** to the shop.
- 3 Helen **didn't write** / **hasn't written** to us last month.
- 4 Pamela **wrote** / **has written** a couple of letters yesterday morning.
- 5 **Were you ever** / **Have you ever been** to Italy?
- 6 My brother **was born** / **has been born** in 1998.
- 7 **Did you meet** / **Have you met** our new teacher yesterday?
- 8 I can see Peter. He **just parked** / **has just parked** in front of the house.
- 9 I **broke** / **have broken** my leg last summer when I **fell down** / **have fallen down** the roof.

11 Explain the difference between of using past simple and present perfect.

- 1 It _____ (*rain*) yesterday.
The grass is wet and the road is dirty because it _____ (*rain*).

- 2 I _____ (*call*) Peter a month ago.
I _____ (*call*) Peter two times today and I'll try again in the evening.

- 3 I _____ (*be*) to London when I was 14.
[A]_____ you ever _____ (*be*) to Cardiff? [B]Yes, I _____ (*be*) there two times.



- 4 I _____ (*go*) to Edinburgh last year.
I _____ (*be*) to Belfast. This is a beautiful city.

12 Choose the best variant to complete the sentence.

- 1 Don't worry about your letter. I _____ it the day before yesterday.
A sended **B** have sent **C** sent
- 2 _____ raining yet?
A Did it stop **B** Is it stopped **C** Has it stopped
- 3 My parents _____ to the USA many times.
A have been **B** were **C** have being
- 4 We _____ a holiday last year.
A didn't have **B** haven't had **C** hadn't had
- 5 [A]Have you got any money? [B]Yes, I _____ it from my brother.
A borrowed **B** have borrowed **C** did borrow
- 6 [A]Are you tired? [B]Yes, a little. I _____ the ceiling today.
A have painted **B** painted **C** paint
- 7 I can't find my umbrella. I think somebody _____ by mistake.
A took **B** takes **C** has taken
- 8 When I was a child, I _____ late for school.
A have always been **B** was always late **C** had always been
- 9 [A]Where is Jane? [B]She _____ the shops. She'll be back soon.
A went **B** has gone to **C** has been to
- 10 My husband _____ in the bank for three years since 2010 to 2013.
A has worked **B** had worked **C** worked
- 11 Mom _____ her car keys, so we have to open the door by force.
A has lost **B** lost **C** losed
- 12 One of the passengers _____ in that accident.
A has died **B** died **C** have died
- 13 My sister and her husband _____ since last Christmas.
A were married **B** have married **C** have been married
- 14 When _____ university?
A had Jill graduated **B** has Jill graduated **C** did Jill graduate

13 Correct the mistakes.

- 1 Have you yet worked in an office?
- 2 He has been married since 10 years ago.
- 3 He wrote ten bestsellers already.
- 4 I have won three awards last year.
- 5 I haven't played the guitar for I was nine.
- 6 Jack has broken his arm yesterday.
- 7 Melanie lived in New York since 2013.
- 8 Our teacher has gone to London twice.
- 9 She's my best friend and I know her for ten years.
- 10 They has arrived a few hours ago.



14 Complete the sentences.

- 1 They got that flat twelve years **ago / for / since**.
- 2 They have lived there **ago / for / since** 2004.
- 3 Jill hasn't been there **ago / for / since** three years.
- 4 Dad isn't at home. He went to the work an hour **ago / for / since**.
- 5 He has worked for this company **ago / for / since** April.
- 6 Oh, John! As usual you are late. I've waited for you **ago / for / since** 11 a.m.
- 7 I phoned him two days **ago / for / since**.
- 8 We haven't seen each other **ago / for / since** that evening at Mr. Grey.
- 9 I have never sailed again **ago / for / since** that journey.
- 10 Two years **ago / for / since** Derry bought a car.
- 11 I haven't spoken to Mary **ago / for / since** Christmas.
- 12 [A]Is it snowing? [B]Yes, it started two hours **ago / for / since**.
- 13 Our family haven't heard from him **ago / for / since** five months.
- 14 Mr. Pembroke doesn't often mow the lawn. He hasn't cut the grass **ago / for / since** ages.

15 Put the verb into the correct form: *past simple* or *present perfect*.

- 1 David _____ in a bar before going abroad. *work*
- 2 _____ you ever _____ in a big company? *work*
- 3 We _____ to Paris three times. Next week we are going there gain. *be*
- 4 Where _____ you _____ on holiday last year? *go*
- 5 Our town is very different now. It _____ a lot. *change*
- 6 What time _____ you _____ home? *get*
- 7 When I _____ young I always _____ jokes on my friends on April 1. *be / play*
- 8 Jane _____ in New York since she _____ 12. *live / be*
- 9 Emma _____ three different jobs since she _____ from the university and now she works in a bank. *have / graduate*

MORE WORDS AND PHRASES TO KNOW

accidental loss – случайная потеря

application – прикладная компьютерная программа

apply – применять

biometric reader – биометрический показатель

ceiling – потолок

claim – заявлять, утверждать

couple – несколько, пара

eye scanner – сканер сетчатки глаза

fingerprint reader – сканер отпечатка пальца

force – сила

graduate – окончить учебное заведение, получить диплом

honest – откровенный, правдивый, честный

in front – впереди

joke – анекдот, шутка

lawn – лужайка, газон

lend money to sb – давать взаймы деньги кому-либо

must be controlled – должен контролироваться

more advanced forms of authentication – более усовершенствованные разновидности проверки подлинности

mow – косить

pattern screen lock – графический ключ

personal identification number – личный опознавательный код

persuade – уговаривать, убеждать

refer to – относиться к

review – отзыв

sail – совершать плавание; управлять парусным судном

skeleton – скелет

source – источник

threat – угроза

tool – инструмент, средство

update – новая версия

2e EDUCATION CLIP: TUSUR (TOMSK STATE UNIVERSITY OF CONTROL SYSTEMS AND RADIOELECTRONICS)

VOCABULARY

1 Read and learn the words and phrases.

leading engineering university	ведущий инженерный университет
experienced and qualified	опытный и квалифицированный
cooperate with	сотрудничать с
foreign development	иностранный, зарубежный развитие
knowledge and skills	знания и умения
be in demand	пользоваться спросом
modern society	современное общество
establish	основывать, создавать
win (– won – won) a competition	выигрывать соревнование
nowadays	теперь, в наше время
full-time education format	очная форма обучения
evening education format	вечерняя форма обучения
extramural education format	заочная форма обучения
native	родной
dynamic and exciting life	динамичная и захватывающая жизнь
various festivals and contests	различные праздники и конкурсы
sporting event	спортивное мероприятие
celebrate	праздновать
wave a flag	разевать флаг

2 Here the letters are according to the ABC. What words are here?

- 1 a e v w
- 2 e e n t v
- 3 a d d e m n
- 4 a f m o r t
- 5 g i n o p r s t
- 6 a a d n o s w y
- 7 a b c e e e l r t
- 8 a c e e o o p r t
- 9 a c d e i n o t u
- 10 a a e l m r r t u x
- 11 e i i n r s t u v y
- 12 e e e g g i i n r n n



3 Complete the tables.

Synonyms	
contest	1
progress	2
found	3
party	4
banner	5
information	6
important	7
talent	8
people	9
diverse	10

Antonyms	
static	11
morning	12
boring	13
inexperienced	14
native	15
death	16
old	17
foreign	18
unqualified	19
lose	20

4 Fill in the gaps with the correct word. Write the extra word.

development / foreign / native

- 1 It is from another country. It is _____.
- 2 It is the place where you are from. It is a _____ town / city / country.

dynamic / knowledge / life

- 3 It is a lot of information. It is _____.
- 4 It is the time between a person's birth and their death. It is _____.

celebrate / skills / win

- 5 People get a prize in a game or competition. They _____.
- 6 People show that a day or an event is important. They _____.

competition / contest / exciting

- 7 It is a competition or an election. It is a _____.
- 8 People test their strength, knowledge and skill. It is a _____.

experienced / qualified / wave

- 9 People pass exams or courses. They are _____.
- 10 People have skill and knowledge. They are _____.

flag / various / university

- 11 It is a symbol of a country. It is a _____.
- 12 It is a place where students study to get a degree. It is a _____.

cooperate / establish / society

- 13 People start a company or an organization. They _____ it.
- 14 People work together with someone to achieve the same aim. They _____.

READING

5 Read and translate the information about the university you study at.

Tomsk State University of Control Systems and Radioelectronics



Tomsk State University of Control Systems and Radioelectronics is one of the **leading engineering universities** in the Russian Federation. TUSUR has **experienced and qualified** professionals, professors and doctors of science.

The university **cooperates with** more than 20 **foreign** universities in education, research, and development. Students get **knowledge and skills**

that **are in demand in modern society**. TUSUR is very proud of its graduates.

TUSUR is a young university. The university first opened its doors in 1962. In 2004 a student business incubator was **established** at TUSUR. In May 2006 the university **won the competition** in the national ‘Education’ project.

Nowadays 13 thousand students study at 13 faculties. There are three **education formats** at the university: **full-time, evening and extramural**. The Faculty of Distant Education gives the students an opportunity to study at the university and work in their **native** cities and towns.

TUSUR students have a very **dynamic and exciting life**. At the university there are a lot of clubs. A student can try dancing, sports, music or poetry. The university organizes **various festivals and contests**: KVN, the beauty contest ‘Miss TUSUR’, photo contests and **sporting events**. Every year TUSUR students **celebrate** Radio Day (on 7 May). The students of the university go across the city, sing songs, **wave flags** and hold balloons.

6 Answer the questions about TUSUR.

- 1 What is the full name of the university you study at?
- 2 Who are teachers of the university?
- 3 Do foreign universities cooperate with TUSUR?
- 4 Is TUSUR an old university?
- 5 When was TUSUR founded?
- 6 When was a student business incubator established?
- 7 How many students are there at TUSUR?
- 8 How can students get higher education at TUSUR?
- 9 What do TUSUR students do in their free time?
- 10 Do TUSUR students celebrate any special day?

7 TUSUR today. Match the numbers with words and expressions.



10	Bachelor's degree programmes
26	Master's degree programmes
30	Postgraduate degree programmes
41% of	Students
80% of	International students
more than 150	Academic & Research Staff
940	Spin-off companies
2 100	Regional hi-tech product
11 000	University income comes from research

8 Match the names of TUSUR faculties and their Russian equivalents.

Faculty of Radio Engineering

Факультет инновационных технологий



Faculty of Radio Design

Юридический факультет



Faculty of Computer Systems

Радиотехнический факультет



Faculty of Control Systems

Радиоконструкторский факультет



Faculty of Electronic Engineering

Факультет электронной техники



Faculty of Innovation Technologies

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Факультет безопасности



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Экономический факультет



Faculty of Distance Learning

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Faculty of Extramural and Evening Education

Факультет дистанционного обучения



Faculty of Advanced Training

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GRAMMAR

9 Plurals. Study the information. Write the plurals of these nouns.

Nouns usually add **-s** in the plural: *birds, shops, taxis, miles*.

If the noun ends in **-s, -ss, -sh, or -ch**, it adds **-es**: *buses, classes, wishes, matches*.

If the noun ends in **a consonant + -y**, the **-y** changes to **-i + -es**: *city – cities*.

But if the noun ends in **a vowel + -y**, the **-y** doesn't change: *boy – boys*.

Some nouns are irregular:

person – people, man – men, woman – women, child – children.

*Example: key – **keys***

1 state	6 republic	11 language
2 person	7 bus	12 day
3 river	8 car	13 country
4 man	9 watch	14 child
5 town	10 party	15 woman

10 Put in a singular noun or a plural noun. Choose the nouns from the list.

child	population	engineer	person	day	city
party	sport	river	man	game	holiday

*Example: Football is a **game**.*

Ice hockey and biathlon are popular winter **sports**.

- 1 What's your job? – I'm an _____.
- 2 Tomsk has a _____ of about 600 thousand people.
- 3 The Ushayka is a _____ in Tomsk. It divides Tomsk into northern and southern parts.
- 4 Tomsk is one of the largest and oldest _____ in Siberia.
- 5 The president is quite popular. The _____ like him.
- 6 There are four major political _____ in Russia.
- 7 New Year's Day and Defender of the Fatherland Day are winter _____.
- 8 In Russia, _____ normally start school at the age of seven.
- 9 A week has seven _____.
- 10 Pilots are usually _____.



11 Give English equivalents of the following plural nouns. Mind the spelling and pronunciation of the plurals.

Example: карандаши – pencils

1 родители	9 страны	17 месяца
2 дети	10 города (<i>2 variants</i>)	18 поезда
3 люди	11 деревни	19 автобусы
4 мужчины	12 моря	20 такси (<i>plural</i>)
5 женщины	13 реки	21 часы (<i>3 variants</i>)
6 братья	14 адреса	22 словари
7 партии	15 церкви	
8 государства	16 праздники	

12 Countable & Uncountable Nouns. Study the information in the table. Which is right? Complete the sentences.

Countable nouns have **plurals**, and **can** be used with *a/an*.

an idea – ideas a flag – flags a president – presidents

Uncountable nouns have **no plurals**, and **cannot** normally be used with *a/an*:

oil, gas, energy, culture, weather, water, etc.

Some nouns are **both countable and uncountable**.

I like coffee. *I would like a (cup of) coffee.*

She never eats cheese. *I like soft French cheeses.* (=kinds of cheese)

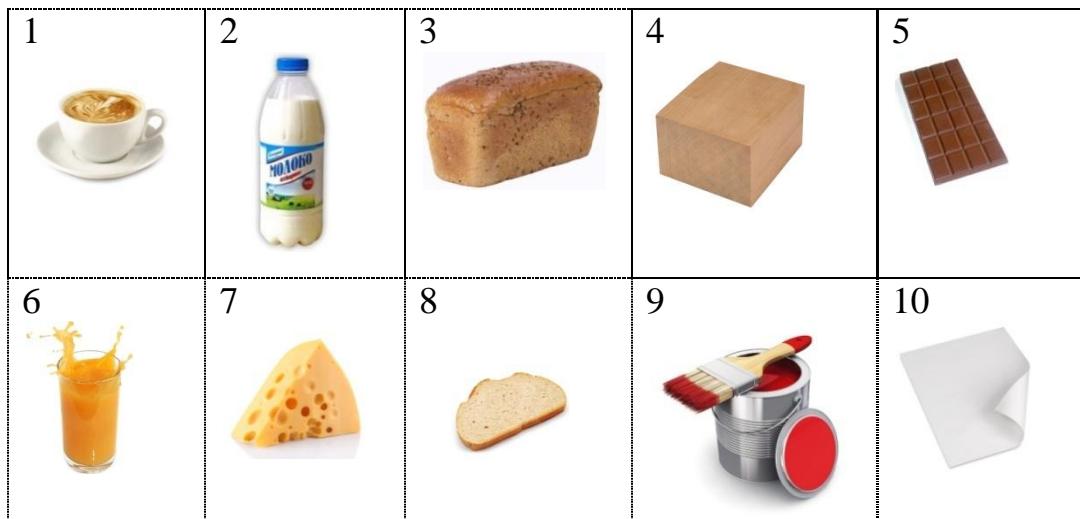
Example: Do you want a chicken / chicken or fish? chicken is right

- 1 Would you like glass / a glass of water?
- 2 Three black coffees / coffee, please.
- 3 It's fine weather / a fine weather today.
- 4 A sugar / Sugar is bad for our health.
- 5 Oil / An oil usually does not mix with water.
- 6 Swiss watch / watches are very expensive.
- 7 Could I have two tea / teas and a cup of coffee, please?
- 8 I don't like a tea / tea without milk.
- 9 Moneys / Money isn't everything.
- 10 Maria Sharapova has got green eye / eyes.
- 11 Rock music / A rock music is quite popular in Russia.
- 12 Many people in Russia live in city / cities.
- 13 I like Russian literature / a Russian literature.
- 14 The Russian Federation is one of the largest producers of an oil / oil.



13 What are the things in the pictures? Write *a ... of ...* for each picture. Use the words in the boxes.

Example: a cup of coffee



bottle piece can slice bar glass cup loaf sheet piece

wood paint bread chocolate bread coffee juice milk paper cheese

14 Some of these sentences are right but most are wrong. Correct the mistakes where necessary.

Example: I'm going to buy some flowers.
I like classical and rock musics.

OK
I like classical and rock music.

- 1 I don't know these two mens.
- 2 I do not like such weathers.
- 3 I would like a glass of mineral water.
- 4 Denis is married and has two childs.
- 5 Would you like a chocolate?
- 6 Knowledge is power.
- 7 The city centre is usually full of tourist.
- 8 Do you know many persons in Tomsk?
- 9 How many universitys are there in Tomsk?
- 10 About 600 thousand peoples live in the city.
- 11 Tomsk has fine wooden and stone architectures.
- 12 There are nine higher education institution and fifteen research institute in Tomsk.
- 13 The coat of arm of Tomsk is a silver horse in a green field.
- 14 There are some factorys in Tomsk.
- 15 Tomsk is famous for its beautiful wooden house.



15 Possessive 's. Study the information. Rewrite these A with 's, B with of the.

We use possessive 's to show that something belongs to someone or something.

Is that Olivia's bag? Show me James's (OR James') car.

I like Ann and Andrew's flat.

We use 's after a singular noun and ' after a plural noun.

My parents' home is in LA.

We use 's with irregular plural nouns (e.g. *children, men, people, women*).

'Cosmopolitan' is an international women's magazine.

We normally use possessive 's for *people*. For *things, places* etc. we generally use an *of*-phrase.

The address of the main building of TUSUR is 40 Lenin Prospect.

Washington, D.C. is the capital of the USA.

Example: his father + his job
the room + its window

his father's job
the window of the room

A

- 1 my friends + their home
- 2 his sister + her children
- 3 her children + their teacher
- 4 women + their clothes
- 5 the student + her name
- 6 John + his faculty
- 7 the teacher + his office
- 8 the professor + her lecture

B

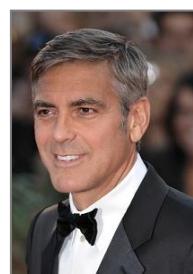
- 1 the street + its name
- 2 the problem + its cause
- 3 the town + its centre
- 4 the faculty + its dean
- 5 the report + its title
- 6 the tests + their results
- 7 Harvard University + its graduates
- 8 MIT + its president

16 Some of the following sentences have a mistake. Correct them.

Example: What is the name of this town? OK

The name of her boyfriend is Mark. *Her boyfriend's name*

- 1 Write your name at the top of the page.
- 2 The mobile number of my groupmate is 89095238677.
- 3 When is the birthday of your boss?
- 4 The film's beginning is very interesting.
- 5 This is the daughter of Victor and Ann, Maria.
- 6 George Clooney's wife is a lawyer.
- 7 Concord, California is Tom Hanks' hometown.
- 8 The residence of the MIT president is Gray House in 77 Massachusetts Ave, Cambridge, MA.
- 9 The Faculty of Arts and Sciences is the largest of the seven faculties of Harvard University.
- 10 Stanford University is one of the world's leading teaching and research universities.



2f REVISION

VOCABULARY AND READING

1 Match the following English words with their Russian equivalents.



17 accountability	q целостность, честность
18 theft	r неотказуемость
19 integrity	s вторжение
20 interception	t перехват
21 authentication	u уведомлять
22 reliability	v нарушать
23 intrusion	w достоверность
24 fraud	x поддерживать, сохранять
25 availability	y ставить под угрозу
26 permission	z мошенничество
27 maintain	aa доступность
28 disrupt	bb подлинность
29 compromise	cc разрешение
30 notify	dd кража
31 non-repudiation	ee конфиденциальность
32 confidentiality	ff подотчётность

2 Match the words to make 16 phrases.

17 make an	q intent
18 communications	r security
19 hit a	s message
20 internet	t send button
21 check the	u policy
22 broad	v effort
23 basic	w security
24 text	x term
25 reduce	y a risk
26 network	z advice
27 wide area	aa security
28 malicious	bb sure
29 privacy	cc ratings
30 mobile	dd sense
31 make	ee security
32 common	ff network



3 Write the prepositions instead of the numbers in brackets.

- ✓ We apply computer security (1) computing devices.
- ✓ The internet is an insecure channel (2) exchanging information.
- ✓ Attacks, spyware and adware, worms and viruses, Trojan horses and denial (3) service, data interception and theft are spread over the internet.
- ✓ Every person holds on some information that is not (4) public use.
- ✓ Usually we want some information to be only accessible by our ‘friends’, but who are your ‘friends’ (5) the way, do you know?
- ✓ Certain social media sites update their privacy policies (6) time (7) time.
- ✓ Mobile security refers to the means by which a mobile device can authenticate users and protect or restrict access (8) data that is on the device.
- ✓ Try to figure (9) a reason why the app or game need each permission.

SPEAKING

4 Read and translate the following topics. Discuss them in small groups.

- 5 Computer security has three main security goals.
- 6 The internet is an insecure channel for exchanging information.
- 7 Network security refers to any activities to protect a network.
- 8 Communications security prevents unauthorized access to telecommunications.
- 9 Mobile devices are a means of planning and organizing people’s work and life.

WRITING

5 Write an essay (10-15 sentences) about the IT security.

- ✓ What does IT security mean?
- ✓ What does IT security consist of?
- ✓ What does IT security deal with?
- ✓ What can you say about the history of IT security?
- ✓ Is IT security important today? Why/Why not?
- ✓ What university should people study to become IT security specialists?
- ✓ Is IT security for home users or businesses?
- ✓ How often do people use IT security?
- ✓ Where do people use IT security?
- ✓ Does IT security have a future?



GRAMMAR

6 Circle the correct answer.

- 1 My best friend **inherited / has inherited** a lot of money last month.
- 2 We **used / have used** the same bank for the last ten years and don't want to change.
- 3 **Did you pay / Have you paid** back the money yet?
- 4 I **took / have taken** \$100 out of the cash machine an hour ago.
- 5 **Did you ever have / Have you ever had** problems with a friend about money?
- 6 **I called / I've called** the bank yesterday and they are going to give us the loan.
- 7 The company **didn't give / hasn't given** us a pay rise last year.
- 8 When **did she borrow / has she borrowed** the money from you?
- 9 We only **parked / have parked** the car an hour ago but they've charged us for two hours!
- 10 I **never owned / have never owned** money to the bank.

7 Complete the dialogues with the correct form of the verbs in brackets.

- 1 A How long _____ you _____ your camera? (have)
B Not long. I _____ it about two months ago. (buy)
- 2 A I _____ shopping at the new mall on Saturday. _____ you _____ there yet? (go, be)
B No, I _____ time yet. _____ you _____ anything? (not have, buy)
- 3 A My grandparents _____ each other for 55 years – since they were eight years old! (know)
B Where _____ they _____? (meet)
A At school. They _____ in the class. (be)
- 4 A Jim _____ a new digital TV. It _____ him a fortune. (just / get, cost)
B Really? I _____ he _____ any money. (think, not have)
A _____ you _____? He _____ \$10,000 on the lottery last week. (not hear, win)
- 5 A _____ you _____ your homework yet? (do)
B Yes, I _____ it this morning, on the bus to school. (do)

8 Choose the correct variant to complete the sentences.

Interviewer Today I'm talking to Harry Fox, the film director. Tell me, Harry, how long *were you / have you been* a film director?

Harry Well, I *studied / have studied* film-making at university in the 1990s, and I *worked / have worked* as a director for over 25 years now.

Interviewer What *was the first film / has the first film been* you *made / have made*?

Harry *A Prisoner's Life* in 2003, but I *lost / have lost* the only copy a year later so nobody *saw / has seen* it since then! My first successful film *was / has been* *Always*, which *came out / has come out* in 2007.

Interviewer And how many countries *did you visit / have you visited* ? *Did you make / Have you made* films outside Britain?

Harry I *didn't work / haven't worked* in many countries – only Britain, Germany, and Italy. Last month I *flew / have flown* to Berlin and *spent / have spent* two weeks filming there.

Interviewer When *did you go / have you gone* to Italy?

Harry In 2015. I *wanted / have wanted* to make a TV documentary called *North and South*, about regional differences in Europe, and I *drove / have driven* all the way from the Alps to Sicily.

Interviewer What are the best things about your jobs?

Harry The travel and the people. I *travelled / have travelled* all over the world, going to film festivals and so on. And I *met / have met* some great people.

Interviewer *Did you start / Have you started* any new projects recently?

Harry Yes, last week I *signed / have signed* a contract for a new film set in China.

Interviewer Well, thank you, Harry – it *was / has been* very interesting talking to you ...

9 Present Simple, Past Simple, or Present Perfect. Put the verb in brackets in the correct tense.

John Tilde

John Tilde is a politician. He (1) _____ (*go*) to Oxford University in 1995, and in 2002 he (2) _____ (*become*) a Member of Parliament. He (3) _____ (*be*) an MP since then. He (4) _____ (*be*) Defence Minister from 2009-2015.

He (5) _____ (*write*) three books, including his autobiography *The Time of my Life*, and a spy story called *The Time to Run*.

He is married to the artist Edna Tilde, and they (6) _____ (*have*) two children. They (7) _____ (*live*) in Oxford for 10 years, then (8) _____ (*move*) to London in 2015. They now (9) _____ (*live*) in a house in Cadogan Square in Central London. He (10) _____ (*be*) happy.

10 Write the questions about John Tilde.

- 1 What _____? – He's a politician.
- 2 When _____? – In 1995.
- 3 When _____? – In 2002.
- 4 How long _____? – Since 2002.
- 5 When _____? – From 2009 to 2015.
- 6 How many _____? – Three.
- 7 _____ he ever _____ a spy story? – Yes, he has. It's called *The Time to Run*.
- 8 What _____? – She's an artist.
- 9 How many _____? – Two.
- 10 How long _____? – For ten years.
- 11 When _____? – In 2015.
- 12 Where _____? – In a house in Cadogan Square in Central London.

3a CYBER CRIMINALS

VOCABULARY

1 Read and learn the words and phrases.

cyber criminal	компьютерный преступник
dig through trash	копаться в мусоре
intercept mail	перехватывать почту
steal people's identities	красть личную информацию людей
hack into an account	взламывать счёт
reveal the information	обнародовать информацию
infect sth with sth	заражать что-либо чем-либо
commit a cyber crime	совершать компьютерное преступление
take advantage of sth	воспользоваться чем-либо
form a criminal community	образовывать преступное сообщество
share strategies and tools	делиться стратегиями и методами
combine forces	объединять силы
launch a coordinated attack	запускать согласованное наступление
crack down on sb	принимать суровые меры относительно
from any location on the globe	с любой точки земного шара
move data	перемещать данные
trace the source of sth	устанавливать происхождение чего-либо
swipe a card through	проводить карту через <i>(читывающее устройство)</i>
out of the owner's view	вне поля зрения владельца
break into sth	вламываться во что-либо

2 Match words from the three columns to make 12 phrases.



break	down	of sth
crack	the owner's	trash
dig	advantage	sth
from	into	identities
hack	the	on sb
infect	strategies	an account
out of	through	with sth
reveal	people's	information
share	any location	of sth
steal	into	and tools
take	the source	on the globe
trace	sth	view

3 Match the nouns from the box with their definitions. What eight phrases do you know from exercise 1 where the nouns are used?

mail card	community force	data criminal	cyber crime attack
--------------	--------------------	------------------	-----------------------

- 1 someone who has committed a crime
- 2 the letters, *etc.* that are sent to or from people
- 3 crime or illegal activity that is done using the internet
- 4 the people living in one particular area or people who are considered as a unit because of their common interests, social group, or nationality
- 5 physical, especially violent, strength, or power
- 6 a violent act intended to hurt or damage someone or something
- 7 information in the form of text, numbers, or symbols that can be used by or stored in a computer
- 8 a piece of plastic that has information printed on it

4 Adjectives describe nouns. Adverbs describe verbs. Choose an adjective or adverb from the right column to complete the sentences.

- 1 The house was donated _____ in 2008. **ANONYMOUS**
- 2 She's got too much dignity to descend to writing _____ letters. **ANONYMOUSLY**
- 3 I didn't _____ see her – I just heard her voice. **ACTUAL**
ACTUALLY
- 4 We had estimated about 300 visitors, but the _____ number was much higher. **REAL**
REALLY
- 5 He's _____ going to do it this time.
- 6 There is a very _____ threat that he will lose his job.
- 7 Over time, driving just becomes _____.
- 8 I turned left _____ without thinking. **AUTOMATIC**
AUTOMATICALLY
- 9 It's a _____ journey.
- 10 We'll have to walk _____ to get there on time. **QUICK**
QUICKLY
- 11 It's a _____ asked question.
- 12 He is a _____ visitor to the US. **FREQUENT**
FREQUENTLY

READING

5 Read and translate the information about cyber criminals.

Cyber Criminals

Before the internet, criminals **dug through people's trash or intercept their mail** to steal their personal information. Now that all of this information is available online, criminals also use the internet to **steal people's identities, hack into their accounts**, trick them into **revealing the information**, or **infect their devices with malware**.

Most **cyber crimes are committed** by individuals or small groups. However, large organized crime groups also **take advantage of** the internet. These 'professional' criminals find new ways to commit old crimes, treating cyber crime like a business and **forming global criminal communities**.

Criminal communities **share strategies and tools** and can **combine forces to launch coordinated attacks**. They even have an underground marketplace where cyber criminals can buy and sell stolen information and identities.

It's very difficult to **crack down on** cyber criminals because the internet makes it easier for people to do things anonymously and **from any location on the globe**. Many computers used in cyberattacks are actually hacked and controlled by someone far away. Crime laws are different in every country too, which can make things really complicated when a criminal launches an attack in another country.

Here are a few types of attacks cyber criminals use to commit crimes. You may recognize a few of them.

- Botnet: a network of software robots, or bots, that automatically spread malware.
- Fast Flux: **moving data** quickly among the computers in a botnet to make it difficult to **trace the source of** malware or phishing websites.
- Zombie Computer: a computer that is hacked into and is used to launch malicious attacks or to become part of a botnet.
- Social engineering: using lies and manipulation to trick people into revealing their personal information. Phishing is a form of social engineering.
- Denial of service attacks: flooding a network or server with traffic in order to make it unavailable to its users.
- Skimmers: devices that steal credit card information when the **card is swiped through** them. This can happen in stores or restaurants when the card is **out of the owner's view**, and frequently the credit card information is then sold online through a criminal community.

Some identity thieves target organizations that store people's personal information, like universities or credit card companies. But most cyber criminals will target home computers rather than trying to **break into** a big institution's network because it's much easier.

6 Match the 6 types of mentioned attacks cyber criminals use to commit a cyber crime and their definitions.

- 1 It is a computer connected to the Internet. A hacker, a computer virus, or a Trojan horse makes the computer do unwanted things from far away.
- 2 It refers to psychological manipulation of people into performing actions or giving confidential information to someone.
- 3 It is the slang term for a device used to read and record the magnetic code(s) from a credit card for later illegal use.
- 4 It is a DNS (Domain Name System) technique used by botnets to hide phishing and malware delivery sites.
- 5 When the software author knows about a flaw, they have zero days to weaken its exploitation.
- 6 The word is a combination of the words *robot* and *network*. The term is usually used with a negative or malicious connotation.



7 Answer the following questions. Use the information from the text



- 1 How did criminals steal information before the internet?
- 2 Why do criminals use the internet today?
- 3 Who commits most cyber crimes?
- 4 What way do criminal communities act?
- 5 Why do criminals use an underground marketplace?
- 6 Why isn't it easy to crack down on a cyber criminal?
- 7 What types of cyber criminals' attacks do you know?
- 8 What do most cyber criminals target?

8 Fill in the gaps with the correct adverb.

- 1 The internet makes it easier for cyber criminals to commit a cyber crime a _____ y and from any location on the globe.
- 2 Many computers used in cyberattacks are a _____ y hacked and controlled by someone far away.
- 3 Crime laws are different in every country too, which can make things r _____ y complicated when a criminal launches an attack in another country.
- 4 A botnet is a network of software robots that a _____ y spread malware.
- 5 Fast Flux means moving data q _____ y among the computers in a botnet to make it difficult to trace the source of malware or phishing websites.
- 6 The card is swiped through out of the owner's view, and f _____ y the credit card information is then sold online through a criminal community.



GRAMMAR

9 The Passive Voice. Present & Past Simple. Study the information.

Form

We form the passive with the verb **to be** in the appropriate tense and the **past participle** of the main verb.

Present Simple **am / is / are + done / cleaned etc.**

Active: Somebody **cleans** this room every day.

Passive: This room **is cleaned** every day.

Many accidents **are caused** by dangerous driving.

I'm **not** often invited to parties.

How many people **are injured** in road accidents every day?

Past Simple **was / were + done / cleaned etc.**

Active: Somebody **cleaned** this room yesterday.

Passive: This room **was cleaned** yesterday.

During the night we **were all woken** up by a loud explosion.

The house **wasn't damaged** in the storm but a tree was blown down.

When **was** that castle **built**?

We use the passive:

- when the person or people who do the action are unknown, unimportant or obvious from the context;
Linda's purse was stolen. The robber was arrested (by the police).
- when the action itself is more important than the person/people who do it;
The annual meeting was held on March 20th.
- when we want to avoid taking responsibility for an action or when we refer to an unpleasant event and we do not want to say who or what is to blame;
Four people were injured in the bank robbery.

Changing from the active to the passive:

- the **active verb** remains in the same tense but changes into a passive form;
- the **object** of the active sentence becomes the **subject** in the passive sentence;
The chef cooked spaghetti. = Spaghetti was cooked by the chef.
- by + the agent** is used to say who or what carries out an action;
The sauce was made by Lisa.
- with + instrument/material/ingredient** is used to say what the agent used;
The sauce was made with fresh tomatoes.
- the agent can be omitted when the subject is *they, he, someone, somebody, people, one, etc.*
Somebody washed the car. = The car was washed.

10 Fill in the gaps with the correct form of the verb *to be*.

- 1 Satellites _____ used for communication today.
- 2 Many discoveries _____ made in the field of security in the past century.
- 3 Nowadays the information _____ sent over the internet.
- 4 Scientific articles _____ published in this journal every month.
- 5 Every second millions of calls _____ made in the world.
- 6 The concert of my favourite band _____ shown on TV last night.
- 7 A very important decision _____ made by the Dean of the faculty yesterday.
- 8 Many songs _____ sung at the music festival last week.
- 9 Everybody left the room and the TV set _____ switched off.
- 10 Do you know by whom the radio _____ invented.

11 Make sentences from the given words.

Present Simple

- 1 The fence / paint / every year.
- 2 Cheese / make / from milk.
- 3 The singer / show / every day.
- 4 Roubles / change into dollars / at the bank.
- 5 The machines / make / in Germany.



Past Simple

- 6 My car / damage / last night.
- 7 The letter / post / yesterday.
- 8 This computer / make / in the USA.
- 9 The children / give / some pens and pencils.
- 10 Several people / hurt / in the accident last night.

12 Rewrite the following sentences into the passive.

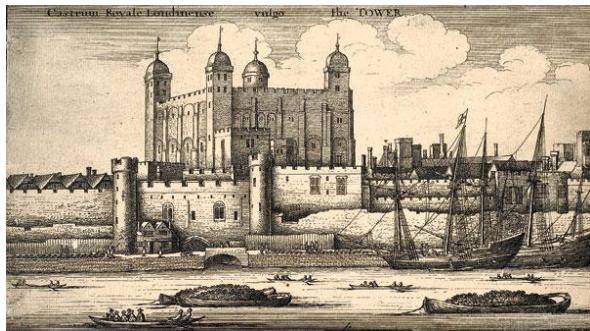
Example: Someone broke this mirror last night. – The mirror was broken last night.

- 1 They play basketball on the beach.
- 2 Someone visits the palace every weekend.
- 3 Someone cleans the rooms in the hotel every day.
- 4 They pay the workers weekly.
- 5 Someone drives this car every week.
- 6 They grow bananas in Brazil.
- 7 Someone stole all my money.
- 8 They built the house two years ago.
- 9 Someone found a bike in the lake.
- 10 They bought this coat in France.



13 Choose the best answer to complete the information.

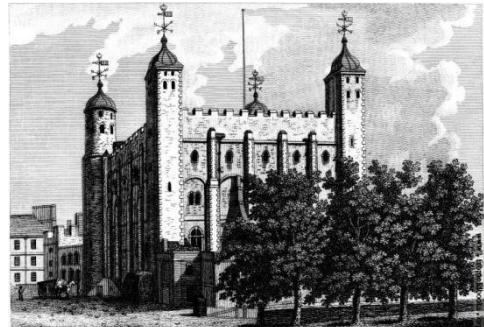
The Tower of London



The Tower of London **is built / was built** by William the Conqueror in 1078 as a castle and palace. Since that time it has been expanded to its present size, and used as an armoury, a zoo, a royal mint, a prison, and a museum. At the time when it **is / was** a prison a lot of people **are locked / were locked** in the Tower for their religious beliefs or suspected treason. Anne Boleyn, Sir Walter Raleigh and Elizabeth the First **are shut / were shut** there, too.

Spies **are imprisoned / were imprisoned** in the Tower during both World Wars. Some of the prisoners **are allowed / were allowed** to walk in the grounds, live in comfortable rooms and receive visitors. Many convicted **are publicly executed / were publicly executed** on Tower Hill. They **are beheaded / were beheaded** with the block and axe, which **are kept and shown / were kept and shown** in the Tower Armoury now.

The Jewel House **is situated / was situated** at the Tower. The collection of the Crown Jewels **is kept / was kept** in it. Saint Edward's Crown, the Imperial State Crown, and the royal sceptre **are guarded / were guarded** there. Saint Edward's Crown **is used / was used** for the coronation ceremonies. 3000 precious jewels **are contained / were contained** in the Imperial State Crown. In 1671 a daring attempt **is made / was made** to steal the Crown Jewels by a man named Thomas Blood.



14 Put the verbs in brackets into the correct tense and voice.

- 1 Not much _____ (*know*) about this phenomenon at present time.
- 2 Peter _____ (*run*) two kilometres every day before work.
- 3 The new nightclub _____ (*open*) last week.
- 4 The thieves _____ (*steal*) the money from the safe yesterday.
- 5 This photo _____ (*take*) by my father when I was three.
- 6 This tree is very old. It _____ (*plant*) in the 19th century.
- 7 I'm going home now because I _____ (*do*) all the work five minutes ago.
- 8 Jim's house is very modern. It _____ (*build*) only two years ago.
- 9 We _____ (*begin*) work early, but we _____ (*not finish*) until late.
- 10 That song _____ (*record*) in 2012, but my favourite one _____ (*record*) in 2015.

MORE WORDS AND PHRASES TO KNOW

actually – фактически, в настоящее время, в данный момент

Anne Boleyn – Анна Болейн (1501–1536), королева Англии с 1533 по 1536 годы

anonymously – анонимно

armoury – арсенал

automatically – автоматически

behead – обезглавливать

blow down – нести ветром

castle and palace – замок и дворец

convict – признавать виновным

descend – опускаться

dignity – достоинство

Domain Name System (DNS) – система доменных имён

donate – жертвовать

Elizabeth the First – Елизавета I (1533–1603), королева Англии и королева Ирландии с 1558 по 1603 годы

execute – казнить

expand – расширять(ся), распространять(ся)

frequently – часто

grounds – территория

mint – монетный двор

really – действительно

Saint Edward (or *Edward the Confessor*) – Эдуард Исповедник (1003–1066), король Англии с 1042 по 1066 годы

scepter – скипетр

Sir Walter Raleigh – Уолтер Рэли (1552–1618), фаворит королевы Елизаветы I

the Crown Jewels – Драгоценности Короны, королевские регалии и ювелирные украшения, принадлежащие не лично британскому монарху, а государству

the Imperial State Crown – Корона Британской Империи

the Tower of London – Лондонский Тауэр

Thomas Blood – Томас Блад (1618–1680), офицер

Tower Hill – Тауэр-Хилл, небольшая возвышенная местность

treason – государственная измена

William the Conqueror – Вильгельм Завоеватель (1028–1087), организатор и руководитель нормандского завоевания Англии

3b CYBER CRIMES AND PUNISHMENT

VOCABULARY

1 Read and learn the words and phrases.

target	цель, мишень
weapon	оружие
gambling	азартная игра
accessory	соучастник
victim	жертва
lose dignity	терять достоинство
bet	держать, пари ставить
severe	суровый
underestimate	недооценивать
add	добавлять
violate a policy	нарушать политику
jail	тюрьма
enhance	улучшать, усиливать
tough punishment	строгое наказание
abuse one's position	злоупотреблять положением
pay a fine	платить штраф
depend on	зависеть от
cyber defender	киберзащитник
be prosecuted	быть осужденным
under the law	в соответствии с законом

2 Match the terms and definitions.

- | | |
|-----------------|--|
| 1 accessory | a an amount of money that you pay for breaking a law or rule |
| 2 be prosecuted | b a place where criminals are kept as a punishment |
| 3 defender | c the system of official rules in a country |
| 4 fine | d when someone is punished |
| 5 jail | e a person who protects someone or something from being attacked, especially by fighting |
| 6 punishment | f something or someone that you attack, shoot at, try to hit, etc |
| 7 target | g any object used in fighting or war, such as a gun, bomb, knife |
| 8 the law | h someone who helps another person to commit a crime but does not take part in it |
| 9 victim | i someone who has been hurt, damaged, or killed or has suffered |
| 10 weapon | j to accuse someone of a crime in a law court |

3 Complete the sentences with the words *in italics* to find an extra word.

abuses / adds / lose

- 1 I hope he doesn't _____ his job.
- 2 Then there's the service charge which _____ another ten percent to the bill.

accessory / bet / pay

- 3 I _____ him a dollar that I was right.
- 4 You can _____ by cash or credit card.

cyberdefender / depends / policy

- 5 She _____ on her son for everything.
- 6 It is company _____ to help staff progress in their careers.

dignity / law / prosecuted

- 7 No one was _____ for the murders.
- 8 He behaved with great _____ and courage.

enhanced / punishment / severe

- 9 Winning that award greatly _____ her reputation.
- 10 He had to stay in his bedroom as a _____ for fighting.

fine / targets / violate

- 11 The court gave her two weeks to pay the _____.
- 12 Countries that _____ international law will be dealt with severely.

gambling / tough / underestimate

- 13 _____ can be an addictive habit.
- 14 Many people _____ the cost of owning a car.



jail / victim / weapon

- 15 He ended in _____.
- 16 Police have found the murder _____.

4 Match the phrases and their English equivalents.

- 1 включать в себя преступление
- 2 дополнительный штраф
- 3 изменять данные
- 4 кражи личной информации
- 5 ложная информация
- 6 недавно
- 7 обнародовать информацию
- 8 разрушительная атака
- 9 совершать киберпреступление
- 10 терять деньги

- a commit a cyber crime
- b damaging attack
- c identity theft
- d alter data
- e reveal information
- f lose money
- g additional fine
- h false information
- i cover a crime
- j in recent years

READING

5 Read and translate the information about cyber crimes and punishment.

Cyber Crimes and Punishment

A cyber crime is a crime that is committed with the help of a computer or a communication device and a network, like the internet. According to the United States Department of Justice, there are three different types of cyber crimes.

- The computer as a **target** – attacking other people's computers with malware or other damaging attacks.
- The computer as a **weapon** – committing 'traditional' crimes that can be committed offline too, such as theft or illegal **gambling**.
- The computer as an **accessory** – using a computer to store illegal or stolen information.

Some examples include sending spam emails (spamming), stealing personal information (identity theft), breaking into someone's computer to view or alter data (hacking) and tricking someone into revealing their personal information (phishing).

Victims of cyber crimes can **lose their dignity**, their money, their jobs, and their good name, and it can take years to repair the damage. Remember, if it's a crime offline, you can **bet** it's also a crime online, and it can have just as **severe** of a punishment.

Different countries have different laws that cover cyber crimes. Don't **underestimate** the seriousness of committing cyber crimes. Here are some examples of the punishment for cyber crime in the United States.

- The minimum punishment for spamming is a fine of up to \$11,000. Additional fines **are added** if the spammer **violated policies** or used automated bots to collect email addresses. Spammers can be sent to **jail** if they used false information or a computer they weren't allowed to use.
- The laws covering identity theft were **enhanced** in 2004, requiring **tougher punishments** to match the seriousness of the crime. Identity thieves can go to jail for up to five years. There are also punishments for identity theft used to commit terrorist acts and for people who **abuse their position** for identity theft.
- Hacking is covered under a Federal law addressing fraud in connection with computers. Punishments range from **paying a large fine** to going to jail for up to 20 years, **depending on** the seriousness of the crime and how much damage the hacker has done.

Due to the increase in cyber crimes in recent years, many governments have enhanced their cyber crime laws. However, they still need the help of **cyber defenders** in tracking down cyber criminals. It's important that you report cyber crimes, like spam, so that the criminals behind them can **be prosecuted** and fined **under the law**.

6 Use the words from the tables to complete the sentences.

spamming	identity theft	hacking	phishing
----------	----------------	---------	----------



- 1 When a person tricks someone into revealing their personal information, the cyber crime is called
- 2 When a person steals personal information, the cyber crime is called
- 3 When a person sends spam emails, the cyber crime is called
- 4 When a person breaks into someone's computer to view or alter data, the cyber crime is called

target	weapon	accessory
--------	--------	-----------

- 5 When a person use a computer to store illegal or stolen information, they use the computer as a
- 6 When a person attacks other people's computers with malware or other damaging attacks, they use the computer as a
- 7 When a person commits 'traditional' crimes that can be committed offline too, such as theft or illegal gambling, they use the computer as a



7 Answer the questions.

- 1 What is a cyber crime?
- 2 How many types of cyber crimes are there according to the United States Department of Justice?
- 3 What can victims of cyber crimes lose?
- 4 What is a minimum punishment for spamming?
- 5 What is a maximum punishment for identity theft?
- 6 What is a minimum punishment for hacking?
- 7 What is a maximum punishment for hacking?
- 8 Why is it important to report cyber crimes?



8 Use the information to translate the words and phrases.



- | | | | |
|---|----------------|----|------------------|
| 1 | вредоносное ПО | 8 | повреждение |
| 2 | хранить | 9 | позволять |
| 3 | незаконный | 10 | требовать |
| 4 | красть | 11 | мошенничество |
| 5 | вламываться | 12 | из-за увеличения |
| 6 | просматривать | 13 | правительство |
| 7 | обманывать | 14 | сообщать |

GRAMMAR

9 The Passive: Present Simple & The Past Simple. Study the information.

Present Simple Passive

Positive English is **spoken** all over the world.

Negative My children **aren't helped** with their homework.

Question Where **is rice grown?**

Past Simple Passive

Positive The animals **were frightened** by a loud noise.

Negative The thief **wasn't seen** by anyone.

Question **Were** the plants **watered** last night?

10 Make the following sentences negative.

- 1 Jam is made from fruit.
- 2 The dog is walked by the boys every day.
- 3 Our newspaper is brought by a boy every morning.
- 4 Mushrooms are collected in winter.
- 5 The waiter was asked to bring some water.
- 6 The grass was cut by Andrew.
- 7 An interesting book was published by the company.
- 8 We were invited to a concert last Sunday.
- 9 Alice was woken up at 7 o'clock by her mother.
- 10 The meeting was attended by several important scientists.



11 Respond to the situations with a negative sentence using the words and word combinations after 'but'.

Example: Cars are made at this factory, but bicycles **are not made at this factory**.

- 1 Glass is made of sand, but paper _____.
- 2 Films are watched by many people, but sports programmes _____.
- 3 Our house was built of wood, but their house _____.
- 4 My dresses were made by my mother, but jackets _____.
- 5 Bread was sold in this shop, but milk _____.
- 6 My books are kept on the shelf, but exercise books _____.
- 7 This apple tree was planted by me, but that cherry tree _____.
- 8 Apples are grown in Belarus, but oranges _____.
- 9 Yesterday the words were learnt by students, but rules _____.
- 10 My younger sister is usually given cereals for supper, but my elder brother _____.



12 Put the words in order to make passive questions.

- 1 accepted? / Is / my apology
- 2 Are / eagles / found / in Alaska?
- 3 caught / last week? / the thieves / Were
- 4 by the police? / seen / the accident / Was
- 5 the beans and carrots / cooked / together? / Were
- 6 always / Are / in the English language? / the tests / written
- 7 built / in 1889? / the Eiffel Tower / Was
- 8 opened? / the first underground railway / was / Where

13 Write questions in the Passive form for these answers.

- 1 Yes, it is. Rice is grown in Spain.
- 2 Yes, it is. Portuguese is spoken in Brazil.
- 3 Yes, it is. The song is sung by his brother.
- 4 No, it isn't. The story isn't known.
- 5 No, they aren't. Elephants aren't found in this area.
- 6 Yes, it was. Sushi was first cooked in Japan.
- 7 Yes, he was. Max was told to be quiet.
- 8 Yes, it was. New York was named after the British city of York.
- 9 No, it wasn't. The bicycle wasn't sold by my father.
- 10 No, they weren't. The trees weren't cut down.



14 Choose the correct variant.

- 1 Chicken soup ... on Sundays.
 a are cooked **b** is cook **c** is cooked
- 2 The car ... last afternoon.
 a be washed **b** is washed **c** was washed
- 3 Cartoons ... by the kids every evening.
 a are watched **b** is watch **c** is watched
- 4 Homework ... by the students yesterday.
 a wasn't done **b** wasn't did **c** isn't done
- 5 Grandfather ... by his grandson.
 a is often helped **b** is helped often **c** often is helped

- 6 I ... to school by car every day by my father.
a was driven **b** am driven **c** are driven
- 7 A letter to uncle Sam ... a few hours ago.
a sent **b** is sent **c** was sent
- 8 More and more trees ... down every year.
a are cut **b** are cutted **c** were cut
- 9 Baseball ... at my university.
a aren't practiced **b** isn't practice **c** isn't practiced
- 10 ... the phone ... by you when I called?
a Was / answered **b** Is / answered **c** Does / answered



15 Put the positive and negative sentences into the Present Simple Passive or Past Simple Passive.

- 1 People keep money in banks.
- 2 They speak English in Australia.
- 3 People all over the world know Brad Pitt.
- 4 Carl Benz made the first motor car.
- 5 The government ordered them to build a new bridge.
- 6 John Lennon and Paul McCartney wrote the song 'Yesterday'.
- 7 She didn't find the book.
- 8 Van Gogh didn't paint 'Mona Lisa'.

16 Put the questions into the Present Simple Passive or Past Simple Passive.

- 1 Do people speak English in Costa Rica?
- 2 Do English people drink tea with milk?
- 3 Do farmers grow rice in Argentina?
- 4 How do people make sushi?
- 5 Where do people speak Mandarin?
- 6 Did Spain win the last Football World Cup?
- 7 When did James Cook discover Australia?
- 8 When did Alexander Fleming discover penicillin?
- 9 How much money did the police find?
- 10 Who directed the film 'Avatar'?



MORE WORDS AND PHRASES TO KNOW

accuse smb of smth – обвинять кого-л. в чем-л.

addictive – вырабатывающий привыкание

additional fine – дополнительный штраф

alter data – изменять данные

apology – извинение

Australia – в 1770 году Джеймс Кук сообщил о благоприятной ситуации в Австралии для основания колонии; диалект английского языка

Avatar – «Аватар», автором сценария и режиссёром является Джеймс Кэмерон

break a law – нарушать закон

commit a cyber crime – совершать киберпреступление

Costa Rica – Коста-Рика, официальный язык государства – испанский

courage – храбрость

cover a crime – включать в себя преступление

damaging attack – разрушительная атака

due to – из-за

eagle – орёл

false information – ложная информация

fighting – бой, схватка

identity theft – кража личной информации

in recent years – за последние годы

lose money – терять деньги

New York – в 1664 году англичане завоевали город и назвали его Нью-Йорк в честь короля Англии Якова II (герцога Йоркского)

offline – не подсоединеный к интернету

reveal information – обнародовать информацию

service charge – доплата за обслуживание (в ресторане)

severely – серьёзно, строго

spammer – тот, кто рассыпает спам

suffer – страдать

take part in – принимать участие в

the first underground railway – первая линия метрополитена длиной 6 км была построена в Лондоне, запущена 10 января 1863 года

the United States Department of Justice – Министерство юстиции США

3c COMPUTER VIRUSES, WORMES, AND TROJAN HORSES

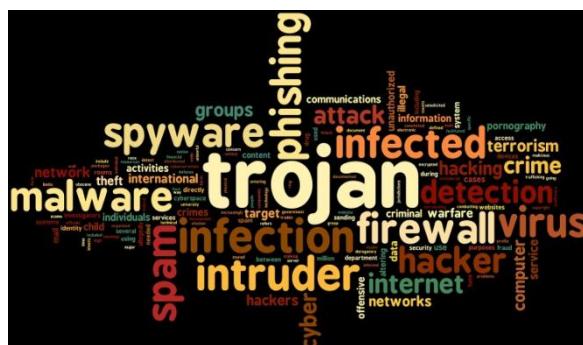
VOCABULARY

1 Read and learn the words and phrases.



interchangeable	взаимозаменяемый
exact	точный
damaging	наносящий ущерб
attach sth to sth	прикреплять ч.-л. к ч.-л.
note	замечать
run	пользоваться (комп. программой)
capability	способность
replicate	копировать
single	единственный
devastating	разрушительный
respond	отвечать, реагировать
be named after	быть названным в честь
annoying	раздражающий
reproduce	воспроизводить
sophisticated	сложный
vulnerability	уязвимость
initiate	начинать, вводить
multiple	множественный
intervention	вмешательство
propagate	распространять

2 Match the synonyms from the two columns.



exact	ability
damaging	advanced
attach	begin
note	copy
capability	destroying
replicate	distribute
single	harmful
devastating	join
respond	notice
sophisticated	numerous
initiate	only
multiple	precise
propagate	react

3 Choose *a*, *b*, or *c* to complete the sentence.

- 1 I looked the word up in the dictionary to check the _____ meaning.
a exact **b** be named after **c** vulnerability
- 2 Nowadays, everybody knows about the _____ effects of pollution.
a annoying **b** damaging **c** sophisticated
- 3 She _____ a photograph to her letter.
a attached **b** be named after **c** run
- 4 Did you _____ a virus check this morning?
a damaging **b** interchangeable **c** run
- 5 She _____ a distinct chill in the air.
a attach sth to sth **b** noted **c** vulnerability
- 6 Both players have the _____ to win this match.
a capability **b** run **c** single
- 7 There was a _____ light in the corner of the room.
a devastating **b** propagate **c** single
- 8 The fire has had a _____ effect on the local wildlife.
a devastating **b** reproduce **c** vulnerability
- 9 How quickly did the police _____ to the call?
a annoying **b** interchangeable **c** respond
- 10 Paul was _____ after his grandfather.
a named **b** replicate **c** reproduce
- 11 The diagram is _____ by permission of the original author.
a interchangeable **b** multiple **c** reproduced
- 12 It's a _____ computer system.
a annoying **b** intervention **c** sophisticated
- 13 The reforms were _____ by Mikhail Gorbachev.
a initiated **b** intervention **c** note
- 14 We made _____ copies of report.
a intervention **b** multiple **c** vulnerability

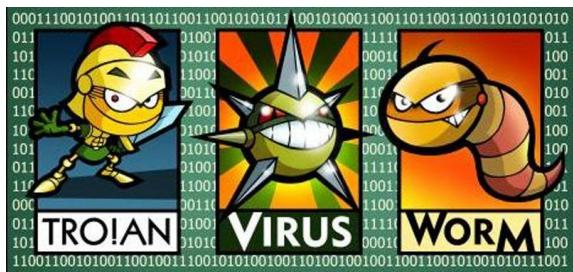
4 Do you remember these verbs from the previous lessons?

- | | | |
|------------|------------|------------|
| 1 infect | 5 consume | 9 appear |
| 2 share | 6 transmit | 10 trick |
| 3 send out | 7 cause | 11 install |
| 4 destroy | 8 spread | 12 protect |

READING

5 Read and translate the information about malicious programmes.

Computer Viruses, Worms, and Trojan Horses



The words *Trojan horse*, *worm* and *virus* are often used **interchangeably**, but they are not **exactly** the same thing. Viruses, worms and Trojan horses are all malicious programmes (malware). They can cause damage to your computer, but there are differences among the three. Knowing those differences can help you better protect your computer from **damaging** effects.

A computer virus **attaches** itself to a programme or file. Then it spreads from one computer to another and leaves infections as it travels. Some viruses can damage your hardware, software or files. It is important to **note** that a virus cannot spread without a human action. The virus may exist on your computer but it actually cannot infect your computer unless you **run** or open the malicious programme. People unknowingly continue to spread a computer virus by sharing infected files or send emails with viruses as attachments in the email.

A worm spreads from computer to computer and it can travel without any human action. The biggest danger with a worm is its **capability** to **replicate** itself on your system. A **single** worm can send out hundreds or thousands of copies of itself and create a huge **devastating** effect. A worm can travel across networks, and the end result in most cases is that the worm consumes too much system memory. It causes Web servers, network servers and individual computers to stop **responding**.

A Trojan horse is full of as much trickery as the mythological Trojan Horse it **was named after**. The Trojan horse, at first glance, appears to be useful software but actually does damage once installed or run on your computer. Some Trojans are designed to be **annoying** like changing your desktop, adding silly active desktop icons. Other Trojan horses can cause serious damage by deleting files and destroying information on your system. Trojans do not **reproduce** by infecting other files nor do they replicate.

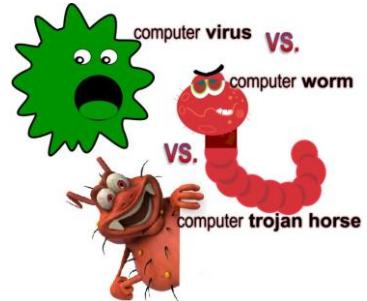
A blended threat is a more **sophisticated** attack that includes some of the worst aspects of viruses, worms, and Trojan horses into one single threat. Blended threats can use server and internet **vulnerabilities** to **initiate**, then transmit and also spread an attack. A blended threat can do **multiple** malicious acts – basically it can cause damage within several areas of your network at one time. Blended threats are the worst risk to security, as most blended threats require no human **intervention** to **propagate**.



6 Match the malicious programmes and fast facts about them.

- 1 virus
- 2 worm
- 3 Trojan horse
- 4 blended threat

- a It appears useful but damages system, requires a human action to run, does not self-replicate.
- b It can replicate itself on system, does not require a human action to spread.
- c It is sophisticated, bundles aspects of viruses, worms and Trojan horses; most require no human action.
- d It attaches to a file, requires a human action to spread.



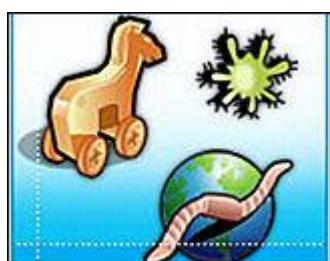
7 Are the statements TRUE or FALSE?

- 1 A computer worm, a virus, and a Trojan horse are exactly the same things.
- 2 A Trojan horse, a virus, and a worm are examples of malware.
- 3 A computer virus requires a human action to spread.
- 4 Any attachment in the email from your friend is virus-free.
- 5 A computer worm requires a human action to spread.
- 6 A worm is capable of travelling across networks.
- 7 The mythological Trojan horse and a computer Trojan horse do not have common features.
- 8 Computer Trojan horses differ from computer viruses and worms.
- 9 Blended threats exploit vulnerabilities of the internet.
- 10 A blended threat cannot cause damage to your computer.

8 Read more information about computer viruses, worms, Trojan horses, and blended threats. Fill in the gaps with the words from the box.

virus	worm	Trojan horse	blended threats
-------	------	--------------	-----------------

- 1 The most common mistake people make when the topic of a computer virus arises is to refer to a worm or _____ as a virus.
- 2 Like a human virus, a computer _____ can range in severity: some may cause only mildly annoying effects while others can damage your hardware, software or files.



- 3 A _____ can be designed to tunnel into your system and allow malicious users to control your computer remotely.
- 4 _____ cause harm to the system or network; they propagate using multiple methods, the attack can come from multiple points, and they also exploit vulnerabilities.

GRAMMAR

Future Simple Passive. Passive with modal verbs.

Future Simple Passive

1. Form

I	will (not)	be	Participle II	I will be asked about my homework tomorrow.
You, we, they				The reports will be written in one hour.
He, she, it				The new contract will be discussed after the meeting.

Will	I	be	Participle II	Will you be asked to come?
	You, we, they			Will the reports be written?
	He, she, it			Will the new contract be discussed tomorrow?

2. Use

- When the person who performs the action is not important or unknown.
- The action will happen in the future.

12 Make the sentences with the given words.

- 5 A ticket will / not / buy.
 6 The flowers / will / water?
 7 The houses / will / built?
 8 The new film / will / show next month.
 9 These questions / will / answer /tomorrow.
 10 You will/ not / invite / to the cinema.



13 Put the verb in brackets into the Future Simple Passive.

- 11 A final decision _____ (make) on Monday.
 12 A new airport _____ (build) near here soon.
 13 Bill _____ (not/invite) to my party any more.
 14 Dinner _____ (serve) in a minute.
 15 My new book _____ (publish) soon.
 16 My work _____ (finally/finish) tomorrow.
 17 That problem _____ (not/solve) until next week.
 18 The money _____ (pay) at the end of October.
 19 This house _____ (sell) next month.
 20 Your bicycle _____ (repair) as soon as possible.

14 Rewrite the sentences using the passive voice.

- 21 Bill Gates is going to sponsor the vaccination program.
- 22 Government forces are going to protect the villages.
- 23 Soldiers are going to kill many people during the war.
- 24 Somebody will find the cure for AIDS.
- 25 The painters are going to paint our house next year.
- 26 They are going to demolish the old hospital next month.
- 27 They will cancel the concert.
- 28 They will hold the next Rock in Rio festival in Buenos Aires.
- 29 They will invite the students to attend the debate.
- 30 They will repair the telephone lines tomorrow.



15 Translate the sentences.

- 31 Дом будет построен.
- 32 Космос будет исследован.
- 33 Родителей встретят на станции.
- 34 Нас попросят прийти как можно раньше.
- 35 Я буду приглашён на вечеринку.
- 36 Я буду обманут!
- 37 Работа будет сделана вовремя.
- 38 Эта книга завтра будет сдана в библиотеку.
- 39 Тебя встретят в аэропорту твои друзья?
- 40 Эти розы будут высажены следующей весной.



Passive with modal verbs

1. Form

We build Passive with modal verb similar to Future Simple Passive.

Example: The house **will be built**.

The house **can be built**.

2. Use

- 41 Pancakes **can** be made on a stove. (Possibility)
- 42 Bikes **may** be ridden on this bike path. (Remission)
- 43 People **must** be warned that there are crocodiles in the area. (Necessity)
- 44 Her work **has to** be done by tomorrow. (Necessity)
- 45 Something **should** be done about that mess in the room. (Advice)

16 Make up the sentences using the Passive Voice of modal verbs.

- 46 The homework /must / do.
- 47 The ball /can/ use/ in the gym.

- 48 The dishes /must/ wash.
 49 The essay/ should/write.
 50 The dog/should/ feed.
 51 This question/could/discuss/.
 52 The things/must/pack.
 53 The documents/ couldn't/sign/.
 54 Mobile phones/can't/use/during the lesson.
 55 Loud music/shouldn't/play/her.



17 Rewrite the sentences using Passive with modal verbs.

- 56 The children can read books.
 57 Susan has to learn geography.
 58 The dog should bring the bones.
 59 Tom must open the window.
 60 Poor people can not spend a lot of money.
 61 The pupils must answer a lot of questions.
 62 How can we solve that problem?
 63 You must not touch this button while the experiment is in progress.
 64 We should call the police at once after the accident.
 65 We must put an end to this quarrel.
 66 You shouldn't make fun of the poor.
 67 The policeman should do a good job.

18 Read the following instructions and fill in the blanks.

Construction of the road

- Assess the needs
- Plan the route
- Take the soil samples
- Clear and level the route
- Put down thick layers of concrete
- Lay the top surface and add traffic guides



The needs a) _____ assessed. The soil samples b) _____ and the route c) _____. The route is d) _____ thick layers of concrete e) _____. The top surface f) _____ and the traffic guides g) _____.

19 Rewrite the instruction below as in the previous exercise.

Making Soap

- Take some castor oil in a beaker.
- Add an equal volume of sodium hydroxide solution to it.
- Heat the mixture. Keep stirring till a paste is formed.
- Cool the contents.
- Separate the solid soap from the aqueous solution.

MORE WORDS AND PHRASES TO KNOW

at first glance – сначала

bundle – добавлять компьютерную программу или другой продукт к продаваемому товару

cause – причинять, быть причиной

chill – холод

consume – потреблять

distinct – отчётливый

distribute – раздавать, распределять

exploit – использовать, эксплуатировать

harmful – вредный

infect – заражать

mildly – слегка

multiple – множественный

notice – замечать

numerous – многочисленный

precise – точный

remotely – совершенно

send out – рассылать

severity – серьёзность, строгость

spread – распространять(ся), распределять

transmit – передавать, транслировать, распространять

trick – обманывать, надувать

trickery – надувательство

tunnel – прокладывать тоннель

ability – способность, умение

diagram – диаграмма

human – человеческий

interchangeably – взаимозаменямо, равнозначно

permission – разрешение

pollution – загрязнение

wildlife – живая природа

3d SOFTWARE

VOCABULARY

1 Read and learn the words and phrases.



adware	рекламное ПО
advertising [U]	рекламный бизнес
advertisement [C]	реклама
embedded	встроенный
consider	считать, полагать
utility	утилита
growing number	возрастающее количество
freeware	бесплатное ПО
nagware	надоедливое ПО
pop-up window	всплывающее окно
purchase an application	покупать прикладное ПО
remind	напоминать
particular action	особенное действие
shareware	условно-бесплатное ПО
free trial	бесплатная пробная версия
request	просить
spyware	шпионское ПО
malware	вредоносное ПО
key logger	кейлоггер
financial transaction	финансовая операция

2 Fill in the gaps with the words from the box.

actions	purchased	particular	number	requested
free trial	transaction	pop-up	reminds	consider

- 1 I don't _____ myself to be a great security specialist.
- 2 A small _____ of children are educated at home.
- 3 Choose the option you want from the _____ window.
- 4 Tickets must be _____ two weeks in advance.
- 5 The gym offers a 30-day _____ to all new members.
- 6 We've _____ two computers the other day.
- 7 Is there any _____ restaurant you'd like to go to?
- 8 We will not allow the violent _____ to change our way of life.
- 9 Every time we meet he _____ me about the money he lent me.
- 10 There was no financial _____ between us.

3 Complete the tables. Translate the words.

Noun	Verb
	advertise
reminder	
request	

Verb	Adjective
	considered
embed	
grow	

4 Match the terms and their definitions.



embedded / growing

- 1 increasing in size or quantity
- 2 fixed into the surface of something

application / transaction

- 3 a computer program that is designed for a particular purpose
- 4 when someone buys or sells something, or when money is exchanged

advertising / advertisement

- 5 the business of trying to persuade people to buy products or services
- 6 a picture, short film, song, etc. which tries to persuade people to buy something

utility / key logger

- 7 a piece of spyware or computer hardware which records keystrokes on a computer
- 8 system software designed to help analyse, configure, optimize, or maintain a computer

adware / spyware

- 9 software that automatically puts advertisements onto a computer screen when a person is using the internet
- 10 software that collects information about how someone uses the internet, or personal information such as passwords, without the user knowing about it

nagware / malware

- 11 computer software that is designed to damage the way a computer works
- 12 software that tries to make users buy a programme, service etc. by making pop-ups appear regularly on their computer screens

freeware / shareware

- 13 computer software that you do not have to pay for, for example from the internet
- 14 software that you get from the internet that you can use free for a short time without paying for it

READING

5 Read and translate the information about different types of software.

Software



Adware, or **advertising-supported software**, is the common name used to describe software that is given to the user with **advertisements embedded** in the application. Adware is **considered** a legitimate alternative offered to consumers who do not wish to pay for software.

There are many ad-supported programmes, games or **utilities** that are distributed as adware. Today we have a **growing number** of software developers who offer their goods as 'sponsored' **freeware** (adware) until you pay to register.



nag

Nagware is a **pop-up window** or other form of visual interface asking the user to register a product, **purchase an application** or take another form of action. The **reminders** 'nag' the user into taking some **particular action**. They will keep appearing until the desired action is performed. The reminder window is a 'nag screen'. Nag screens pop up when the application is activated and can appear at any time during the application's use. Nagware is used in reference to '**shareware**'. It offers a **free trial** period of use for the application and then **requests** that the user purchase the rights to use software.



Shareware



Spyware is any software that gathers user information through the user's internet connection without his or her knowledge, for advertising purposes. Spyware applications are as a hidden component of freeware or shareware that can be downloaded from the internet. Once installed, the spyware monitors user activity on the internet and transmits that information to someone else. Spyware can also gather information about email addresses and even passwords and credit card numbers.

Malware is short for malicious software. Malware refers to software designed to damage or disrupt a system. There are many different types of malware, from spyware to **key loggers** and computer viruses or worms. 'Financial malware' is designed to scan a computer system for information related to **financial transactions**. The standard protection from malware is anti-malware – software tools and programmes designed to identify, remove and prevent malicious software from infecting computer systems or electronic devices.



6 Can you match the six types of software and the six pictures?



1



2



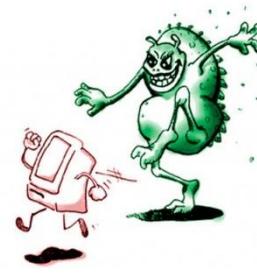
3



4



5



6

7 How are the words *adware*, *freeware*, *nagware*, *shareware*, *spyware*, and *malware* formed?

8 Study extra information. Match the pieces and the six types of software.

adware

a It is a category of software for computers. It is software that collects some data, usually without the computer users' knowledge.

freeware

b It is an advertising computer programme that can be put there by other people on someone's computer, sometimes without their permission.

nagware

c It, short for malicious software, is a kind of software that can be installed on a computer without approval from the computer's owner.

shareware

d It (also known as 'begware', 'annoyware', or 'nagscreen') is a type of shareware that persistently reminds (nags) the user to register it by paying a fee.

spyware

e It is software that people may get without paying for it. It may be free in price, but the users might not be allowed to distribute the software or source code with others.

malware

f It is a way to sell software. The user will get a preview or demo of the software for free. This way, the user can decide if he or she likes the programme or not before buying it.

GRAMMAR

Present Continuous & Present Perfect Passive

Present Continuous Passive

1. Form

I	am (not)	being	Participle II	I am being asked a question now.
You, we, they	are (not)			The reports are being written now.
He, she, it	is (not)			The new contract is being discussed .

Am	I	being	Participle II	Am I being asked a question now?
Are	You, we, they			Are the reports being written ?
Is	He, she, it			Is the new contract being discussed ?

2. Use

- When the person who performs the action is not important or unknown.
- The action is happening at the moment.
- The difference between the Present Simple Passive and Continuous is the same as in the Active Voice.

Example: The reports are written every week.

The reports are being written now.

Note: We can also use Continuous forms for future.

Example: The contract is being discussed next week.

9 Read the sentences and define the tense.

- 1 Bob's secretary is typing the letter now.
- 2 Mum's making cookies for tomorrow.
- 3 She's baking a cake in the kitchen.
- 4 Some pancakes are being made in the kitchen.
- 5 The animals are being fed by the farmer.
- 6 The letter is being delivered by hand.
- 7 The policeman is questioning the criminal.
- 8 The students are being taught by a new teacher today.
- 9 The surprise party is being organized by her friends.
- 10 We're learning Spanish this year.



10 Rewrite using the passive voice.

- 1 A famous interior designer is redecorating their house.
- 2 A tutor is teaching Jill at home.
- 3 An experienced dog handler is training the dogs.
- 4 Greenpeace is informing the public about the global warming.
- 5 School children are cleaning the beaches.
- 6 The Civil Defence is warning people to stay at home.
- 7 They are developing new devices.
- 8 They are saving the Amazon Forest.
- 9 They are selling cakes to raise money.
- 10 They are translating the book into Spanish.

11 Put the verb in brackets into the Present Continuous Active or Passive.

- 1 Dinner _____ (prepare) by my husband tonight.
- 2 Drinks _____ (serve) in the lounge bar.
- 3 He _____ (take) to hospital by ambulance.
- 4 Jane _____ (help) Bob with his maths.
- 5 Look! That girl _____ (kiss) by her boyfriend.
- 6 She _____ (take) her baby to the park.
- 7 The barman _____ (prepare) the drinks.
- 8 The cleaning lady _____ (prepare) the rooms.
- 9 The grapes _____ (pick) next week.
- 10 The rooms _____ (clean) at the moment.



Present Perfect Passive

1. Form

I, you, we, they	have (not)	been	Participle II	The reports have been written now. already
He, she, it	has (not)			The new contract has been discussed .

Have (not)	I, you, we, they	been	Participle II	Have the reports been written now. yet?
Has (not)	He, she, it			Has the new contract been discussed ?

2. Use

- When the person who performs the action is not important or unknown.
- The action happened in the past and is connected with present.
- The difference between the Present Perfect Passive and Past Simple Passive is the same as in the Active Voice.

Example: The reports were written last week.

The reports have **just** been written.

The new contract has been discussed **recently**.

Has the project been finished **yet**?

12 Rewrite the sentences in the Present Perfect Passive.

- 1 For the last 3 years he has put on stage 4 new performances.
- 2 Has the postman delivered our mail yet?
- 3 Have the results of your work ever disappointed you?
- 4 How many points have the team scored in this game?
- 5 Our teacher has given us lots of homework today.
- 6 People have asked me this question hundreds of times.
- 7 Since 2010 they have built 2 sports centres in our city.
- 8 This building looks so old, nobody has ever renovated it.
- 9 This cooker doesn't seem new, somebody has already used it.
- 10 Thousands of people have visited this small resort this summer.

13 Put the verb in brackets into the Present Perfect Active or Passive.

- 1 6 million Euros _____ (steal) from a bank in the centre of town.
- 2 A tiger _____ (capture) in a park in Brighton.
- 3 All flights _____ (cancel) because of the strike.
- 4 He _____ (go) to Mexico. He'll be back in a week.
- 5 My husband and I _____ (be) together for years.
- 6 She _____ (work) as a teacher for over 30 years.
- 7 That castle _____ (visit) by hundreds of tourists.
- 8 The doors to the museum _____ (not/open) yet.
- 9 They _____ (finish) the repairs on the roof.
- 10 War _____ (declare)!



14 Put the verbs in brackets in the Present Perfect Passive or Past Simple Passive.

- 1 We didn't know that the programme _____ already _____ (broadcast).
- 2 I hope that our fight _____ (forget).
- 3 I'm angry because my party _____ (spoil).
- 4 By June all exams _____ (pass) and we could at last enjoy our holidays.
- 5 Jim looks so happy. Do you know that he _____ just _____ (offer) a new job?
- 6 The novel I _____ (give) is another science fiction story.
- 7 The film that was on was not new: it _____ (show) many times.

15 Translate the sentences; use Present Perfect Passive or Past Simple Passive.

- 1 Все цветы распроданы.
- 2 Дом только что достроили.
- 3 Книги вернули на прошлой неделе.
- 4 Письмо вернули, так как на нем не было марки.
- 5 Стены покрасили, пока никого не было дома.
- 6 Тест писали вчера в час дня.
- 7 Цветы были политы вчера.
- 8 Этой комнатой последнее время не пользуются.
- 9 Яйца уже сварили.



MORE WORDS AND PHRASES TO KNOW

advertise – рекламировать

approval – одобрение

configure – конфигурировать; оснащать

considered – взвешенный, обдуманный

consumer – потребитель

demo – демонстрационный образец

disrupt – срывать

embed – встраивать

free in price – бесплатный

gather – собирать(ся)

grow – расти, увеличиваться

identify – устанавливать, определять

in reference to – в связи с

key logger – кейлоггер, программа для перехвата вводимой с клавиатуры информации

keystroke – нажатие клавиши

legitimate – законный

nag – пилить, ворчать

persistently – упорно, настойчиво

preview – предварительный просмотр

reminder – напоминание

request – просьба, (вежливое) требование

surface – поверхность

utility – утилита, компьютерная программа

violent – насильственный, ожесточённый; опасный, жестокий

3e CULTURE CLIP: THE UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND

VOCABULARY

1 Read and learn the words and phrases.

lie – lay – lain	лежать; находиться
make up	составлять
square kilometre	квадратный километр
important global city	всемирно важный город
financial centre	финансовый центр
mountainous	гористый
all the rest	всё остальное
vast plain	обширная равнина
highly developed industrial country	высокоразвитая промышленная страна
a producer and an exporter	производитель и экспортёр
iron and steel products	изделия из железа и стали
machinery and electronics	машинное оборудование и электроника
chemicals and textile	химические продукты и текстиль
aircraft and navigation equipment	авиация и навигационное оборудование
constitutional monarchy	конституционная монархия
parliamentary government	парламентарное правительство
have no real power	не обладать действительной властью
chamber	палата
major	важный; крупный
traditions and customs	традиции и обычаи

2 Complete the tables.

Synonyms	
aeroplane(s)	1
state	2
economic	3
possess	4
extremely	5
be situated	6
direction-finding	7
goods	8
cloth	9
large	10

Antonyms	
unconstitutional	11
undeveloped	12
importer	13
local	14
agricultural	15
minor	16
republic	17
flat (<i>adj</i>)	18
mountain	19
unreal	20

3 Fill in the squares with vowels.

1 c h m b r

2 m k p

3 c h m c l s

4 m c h n r

5 l c t r n c s

6 f n n c l c n t r

7 s q r k l m t r

8 h v n r l p w r

9 n v g t n q p m n t

10 m p r t n t g l b 1 c t

11 p r l m n t r g v r n m n t

12 r n n d s t l p r d c t s

UNITED KINGDOM



4 Choose the correct word or phrase *in italics* in each sentence.

- 1 The UK has a strong *city / government*.
- 2 London is the capital *city / government* of England.
- 3 The Russian Federation plays a *major / producer* role in the peace process.
- 4 Australia is one of the main *major / producers* of wool.
- 5 Japan is a major *exporter / navigation* of cars.
- 6 In the past, *exporter / navigation* depended on knowledge of the positions of the stars. (*depend – depended - depended*)
- 7 The river *lies / real* 30 km to the south.
- 8 What is the *lie / real* reason George is absent?
- 9 Usually students have some *constitutional / financial* difficulties.
- 10 Freedom of speech is a *constitutional / financial* right.
- 11 *All the rest / Traditions and customs* vary in different countries.
- 12 Bill and Paul and *all the rest / traditions and customs* are late for English.

READING

5 Read and translate the information about the United Kingdom.

The United Kingdom of Great Britain and Northern Ireland



The United Kingdom, or the UK, **lies on the British Isles**. It consists of four parts: *England, Wales, Scotland, and Northern Ireland*. England, Wales and Scotland also **make up** Great Britain. The territory of the UK is about 244,000 **square kilometres**. The population is more than 63 million. The capital of the country is London. It is an **important global city and financial centre**.

The northwest part of the country is **mountainous**. People call it *the Highlands*. **All the rest** is a **vast plain**. It is *the Lowlands*. The most important rivers are *the Severn, the Thames and the Trent*.

Great Britain is a **highly developed industrial country**. It is one of the world's largest **producers and exporters** of iron and steel products, machinery and electronics, chemicals and textile, aircraft and navigation equipment.

The UK is a **constitutional monarchy** with a **parliamentary government**. Today, the monarch **has no real power**. The Prime Minister is the head of the government. The British Parliament consists of two **chambers**: *the House of Lords* and *the House of Commons*. It sits in the Houses of Parliament in Westminster. The **major** political parties in the United Kingdom are *the Conservative, the Labour, the Liberal parties, and the Scottish National party*.

Great Britain is a country with old cultural **traditions and customs**. The most famous educational centres are the Universities of Oxford and Cambridge.

Notes

the British Isles – Британские острова

England, Wales, Scotland, and Northern Ireland – Англия, Уэльс, Шотландия и Северная Ирландия

the Highlands – Северо-Шотландское нагорье (Хайленд)

the Lowlands – Среднешотландская Низменность (Лоуленд)

the Severn, the Thames and the Trent – реки Северн, Темза, Трент

the House of Lords – Палата лордов

the House of Commons – Палата общин

Westminster – Вестминстер (район, где находится Вестминстерское аббатство)

the Conservative party – Консервативная партия

the Labour party – Лейбористская партия

the Liberal party – Либеральная партия

the Scottish National party – Национальная партия Шотландии

6 Complete the sentences with the numbers from the text above.

- 1 _____ countries make up the United Kingdom.
- 2 Great Britain consists of _____ countries.
- 3 The UK is about _____ square kilometers.
- 4 More than _____ million people live in the UK.
- 5 There are _____ most important rivers in the kingdom.
- 6 The British Parliament consists of _____ chambers.
- 7 There are _____ major political parties in the state.
- 8 There are _____ most famous educational centres in the country.

7 Are the statements TRUE or FALSE?

- 1 The United Kingdom is an island country.
- 2 The UK is the largest country in the world.
- 3 The Thames is the only river in the state.
- 4 The surface of the British Isles varies very much.
- 5 The country has nothing to produce.
- 6 The UK is a highly developed industrial country.
- 7 The UK is a constitutional monarchy.
- 8 There is only one political party in the state.
- 9 The UK is not an old country.
- 10 The state is not rich in universities.

8 Complete the table about the four countries of the UK.

Capitals: Belfast, Cardiff, Edinburgh, London

Area, thousand km²: 14; 21; 79; 130: Northern Ireland is the smallest.

Population, million: 2; 3; 5; 53: Northern Ireland is the least populated.

National flower: the daffodil, the flax, the red rose, the thistle

Flag				
Country				
Capital				
Area				
Population				
National flower				

GRAMMAR

9 Pronouns. Study the information.

Personal pronouns		Possessive adjectives	Possessive pronouns
subject	object		
I	me	my	mine
he	him	his	his
she	her	her	hers
it	it	its	(its)
we	us	our	ours
you	you	your	yours
they	them	their	theirs

10 Change the nouns and noun phrases for subject personal pronouns.

We use **personal pronouns** in place of nouns and noun phrases.

Mike is eighteen. **He** is a university student.

My sister is thirty-two. **She** is an accountant.

We use **I, he, she, it, we, you, they** as subjects before verbs.

I like physics. **We** are from Tomsk in Russia.

Example: Mary – she

- | | | |
|--------------|------------------------|----------------------------|
| 1 university | 6 my mother and father | 12 Wiliam and Kate |
| 2 students | 7 education programme | 13 teacher |
| 3 Paul and I | 8 Elizabeth II | 14 my fellow student and I |
| 4 young man | 9 you and Max | 15 faculties |
| 5 car | 10 dog | 16 girl |
| | 11 year | |

11 Rewrite the sentences with subject personal pronouns. Use them in place of the nouns and noun phrases *in italics*.

Example: The typical first degree is a bachelor's degree.

It is a bachelor's degree.

- 1 *Mary* is a third-year student.
- 2 *Anastasia and I* are from the same group at university.
- 3 *You and your friend* are welcome to our company.
- 4 *Master's degrees* in the UK take at least a year full-time.
- 5 *The University of Cambridge* has more than 18,000 students.
- 6 *Sir Tim Berners-Lee, inventor of the World Wide Web*, is an Oxford graduate.
- 7 *Oxford and Cambridge Universities* are the two oldest universities in the English-speaking world.



12 Rewrite the sentences with object personal pronouns. Use them in place of the nouns and noun phrases *in italics*.

We use **me, him, her, it, us, you, them** as objects after verbs, after prepositions and after *be*.

They know us. *Talk to her.* ‘Who’s that?’ ‘It’s **me**.’ (NOT normally ‘*It is I*.’)

We use the pronoun **you** to talk about one person or people (it is singular or plural). It is usually clear from the context.

We also use **you** to talk about people in general, not someone specific:
Too much coffee is bad for you.

Example: Do you know *Mr Stevens*? **Do you know him?**

- 1 I do not like *examinations*.
- 2 Do not forget about *Lena and me*.
- 3 **I want to come with you and Alexander.**
- 4 **People around the world know Queen Elizabeth II.**
- 5 Tell *William* the homework for tomorrow.
- 6 **After students complete an undergraduate degree, they have an opportunity to take a postgraduate degree.**
- 7 About 20,000 people apply for undergraduate study at *the University of Oxford* every year.



13 Use the correct pronoun.

Example: I know Pete, and he knows **me**.

- 1 I never read English books. I do not like _____.
- 2 My brothers Victor and Paul are programmers. _____ live in London.
- 3 Andrew never does his homework. Please talk to _____.
- 4 I think _____ is a good actress.
- 5 Kate Middleton (*Catherine, Duchess of Cambridge*) is quite popular in Britain. Many people like _____.
- 6 The University of Oxford is located in England. _____ is over 800 years old.
- 7 26 British Prime Ministers studied at Oxford University. David Cameron is one of _____.
- 8 Doctoral degrees usually take three years full-time. _____ include programmes of original research.
- 9 Michael is studying for a bachelor’s degree at Cambridge. _____ is in his first year.
- 10 The Bachelor of Arts and Bachelor of Science are typical first degrees in the UK. _____ normally last for three years.



14 Look at the information in the tables. How do you usually form a possessive pronoun from a possessive adjective? What possessive pronoun is different?

We use pronouns to talk about possession and belonging. There are two types: possessive adjectives and possessive pronouns.

We use **possessive adjectives** before a noun.

We use **possessive pronouns** in place of a noun (without a noun).

Is that your copybook? Mine is the same colour.

'Is this laptop his or hers?' 'It's his.'

We use **Whose ...?** to ask about which person owns something.

'Whose (money) is this?' **'It is mine.'**

! **its** = possessive adjective **it's** = it is

Cambridge is famous for its university.

I like Cambridge. It's a beautiful city. (= It is a nice city.)

15 Complete the sentences with the correct possessive adjective (*my/your etc.*).

Example: Each state has **its** own constitution and government.

- 1 I have a friend in the States. _____ friend lives in Washington, D.C.
- 2 We study at TUSUR. _____ university is one of the leading engineering universities in Russia.
- 3 You are students and _____ aim is to receive higher education.
- 4 Do you live in New York City? What is _____ address?
- 5 The USA is a large country. _____ area is about ten million square kilometres.
- 6 The President of the United States is the head of state and the head of government. _____ residence is the White House.
- 7 The people from the US are Americans. _____ national language is English.
- 8 Hillary Clinton is an American politician. _____ husband was the 42nd President of the United States.

- 9 Barack Obama is a Democrat. _____ party (*the Democratic Party*) is one of the two major political parties in the USA.


- 10 Natalie Portman is a famous American actress, but _____ homeland is Israel.
- 11 The state of Indiana is famous for _____ basketball passion.

16 Rewrite the sentences with the possessive pronoun.

Example: It's *our* university. **It's ours.**

- 1 They're *his* keys.
- 2 It's *her* assessment record book.
- 3 That's *your* computer.
- 4 This is *my* money.
- 5 They are *her* letters.
- 6 Those are *their* suitcases.

- 7 They are *my photos*.
- 8 These are *our documents*.
- 9 They are *your coursebooks*.

- 10 It is *his passport*.
- 11 They are *her glasses*.

17 Choose the right word.

Example: This is an interesting book. Is it your/ yours? yours is right

- 1 Is this wallet your/ yours?
- 2 Are those your/ yours things?
- 3 Which children are their/ theirs?
- 4 Americans love their/ theirs country.
- 5 The idea is not my/ mine. It's her/ hers.
- 6 'Where is Chicago?' 'Its/ It's in the US.'
- 7 Can we use your car? Our/ ours is in the repair shop.
- 8 Our/ ours parents are on holiday in Miami all this week.
- 9 'Whose mobile phone is this?' 'It's your/ yours. My/ Mine is in my handbag.'
- 10 Los Angeles is a big city in the state of California. Its/ It's nickname is *City of Angels*.
- 11 The largest city in the United States is the city of New York. It's / Its total area is over 1,200 km².

18 Put in the correct pronoun (*I/ me/ my/ mine* etc.).

Example: The USA is in North America. Its capital is Washington, D.C.

- 1 _____ have English lessons at university. Our lessons are twice a week.
- 2 'Is this your essay?' 'Yes, it is _____.'
- 3 Please give _____ some more time. We are not ready yet.
- 4 Tell _____ about the meeting. I want to know all the details.
- 5 Jane wants to study languages at university. She likes _____ very much.
- 6 Brad Pitt is an actor and producer. _____ wife is also a famous actress.
- 7 Oprah Winfrey is famous for _____ talk show
The Oprah Winfrey Show on American television.
- 8 Las Vegas is famous for _____ casinos.
- 9 New Yorkers love _____ city.
- 10 *The New York Times* is an American daily newspaper.
_____ is well known around the world.
- 11 _____ call 911 for an ambulance in the United States.
- 12 Hollywood is located in Los Angeles, California. _____ actors and actresses are popular all around the world.
- 13 McDonald's is the world's largest chain of hamburger fast food restaurants.
_____ serves around 68 million customers daily in 119 countries.
- 14 The City of Chicago has many nicknames. _____ include the *Windy City* and the *Second City*.



3f REVISION

VOCABULARY AND READING

1 Match the following English words with their Russian equivalents.



- | | |
|--------------------|--------------------------|
| 33 interchangeable | gg соучастник |
| 34 intervention | hh считать, полагать |
| 35 embedded | ii разрушительный |
| 36 victim | jj встроенный |
| 37 replicate | kk взаимозаменяемый |
| 38 multiple | ll вмешательство |
| 39 remind | mm множественный |
| 40 underestimate | nn напоминать |
| 41 respond | oo копировать |
| 42 request | pp просить |
| 43 devastating | qq отвечать, реагировать |
| 44 sophisticated | rr сложный |
| 45 accessory | ss цель, мишень |
| 46 consider | tt недооценивать |
| 47 vulnerability | uu жертва |
| 48 target | vv уязвимость |

2 Match the words to make 16 phrases.



- | | |
|----------------|-----------------------|
| 33 particular | gg position |
| 34 purchase on | hh prosecuted |
| 35 form a | ii defender |
| 36 cyber | jj transaction |
| 37 lose | kk criminal community |
| 38 pay a | ll trial |
| 39 reveal the | mm number |
| 40 key | nn logger |
| 41 growing | oo dignity |
| 42 violate a | pp action |
| 43 abuse one's | qq fine |
| 44 be | rr window |
| 45 tough | ss application |
| 46 financial | tt information |
| 47 free | uu punishment |
| 48 pop-up | vv policy |

3 Write the missing words instead of the numbers in brackets.

- e Before the internet, criminals dug (1) people's trash or intercept their mail to steal their personal information.
- f Nowadays criminals also use the internet to steal people's identities, hack (2) their accounts, trick them into revealing the information, or infect their devices (3) malware.
- g Large organized crime groups also take advantage (4) the internet.
- h It's very difficult to crack (5) on cyber criminals because the internet makes it easier for people to do things anonymously and (6) any location (7) the globe.
- i Fast Flux is moving data quickly among the computers in a botnet to make it difficult to trace the source (8) malware or phishing websites.
- j Skimmers are devices that steal credit card information when the card is swiped (9) them. This can happen in stores or restaurants when the card is (10) (11) the owner's view, and frequently the credit card information is then sold online through a criminal community.
- k Most cyber criminals will target home computers rather than trying to break (12) a big institution's network because it's much easier.
- l Punishments range from paying a large fine to going to jail for up to 20 years, depending (13) the seriousness of the crime and how much damage the hacker has done.
- m It's important that you report cyber crimes, like spam, so that the criminals behind them can be prosecuted and fined (14) the law.
- n A computer virus attaches itself (15) a programme or file.
- o A Trojan horse is full of as much trickery as the mythological Trojan Horse it was named (16).

SPEAKING

4 Read and translate the following topics.

Discuss them in small groups.



- 10 Criminals use the internet to commit a cyber crime.
- 11 Cyber crimes and the punishment go hand in hand.
- 12 The words Trojan horse, worm and virus are often used interchangeably, but they are not exactly the same thing.
- 13 There are different types of software.

WRITING

5 Write an essay (10-15 sentences) about one of the threats a security specialist deals with.

GRAMMAR

6 The following sentences are in the active voice. Change them into the passive voice.

- 1 My mother will punish me.
- 2 The children are studying grammar.
- 3 I had finished my homework.
- 4 They called off the match.
- 5 Mrs Smith teaches us English.
- 6 You must switch off the lights.
- 7 I must finish this assignment.
- 8 The children ate the ice cream.
- 9 The painter created a beautiful painting.
- 10 Mr Johnson has filed the papers properly.



7 Change the following sentences into the active or the passive voice as appropriate.

- 1 The poet wrote a nice poem.
- 2 My camera has been stolen.
- 3 My dress is ruined!
- 4 Trespassers will be prosecuted.
- 5 No smoking.
- 6 Keep your city clean.
- 7 The milk has soured.
- 8 Please switch on the lights.



8 The following passage has not been edited. There is an error in each of the lines. Write the incorrect word and the correct word.

First the chicken was take and chopped
It was wash and dried. Salt, chili
powder and curd was add. The chicken
was marinate for one hour. The pieces
were fry in oil. Then it was
cook with milk, chilies and sauces.

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____
- f) _____

9 Put the verb in bracket in the correct active/passive voice & tense.

- 1 The watch _____ I'll take it to the watchmaker (break).
- 2 Someone _____ at you. Do you know him? (look)
- 3 The stain on my coat _____ (remove).
- 4 The criminal _____ (catch) yesterday.
- 5 REM _____ a compilation album (release)
- 6 This castle _____ in 1639 (build).
- 7 Mary _____ a nice birthday present (give).
- 8 These laptops _____ in China (make).
- 9 The plane _____ (just/ land).

10 Underline the best option:

- 1 The book was **published/published** in 2010.
- 2 My parents **will lend/will be lent** me some money to buy a new car.
- 3 It is **said/says** that some sports involve serious risks.
- 4 Lots of workers **have been made/have made** redundant as a result of the crisis.
- 5 My father **was bought/ bought** me a CD.
- 6 Fewer letters **are written/write** nowadays.
- 7 The TV presenter **has been made/has made** lots of mistakes today.
- 8 Where are you **being lived/are you living**?
- 9 My children **are liked/like** pasta.
- 10 Emails **are sent/send** more and more.

11 Rewrite the sentences in the active. When you don't have a subject use they.

- 1 A lot of souvenirs are bought by tourists.
- 2 He has been hit by a car.
- 3 He has been taken away by the police.
- 4 I have been woken up by a strange noise.
- 5 «Romeo and Juliet» was written by Shakespeare.
- 6 Their house won't be sold.
- 7 We weren't told that there was a strike.



12 All the sentences are in the passive. Read them and correct any verb forms that are incorrect. Tick the correct answers.

- 1 Our passports were taking by a woman in uniform.
- 2 Three men were arrested last night when they tried to break into the Museum.
- 3 Stamps can be buying at the post office.
- 4 Simon's car has be stolen from the car park.
- 5 We have been invited to Helen's party.
- 6 The new library won't be building in the town centre.

13 Rephrase the sentences in two ways. Omit unimportant agents.

Example: The teacher asked them a question.

- a) The question was asked by the teacher.
- b) They were asked a question.

- 1 Their mother read them another story.
- 2 Someone handed the judge a document.
- 3 He has served us a wonderful meal.
- 4 They haven't sent me the message.
- 5 I will give him a birthday present.
- 6 They are showing her the photos.



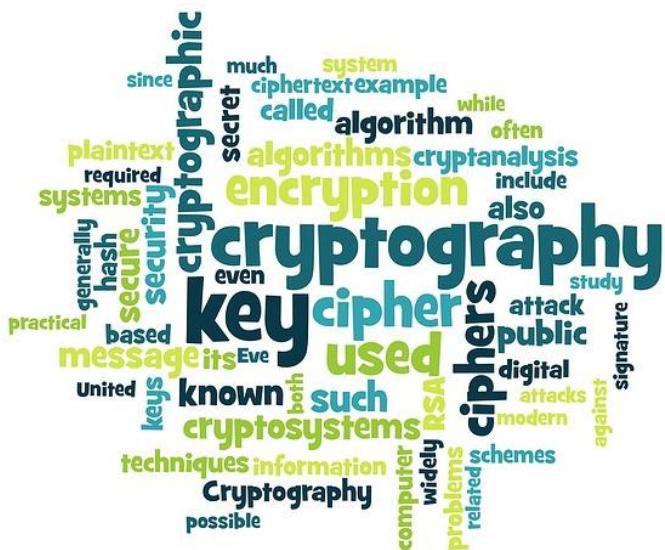
4a CRYPTOGRAPHY

VOCABULARY

1 Read and learn the words and phrases.

cryptography	криптография
intersection	пересечение
ATM (= automated teller machine)	банкомат
DRM (= digital rights management)	технические средства защиты авторских прав
copyright infringement	нарушение авторского права
prior to	до, перед
encrypt	зашифровывать, закодировать
conversion	изменение
apparent nonsense	очевидный абсурд
recipient	получатель
eavesdrop	подслушивать
adversary	противник
carry out	осуществлять, вполнять
plaintext	исходный текст
code	код
precisely	точно
cipher	шифр
(cryptographic) key	криптографический ключ
decrypt	расшифровывать
ciphertext	шифротекст

2 Write the synonyms to the words to complete the table.



cash machine, cashpoint	1
code, v	2
change	3
taker	4
enemy	5
execute	6
cipher	7
exactly	8
code, n	9
decode	10

3 Match the terms and definitions.

infringement / conversion / nonsense / recipient

- 1 a person who receives something
- 2 an action that breaks a rule, law, etc
- 3 the process of converting something from one thing to another
- 4 language that cannot be understood because it does not mean anything

prior to / apparent / eavesdrop / carry out

- 5 seeming to exist or be true
- 6 before a particular time or event
- 7 to listen to someone's private conversation without them knowing
- 8 to do or complete something, especially that you have said you would do or that you have been told to do

cryptography / ATM / DRT / copyright

- 9 a machine that you get money from using a plastic card
- 10 the use of special codes to keep information safe in computer networks
- 11 the legal right to control the production and selling of a book, play, film, photograph, or piece of music
- 12 the way that a company controls how users pay for music, films, books, etc. that are available on the internet or on electronic equipment in a digital form

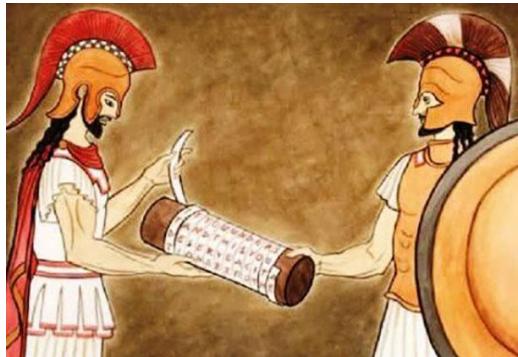
4 Change the number into one of the words: ATM, DRM, key, code, cipher, apparent, carrying, nonsense, adversary, copyright, decrypted, encrypted, precisely, conversion, recipients, intersection, eavesdropping, infringements.

- Dr Carter is (1) out research on early Christian art.
- There are one or two (2) discrepancies between the two reports.
- The translation of the instructions was so poor they were just (3).
- The letter was written in (4). (*four letters*)
- The fireworks begin at eight o'clock (5).
- Solar power is the (6) of the sun's energy into heat and electricity.
- The (7) of the lines on the graph marks the point where we start to make a profit.
- Is there an (8) on this street? I need to get some money out.
- Who owns the (9) on this article?
- Even minor (10) of the law will be severely punished.
- Your financial information is fully (11) and cannot be accessed.
- Former Nobel Peace Prize (12) include Jimmy Carter and Barack Obama.
- He was (13) on our conversation.
- He saw her as his main (14) within the company.
- The message was written in (15). (*six letters*)
- (16) can ensure that programs distributed by internet are legal copies for which the copyright holder is being paid a fee.
- Messages encrypted using the public (17) can be (18) only by someone with the private key.

READING

5 Read and translate the information about cryptography.

Cryptography



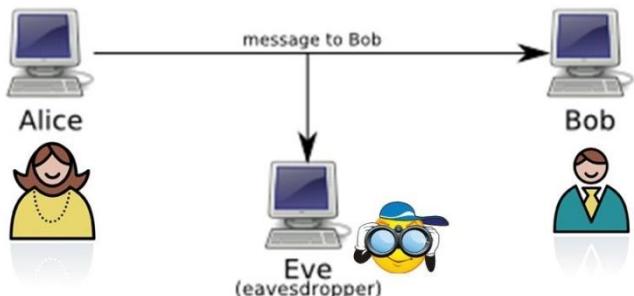
When Julius Caesar sent messages to his generals, he didn't trust his messengers. So he replaced every A in his messages with a D, every B with an E, and so on through the alphabet. Only someone who knew the 'shift by 3' rule could decipher his messages.

The word 'cryptography' comes from the two Greek words. The first one means 'hidden, secret' and the second one has the meaning of 'writing'. Cryptography is the practice and study of techniques for secure communication.

Various aspects in information security such as confidentiality, integrity, availability, authentication, non-repudiation, accountability, and reliability are central to modern cryptography.

Modern cryptography exists at the **intersection** of the disciplines of mathematics, computer science, and electrical engineering. Applications of cryptography include **ATM** cards, computer passwords, and shopping on the internet. Cryptography also plays a major role in **DRM** and **copyright infringement** of digital media.

Cryptography **prior to** the modern age was effectively synonymous with **encryption**, the **conversion** of information from a readable state to **apparent nonsense**. The originator of an encrypted message (Alice) shared the decoding technique needed to recover the original information only with intended **recipients** (Bob), thereby precluding unwanted persons (Eve) from doing the same. The cryptography literature often uses Alice ('A') for the sender, Bob ('B') for the intended recipient, and Eve ('**eavesdropper**') for the **adversary**. Nowadays the methods used to **carry out** cryptology are increasingly complex and its application is more widespread.



When a message (a '**plaintext**') is sent using cryptography, it is changed (or encrypted) before it is sent. The method of changing text is called a '**code**' or, more precisely, a '**cipher**'. Ciphers use a '**key**' which is a secret that hides the secret messages. The changed text is called '**ciphertext**'. The change makes the message hard to read. Someone who wants to read it must change it back (or **decrypt** it). How to change it back is a secret. Both the person that sends the message and the one that gets it should know the secret way to change it, but other people should not be able to. Studying the ciphertext to discover the secret is called '**cryptanalysis**' or '**cracking**' or sometimes '**code breaking**'.

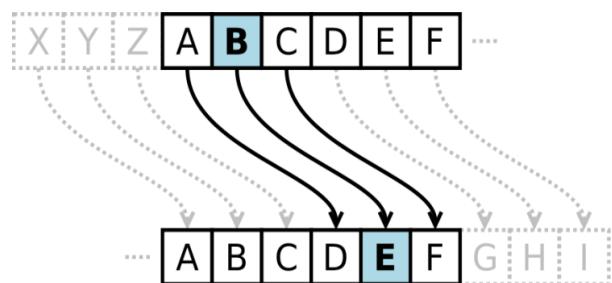
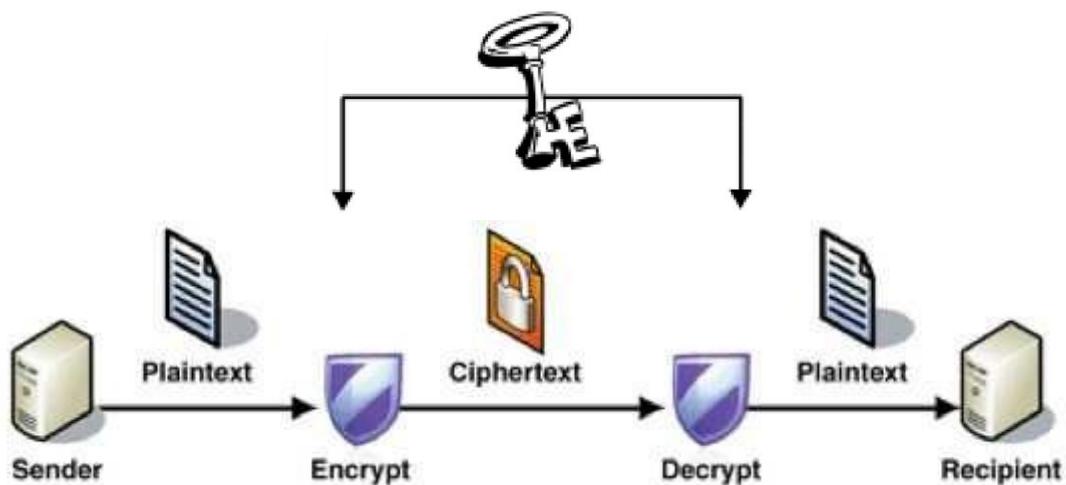
6 Match the terms and the definitions.

- | | |
|-------------------|--|
| Cryptography | a the output of the encryption process |
| Cryptographic key | b the study of methods for obtaining the meaning of encrypted information without access to the secret information which is normally required to do so |
| Encryption | c a way of changing information into something else |
| Decryption | d a way to change encrypted information back into the plaintext |
| Code | e the art or practice of concealing a message within another message |
| Cipher | f a piece of information that allows control over the encryption or decryption process |
| Plaintext | g the information which the sender wants to transmit to the receiver(s) |
| Ciphertext | h the practice and study of hiding information |
| Stenography | i an algorithm for performing encryption (coding) or decryption (decoding) |
| Cryptanalysis | j allows information to be hidden so that it cannot be read without special knowledge (such as a password) |

7 Answer the questions about cryptography.

- 1 What is cryptography?
- 2 What does the word ‘cryptography’ mean?
- 3 What does modern cryptography include?
- 4 Where is cryptography used?
- 5 When does a person encrypt his message: before or after sending it?
- 6 What is a ‘cipher’?
- 7 Can all people read an encrypted message?
- 8 Is a cryptographic key secret?
- 9 What do you know about the Caesar cipher?
- 10 Does only one cipher exist?

8 Explain what the terms at the picture mean.



GRAMMAR

Future Simple. When- and if-clauses

We use **Future Simple**:

5 to refer to things in the future that we think are **certain**

She will be here in fifteen minutes.

6 to make **predictions** about the future

The new computer will probably cost over \$500.

We often say **I think (I don't think) ... will ...:**

I think Tracy will pass the exam. I don't think they will win.

7 for **immediate intentions** and **decisions**. We usually use '**'ll**', not **will**, after **I think**.

I'm tired. I don't think I'll work late tonight.

8 to make **promises** and **offers**

I will phone you tomorrow.

We use **will** + the base form of the verb.

Positive	Negative	Question	Short answers
I			
You			
We			
They			
He			
She			
It			
	will (‘ll) work.	will not work. (won’t work.)	Will { I you we they he she it } work?
			Yes, { I you we they he she it } will.
			No, { I you we they he she it } won’t.

9 Complete the sentences with your own predictions.

Example: It will / will not snow next week. (snow)

- 1 Russia _____ the next football World Cup. (win)
- 2 Russia _____ a superpower in 2050. (become)
- 3 There _____ a world government before 2050. (be)
- 4 There _____ a new world war before 2050. (be)
- 5 English _____ the world language in 2050. (be)
- 6 People _____ very different in 2150. (look)
- 7 Everybody _____ a car in 2050. (have)
- 8 Everybody _____ a smartphone in 2050. (have)
- 9 Everybody _____ a computer in 2050. (have)
- 10 People _____ all information on computer in 2050. (store)
- 11 People _____ to avoid security breaches in 2050. (learn)
- 12 People _____ all information through the Internet in 2050. (transmit)
- 13 (Write your own prediction.)

10 Put in will ('ll) or will not (won't).

Example: I need some exercise. I think I'll go for a walk.

- 1 James _____ be 21 next year.
- 2 It _____ rain, so you don't need to take an umbrella.
- 3 I have some spare time. I think I _____ go out.
- 4 I'm leaving tonight, so I _____ be at work tomorrow.
- 5 I _____ call you at about 6 o'clock.
- 6 OK. My diary says I'm free on Wednesday.
So we _____ meet next Wednesday.
- 7 They _____ tell us very much until January.
- 8 _____ you be at home early tomorrow?
- 9 I _____ keep the firewall on. I think it is not necessary.
- 10 I am sure you _____ make a brilliant security specialist.
- 11 Don't miss so many classes. You _____ pass the credit test.
- 12 I think Sarah _____ pass the exam. She is very good at technical drawing.



11 Where will you be? Write sentences about yourself. Use I'll be ... or I'll probably be

Example: I'll (probably) be at home in the evening.

- 1 two hours from now
- 2 at 9 p.m. today
- 3 at midnight tonight
- 4 at 11 a.m. tomorrow
- 5 at 7 o'clock tomorrow evening
- 6 a year from now
- 7 six years from now



When- and if-clauses

After **when** or **if** we use the Present Simple form. In the main clause we use the Future Simple form or **to be going to**.

Examples:

When I meet him I will tell him about the conference.

I **will tell** him about the conference when I meet him.

When the weather **is** fine we **will go** for a picnic.

We **will go** for a picnic when the weather **is** fine.

If you **don't hurry** you **will be** late.

You **will be** late if you don't hurry.

If I have time I **will help** you with your homework.

I **will help** you with your homework if I have time.

12 Complete the sentences with the verbs. Write true sentences.

When I'm older I will ...

buy have eat go

- 68 When I'm older I _____ to parties.
69 When I'm older _____ two children.
70 When I'm older I _____ a car.
71 When I'm older I _____ a lot of sweets.



When I'm older I will not....

do write wash go

- 72 When I'm older I _____ any homework.
73 When I'm older I _____ my father's car.
74 When I'm older I _____ to school.
75 When I'm older I _____ so much.

13 Match two columns to make sentences.

- 76 If you pass the exam
77 If we meet tomorrow
78 If Sam has money
79 If I have time
80 If the weather is fine
81 If you go to bed late today
82 If it is late after party

- a I will help you with your homework.
b you may oversleep tomorrow.
c we will go for a picnic.
d I will have a taxi.
e you will get monthly grant.
f he will buy a car.
g I will give you this book.

14 Write the correct form of the verbs in brackets.

- 83 If it is hot this afternoon, we _____ (go) to the beach.
84 Peter (get) into trouble if he steals that cell phone!
85 You _____ (not pass) if you don't study harder!
86 I _____ (make) dinner if you like.
87 If it _____ (not be) too expensive, we'll buy it.
88 I _____ (give) you \$5 if you _____ (wash) my car.
89 I _____ (phone) you if I _____ (have) any news.
90 If we _____ (not help) them, they _____ (not finish) the work on time.
91 I _____ (buy) a new laptop computer if I _____ (save) enough money.
92 He _____ (not go) to school tomorrow if he _____ (not feel) better.
93 If they (not hurry), they _____ (be) late.
94 If it _____ (snow), we _____ (build) a snowman.
95 If you _____ (eat) everything now, you _____ (not have) anything to eat at lunchtime!
96 If you _____ (not turn down) the music, you _____ (wake up) the baby!



MORE WORDS AND PHRASES TO KNOW

immediate – недавний; происходящий здесь и сейчас

promise – обещание

4b ANTIVIRUS SOFTWARE

VOCABULARY

1 Read and learn the words and phrases.

antivirus software	антивирусная программа
hateful	ненавистный, отвратительный
day-to-day	повседневный
schedule	включать в расписание, планировать
flash drive	флеш-память, флеш-накопитель
behindhand	с опозданием
defender	защитник
essentials	предметы первой необходимости
suspicious	подозрительный
hence	следовательно
proliferation	рост числа (чего-либо)
hijacker	угонщик (самолёта), террорист
backdoor	бэкдор
rootkit	руткит
dialler	диалер
uniform resource locator (URL)	единий указатель ресурса
scam	мошенничество
advanced persistent threat (APT)	целевая кибератака
distributed denial-of-service (DDoS)	распределительная атака типа «отказ в обслуживании»
permanently	постоянно

2 Match the terms and their definitions.

hateful	day-to-day	schedule	suspicious
---------	------------	----------	------------

- a extremely unpleasant or unkind
- b happening every day as a regular part of your job or your life
- c to arrange that an event or an activity will happen at a particular time
- d making you feel that something is wrong or that something bad or illegal is happening
- e for this reason

behindhand	essentials	hence	proliferation	scam
------------	------------	-------	---------------	------

- e for this reason

- f an illegal plan for making money
- g the most important or necessary things
- h when something increases in number very quickly
- i late in doing something or slower doing something than expected

antivirus	flash drive	backdoor	dialler
-----------	-------------	----------	---------

- j relating to something that is done secretly or in a way that is not direct or honest
- k produced and used to protect the main memory of a computer against infection by a virus
- l a small piece of equipment that you connect to a computer or other piece of electronic equipment to copy and store information
- m a piece of software that allows people to connect to a phone number, for example over the internet, or by speaking a name or number into their mobile phone

3 Fill in the gaps in the sentences with the words from the right column.

- | | |
|--|--------------------|
| 1 He moved here _____ in 2012. | HATEFUL |
| 2 She called me the most _____ names. | SCHEDEDLED |
| 3 He's got an interview today, _____ the suit. | BEHINDHAND |
| 4 Your appointment has been _____ for next Tuesday. | SUSPICIOUS |
| 5 I called airport security after noticing a _____ package. | HENCE |
| 6 I worked late last night because I was _____ with my accounts. | BACKDOOR |
| 7 The change was immediately dismissed as a _____ tax increase. | DIALER |
| 8 A web-based _____ is useful for computer users who do not have access to a traditional telephone line. | PERMANENTLY |

READING

4 Read, translate and learn about what antivirus software is and how it helps to protect your computing device.

Antivirus Software

Antivirus software is a program or set of programs that are intended to prevent, search for, detect, and remove software viruses, and other **hateful** software like worms, trojans, adware, and more. These tools are dangerous for users to have installed and up-to-date since a computer without antivirus software installed will be infected within minutes of linking to the net. The attack is continuous, with antivirus companies update their detection tools continually to deal with the more than 60,000 new pieces of malware created **day-to-day**.

There are some different corporations that build and propose antivirus software and what each proposal can vary but all achieve some basic functions:

- scan exact files or directories for any malware or identified hateful patterns;
- agree you to **schedule** scan to automatically run for you;
- agree you to initiate a scan of an exact file or of your PC, Laptop, Mobile, Android tablet, iPhone, and other device or of a CD or **flash drive** at all time;
- remove any malicious code detected occasionally you will be informed of an infection and asked if you want to clean the file, additional programs will automatically do this **behindhand** the scenes;
- show you the strength of your PC, Laptop, Mobile, Android tablet, iPhone, and other device.

In Windows 8, Windows **Defender** replaces Microsoft Security **Essentials** (MSE). Windows Defender runs in the background and notifies you when you need to take specific action. However, you can use it any time to scan for malware if your computer isn't working properly or you clicked a **suspicious** link online or in an email message.

Antivirus software was originally developed to detect and remove computer viruses, **hence** the name. However, with the **proliferation** of other kinds of malware, antivirus software started to provide protection from other computer threats. In particular, modern antivirus software can protect from: malicious Browser Helper Objects (BHOs), browser **hijackers**, key loggers, **backdoors**, **rootkits**, trojan horses, worms, **diallers**, fraud tools, adware and spyware.

Some products also include protection from other computer threats, such as infected and malicious **uniform resource locators (URLs)**, spam, **scam** and phishing attacks, online identity (privacy), online banking attacks, social engineering techniques, **advanced persistent threat (APT)**, botnets, **DDoS** attacks.

Permanently be sure you have the best, up-to-date safety software installed to protect your device.

5 What do the acronyms mean?

APT	personal computer
BHO	compact disc
CD	Microsoft Security Essentials
DDoS	Browser Helper Object
MSE	uniform resource locator
PC	advanced persistent threat
URL	distributed denial-of-service

6 Complete the sentences with the terms from the box.

backdoor	dialler	flash drive	rootkit	scam
Antivirus software		Browser hijacking		Windows Defender
	advanced persistent threat		distributed denial-of-service (DDoS)	
	Browser Helper Object (BHO)		Microsoft Security Essentials (MSE)	
		Uniform Resource Locator (URL)		

- 1 _____ can prevent access to computer systems by unwanted computer programs.
- 2 A _____ is a popular way to store digital information. It is an easy way to share data or information.
- 3 _____ is another name for a web address. It is made of letters, numbers and other symbols in a standard form.
- 4 APT is an acronym to _____. It refers to a set stealthy and continuous computer hacking processes.
- 5 A _____ is a computer virus which allows someone to take control on your computer. It is very dangerous.
- 6 _____ is designed as a plug-in for Microsoft's internet Explorer web browser to provide added functionality.
- 7 A _____ is a cyber attack where the perpetrator uses more than one, often thousands of, unique IP addresses.
- 8 _____ is an application made by Microsoft. It prevents, removes and quarantines spyware in Microsoft Windows.
- 9 A _____ is an attempt to defraud a person or group after first gaining their confidence, used in the classical sense of trust.
- 10 In computing, a _____ is a way of bypassing security mechanisms to gain access to a resource that is otherwise secured.
- 11 _____ is a free antivirus software created by Microsoft that provides protection against viruses, spyware, rootkits, and Trojans for Windows XP.
- 12 A _____ is an electronic device that is connected to a telephone line to monitor the dialed numbers and alter them to seamlessly provide services that otherwise require lengthy National or International access codes to be dialed.
- 13 _____ is a form of unwanted software that modifies a web browser's settings without a user's permission, to inject unwanted advertising into the user's browser.

GRAMMAR

Be going to

We use ***be going to*** + the base form of the verb:

- 1 to talk about future **plans, decisions** and **firm intentions**, especially in an informal style

I'm going to buy some books tomorrow.

- 2 to **predict** something that we think is certain to happen or which we have evidence for now

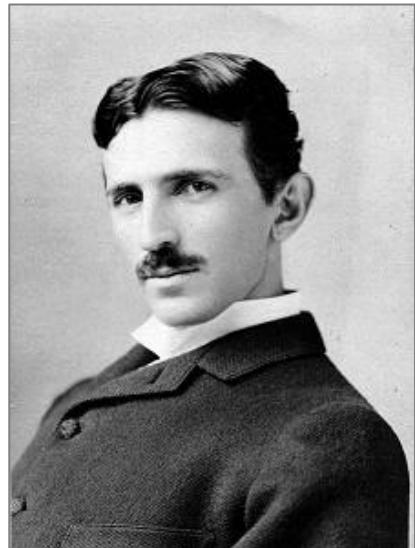
It's going to snow again soon. (The speaker can probably see dark snow clouds.)

I He/She/It We/You/They	am is are	(not) going to	work.
Am Is Are	I he/she/it we/you/they	going to	work?

7 Fill in the gaps with *am/is/are*. Translate the sentences.

Example: The radio says it is going to be sunny tomorrow.

- 1 We _____ going to drive to London on Saturday.
- 2 *I'm* about 100% sure *I* _____ going to fail in the exam tomorrow.
- 3 Sarah and Sean _____ going to buy a house in Manhattan.
- 4 *They* _____ going to develop a new product next month.
- 5 The laboratory _____ going to control the quality of the test method.
- 6 *The scientists* _____ going to repeat Tesla's experiment in the autumn of 2016.
- 7 According to the press release, *the company* _____ going to produce a wide range of modules for these phones.
- 8 I _____ going to change the password on my laptop.
- 9 It _____ going to cost ₱8,000 to repair your computer.



8 Put the sentences together, using *be going to*.

Example: I don't want to go home by bus. I'm going to walk.

BEGINNINGS	ENDS
A 1 I don't want to go home by bus. 2 Jane is going to Cardiff next week. 3 After university I 4 The weather forecast says 5 The number of students at the university 6 The rouble exchange rate	a She / stay in a hotel. b go down next year. c go up next week. d I / walk. e it / snow tomorrow. f work as an IT security specialist.
B 7 What / John / do 8 Jack and Paul / start 9 Rita / spend more time 10 I / finish 11 William / buy	g a new tablet computer next month. h when he graduates from university? i my term paper at the weekend. j their own business. k on her studies this term.

9 Look at Alex's diary. In pairs, ask and answer questions about his plans. Use *be going to*

Monday 21	Thursday 24
<i>write report</i> <i>call mom</i>	<i>course work deadline</i> <i>buy food for cat</i> <i>visit grandma at 18.30</i>
Tuesday 22	Friday 25
<i>dinner with Sarah</i> <i>buy a gift for Sam</i>	<i>meet mom at the station at 14.00</i>
Wednesday 23	Saturday 26
<i>dentist at 14.00</i> <i>meet Sam at 19.00</i>	<i>party at Sam's house at 19.00</i>

10 Ask questions for the following answers.

Example: Who are you going to see? - I am going to see my grandparents.

- 1 She is going to read a book.
- 2 They are going to live in the countryside.
- 3 I am going to invite John.
- 4 He is going to visit the British Museum.
- 5 They are going to play football.
- 6 My sister is going to study in London.

11 Turn the sentences into the future (going to). Follow the example.

Example: I study every day. I'm going to study tomorrow.

- 1 He does gymnastics once a week.
- 2 I clean my bedroom every morning.
- 3 She phones her boyfriend every morning.
- 4 She plays video games every morning.
- 5 She reads the papers every day.
- 6 They have a party every week.
- 7 They take the rubbish out every night.
- 8 We go fishing with them every week.
- 9 We watch television every evening.

12 Answer the questions. Follow the example.

Example: Are you going to study tonight? (attend a concert) No, I'm going to attend a concert.

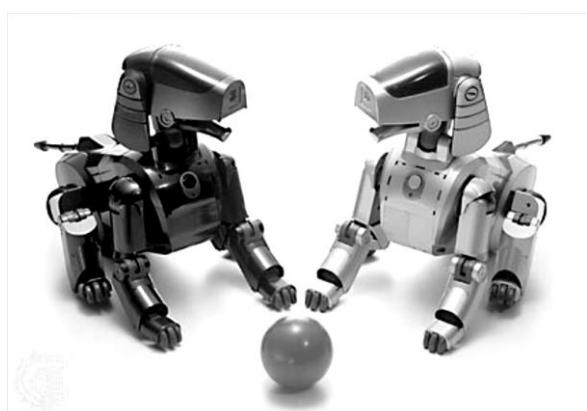
- 1 Are you going to have lunch now? (have/ a rest)
- 2 Are you going to work today? (stay / in bed / all day)
- 3 Is he going to buy a new pair of shoes? (buy / a pair of roller skates)
- 4 Are they going to wash the car tomorrow morning? (mend / the bicycle)
- 5 Are they going to cook dinner? (go/ to a pizza restaurant)
- 6 Is she going to write on the board? (write / in the exercise book)
- 7 Are they going to wear an anorak? (wear / a rain coat)
- 8 Are they going to visit the exhibition? (have / a barbecue/ in their garden)

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13 Fill in the table below and answer the questions.

My Own Personal Robot...

...is going...	...is never going...



- 1 Do you think people are going to use robots in everyday life in a few years?
- 2 Is it good or bad to have a machine which works instead of you? Why?
- 3 Are the robots going to change man in some professions (doctors, teachers, drivers)?
- 4 Do you know the Three Laws about robots by Isaac Azimov? What is going to happen if they are broken.

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MORE WORDS AND PHRASES TO KNOW

certain – точный, определённый

decision – решение

evidence – доказательство(-а); признак(и)

firm – твёрдый

identify – определять

initiate – начинать, вводить

intention – намерение

predict – предсказывать

4c ACCESS CONTROL

VOCABULARY

1 Read and learn the words and phrases.

access control	контроль доступа
barrier	барьер, ограждение
alarm	сигнализация
guard	сторожить, охранять; караулить
digital signature	цифровая подпись
identification	опознавание, установление личности
feature	черты лица
fingerprint	отпечаток глаза
personnel	персонал, штат
accompany	相伴, сопровождать
intelligent	умный
grant	выдавать, давать разрешение
sensor	датчик
make a decision	принять решение
independent	независимый
retina	сетчатка (глаза)
palm	ладонь
sweaty	потный
dilate	расширять(ся)
permit	разрешать

READING

2 Read and translate about many different ways in which individuals/entities can prevent someone/thing from accessing their premises/belongings.

Access Control

Access control is the term used to describe how a person, mechanical device, or computer system uses both physical **barriers** and **alarms** to keep an unauthorized person from entering a specific area.

Nowadays, almost every computer user has a firewall or antivirus, a pop-up blocker, and many other programs running on his/her computer. All of these programs are access control mechanisms that **guard** users from intruders. Computers have complicated access control abilities. They ask for authentication and search for the **digital signatures**.

Physical security involves a door, lock, wall, or some other object that physically prevents a person from entering a room or building. A door with its handle is the most common form of physical security. Generally, other access control sources such as **identification** scanners (which scan physical **features**, voices, and **fingerprints**), alarms, cameras, or armed **personnel accompany** physical security.

A **non-intelligent** access control reader (basic reader) is an access control system that simply reads the user's input and has no control over whether or not access is **granted**. For example, an access control system requires the user to swipe a card in order to access a room or account. These types of readers are the most common and can be found on ATM machines and hotel doors.

A semi-intelligent access control reader acts in the same manner as a non-intelligent access control reader but has some control over the actual physical security that prevents the user from accessing the room or object. For example, an access control system that uses a **sensor** to open a door, such as those often found in supermarkets, would be considered a semi-intelligent access control reader.

An intelligent access control reader receives input from the user just as any other reader would, but has full control over whether access is granted or not. These types of systems can actually **make decisions** based on the situation and are fully **independent** from other computer systems. For example, an access control system that requires the user to provide a fingerprint and **retinal** scan would not be considered an intelligent access control reader by itself. However, if that system were able to notice that the user's **palms** were **sweaty** and eyes were **dilated** and made a decision to not **permit** the user into the account or building, it would be considered an intelligent access control reader.

GRAMMAR

Will vs be going to

We use **be going to**:

• when we want to talk about a plan for the future.	I'm going to see him later today. They're going to launch it next month.
• when we want to make a prediction based on evidence we can see now.	Look out! That cup is going to fall off. Look at those black clouds. It's going to rain soon.

We use **will**:

• with "I think, I promise, I wish, I guess, I hope".	I think she'll do well in the job. I hope you'll enjoy your stay.
• at the moment we make a new decision or plan . The thought has just come into our head.	Bye. I'll phone you when I get there. I won't tell him. I promise.

Compare:

	
- Look at those black clouds. It's going to rain soon.	- It's so hot! I hope it will rain soon!

3 Write **A** if the decision is made at the moment of speaking or **B** if it is a decision made before.

- 1 I'm bored! I think I'll phone Alison.
- 2 We are going to have a party next weekend.
- 3 Our teacher says he's going to give us a test next week. ____
- 4 I'm hungry. I think I'll make a sandwich.
- 5 You haven't got any money? I'll lend you some.
- 6 It's Steve's birthday next week. I'm going to buy him a great present.
- 7 There's a test next Monday, so I'm going to study over the weekend.
- 8 It's very cold in here, isn't it? I'll close the window.

4 Put the correct words into the sentences:

will *going*

won't

not going

- 1 I'm _____ to college today.
- 2 I'm _____ to college today because it's raining.
- 3 Jack _____ be at work today. He's sick.
- 4 Next week we are _____ on holiday.
- 5 I _____ see you next week. Take care.
- 6 I'm _____ shopping tomorrow.
- 7 We are _____ shopping in the mall at the weekend.
- 8 The doctor _____ see you at 5 o'clock.
- 9 I _____ help you paint your house.
- 10 I _____ see you next week because I'm _____ on holiday

5 Circle the correct words.

- 1 I want to visit Paris next year so I'm **going to** / **I'll** learn French next term.
- 2 There aren't any good films on TV tonight, so I think I'm **going to** / **I'll** watch the football match.
- 3 My computer's old so my dad's **going to** / 'll buy me a new one for my birthday.
- 4 My sister and I have planned our holiday. **We're going to** / 'll visit our cousin in Canada.
- 5 I haven't spoken to John for a long time. I think I'm **going to** / 'll phone him now.
- 6 What can I get Jane for her birthday? I know. I'm **going to** / 'll take her to the cinema.



6 Write the correct form of *going to*, *will*.

- 1 "Why is Sofia getting a passport?" "She _____ live in Spain for a year"
- 2 I know she _____ (not) agree with this idea.
- 3 I think the film _____ (be) a big success.
- 4 There's someone at the door. "Ok, I _____ answer it."
- 5 She _____ never see her parents again. She has moved to South Africa.
- 6 "Is that your new stereo?" "Yes, but it doesn't work. I _____ to take it back to the shop!"
- 7 I think the exam _____ be easy.
- 8 "I see Hannah and Peter together a lot." "Yes, they _____ get married"
- 9 You _____ probably have a really good time.
- 10 The dog looks ill. I think it _____ be sick.



7 With a partner, ask and answer questions about your plans.

Example: – *What are you doing tomorrow morning? – I'm going to university.*

tomorrow morning	in a month
in two hours	in Summer
next weekend	after exams
today evening	after the lessons
next Friday	in 10 years

8 Make an interview with a scientist about life in the future. Make the questions.

1 _____ life, be, better?

I think, life will be better because people will change.

2 _____ people, take care of each other?

Yes, they will.

3 _____ what, people, eat?

I'm sure that people will eat more healthy food. Lots of fruit and vegetables.

4 _____ how, they, travel?

In my view, there will be some electric cars, electric bikes and modern planes, trains and buses. Some people will also prefer walking to driving any vehicles to save our planet.

5 _____ people, fly, on Mars?

Yes, there are some projects but we still have a lot of problems unsolved.

9 Considering all the uses of will and going to, choose the best form.

1 “Why are you wearing those old clothes?” - “Because I **will do / am going** to do the gardening.”



2 “I think I have a temperature.” - “Wait a minute. I **will get / am going to get** the thermometer.”

3 “What time is Ann’s party?” - “I don’t know but I **will phone / am going to phone** her.”

4 “Why are you buying so much food?” - “Because I **will invite/ am going to invite** some friends for dinner.”

5 “What **will you do / are you going to do** in the summer holidays?” - “I **will spend / am going** to spend a few weeks at my cousin’s beach house.”

6 “Don’t forget it’s a secret!” - “Don’t worry, I **won’t tell / am not going to tell** anyone.”

7 “What do you want to eat?” - “I’m not sure. Maybe I **will have / am going to have** a cheeseburger.”

8 “Look how that lunatic is driving! He **will kill / is going to kill** someone!” - “I **will get / am going to get** his number plate. Have you got a pen?”

MORE WORDS AND PHRASES TO KNOW

account – счёт

authentication – установление подлинности

4d INTRUSION DETECTION SYSTEMS (IDS) AND INTRUSION PREVENTION SYSTEMS (IPS)

VOCABULARY

1 Read and learn the words and phrases.

intrusion detection system (IDS) система обнаружения вторжений

intrusion prevention system (IPS) система предотвращения вторжений

confusing сбивающий с толку

vendor поставщик

acronym акроним (*вид аббревиатуры*)

solve a problem решать проблему

compared to по сравнению с

firewall брандмауэр

packet пакет (*блок данных*)

wire провод

deny отказывать, лишать

drop исключать

absence отсутствие

implicit безоговорочный

visibility видимость

posture состояние, положение

from the security point of view с точки зрения безопасности

excruciating мучительный

release выпускать

hybrid гибрид

READING

2 Read, translate and learn about intrusion defence tools.

Intrusion detection systems (IDS) and intrusion prevention systems (IPS)

Intrusion detection systems (IDS) and intrusion prevention systems (IPS) are a particularly confusing area because the products are so similar, the vendors are all the same, and even the acronyms are hard to tell apart. We will explain the capabilities of each and how to decide whether you need one or both technologies.

It is important to start out with the understanding that IDS and IPS are very, very different tools. Even though they have a common base, they fit into the network in different places, have different functions, and solve different problems.

An IPS is best compared to a firewall. In a typical firewall, you'll have some number of rules: maybe a hundred, maybe a thousand. Most of those rules are 'pass' rules: 'allow the traffic through'. Thus, the firewall gets a packet off the wire and starts through its rules, looking for a rule that says 'allow this packet through'. If it gets to the end of the list and there's no rule saying 'allow this packet through', then there is a final 'deny' rule: 'drop everything else'. Thus, in the absence of a reason to pass the traffic the firewall drops it.

And IPS is like that, but inside out: it has rules, maybe hundreds, maybe thousands. Most of those rules are 'deny' rules: 'block this known security problem'. When a packet shows up at the IPS, the IPS looks through its rule list from top to bottom, looking for some reason to drop the packet. At the end of the list, though, is an implicit 'pass' rule: 'allow this packet through'. Thus, in the absence of a reason to drop the traffic, the IPS passes it through.

If an IPS is a control tool, then an IDS is a visibility tool. Intrusion Detection Systems sit off to the side of the network, monitoring traffic at many different points, and provide visibility into the security posture of the network. A good analogy is to compare an IDS with a protocol analyzer. A protocol analyzer is a tool that a network engineer uses to look deep into the network and see what is happening, in sometimes excruciating detail. An IDS is a 'protocol analyzer' for the security engineer. The IDS looks deep into the network and sees what is happening from the security point of view.

If all products were either an IDS or an IPS, then the answer to the question of 'which should I buy' would be easy: buy an IDS if you want visibility, and buy an IPS if you want control. But IPS and IDS vendors do not make it easy for us, because they have developed and released hybrid products which combine IDS visibility on top of IPS control.

GRAMMAR

Future Forms

Form	Situation	Example
Present Continuous	plans	I am meeting my friend at the pub this evening. Emma is flying to London next week.
be going to	plans	We are going to meet George at the stadium.
	predictions based on observations	Look at those black clouds. It's going to snow .
Present Simple	timetables schedules	The train leaves at 8.00 The film starts at 7 o'clock.
Future Simple	future facts decisions at the time of speaking predictions	Luke left three hours ago, so he will be in London by now. I'll carry your bag for you. I think he will pass the exam well.

3 Complete the second sentence so that it has a similar meaning to the first sentence:

*Example: My party is on Thursday. - I'm **having** a party on Thursday.*

- 1 Tomorrow's weather forecast is for rain.
It's _____ tomorrow.
- 2 I predict a victory for our team.
I think _____ win.
- 3 Tomorrow I'll be absent, Mr Jones.
I _____ here tomorrow, Mr Jones.
- 4 Terry intends to finish painting the kitchen this evening.
Terry _____ painting the kitchen this evening.
- 5 I have a plan to go to the cinema on the weekend.
I _____ to the cinema on the weekend.
- 6 The bus will be here at 5 o'clock.
The bus _____ at 5 o'clock.



4 Open the brackets and complete the sentences. For arranged actions use Present Continuous, when you decide to do something at the moment of speaking use Future Simple.

- 1 -Are you ready to go? – I _____ (to be) ready in 2 minutes.
- 2 Oh! My favourite chair is broken! – Don't worry! I _____ (to repair) it in a minute.
- 3 They _____ (to drive) to Novosibirsk next weekends. They told me yesterday.
- 4 I'm sorry I was late for the lesson. It _____ (not happen) again.

- 5 Her parents _____ (to fly) to Greece next summer. They bought tickets.
- 6 Tom and Jane _____ (to get married) next month. They invited us.
- 7 It's Kate's birthday next week. She _____ (to be) 18. – I _____ (to buy) her a present.
- 8 Carl _____ (not play) football on Saturday. His leg hurts.
- 9 I think John _____ (to pass) the exam. He studied hard all the semester.
- 10 Let's go to the cinema tonight? – I'm afraid I can't. I _____ (to prepare) for an important exam.
- 11 _____ you _____ (to be) at home tomorrow evening?
- 12 Don't drink too much coffee before you go to bed. You _____ (not sleep).



5 Open the brackets and complete the sentences. For arranged actions use Present Continuous, for timetables, schedules, programs, buses, trains use Present Simple.

- 1 I _____ (to go) to the concert this evening! I can't wait!
- 2 What time _____ the film _____ (to begin)?
- 3 I _____ (not go) anywhere tonight. I _____ (to stay) at home.
- 4 Lucy and James _____ (to go) to the theatre this evening. The play _____ (to begin) at 8.00.
- 5 Excuse me. What time _____ this train _____ (to get) to London?
- 6 Lily is doing an Italian course at the moment. The course _____ (to finish) on Wednesday.
- 7 Do you know about Alex and Jane? They _____ (to get married)!
- 8 -My friends _____ (to go) on holiday next Friday. – That's nice! Where _____ they ...?
- 9 I'm bored with this soap opera. When _____ it _____ (to finish)?
- 10 Hurry up! Our train _____ (to leave) in 5 minutes.



6 Put the verbs in brackets into the Future Simple, the Present Simple or the Present Continuous form.

- 1 I _____ (to see) Peter at eight o'clock tomorrow. – Really? I thought he is in the country with his mother.
- 2 What _____ you _____ (to do) on Sunday morning? – Nothing, I have no plans.

- 3 – There is a new movie with Scarlett Johansson. I _____ (to go) to the cinema tomorrow. Would you like to go with me? – What time _____ it _____ (to start)?
- 4 – Sarah _____ (to have) a birthday party next Saturday. _____ you _____ (to come)? – Oh! I think I _____ (to come).
- 5 – Excuse me! What time _____ the train _____ (to arrive)? – At 5.45. _____ you _____ (to go) to Novosibirsk?

7 Put each verb in brackets in the most appropriate Future form. More than one answer may be possible in some sentences.

- 1 I think fashion _____ (be) very different in the year 2050.
- 2 My brother _____ (study) classical music in Salzburg.
- 3 Don't lend Paul your car. He _____ (crash) it.
- 4 I bought this camera because I _____ (take) a photography course next week.
- 5 I'm sure William _____ (not pass) the exams again.
- 6 The show _____ (not start) until 7.30 so I think we _____ (have) time to eat a sandwich first.
- 7 What _____ (Harry / do) when he leaves school?
- 8 He has already decided: he _____ (study) medicine in London.



8 Choose the correct variant.

- 1 Can you give me a lift to Amelia's party this evening?
 - a. No problem. I'm going to pick you up at nine.
 - b. No, problem. I'll pick you up at nine.
- 2 Why can't you come to the cinema tomorrow?
 - a I've already told you. We are having dinner with our cousins.
 - b I've already told you. We 'll have dinner with our cousins.
- 3 Hi Ferry. Are you walking to the bus stop?
 - a Yes, it's Kate birthday and I'll get the bus to her house.
 - b Yes, it's Kate birthday and I'm going to get the bus to her house.
- 4 Hey folks! The phone is ringing.
 - a Ok. I'll answer it.
 - b OK. I'm answering it.
- 5 Who do you think is going to get the job in the bank?
 - a I think James is getting the job.
 - b I think James will get the job.
- 6 This box looks awfully heavy!
 - a I'm helping you carry it if you like.
 - b I'll help you carry it if you like.

MORE WORDS AND PHRASES TO KNOW

apart – на части

prediction – предсказание, прогноз

4e EDUCATION CLIP: HIGHER EDUCATION IN THE UK

VOCABULARY

1 Read and learn the words and phrases.

reputation worldwide	всемирная репутация, репутация по всему миру
provide	обеспечивать; предоставлять
quality	качество
age	возраст
study for a degree	получать степень (высшее образование)
academic degree	академическая степень
award	присуждать
typical	типичный, обычный
last	продолжаться
offer	предлагать
undergraduate	студент, получающий степень бакалавра
complete	заканчивать, завершать
postgraduate	студент, получающий степень магистра или доктора по крайней мере
at least	
include	включать
research	научное исследование
century	век, столетие
pay fee	зд. оплачивать обучение
living costs	стоимость проживания
obtain a personal grant	получать персональную стипендию

2 Match the words and their definitions.

A

- | | |
|-----------------|--|
| 1 award | a a detailed study of a subject |
| 2 grant | b money for a special purpose |
| 3 research | c to officially give someone a prize or money |
| 4 undergraduate | d a student who is studying for a higher degree |
| 5 postgraduate | e a student who is studying for their first degree |

B

- | | |
|-----------------|---|
| 6 fee | f to provide something |
| 7 offer | h in all parts of the world |
| 8 worldwide | i money for professional advice or services |
| 9 reputation | j what people think about someone or something |
| 10 living costs | g money that a student needs to live in a hall of residence |

3 Can you guess what words and phrases are here?

1 c e n r t u y
2 c d e i l n u
3 a i l q t u y
4 a c i l p t y
5 a a d e g o p r s t t u
6 a a d d e e g n r r t u u
7 a d d e e e f g o r r s t u y
8 a a c c d d e e e i g m r

4 Complete the sentences.

- 1 At what _____ do people enter a higher education institution in the UK?
A academic **B** age **C** at least
- 2 You should wait for the examination results _____ an hour.
A at least **B** award **C** century
- 3 _____ the sentences with one of the phrases.
A complete **B** degree **C** fee
- 4 How long does the examination _____?
A grant **B** include **C** last
- 5 These textbooks are impossible to _____.
A living costs **B** obtain **C** offer
- 6 Her uncle has a _____ interest in her education.
A offer **B** pay **C** personal
- 7 These booklets _____ useful information about TUSUR.
A postgraduate **B** provide **C** quality
- 8 All over the world students ask for a good _____ of education.
A provide **B** quality **C** reputation
- 9 Both universities have a good _____.
A reputation **B** research **C** study
- 10 They are doing some interesting _____ on hacking.
A research **B** study **C** typical

READING

5 Read and translate the information about higher education in the UK.

Higher Education in the UK



The UK has a **reputation worldwide** for **providing** high **quality** higher education. Students usually enter university from **age** 18, and **study for an academic degree**. There are 160 universities and colleges in the UK. They **award** a lot of degrees. The **typical** first degree is a bachelor's degree. It usually **lasts** for three years. Usually this is a *Bachelor of Arts (BA)* or *Bachelor of Science (BSc)* degree.

Some universities **offer** a *vocational foundation degree*. It usually lasts two years. During the first degree students are **undergraduates**.

After students **complete an undergraduate degree**, they have an opportunity to **take a postgraduate degree**. This is a master's degree, such as the *Master of Arts (MA)*, *Master of Science (MSc)* or *Master of Business Administration (MBA)*, or a **doctorate**, such as the *Doctor of Philosophy* degree (*PhD* or *DPhil*). Master's degrees take **at least** a year of full-time postgraduate study and **include** an element of **research**. *Doctoral degrees* usually take three years full-time. They include programmes of *original research*.

England has the two oldest universities in the English-speaking world, the Universities of Oxford and Cambridge with history of over eight **centuries**. The UK universities are among the top higher education institutions in the world.

The higher education in the UK is not free. Students **pay fees** and **living costs**, but they often **obtain a personal grant** from the state.

Notes

Bachelor of Arts (BA) – бакалавр искусств (степень бакалавра по одной из гуманитарных наук в университетах)

Bachelor of Science (BSc) – бакалавр естественных или точных наук

vocational foundation degree – базовая профессиональная степень

Master of Arts (MA) – магистр искусств, магистр гуманитарных наук

Master of Science (MSc) – магистр естественных или точных наук

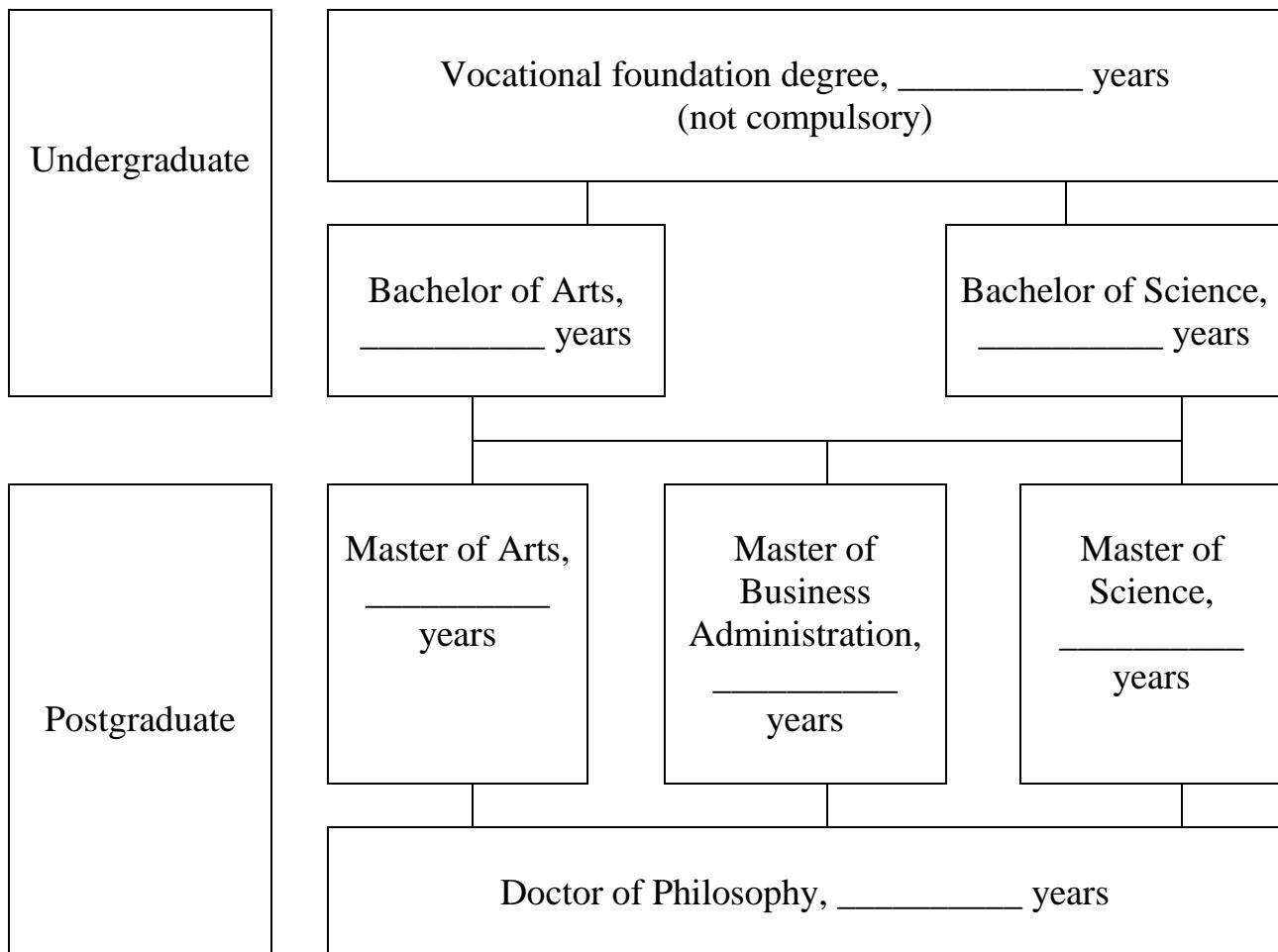
Master of Business Administration (MBA) – магистр делового администрирования
doctorate, doctoral degree – докторская степень

Doctor of Philosophy (PhD, DPhil) – доктор наук (общая для всех областей
докторская степень)

original research – оригинальное, подлинное исследование (исследовательская
работа)

6 Complete the table.

The System of Higher Education in the UK



7 Correct the mistakes about higher education in the United Kingdom.

- 1 The higher education is free.
- 2 There are 320 universities and colleges in the UK.
- 3 Students usually enter university from age 24.
- 4 Doctorates usually take three years extramural.
- 5 Universities award only Bachelor of Arts and Master of Arts degrees.

8 Fill in the gaps.

- 1 The UK provides high quality _____ education.
- 2 During the _____ degree students are undergraduates.
- 3 Doctorates include _____ of original research.
- 4 The Universities of Oxford and Cambridge are over _____ centuries old.
- 5 The UK has two oldest _____ in the English-speaking world.

GRAMMAR

Adjectives and adverbs; Degrees of comparison

Adjectives describe nouns. The adjective is before the noun:

*I live in a **modern** flat.*

The adjective is also after the verb **be**:

*The book is **interesting**.*

Most common adjectives are members of a pair of opposites (antonyms), e.g.:

<i>big – small</i>	<i>early – late</i>	<i>high – low</i>	<i>loud – quiet</i>
<i>cheap – expensive</i>	<i>easy – difficult</i>	<i>hot – cold</i>	<i>old – new / modern</i>
<i>dead – alive</i>	<i>fast – slow</i>	<i>light – dark</i>	<i>old – young</i>
<i>dry – wet</i>	<i>good – bad</i>	<i>light – heavy</i>	<i>warm – cool</i>

9 Put the words in the right order.

*Example: (big / they / a / live / house / in) **They live in a big house.***

- 1 (British / is / Tracy)
- 2 (quiet / please / be)
- 3 (you / student / a / are / good)
- 4 (his / beautiful / is / girlfriend / very)
- 5 (boxes / heavy / are / these / big / and)
- 6 (interesting / but / course / is / the / difficult)
- 7 (you / any / speak / languages / do / foreign?)
- 8 (expensive / an / James / computer / tablet / has)
- 9 (do / system / the / you / operating / like / new?)
- 10 (gain / phreaks / access / to / systems / unauthorized / telecommunication)



Adverbs describe verbs. To form regular adverbs, we add **-ly** to the adjective.

Adjectives ending in **-y** change to **-ily**.

Compare:

*This is an **easy** exercise. I can do that **easily**.*

*Be **careful!** Listen **carefully!***

These words are adjectives and adverbs: *early, late, fast, hard*.

*Our job is very **hard**. We work very **hard**.*

*Sorry, I'm **late**. I never come **late**.*

(Un)friendly is an adjective.

*Philip is a **warm** and **friendly** person but his brother is very **unfriendly**.*

The adverb from *good* is *well*.

*He is a **good** instructor. He teaches me **well**.*

10 Which is right?

Example: Can you speak slow/ slowly, please?
slowly is right

- 1 The music is playing very quiet/ quietly.
- 2 Please be quiet/ quietly. I'm studying.
- 3 Stephen usually does very good/ well in his exams.
- 4 Martin's English is very good/ well. He speaks English very good/ well.
- 5 It's going to be an easy/ easily test. You'll pass easy/ easily.
- 6 Don't worry. Amanda is a careful/ carefully driver. She always drives very careful/ carefully.
- 7 That's not a bad/ badly idea.
- 8 Some companies pay their workers very bad/ badly.
- 9 EU citizens can now travel free/ freely between member states.
- 10 Phreaks trick a phone system to make free/ freely calls.



Comparative adjectives are forms like *younger, more expensive*.

The comparative is **-er** (*younger*) or **more** ... (*more expensive*).

Superlative adjectives are forms like *youngest, most expensive*.

The superlative is **-est** (*youngest*) or **most** ... (*most expensive*).

- Short (1-syllable) words add **-er, -est**:

Saint Petersburg is an old city. Tomsk is older than Saint Petersburg, but Moscow is the oldest.

BUT *safe – safer – the safest*: *It is one of the safest cars in the world.*

Adjectives ending in 1 vowel + 1 consonant double the consonant:

It is hotter in the afternoon than in the morning.

Russia is the biggest country in the world.

- 2-syllable words ending in **-y** change **y** to **i** and add **-er, -est**:

Exercise 1 is easy and Exercise 2 is even easier. But I think Exercise 3 is the easiest.

- Other 2-syllable words and longer words put **more** and **(the) most** in front:

The information in the article is more useful than in the book.

This problem is the most important of the three.

These adjectives are irregular: *far – further – the furthest*

good – better – the best bad – worse – the worst

11 Write the comparative and superlative of these adjectives.

Example: old – older – the oldest

- 1 happy
- 2 difficult
- 3 interesting
- 4 modern
- 5 cheap
- 6 nice
- 7 far
- 8 late
- 9 heavy
- 10 serious
- 11 new
- 12 wet



Comparative and superlative adverbs normally have **more** and **most**.

*Can you drive **more** slowly?*

*German is the language he speaks **the most** easily.*

But the following adverbs have **-er**, **-est** like adjectives:

early fast hard late near soon

*Mary will be back **later**. Bill works **hardest** of all.*

We can also use **better**, **best**, **worse** and **worst** as adverbs.

*Mike is doing **worse** in the exams this term. Which one do you like **best**?*

12 Write the comparative/superlative of a word from the box for each gap.

near	good	well	safe	long	fast	hard
interesting	carefully	expensive	late	big	slow	

Example: Los Angeles is safer than New York.

- 1 London is _____ than other UK cities. Its area is about 1,600 km².
- 2 ‘What is _____ river in the world?’ ‘The Amazon.’
- 3 ‘Life in the country is _____ than city life.’
‘Yes, the city is much faster.’
- 4 Teachers always say that students must work _____.
- 5 Children learn things _____ than adults.
- 6 Linda swims _____ (лучше) than her sister.
- 7 Jack’s wife drives _____ than he does.
- 8 We are going to Rome _____ in the year.
- 9 Are desktop computers _____ than laptops? I’m thinking which to buy.
- 10 Excuse me, where is _____ computer shop?

- 11 David is a good programmer but he isn't _____ in the company.
- 12 It is _____ article on robotics in the journal.

13 Translate these sentences into English. Use comparatives/superlatives.

- 1 У меня много друзей в новой группе. Люди здесь гораздо (*much*) дружелюбнее.
- 2 Университетский корпус – самое старинное здание на этой улице.
- 3 Я не могу говорить громче.
- 4 Машина моего друга дороже моей.
- 5 Китайский – это самый трудный для меня язык.
- 6 Я собираюсь посмотреть последние новости по телевизору.
- 7 Это самый лёгкий мобильный телефон из трёх (*of the three*).
- 8 В нашей компании самое современное оборудование в городе.
- 9 Какой из этих компьютеров работает (*run*) быстрее всех?
- 10 Майкл считает, что планшетный компьютер лучше ноутбука

4f REVISION

VOCABULARY & READING

1 Match the terms and their abbreviations.

APT	personal computer
ATM	Microsoft Security Essentials
BHO	compact disc
CD	Browser Helper Object
DDoS	advanced persistent threat
DRM	intrusion prevention system
IDS	intrusion detection system
IPS	distributed denial-of-service
MSE	uniform resource locator
PC	digital rights management
URL	automated teller machine

SPEAKING & WRITING

2 Read and translate the following topics. Discuss them in small groups. Choose one topic to write about it 10-15 sentences.

- 1 Cryptography
- 2 Antivirus Software
- 3 Access Control
- 4 Intrusion defence tools

GRAMMAR

6 Complete the sentences using one of the forms: “will” or “going to”.

- 1 Are you going to the supermarket? - Yes, I ... (to buy) some food.
- 2 - Where are you going? - I ... (to buy) an ice cream.
- 3 ... (you/ to read) this detective story? Can I take it?
- 4 Can I use your toothpaste? I ... (to brush) my teeth.
- 5 I can't see you in the evening. I ... (to visit) my parents.
- 6 I promise I ... (to visit) you as soon as I can.
- 7 I'm not sure but it's possible that they ... (to ask) to do a test project.
- 8 It is her birthday tomorrow. She ... (to be) 19.
- 9 Of course I ... (to take) you to the station.
- 10 Oh, I'm sorry. I completely forgot. I ... (to do) it in a minute.
- 11 We ... (to be) away all day tomorrow. We have a group project.
- 12 We ... (to spend) our weekend in the country. Do you want to come along?
- 13 We've nothing to do. ... (we/ to watch) a movie?
- 14 What ... (you / to do) this afternoon?
- 15 What ... (you/ to study) in next term?
- 16 What language ... (you / to study) next year? I've decided for German.
- 17 What would you like, tea or coffee? I ... (to have) some tea.

7 Complete the sentences using one of the forms: Present simple, Future Simple, Present Continuous, to be going to.

- 1 (to the waiter): I _____ (have) a steak, please.
- 2 The boys _____ (start) school on Monday.
- 3 Our new branch _____ (open) next week.
- 4 I _____ (take) an exam in October.
- 5 I'm going _____ (buy) a bicycle.
- 6 Look at the clouds! It _____ (go) rain!
- 7 I'm sure I _____ (not) lose my key.
- 8 I suppose they _____ (sell) the house.
- 9 Birds _____ (build) nests.
- 10 Listen to the wind! We _____ (have) a rough crossing!
- 11 The neighbours _____ (come) in to watch television.
- 12 13. We _____ (leave) at six, _____ (arrive) in Dublin at ten and _____ (take) the plane to New York.

8 Correct one verb form in each sentence. All the sentences are future.

- 1 The English class will be at 10.40.
- 2 I think Jane comes back tomorrow.
- 3 I am becoming a security specialist in five years.
- 4 I buy a new mobile in the next few months.
- 5 I don't think the computer is going to need more repairs.
- 6 James believes computers are soon replacing books.
- 7 What do you do on Friday afternoon?

- 8 The plane is going to arrive at 6 a.m. on Monday.
- 9 I do all I can for you – I promise.
- 10 We'll be late – look at the traffic jam.
- 11 I'm going to have an economics lecture at 10.40 tomorrow.
- 12 I can't come with you today. I'll go to university. We have classes from 8.50 to 16.35.

9 Translate the following sentences into English.

- 1 Если ты поедешь на автобусе, это будет дешевле.
- 2 Майк пойдет на концерт, если достанет билет.
- 3 Когда я пойду на учебу, я закрою окно.
- 4 Я куплю молоко и хлеб когда схожу в библиотеку.
- 5 Когда я приеду во Францию, я хочу посетить все интересные музеи.
- 6 Я сдам работу учителю, когда проверю все еще раз.
- 7 Когда достаточно поспишь, ты почувствуешь себя лучше.
- 8 Когда я найду эту статью, я дам тебе ее прочитать.
- 9 Когда я буду на отдыхе, я буду ходить по магазинам.

10 Put the verbs in brackets into the right tense: Future Simple, be going to, Present Simple or Present Continuous

- 1 Will: What time _____ (your evening class/finish)?

Liz: Half past nine.

Will: _____ (I/come) and collect you?

Liz: Thanks, but I _____ (meet) my sister for a drink.

- 2 Sandy and Alison are students who have been sharing a flat. Sandy is leaving to do a course abroad.

Sandy: It's hard to say goodbye after so long.

Alison: We must keep in touch. _____ (you/remember) to send me your address when you _____ (get) to the States?

Sandy: Of course. I _____ (probably/not/have) time next week, because my course _____ (start) the day after I _____ (arrive), and I _____ (spend) the weekend with some old friends of my father's.

Alison: Well, you can phone.

Sandy: Yes, I guess so. Do you know what you _____ (do) this time next Sunday?

Alison: I _____ (get) ready to go to London.

Sandy: OK. I _____ (phone) about three o'clock next Sunday.

Alison: Great. I _____ (wait) for your call.

- 3 Ann: _____ (you two/go) out?

Bill: Yes, why?

Ann: It's just said on the radio that it _____ (snow).

Bill: Oh, has it? I _____ (take) my big coat then.

Joe: Good idea. So _____ I.

5a HACKING

VOCABULARY

1 Read and learn the words and phrases.

hacking	хакерство
explore	исследовать
expert on programming languages	эксперт по языкам программирования
systematic and tiresome process	систематический и утомительный процесс
complex activity	сложный вид деятельности
pleasure and amusement	удовольствие и развлечение
result in advances	приводить к прогрессу
footprinting	зондирование, разведка
gather	собирать
scanning	изучение
enumeration	перебирание
identify	определять
penetration	проникновение
attempt	попытка; пытаться
launch	запускать
covering tracks	заметание следов
install a programme (US program)	устанавливать программу
replace	заменять
exist	существовать
steal	красть

2 Write the English equivalent instead of the Russian word in brackets.

- 1 I write programming languages but just for my own (*развлечениe*).
- 2 This is his second (*попытка*) at the exam.
- 3 The situation is very (*сложный*).
- 4 My father is an (*эксперт*) on hacking.
- 5 The best way to (*исследовать*) the city is on foot.
- 6 You can't (*существовать*) without water for more than a week.
- 7 You need to (*определять*) your priorities: family or work.
- 8 Joe, can you help me to (*устанавливать*) this software?
- 9 I get a lot of (*удовольствие*) from studying at TUSUR.
- 10 Hacking can be a long and difficult (*процесс*).
- 11 Pascal is a (*язык программирования*).
- 12 Checking all passwords to a system is a (*утомительный*) task.

3 Complete the ‘stairs’ with words from exercise 1. Don not use a word twice.

1	e	x			t
2	e	x	p		t
3	e	x	p	r	e
4	e			r	n

17	c	o			r
18	c	o			x

5	p			c		s
6	p			s		e
7	p			a		e
8	p			m		g
9	p			t		n

19	r	e			t
20	r	e			e

10	s		e		l
11	s		n		g
12	s		e		c

21	t	r			k
22	t		r		e

13	a		t			t
14	a		a			e
15	a		v			y
16	a		m			t

25	i			t		l
26	i			t		y

27		a		h		
28		a			i	n

29					i	n	g
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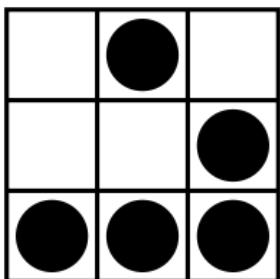
4 Match the words and phrases with their English equivalents.

дополнительный	solution
атака	harmless
текущий, нынешний	current
уничтожать	technology
плата	step
получать	service
безвредный	resource
видоизменять	gain
предлагать	additional
ресурс	attack
услуга	offer
решение	fee
мера, шаг	destroy
техника	modify

READING

5 Read and translate the information about hacking.

Hacking



*The Glider is an emblem
of the 'hacker community'
by Eric S. Raymond.*

A hacker is a computer enthusiast. Hackers **explore**, play with, and learn about computers. They are **experts on programming languages** and computer systems. They can write computer programs. Hackers also find clever solutions to difficult and different problems.

Hacking is a **systematic and tiresome process** of a lot of **complex activities**. Usually it is for **pleasure and amusement**, or to exercise the brain. Hacking is usually harmless, and can even **result in advances** in current technology.

There are six steps in the hacking process:

1. **footprinting**: the hacker **gathers** information about the company;
2. **scanning**: the hacker understands what specific computer systems and services are in use;
3. **enumeration**: the hacker **identifies** *poorly protected* computer resources;
4. **penetration**: the hacker **attempts** to gain control of one or more computer systems;
5. **advance**: the hacker **launches** additional attacks and/or gathers additional information;
6. **covering tracks**: the hacker **installs programs**; the programs **replace** the **existing** software system, cover his/her tracks and gather new information.

In the modern world there are several types of hackers:

- a white hat hacker *legally* tests the security system of a computer network;
- a grey hat hacker illegally breaks a secure system and offers the administrator to correct a security defect for a fee;
- a black hat hacker (or a *cracker*) destroys, modifies, or **steals** data.



6 Answer the following questions.

- 1 What is a hacker?
- 2 What do hackers do?
- 3 What is hacking?
- 4 Can hacking be useful? Why / Why not?
- 5 Who is Eric S. Raymond? What is he famous for?
- 6 How many steps are there in the hacking process?
- 7 What types of hackers do you know?
- 8 What does a white hat hacker do?
- 9 What does a grey hat hacker do?
- 10 What does a black hat hacker do?

7 Match the six steps in the hacking process to their explanation.

- ✓ The hacker deletes everything that shows his/her malicious behaviour. He/She hides hacking files and avoids detection.
- ✓ The hacker can install a Trojan horse programme to gather additional information from data that is on the network.
- ✓ For example, the hacker gets a list of usernames during enumeration, he/she can usually guess one of the user's passwords and access that user's account.
- ✓ It is like a person enters an office, looks through documents and searches for the necessary information. The hacker identifies user accounts and connects to computer in the network.
- ✓ The hacker gains more detailed information on a company's network and understands which systems on the network are reachable from the Internet. It is like a person knocks on the door to see if it is open or closed.
- ✓ The hacker gains information about the place of the company, phone numbers and employee names. A clever phone call to the technical support department helps: 'Hi. This is Bill and I forgot my password. Can you tell me what it is?'

8 Write a word that is similar in meaning to the underlined part.

- 1 During footprinting the hacker collects information about the company.
- 2 During examining the hacker gains more detailed information.
- 3 During enumeration the hacker discovers user accounts.
- 4 During moving into the hacker attempts to gain control of the systems.
- 5 During the advance step the hacker begins additional attacks.
- 6 During the covering tracks step the hacker changes the existing software system.

GRAMMAR

Adjectives with –ing and –ed

We can build an adjective with endings **–ed** or **–ing**.

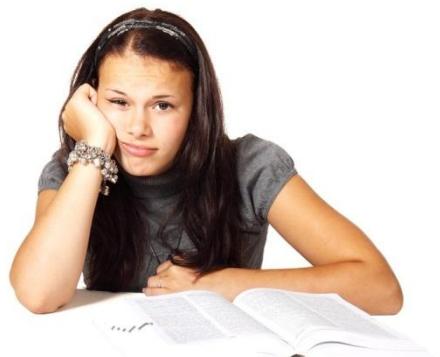
Example: to bore (скучать) – bored (скучающий) and boring (скучный).

We use the adjective with **–ed** to reflect **how the person feels** about something:

Example: I was **bored** by the history lesson. – **Мне было скучно** на лекции по истории.

We use the adjective with **–ing** to describe **something**:

Example: The history lesson was **boring**. – Лекция по истории была **скучной**.



9 Read the situation and say how you feel about it using – ing adjectives.

- 1 You were told that the next lesson is cancelled.
- 2 Your sister doesn't answer her phone the whole day.
- 3 You learnt that you won the first price in the Math Olympiad.
- 4 You are going home and suddenly a big dog is running towards you.
- 5 You had five lessons and a training in one day.

10 Describe these things or situations using –ed adjectives.

- 1 A long sad film about relationship.
- 2 A football game between Manchester and United.
- 3 A trip to the forest for a week.
- 4 A weekend in a hotel in Alps.
- 5 When a friend offers you to drive his BMW.



11 Fill the gaps with the adjectives in brackets and translate the sentences.

Example: He's such a monotonous speaker. I was **bored**. (bored / boring)

- 1 I had such a _____ day I went straight to bed. (tired / tiring)
- 2 Everyone's very _____ about the news. (excited / exciting)
- 3 I don't like watching _____ films on my own. (depressed / depressing)
- 4 I was _____ when she told me she'd got divorced. (amazed / amazing)
- 5 He's such a _____ guy. He only ever talks about himself. (bored / boring)

- 6 I'm very _____ in films and theatre. (interested / interesting)
- 7 It was a very _____ situation. (interested / interesting)
- 8 There's been some very _____ news. (surprised / surprising)
- 9 Their hamburgers are _____. (disgusted / disgusting)
- 10 Dad always arrives home from work very _____. (exhausted / exhausting)

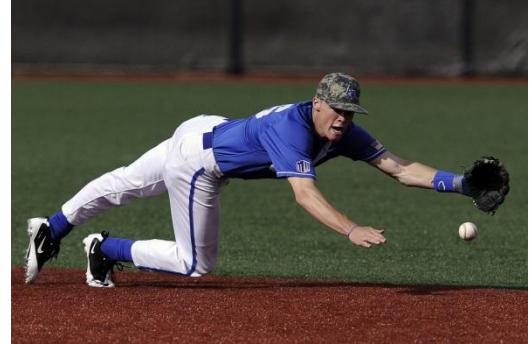
12 Rewrite these sentences using adjectives with -ed/-ing endings.

Example: The journey tired us. The journey **was tiring**.

- 1 It was an exciting tennis match. Everyone _____ .
- 2 The children delighted us. The children _____ .
- 3 The children delighted us. We _____ .
- 4 We are having a relaxing holiday. We all feel _____ .
- 5 Art is very interesting. I am _____ .
- 6 I am interested in learning a language. Learning a language is _____ .

13 Use one of the adjectives in the box to complete each sentence.

frightening	frightened
boring	bored
tiring	tired
surprising	surprised
amusing	amused
interesting	interested
satisfying	satisfied



- 1 I think baseball is a _____ game. I really don't understand what attracts people to it.
- 2 Are you _____ with your meal, sir? Perhaps I can bring you some more bread.
- 3 Being a nurse is a difficult job but I'm sure it is very _____ .
- 4 I absolutely adore my uncle Bill he's very _____ .
- 5 I find being alone at night in a strange place very _____ .
- 6 If two big dogs attacked you, would you be really _____ ?
- 7 Jenny are you _____ in what I'm saying or not? At least show some enthusiasm!
- 8 John, don't sit around looking so _____. Go and do something!
- 9 Look it's after midnight and I am feeling really _____. I'm sorry but I must go to bed.
- 10 My brother-in-law thinks he's a very _____. person but he bores me to tears!
- 11 My job is so _____. I work a lot at the office and then have to spend another hour or two doing paperwork at home.
- 12 The maths teacher wasn't _____ at all yesterday because the students had played a funny practical joke on him.
- 13 The most _____ thing about Linda is that she got promotion and didn't even tell anyone.
- 14 The room was in darkness when I entered and then suddenly the lights came on and everyone was shouting "Happy Birthday!". I was so _____ .

MORE WORDS AND PHRASES TO KNOW

cracker – взломщик

Eric Steven Raymond – Эрик Стивен Рэймонд (программист, писатель)

glider – планер, или глайдер – одна из фигур игры «Жизнь»

legally – законно, на основании закона

poorly protected – плохо защищённый

5b SOFTWARE CRACKING

VOCABULARY

1 Read and learn the words and phrases.

software cracking	взлом ПО
term	термин
remove or disable features	удалять или отключать функции (свойства)
annoyance	раздражение
nagware	надоедливое ПО
adware	рекламное ПО
costly and unethical	дорогой и неэтичный
serial number	регистрационный (серийный) номер
tool	инструмент
keygen	генератор ключей
patch	патч, «заплата»
loader	загрузчик, средство загрузки
generate legitimate licenses	генерировать легальные лицензии
own	собственный
startup	запуск и начальные действия
trainer	трейнер
cheat in a game	жульничать в игре
novice	новичок
crasher	разрушитель
thief	вор

2 Match the words from the two columns.

adware	breaking
novice	delete
nagware	harm, weaken
cracking	characteristic, function
feature	begware, annoyware, nagscreen
costly	advertisement + software
remove	expensive
disable	instrument
tool	key generator
keygen	produce
legitimate	lawful, legal
own	beginner
generate	personal, proper

3 Complete the ‘stairs’ with words from exercise 1. Do not use a word twice.

1	c				t
2	c			y	
3	c				r
4	c				g
5	l				r
6	l			e	
7	l				e
8	a				e
9	a				e
10	s				l
11	s			p	
12	s				e
13	g		e		
14	g				e

15				n
16	p			h
17	t			m
18	t			l
19	t			f
20	t			r
21	k			n
22	n			r
23	n			e
24	r			e
25	d			e
26	f			e
27	n			e
28	u			l

4 Complete the tables. Pay attention to the part of speech.

Noun	Russian equivalent	Noun	Russian equivalent
cracking	взлом	cracker	1
espionage	шпионаж	spy	2

Verb	Russian equivalent	Noun	Russian equivalent
distribute	распространять	distribution	3
modify	виديизменять	modification	4
protect	защищать	protection	5

Verb	Russian equivalent	Adjective	Russian equivalent
desire	желать	undesirable	6

Noun	Russian equivalent	Adjective	Russian equivalent
harm	вред	harmful	7
value	ценность	valuable	8

READING

5 Read and translate the information about software cracking.

Software cracking



Software cracking is the modification of software. The term goes back to the middle 1980s.

Crackers **remove or disable features** that they think undesirable. They are especially copy protection features or software **annoyances** like **nagware** and **adware**.

The distribution of *cracked* copies is illegal in most countries. There are some lawsuits over cracking software. *Besides*, cracking is harmful, **costly and unethical**.

A cracker uses a *stolen serial number* or a **tool**. Some of these tools are a **keygen**, a **patch** and a **loader**.

- A keygen (key generator) **generates legitimate licenses in your own name**.
- A patch modifies the machine code of another program. **It** changes only a few bytes.
- A loader modifies the **startup** of a programme and avoids the protection. With the help of a **trainer** (an example of a loader) people **cheat in games**.

There are several types of crackers in the modern world.

- A **novice** wants to try *proven* methods, but does not want to create new techniques.
- A computer student experiments with cracker techniques.
- A tourist *breaks in and looks around*: emails, databases, and system tools.
- A **crasher** wants to crash a system and to create a lot of problems.
- A **thief** steals credit card numbers or other valuable data.
- There is also a spy, a terrorist, an *angered ex-employee* and a *spurned suitor*.



6 Answer the following questions.

- 1 What is software cracking?
- 2 What do crackers do?
- 3 What three adjectives can you use to describe software cracking?
- 4 What do crackers use?
- 5 What is a keygen?
- 6 What is a patch?
- 7 What is a loader?
- 8 What does a ‘novice’ cracker do?
- 9 What does a ‘computer student’ cracker do?
- 10 What does a ‘tourist’ cracker do?
- 11 What does a ‘crasher’ cracker do?
- 12 What does a ‘thief’ cracker do?

7 Match the terms with their definitions.

adware	loader	patch	startup
keygen	nagware	serial number	trainer

- a It is an advertising computer programme. It automatically puts advertisements onto a computer.
- b It is a unique number. People use it for identification. It contains numbers and letters.
- c It is software. People design it to update a computer programme or to support and improve data.
- d People use it to modify memory of a computer game. It can manipulate the data to cheat in the game.
- e It is a computer programme. It generates a serial number. It is necessary to activate for use a software application.
- f It is a part of an operating system. It loads programmes and libraries. It is one of the essential stages in the process of starting a programme.
- g It means ‘to start a computer’ or another electronic device. When you start a computer, your processor looks in the system ROM for instructions and follows them.
- h It is small screens. You need to click on them to close. They regularly appear on computer screens. It is software. It makes users buy a programme or a service.

8 Use the information about software cracking to complete the sentences.

- 1 A thief cracker s _____ s bank card numbers or other valuable data.
- 2 In most countries, the distribution of cracked copies is i _____ l.
- 3 There are some 1_____s over cracking software.

GRAMMAR

Verb + to + verb

We use the **to + the base form of the verb** after a number of common main verbs. These include:

<i>afford</i>	<i>forget</i>	<i>need</i>	<i>prepare</i>
<i>agree</i>	<i>help*</i>	<i>offer</i>	<i>refuse</i>
<i>ask</i>	<i>hope</i>	<i>plan</i>	<i>try</i>
<i>decide</i>	<i>learn</i>	<i>promise</i>	<i>want</i>
<i>fail</i>	<i>manage</i>		

I want to speak to you. *My brother is learning to drive.*

We also use **to + the base form of the verb** after **would like**, **would love** and **would prefer**.

I would like to meet Sarah.

We do not use **to** after most modal verbs (**can**, **may**, **must**, **should**).

Can you drive?

But we use **to + the base form of the verb** after **be able** (= ‘can’) and **have** in the meaning of ‘need’ or ‘must’:

Irene won’t be able to pass the exam. *I have to go to Moscow tomorrow.*

*We can also use *help* without *to*: *Please, help me (to) find my keys.*

9 Translate the sentences from English into Russian.

- 1 Young people often cannot *afford to buy* a home.
- 2 They will probably *agree to sell* the house for \$140,000.
- 3 You should *ask* your father *to give* you some advice.
- 4 If you *decide to shop* for things online, look for some reviews on the Internet.
- 5 Mark always *fails to arrive* on time.
- 6 Don’t *forget to lock* the door.
- 7 These lessons *help me to improve* my English skills.
- 8 She *hopes to go* to university next year.
- 9 Today’s children *learn to use* computers at an early age.
- 10 The hacker *manages to gain* access to anyone’s computer in five minutes.
- 11 I *need to do* some shopping on my way home from work.
- 12 I think you should *offer to help* Jason with the report.
- 13 Do you *plan to leave* London in the distant future or the near future?
- 14 The four-year students *are preparing to take* their final exams.
- 15 You must *promise to call* your parents every week.
- 16 Pamela is very busy during the week, so she *refuses to work* on Saturdays.
- 17 We must *try to spend* less money.
- 18 Stephen *wants to enter* the university to become an IT security specialist.



10 Put in *to* where necessary.

Example: We can — speak English.

- 1 I'm going — ask James — help me with my homework.
- 2 I can't — find all the necessary information on the topic in this book.
I think I'll — search the Internet for it.
- 3 Entrance exams don't *help the students* — choose their "dream" college.
They help the colleges — choose their "dream" students.
- 4 Candidates must — answer two questions from each paper.
- 5 What do you hope — gain from the course?
- 6 Does he have — do exams this year?
- 7 The manager will — phone you later.
- 8 Jason wants — become a computer programmer.
- 9 I cannot — go there now – I have some work to do.
- 10 Prepare — work hard during the summer.
- 11 Jim always tries — use very secure passwords.
- 12 Only authorized users are able — modify the data when they need.
- 13 You shouldn't forget — log out of a website.
- 14 For elderly people it's often hard to learn — use a computer.
- 15 We cannot afford — make any mistakes at this stage in the project.



11 Complete the sentences with the proper form of a verb from the box.

promise	need	afford	learn	help	ask	refuse	fail
try	agree	offer	want	prepare	manage	forget	like

Example: I promise to be there by 6 p.m.

- 1 Diana sometimes loses her phone, but *she always* — to call you back.
- 2 — John to post those letters tomorrow.
- 3 I would — to make a phone call.
- 4 — to be more careful next time.
- 5 On cold mornings the car always — to start.
- 6 I'm afraid the team will — to reach the final this year.
- 7 The newspaper must — to apologize for the article.
- 8 Mark cannot — to fail in any of his exams.
- 9 I — to buy a laser printer.
- 10 If you — to log out, don't worry – *My Account* will automatically sign you out after 15 minutes of inactivity.
- 11 Computer security — to protect computers from unauthorized access.
- 12 The operating system is very old – you — to change it.
- 13 I — to program in Java and C++ now.
- 14 Mason — to go to University next year. He is in his final school year now.
- 15 We hope Mr Jackson will — to take part in our research project.

Click To Log Out 

12 Put in the English equivalents of the verbs in brackets. Use *to* where necessary.

Example: I want (*поехать*) abroad in the summer.

I want to go abroad in the summer.

- 1 I'm planning (*закончить*) work on my term paper next week.
- 2 Mary often fails (*сдать*) an exam from the first.
- 3 Try (*делать*) the homework for every class.
- 4 Sometimes I decide (*провести*) the holidays with my family and don't go out.
- 5 My colleague never refuses (*работать*) on Saturdays.
- 6 He'd prefer (*не работать*) but he doesn't have much choice.
- 7 I think I'll agree (*переехать*) to Europe.
- 8 Computer security helps (*защитить*) digital equipment, information and services from unintended or unauthorized access, change or destruction.
- 9 Only authorized users can (*получить доступ к*) information on this computer.
- 10 Only authorized users are able (*изменить*) the data when they need.



13 Translate the following sentences from Russian into English.

- 1 Виктор не пойдёт с вами – он готовится к экзамену по информатике.
- 2 Обещаю поговорить с деканом о занятиях в новой лаборатории.
- 3 Нам обычно удаётся откладывать (*save*) по 300 долларов в месяц.
- 4 Я надеюсь завести новых друзей (*make new friends*) в компании.
- 5 Директор собирается предложить Дэвиду и его команде разрабатывать новую информационную технологию.
- 6 Джейк говорит, он не может позволить себе купить новый ноутбук в этом месяце.
- 7 Мне нужно заменить свой старый компьютер в ближайшем будущем.
- 8 Я собираюсь попросить друга помочь мне наладить (*fix*) компьютер.
- 9 Мне приходится менять пароль от (*for*) почтового ящика (*email account*) довольно часто.
- 10 Сейчас мы учимся писать программы в JavaScript.
- 11 Линда хочет провести своё собственное исследование по вопросам компьютерной безопасности (*on computer security issues*).
- 12 Не забудьте установить автоматическое обновление для (*set automatic updates for*) всех приложений.



MORE WORDS AND PHRASES TO KNOW

angered ex-employee – рассерженный бывший сотрудник

besides – кроме того, более того

break in and look around – взламывать и осматривать

cracked – взломанный

go back – брать начало

in your own name – от своего собственного имени

proven – испытанный, проверенный

spurned suitor – отверженный поклонник

stolen – украденный

the middle 1980s – середина 1980-х годов

5c SOCIAL ENGINEERING

VOCABULARY

1 Read and learn the words and phrases.

social engineering	социальная инженерия
sophistication	утончённость, сложность
frequency	частота, повторяемость
interaction	общение, взаимодействие
legitimate	законный
fraudster	мошенник
con artist	мошенник
credentials	имя пользователя и пароль
masquerade as sb/sth	притворяться, выдавать себя за кого-либо
feign	притворяться, симулировать
appeal	привлекать
vanity	тщеславие
authority	власть
greed	жадность
glean	добывать (сведения), собирать по мелочам
sleuth	сыщик, детектив
divulge	разглашать
mitigate	смягчать, уменьшать
con	вымогательство
savvy	смекалка; сметливый

READING

2 Read and translate the information about social engineering.

Social Engineering

As **social engineering** attacks continue to grow in **sophistication** and **frequency**, companies should look to employee education as a first line of defence. Learn how to recognize and avoid social engineering attacks.

Social engineering is a non-technical strategy cyber attackers use that relies heavily on human **interaction** and often involves tricking people into breaking standard security practices. The success of social engineering techniques depends on attackers' ability to manipulate victims into performing certain actions or providing confidential information. Today, social engineering is recognized as one of the greatest security threats facing organizations. Social engineering differs from traditional hacking in the sense that social engineering attacks can be non-technical and don't necessarily involve the compromise or exploitation of software or systems. When successful, many social engineering attacks enable attackers to gain **legitimate**, authorized access to confidential information.

Social engineers are a modern day form of **fraudsters** or **con artists**. They may attempt to access computer networks or data stores by gaining the confidence of authorized users or stealing those users' **credentials** in order to **masquerade** as trusted insiders. It is common for social engineers to rely on the natural helpfulness of people or to attempt to exploit their perceived personality weaknesses. For example, they may call with a **feigned** urgent problem that requires immediate network access. Social engineers have been known to **appeal** to **vanity**, **authority**, **greed**, or other information gleaned from eavesdropping or online **sleuthing**, often via social media.

Cyber criminals use social engineering tactics in order to convince people to open email attachments infected with malware, persuade unsuspecting individuals to **divulge** sensitive information, or even scare people into installing and running malware.

Your organization should take steps toward educating employees on the common types of social engineering attacks, including baiting, phishing, pretexting, quid pro quo, spear phishing, and tailgating. While there are technological solutions that help **mitigate** social engineering (such as email filters, firewalls, and network or data monitoring tools), having an employee base that is able to recognize and avoid common social engineering tactics is ultimately the best defence against these schemes.

Social engineering is a serious and ongoing threat for many organizations and individual consumers who fall victim to these **cons**. Education is the first step in preventing your organization from falling victim to **savvy** attackers employing increasingly sophisticated social engineering methods to gain access to sensitive data.

3 Match the paragraphs and the headings.

- A A Definition of Social Engineering
- B Conclusion
- C Cyber criminals
- D Introduction
- E The Why and How of Social Engineering
- F Types of Social Engineering Attacks

4 Match the names of the social techniques and their definitions.

Baiting Quid pro quo	Phishing Spear phishing	Pretexting Tailgating
---------------------------------------	--	--

- QUID PRO QUO**
- An attack occurs when attackers request private information from someone in exchange for something desirable or some type of compensation. For instance, an attacker requests login credentials in exchange for a free gift. Remember, if it sounds too good to be true, it probably is.
 - Attackers conduct attacks when they leave a malware-infected device, such as a USB flash drive or CD, in a place where someone likely will find it. The success of a attack hinges on the notion that the person who finds the device will load it into their computer and unknowingly install the malware. Once installed, the malware allows the attacker to advance into the victim's system.
- PRETEXTING**
-
- It occurs when an attacker fabricates false circumstances to compel a victim into providing access to sensitive data or protected systems. Examples of attacks include a scammer pretending to need financial data in order to confirm the identity of the recipient or masquerading as a trusted entity such as a member of the company's IT department in order to trick the victim into divulging login credentials or granting computer access.
 - It is a physical social engineering technique that occurs when unauthorized individuals follow authorized individuals into an otherwise secure location. The goal of it is to obtain valuable property or confidential information. It could occur when someone asks you to hold the door open because they forgot their access card or asks to borrow your phone or laptop to complete a simple task and instead installs malware or steals data.





sensitive information such as financial data or trade secrets.

- It occurs when an attacker makes fraudulent communications with a victim that are disguised as legitimate, often claiming or seeming to be from a trusted source. In an attack the recipient is tricked into installing malware on their device or sharing personal, financial, or business information. Email is the most popular mode of communication for attacks, but it may also utilize chat applications, social media, phone calls, or spoofed websites designed to look legitimate. Some of the worst attacks make charity pleas after natural disasters or tragedies strike, exploiting people's goodwill and urging them to donate to a cause by inputting personal or payment information.



GRAMMAR

Verb + verb with -ing

We use the **-ing forms** of verbs after some common verbs:

avoid	finish	stop
enjoy	mind	suggest

We also use the **-ing forms** after **go** for sports and activities:

Let's go skiing next weekend.

We also use the **-ing forms** of verbs after verbs + a preposition:

We are thinking of moving to San Francisco.

9 Complete the sentences with the **-ing** form of a verb from the box.

read give get study spend do ring install ski talk
skate read help write ask buy think meet hold

Example: I have a lot of books. I enjoy reading.

- 1 We go _____ *in the Swiss Alps every year.*
- 2 You should avoid _____ *too much time on playing computer games.*
- 3 What do you think of _____ *a computer on eBay?*
- 4 When will you finish _____ *the book?*
You must return it to the library on Friday.
- 5 That phone never stops _____!
- 6 Jill will finish _____ *in Australia in 2021.*
- 7 William suggested _____ *the meeting on the hacking issues on Wednesday.*
- 8 I don't mind _____ *you with the article for the journal.*
- 9 Sheila often goes _____ *with her university friends in winter.*
- 10 Stanley enjoys _____ *programmes for iPhones and iPads.*
- 11 You must avoid _____ *any unnecessary information.*
- 12 Stop _____, please. You are in class.
- 13 Do you mind _____ *up early for university?*
- 14 I'm thinking of _____ *the new version of Windows.*
- 15 I want to travel because I enjoy _____ *people and seeing new places.*
- 16 I always suggest _____ *your parents for their opinion.*
- 17 I can't stop _____ *of the problem.*
- 18 We are thinking of _____ *a new experiment in the near future.*



After some verbs, both the **-ing form** and **to + the base form of the verb** are possible without much change of meaning:

<i>begin</i>	<i>continue</i>	<i>start</i>
<i>hate</i>	<i>like</i>	<i>love</i>

Do you like playing computer games? *Do you like to play computer games?*
When do you begin learning the piano? *When do you begin to learn the piano?*

We can use either the **-ing form** or **to + the base form of the verb** after some verbs, but with a change in meaning:

<i>remember</i>	<i>stop</i>	<i>try</i>
-----------------	-------------	------------

I don't remember signing a contract. (= I don't have it in my memory.)

Remember to sign the contract tomorrow. (= Don't forget to do it.)

You should stop working late. (= You should finish doing it.)

Let's stop to have a rest. (= Let's pause for a short time and have a rest.)

Try searching the web for the address. (= See if you can find the address on the web.)

I'll try to reach Jack on the phone. (= It may be difficult but I'll make the attempt.)

10 Choose the correct verb form, **to ...** or **-ing**. Tick the sentences where both of them are possible.

Example: Do you want going/ to go to Europe for the New Year? to go is right

- 1 Do you want to continue learning/ to learn English?
- 2 She hates making/ to make mistakes.
- 3 Thanks – I'd love taking/ to take part in the seminar.
- 4 Stop worrying/ to worry – we'll get there in time for the conference.
- 5 Remember calling/ to call me when you arrive!
- 6 When will you begin writing/ to write your report?
- 7 What are you trying doing/ to do?
- 8 My friend loves reading/ to read stories about computer hackers.
- 9 I remember reading/ to read something about it in the newspaper.
- 10 John isn't here. Try phoning/ to phone his home number.
- 11 Simon prefers travelling/ to travel over long distances by plane.
- 12 Please just don't stop thinking/ to think about the consequences.
- 13 I'd prefer discussing/ to discuss this issue right now.
- 14 I don't remember getting/ to get an email from Lisa.
- 15 I'll try repairing/ to repair your computer tomorrow.
- 16 Try using/ to use a tablet computer. I'm sure you'll like it.
- 17 The company started developing/ to develop a new supercomputing technology last year.



11 Put the verb in the right form, *to* ... or -ing.

Example: I enjoy **working** (work) on my new computer.

- 1 When the lecturer finishes _____ (speak), you can ask him questions.
- 2 I think I'll stop _____ (work) when I'm 65.
- 3 Why did you decide _____ (take) part in the contest?
- 4 We can't afford _____ (wait) any longer or we'll miss the plane.
- 5 Gillian is preparing _____ (leave) for Berlin on Thursday.
- 6 Do you enjoy _____ (visit) other countries?
- 7 I don't mind _____ (use) the Internet for research.
- 8 The company is planning _____ (start) the production of these new industrial robots in autumn.
- 9 I'd prefer _____ (keep) the information secret. It is rather sensitive.
- 10 We hope _____ (protect) our network with the new security software.
- 11 I'll help you _____ (choose) the best antispyware programme.
- 12 Would you like _____ (hack) into somebody's home computer?



12 Complete these sentences. Write about yourself. Use *to* ... or -ing.

- 1 I love _____
- 2 I enjoy _____
- 3 I don't like _____
- 4 Tomorrow I'd like _____
- 5 When I'm on holiday, I like _____
- 6 I don't mind _____ but _____
- 7 I wouldn't like _____
- 8 I hope _____
- 9 I remember _____
- 10 I often (sometimes) forget _____

13 Translate the sentences into English. Use *to* ... or -ing.

- 1 В следующий раз не забудьте сделать домашнюю работу.
- 2 Мне нужно закончить доклад на этой неделе.
- 3 Попросите разрешения воспользоваться калькулятором.
- 4 Мой друг надеется учиться за границей (*abroad*) в следующем году.
- 5 Я никогда не отказываюсь помочь кому-то, если (*if*) у меня есть время.
- 6 Джеймс обычно избегает разговоров о своей работе.
- 7 Некоторые люди никогда не могут позволить себе купить собственный дом.
- 8 Не забудь выключить телевизор и компьютер.
- 9 Страйтесь использовать надёжные пароли для различных сайтов.
- 10 Мы хотим предложить Вам воспользоваться нашей новой программой.

MORE WORDS AND PHRASES TO KNOW

rely on – зависеть от

exploitation – эксплуатация, использование

attempt – попытка

confidence – уверенность, доверие

helpfulness – польза

weakness – слабость; недостаток

urgent – срочный

immediate – немедленный, безотлагательный

insider – инсайдер; человек, имеющий конфиденциальную информацию

convince – убеждать, уговаривать

ultimately – в конце концов

ongoing – продолжающийся

5d PHREAKING

VOCABULARY

1 Read and learn the words and phrases.

phreaking	фрикинг
blend	сочетание
art	искусство
get start	брать начало
predecessor to	предшественник для
creative	творческий
take part in	принимать участие в
trick	обманывать
meaning	значение
positive	положительный
curious about	любопытный по отношению к
experiment with	экспериментировать с
public	общественный
negative	отрицательный
mean	значить
abuse	оскорблять; портить
weakness	слабое место
make a free call	звонить по телефону бесплатно
popular	популярный
obsession	одержимость

2 Complete the ‘stairs’ with words and phrases from exercise 1.

1	a		
2	a		e

13	m			n
14	m			g

3	p					c	
4	p	o				r	
5	p	o					e
6	p						g

15	o							n
16	c			a				e
17	n			a				e
18	w							s

3 Complete the table. Pay attention to the part of speech.

Noun	Adjective	Verb
abuse	abusive	1
2	artful	—
3	—	blend
4	—	call
creativity	5	create
curiosity	6	—
experiment	experimental	7
maker	—	8
9	meaningful/meaningless	10
11	obsessive	obsess
negative/negation	12	negate
13	partial	part
popularity	14	popularize
15	—	predate
public	16	—
17	starting	start
trick	tricky	18
19	weak	weaken

4 Complete the sentences with the words from the right column.

- 1 He is very good at _____. *art*
 2 You are a _____ of the family. *blend*
 3 I am not really ill – it is just a _____. *experiments*
 4 He seems a lot better than his _____. *part*
 5 Their music is a _____ of pop and rock. *predecessor*
 6 They are doing _____ to test the security system. *trick*
- 7 I am _____ about his life in London. *creative*
 8 A _____ number is less than zero. *curious*
 9 He is _____ about his health. *negative*
 10 ‘Jack’ is one of the most _____ boy’s names. *obsessive*
 11 The government is against smoking in _____ places. *popular*
 12 Her book is full of _____ ways to decorate your home. *public*
- 13 _____ me at the weekend. *abuse*
 14 The red light _____ stop. *call*
 15 They are _____ a film about her life. *making*
 16 Usually many factors _____ the economy. *means*
 17 The first lesson at TUSUR _____ at 8.50 a.m.. *starts*
 18 Different football teams’ fans often _____ each other. *weaken*

READING

5 Read and translate the information about phreaking.

Phreaking



The term ‘phreak’ is a **blend** of the words ‘phone’ and ‘freak’. Phreaking is the **art** and science of cracking the telephone network. Phreaking **got start in the late 1950s** in the United States of America. Some people think that phreaking is the **predecessor to** computer hacking.

‘Phone phreak’, ‘phreaker’, or ‘phreak’ are names for **creative** people who **take part in** phreaking. They use a computer or other device to **trick** a phone system. Nowadays some people think that phreaking is a form of hacking because phreaks apply hacking to telephone networks. Phreaking is an intellectual game and a form of exploration.

The word phreaking has two **meanings**. *On the positive side* it describes the activity of people who are **curious about** the telephone network. They study, **experiment with** and like to explore telecommunication systems, such as equipment and systems *connected to* **public** telephone networks. They explore the phone system to understand how it works.

On the negative side it **means** the activity of people who like to break into or **abuse** the telephone network. Phreaks use **weaknesses** in the phone system. *Then* they crack the phone network and gain unauthorized access to telecommunication systems, especially to **make free calls**. Phreaks hack or trick telephone companies.

Phreaking is about or even more than 60 years old but it is *still popular*. People, especially teenage boys and young men, want to understand and explore the telephone network. It is a hobby for some and an **obsession** for others.

6 Find the paragraphs in the text that tell about these things.

- A Cracking
- B The word ‘phreak’
- C A hobby or an obsession
- D Curiosity
- E The word ‘phreaking’



7 Are the statements TRUE or FALSE?

- 1 The term ‘phreak’ is a blend of six words.
- 2 Some curious people take part in phreaking.
- 3 The words ‘phreaking’ has one meaning.
- 4 Some phreaks make free calls.
- 5 All children are phreaks.
- 6 Phreaking got start in 2012 in Russia.
- 7 Phreaking can be a form of hacking.
- 8 All people don’t like to explore systems connected to public telephone network.
- 9 Some phreaks gain unauthorized access to telecommunication systems.
- 10 Phreaking is a hobby only for elderly people.

8 Match the beginnings (1 – 5), the continuations (6 – 10) and the endings (11 – 15) to make 5 sentences. Use the information from the text.

Beginnings

- 1 Phreaks are
- 2 Phreaking is
- 3 Phreaking is especially
- 4 Phreaking is the science
- 5 Phreaks gain unauthorized access



Continuations

- 6 and art of cracking
- 7 popular among teenage
- 8 a form of exploration and
- 9 creative and curious people
- 10 to telecommunication systems



Ends

- 11 to make free calls.
- 12 an intellectual game.
- 13 boys and young men.
- 14 the telephone network.
- 15 who take part in phreaking.

GRAMMAR

Infinitive of purpose

We often use **to + the base form of the verb** (= the infinitive) to say why a person does something or why something happens.

I'm going to America to learn English.

We need some money to buy food.

9 Complete the sentences. Choose from the box. Translate the sentences.

robotics engineer firewall search engine backup hacker
antivirus program cracker security specialist doctor website

Example: A doctor examines a patient to find out what is wrong with them.

- 1 A _____ breaks a secure system *to gain access to confidential information or to destroy, modify or steal data.*
- 2 A network _____ builds firewalls and installs antivirus software on servers and computers within a network *to avoid breaches in security.*
- 3 A _____ uses a stolen serial number or a special tool *to break the software protection mechanisms.*
- 4 An _____ scans the computer *to detect and remove malicious files.*
- 5 A _____ searches the Internet *to find the information you want.*
- 6 A _____ uses cookies *to remember information about your visit, like your language and other settings.*
- 7 A _____ designs software systems *to control robotic systems.*
- 8 A _____ controls network traffic *to prevent unauthorized access to the network.*
- 9 A _____ is a copy of a computer document, programme etc. that we use *to recover lost data.*



10 Answer the questions with an infinitive of purpose.

Example: Why are you going to the café? To meet my friends.

- 1 Why do you go to university?
- 2 Why are you learning English?
- 3 Why are you doing your homework?
- 4 Why are you going to the gym?
- 5 Why do you need money?
- 6 Why do you use a computer?
- 7 Why do you set up a password for a website?
- 8 Why do you use a mobile phone?
- 9 Why do you watch television?
- 10 Why do people use robots?

11 Write sentences to say why people go to the following places. Begin *You go ...*

Example: a school *You go to school to get an education.*

- 1 a driving school
- 2 a garage
- 3 a library
- 4 a book shop
- 5 a supermarket
- 6 a computer shop
- 7 the newsagent's
- 8 the chemist's
- 9 a hospital
- 10 a post office
- 11 a bank
- 12 a station
- 13 an airport
- 14 a restaurant
- 15 a cinema
- 16 a gym
- 17 a swimming pool
- 18 a football stadium



12 Combine the following sentences into one using an infinitive of purpose.

Example: We go to the *theatre*. We watch plays there.

We go to the theatre to watch plays.

- 1 We do *sport*. We want to keep fit and healthy.
- 2 We go to *work*. We need to earn money.
- 3 We earn *money*. We want to buy food, clothes, and things like a car or a home, to travel and help our families.
- 4 We watch *the news*. We want to know what is happening in the world around us.
- 5 We read *books*. We get information about different topics from them.
- 6 We learn *languages*. We need to understand people from different places and to communicate with them.
- 7 We participate in *conferences*. We want to discuss important matters, exchange information about them.
- 8 We use *the phone*. We speak to someone in another place by it.
- 9 We use *smartphones*. We make calls, send text messages, get directions, surf the web, play games, listen to music, and watch films on them.
- 10 We install and update *antivirus and antispyware programs*. We want to protect our computers.
- 11 We use *the Internet*. We search for information, contact people, shop online, play games, and do many other things on it.



13 Use your own ideas to finish the sentences below. Use *to*

Example: I'm going to the shop to buy a newspaper.

- 1 Charles wants to go to university _____.
- 2 David wants to study at Harvard University _____.
- 3 I'm studying at TUSUR _____.
- 4 I'm going to the library _____.
- 5 I often use a dictionary _____.
- 6 I'm going to the computer shop _____.
- 7 I want to watch television tonight _____.
- 8 I'm going to phone Alice _____.
- 9 I'm going to stay at home for the weekend _____.
- 10 I'm going out _____.
- 11 I'm going home now _____.
- 12 I'm very busy. I haven't got time _____.
- 13 Have you got time _____?
- 14 I need to borrow some money _____.
- 15 Everybody needs money _____.
- 16 I'm going to London _____.
- 17 I'd like to go to America _____.
- 18 I want to travel around the world _____.

14 Translate these sentences from Russian into English.

- 1 Том часто звонит родителям, чтобы спросить у них о здоровье.
- 2 По вечерам Джейн иногда включает телевизор, чтобы посмотреть новости и интересные программы.
- 3 Обычно я пользуюсь интернетом, чтобы найти информацию или пообщаться с друзьями в соцсетях (*in social networks*).
- 4 Я хочу загрузить новое приложение, чтобы открывать PDF-файлы.
- 5 У меня нет времени, чтобы играть в компьютерные игры.
- 6 Я планирую купить планшет, чтобы носить его с собой в университет.
- 7 Мой друг собирается накопить деньги, чтобы купить мощный (*powerful*) ноутбук.
- 8 Роберт хочет поступить в университет, чтобы изучать информационную безопасность.
- 9 Джон старательно учится, чтобы стать хорошим программистом.
- 10 Виктор изучает английский, чтобы получить хорошую работу.
- 11 На следующей неделе Линда едет во Францию, чтобы принять участие в конференции по (*on*) экономической безопасности.
- 12 Мэри каждый день пользуется электронной почтой, чтобы связаться с (*contact*) коллегами по работе в других регионах.



MORE WORDS AND PHRASES TO KNOW

connected – соединённый, присоединённый, связанный

freak – фанатик; человек, помешанный на чём-либо

in the late 1950s – в конце 1950-х гг.

on the negative side – с отрицательной точки зрения

on the positive side – с положительной точки зрения

still – всё ещё

then – после этого, потом

5e CULTURE CLIP: THE UNITED STATES OF AMERICA

VOCABULARY

1 Read and learn the words and phrases.

simply	просто
only	только
others	другие
capitalist economy	капиталистическая экономика
gold, coal, and uranium deposits	месторождения золота, угля и урана
top	ведущий, основной
corn and wheat	кукуруза и пшеница
sugar and tobacco	сахар и табак
federal republic	федеративная республика
executive branch	исполнительская власть
legislative branch	законодательная власть
judicial branch	судебная власть
federal court	федеральный суд
each	каждый
the highest law	высший, верховный закон
be home to	быть домом для
ethnic group	этническая группа
value	ценность
have a large influence on	оказывать значительное влияние на
especially	особенно

2 Complete the table. Translate the words.

Noun	Adjective	Verb
capitalism	1	capitalize
2	economical	economize
execution	3	execute
4	gold / golden	gild
5	group	group
6	influential	influence
judge	7	judge
8	lawful	—
legislation	9	legislate
10	home	—
top	11	top
12	valuable	value

3 Fill in the squares with consonant letters.

1 i u e e

2 e e i a y

3 e i o u

4 e e a o u

5 o a e a

6 e e a e u i

7 o a a u a i u

8 a i a i e o o y

9 e i a i e a

10 u a a o a o

4 Use the words from the box to complete the sentences.

court
deposit
each

especially
group
high

home
law
only

others
simply
wheat

- 1 _____ of them wants to try.
- 2 She is _____ seventeen years old.
- 3 He is not at _____ at the moment.
- 4 Kate likes the country, _____ in spring.
- 5 The _____ doesn't allow you to do this.
- 6 You can take them to _____ if they don't pay.
- 7 In the USA, there is a valuable new _____ of coal.
- 8 You only know about this book, but there are _____.
- 9 Usually Mike goes camping with a small _____ of friends.
- 10 _____ is an important crop for millions of people all over the world.
- 11 She is a daughter of the president, and she enjoys _____ status among her friends.
- 12 A lot of people miss out on this opportunity _____ because they don't know about it.

READING

5 Read and translate the information about the United States of America.

The United States of America



The United States of America is a large country in North America. People often call it the “USA”, the “US”, the “United States”, “America”, or **simply** “the States”. It is the fourth biggest country in the world. **Only** Russia, Canada and China are bigger. The USA consists of 50 states, *the District of Columbia (Washington, D.C.)*, and 5 territories.

The capital of the country is Washington, D.C. The largest city is New York. Other major US cities include Los Angeles, Chicago, Las Vegas, and **others**.

The United States has a **capitalist economy**. The country has rich mineral resources, with many **gold, coal, and uranium deposits**. America produces cars, airplanes, and electronics. It is also one of the **top** producers of **corn and wheat, sugar and tobacco**.

The US is a **federal republic**. The head of state and government is the President of the United States of America. There are three branches of the federal government. They are the **executive branch** (the President and his administration), the **legislative branch** (*the United States Congress*), and the **judicial branch** (*the Supreme Court of the United States* and **federal courts**). The USA has two major political parties, *the Republican Party* and *the Democratic Party*.

Each state has its own constitution and government, but the United States Constitution is the **highest law** of the country.

The United States **is home to** many cultures and **ethnic groups**, traditions, and values. American culture **has a large influence on** most of the world, **especially** the Western world.

Notes

Washington, D.C. (the District of Columbia) – Вашингтон, округ Колумбия
the United States Congress – Конгресс США

the Supreme Court of the United States – Верховный Суд США
the Republican Party – Республиканская политическая партия
the Democratic party – Демократическая политическая партия

6 Answer the questions.

- 1 How do people call the United States of America?
- 2 How many states does the USA consist of?

- 3 What is the capital of the country?
- 4 What are other major cities in the USA?
- 5 What does the USA produce?
- 6 What are the three branches of the government according to the US Constitution?
- 7 What are the main political parties in the USA?
- 8 What is the highest law of the country?
- 9 What do you know about the American culture and traditions?
- 10 Who is the US President now?

7 Match the paragraphs and their names.

- a Riches
- b Culture
- c Politics
- d Major cities
- e The highest law
- f General information

8 Each of the fifty states has a nickname. Write the names of the states.



- 1 M _____ is *The Bread and Butter State* and *The Wheat State*.
- 2 M _____ is in the valley of the Great Lakes. It is *The Great Lake State*.
- 3 K _____ is in the central part of the USA. It is *The Central State*.
- 4 V _____ is in the Green Mountains. It is *The Great Mountain State*.
- 5 The water of the rivers of N _____ is dark. It is *The Blackwater State*.
- 6 The territory of A _____ is the largest in the USA. It is *The Great Land*.
- 7 The Great Salt Lake is on the territory of U ___. It is *The Salt Lake State*.
- 8 The northern part of N _____ H _____ is in the White Mountains. It is *The White Mountain State*.

GRAMMAR

Prepositions of time, place and movement

We use **at** + **clock time**: *at 9 o'clock, at 8.20, at noon/ midday (=12.00), at midnight (=00.00)*

We use **on** + **a day or date**: *on Friday(s), on your birthday, on 25 January(,) 1995*

We use **in** + **a long period of time** (**a month/ season/ year/ century**): *in April, in winter, in 2001, in the 20th century*

We also use **at**, **on** and **in** in the following phrases:

<i>at night</i>	<i>on Monday morning</i>	<i>in the morning</i>
<i>at the weekend/ at weekends</i>	<i>on Tuesday afternoon</i>	<i>in the afternoon</i>
<i>at the moment</i>	<i>on Friday evening</i>	<i>in the evening</i>
<i>at the end of ...</i>		
<i>at the New Year</i> (with public holidays)		

We do not use **at/ on/ in** before:

<i>this ... (this week/ this evening etc.)</i>	<i>last ... (last July/ last year etc.)</i>
<i>next ... (next week/ next month etc.)</i>	<i>every ... (every day/ every Sunday etc.)</i>

9 Complete the sentences. Use **at**, **on**, **in** or no preposition.

Example: We usually sleep at night.

- 1 I'm afraid he's not here ____ the moment.
- 2 ____ summer she usually works as a shop assistant.
- 3 I want to see you in my office ____ this Wednesday.
- 4 The new day starts ____ midnight.
- 5 I am leaving Dallas ____ next Thursday.
- 6 They usually stay up ____ 1 a.m.
- 7 Are you doing anything ____ Friday night?
- 8 The working week begins ____ Monday.
- 9 Classes at university usually start ____ the morning.
- 10 The first class begins ____ 8.50.
- 11 The academic year in Russia starts ____ 1 September.
- 12 The summer examinations are ____ June.
- 13 Students do not go to university ____ Christmas.
- 14 Harvard College (the 'original' Harvard) was founded ____ 1636.



Other common prepositions of time include **during**, **before**, **after**, and **until**.

*They work **during** the night and sleep by day.*

*Let's meet at our house **before** the show.*

*Go back to university **after** lunch.*

*Can you wait **until** tomorrow?*

We use **from ... to ...** to give information about a period of time.

*The museum is open **from Monday to Saturday**.*

10 Put in *during/ before/ after/ until/ from ... to*

Example: She's interested in the period **from** the early 1940s **to** now.

- 1 Emma is usually at home _____ the day.
- 2 Always wash your hands _____ meals.
- 3 Let's wait _____ the rain stops.
- 4 _____ the summer season, all the hotels are full.
- 5 Some people believe in life _____ death.
- 6 I think I will stay here _____ the end of the week.
- 7 He's usually in his office _____ around 9.00 _____ 6.00.
- 8 John has an exam the day _____ tomorrow.
- 9 The academic year in the US lasts _____ September _____ May.
- 10 In Russia the winter examinations are normally _____ the New Year.



11 Complete the sentences in your own way. Use a noun phrase with a preposition of time.

Example: Peter usually has a party **on his birthday**.

- 1 I usually phone my parents/ my friend _____.
- 2 I usually go to a night club _____.
- 3 I always feel tired _____.
- 4 I was born _____.
- 5 I often do my homework _____.
- 6 I leave home for university _____.
- 7 I normally get home after university _____.
- 8 I usually go to bed _____.
- 9 Goodbye! See you _____.
- 10 Knowledge Day is _____.
- 11 She has got French lessons _____.
- 12 Our summer examinations are _____.
- 13 We have no university classes _____.
- 14 Radio Day is _____.
- 15 He is meeting his colleague in San Francisco _____.

12 Look at these time expressions. Do we use them with *at*, *on*, *in* or no preposition? Make four lists.

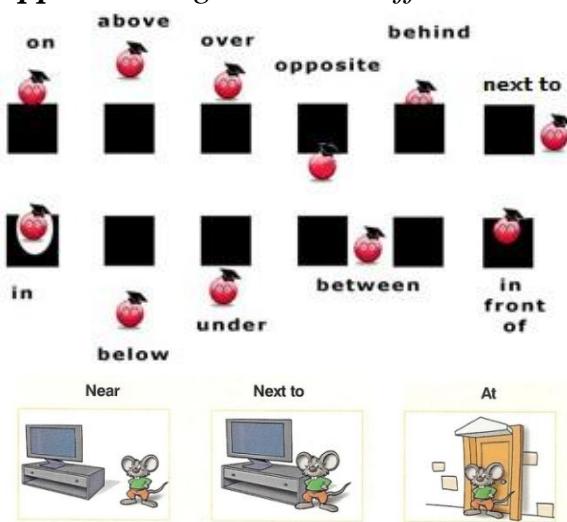
Monday, 3 o'clock, last Wednesday, Sunday, 1st September, the afternoon, May, next Thursday, 2013, the morning, night, Monday morning, this morning, summer, every summer, my birthday, the weekend, 8.50, tomorrow morning, June, Friday night, 1604, 4th July, the spring, weekends, Christmas, Valentine's Day, yesterday afternoon.

13 Translate the time expressions into English.

- 1 в течение месяца
- 2 до завтра
- 3 перед Новым годом
- 4 после занятий
- 5 с пяти до восьми вечера
- 6 в 10.40
- 7 на следующей неделе
- 8 в прошлом году
- 9 девятого мая
- 10 в полдень

The most common prepositions of place include *in*, *at*, *above*, *below*, *on*, *over*, *under*, *in front of*, *behind*, *near*, *next to*, *opposite* and *between*.

We are *in* the building *opposite* the government offices.



14 Complete the sentences with a preposition of place. Sometimes two or more variants are possible.

Example: Atlanta is a city in the south of the USA.

- 1 I want to work _____ England.
- 2 What is the largest country _____ the world?
- 3 Can I sit next _____ the window?
- 4 Put a tick _____ the answer that you think is correct.
- 5 The book is on the shelf just _____ your head.
- 6 John's sister lives _____ New York City.
- 7 The bank is _____ the university hall.
- 8 Paul's office is _____ the bookshop.
- 9 Please print your name clearly _____ your signature.
- 10 There is a lot of analytical information _____ the article.
- 11 You can find factual information _____ encyclopedias.

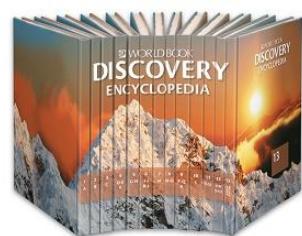
* We use ***in***, ***at***, ***on*** in the following phrases:

<i>in a street</i>	<i>at home</i>	<i>on a bus / a train /</i>
<i>in the city centre</i>	<i>at work / university / college</i>	<i>a plane / a ship</i>
<i>in the world</i>	<i>at a concert / a football match</i>	<i>on the ground floor /</i>
<i>in a newspaper / a book</i>		<i>etc. the first floor etc.</i>
<i>in a photograph / a picture</i>	<i>at the bus stop</i>	<i>on campus</i>
<i>in class / a meeting</i>	<i>at the top / bottom</i>	<i>on computer</i>
<i>in the middle (of ...)</i>	<i>at the beginning / end (of ...)</i>	

15 Complete the sentences with ***in***, ***at*** or ***on***.

Example: Let's meet ***at*** the bus stop.

- 1 I'm staying _____ home this evening.
- 2 I sometimes spend the Sunday afternoon _____ a football match.
- 3 Let's meet _____ the bus stop.
- 4 My brother is on the left _____ the picture.
- 5 We're going to town _____ the bus, okay?
- 6 I'm sorry but she's _____ a meeting – I'll ask her to call you back later.
- 7 Mr Brown's office is _____ the end of the corridor.
- 8 She teaches _____ the University of London.
- 9 The office is _____ the second floor.
- 10 The main building of TUSUR is _____ Lenin Prospect.
- 11 This is my group photo – I'm the one _____ the middle.
- 12 You must not write text messages _____ class.
- 13 Write your name _____ the top of the page.
- 14 There's an interesting article _____ the newspaper.
- 15 We store the information _____ computer.



5f REVISION

VOCABULARY & READING

1 Match the words and their Russian equivalents.

footprinting	вор
novice	разрушитель
scanning	новичок
enumeration	заметание следов
crasher	прогресс
penetration	проникновение
advance	перебирание
thief	изучение
covering tracks	зондирование, разведка

SREAKING & WRITING

2 Discuss the following topics in pairs. Write an essay about one of the topics in 10-15 sentences.

- 1 Hacking
- 2 Software cracking
- 3 Social engineering
- 4 Phreaking

GRAMMAR

3 Put the words in the right order to make sentences with verb + *to* + verb.

- 1 (after / o'clock / plan / to / three / arrive / they)
- 2 (we / this / afford / abroad / to / can't / go / summer)
- 3 (always / to / I / a conference / agree / in / take part)
- 4 (John / the password / needs / change / to)
- 5 (what / to / you / are / do / trying?)
- 6 (you / helps / information / the Internet / find / to)
- 7 (promise / never / do / do / to / cannot / you / what)
- 8 (admit / refuses / wrong / is / Catherine / to / she / that)
- 9 (the college / think / Suzan / I / will fail / enter / to)
- 10 (are / to / Jessica and Martin / leave / preparing / for New York)
- 11 (never / at / to / forgets / his / phone / Jake / parents / the weekend)
- 12 (my / is / brother / use / learning / six-year-old / a computer / to)
- 13 (sometimes / me / with / David / to / offers / mathematics / help)
- 14 (ask / they / the students / to / are going to / the questionnaire / complete)
- 15 (Stephen / install / new / a / on / wants / operating system / to / computer / his)

4 Complete the sentences with the English equivalents of the phrases in brackets. Use verb + verb with *-ing*.

- 1 ‘What do you do to keep fit?’ ‘I jog and (занимаюсь плаванием).’
- 2 I think I’ll (закончу писать) the article at the weekend.
- 3 Do you ((не) против подождать) for half an hour?
- 4 Helen (получает удовольствие от игры в) computer games.
- 5 The chief is going to (предложит провести встречу) at the company’s office.
- 6 (Перестаньте пользоваться) that pirate software. It’s illegal.
- 7 I try to (избегать проводить) more than two hours a day at the computer.
- 8 Sheila (подумывает о том, чтобы заменить) her old mobile with an expensive smartphone.

5 Complete the sentences with the correct verb form, *to ...* or *-ing*.

- 1 It’s going to stop _____ (*rain*) soon.
- 2 He stopped _____ (*pick up*) the banknote.
- 3 Try _____ (*not forget*) anything this time.
- 4 Why don’t you try _____ (*use*) a different antivirus programme?
- 5 I must remember _____ (*send*) Christopher an email tonight.
- 6 Do you remember _____ (*turn off*) the computer?

6a PROGRAMMING LANGUAGES

VOCABULARY

1 Read and learn the words and phrases.

programming language	язык программирования
sheer number	огромное количество
overwhelming	непреодолимый, подавляющий
flexible	гибкий
from scratch	с нуля
high level language	язык высокого уровня
concept	понятие, идея
scalable	изменяемый
stable	постоянный
maintainable	удобный в сопровождении
game engine	программная составляющая игры
backend	внутренний интерфейс
query	вопрос
relational database management system	система управления базами данных
opportunity	возможность, удобный случай
dissuade	отговаривать
resource	ресурс
relevant	уместный, актуальный
inevitability	неизбежно
ultimately	в конце концов

READING

2 Read about programming languages.

Programming Languages

Introduction

If you're looking to learn how to code, the **sheer number** of programming languages may be **overwhelming** – what language should you indeed learn? This article hopes to give you some pointers by comparing different programming languages. Let us take a look at the languages we're going to be covering.



Dynamic Languages

Dynamic languages are generally thought of as easier for total beginners to learn because they are **flexible** and fun. You can quickly build an app **from scratch** with less lines of code, and there is no hard rule on how to write things to behave in the way you want them to.

As dynamic languages are usually very **high level languages**, you would spend less time trying to get the details right and more time learning programming **concepts**, which is another reason dynamically typed languages are popular with beginners who are motivated by being able to build things and see results quickly.



Java Script



Python



PHP

Statically Typed Languages

Apps built with statically typed languages are known to be more **scalable**, **stable**, and **Maintainable**. Static languages are usually more strict with catching errors through type checking, and it takes more code to build a prototype. **Game engines**, mobile apps, and enterprise-level **backends** are usually built with statically typed languages.



Java



Objective-C / Swift (for iOS development)

C
Objective-C
C++
C# ('C Sharp')

Other

SQL (“Sequel”), or Structured Query Language, is a **query** language used to communicate with databases. Although SQL cannot be used to build apps, it is used to manage the data in apps that use **relational database management systems (RDMS)**.



Job Opportunities

So, now you know a bit about programming languages and perhaps a bit about their perceived difficulty. However, not all languages have the same demand or salary. If your goal in learning how to program is job opportunity and you are not going to be **dissuaded** by how hard people say a language is going to be, here are some pointers to help you figure out what language you should learn.

Programming Resources

If you know a little about the developer world, then you probably know it's really important and helpful to have support from other developers, especially if you plan to learn on your own. Being a part of a supportive community will definitely make your future development life easier.

The Future of Each Programming Language

How **relevant** will a programming language be in the future? First of all, the future of a language will largely depend on the growth of its community, as fresh blood/adoption rate is what keeps a language popular and ensures that it will continue to have resources.

Conclusion

What language should a coding beginner learn? Clearly, if you wish to get into web development, you would **inevitably** have to learn JavaScript, whether you like it or not. If you want to do backend web development, you must learn some form of SQL. Furthermore, if you want to mine websites for data or if you're interested in being a data scientist, then Python is a good language to learn. If you want to work for an enterprise, then Java is the way to go. If you're actually not that interested in building things and you're more interested in job opportunities, then perhaps SQL is a nice place to start out with (especially if you like math). Altogether, what programming language you should learn will **ultimately** depend on what you want to do.

GRAMMAR

Reported speech

1 We use reported speech to retell somebody's words.

Direct statement: He *said*, "I **love** her so much".

Indirect statement: He *said* that he **loved** her so much.

2 Instead of "say" we can use other verbs:

mention, claim, ask, add, tell, admire, admit, consider, promise

3 In the indirect speech we change the tenses:

Present tense

He said, "I **love** her so much".

Past tense

He said, "I **loved** her so much".

Present perfect

He said, "I **have loved** her so much".

Future Simple

He said, "I **will love** her so much".

Imperative

He said, "**Love** me!"

Past tense

He said that he **loved** her so much.

Past perfect tense

He said that he **had loved** her so much.

Past perfect tense

He said that he **had loved** her so much.

Would

He said that he **would love** her so much.

Infinitive

He told her **to love** him.

4 Also, we need to change references to time and place:

yesterday

the day before

today

that day

last week/month/...

the week/month/... before

tomorrow

the previous week/month/...

next month/year/...

the next day

this/these

the following month/year/...

here

that/those

now

there

then/at that moment

5 The questions in the reported speech are changed in the following way:

In questions with Wh/How the question word remains:

He asked me, "Why do you love me?" He asked me **why I loved** him.

He asked me, "How much do I love me?" He asked me **how much I loved** him.

Yes/No questions turn into If/Whether questions

He asked me, "Do you love me?" He asked me **if I loved** him.

He asked me **whether I loved** him.

Note: In the reported questions there is no change in the word order or auxiliary verbs.

3 Write what Sarah said, making the necessary changes.

- 1 “I’m living in New York.”
- 2 “My mother isn’t very well.”
- 3 “Jane and Paul are going to visit Italy next month.”
- 4 “My brother had an accident.”
- 5 “I haven’t seen Diana last night.”
- 6 “Jack and Jill were waiting for the bus.”
- 7 “I don’t drink coffee anymore.”
- 8 “Tom can speak Japanese.”
- 9 “I will go to Anna’s birthday party.”
- 10 “My purse was stolen this morning.”
- 11 “Kate took my keys.”
- 12 “My husband has just finished reading this interesting book.”
- 13 “Daniel didn’t buy the tickets for the theatre yesterday.”



4 Choose the correct word.

- 1 She **said** / **told** us to stand up.
- 2 Mr Jones **said** / **told** the manager he was leaving.
- 3 Everybody **said** / **told** the concert had been terrible.
- 4 I didn’t **say** / **tell** Meg that I was coming today.
- 5 The Prime Minister **said** / **told** that things would get better soon.
- 6 Alice **said** / **told** she was sick.
- 7 Nancy didn’t **say** / **tell** us anything.
- 8 You **said** / **told** me you were working tonight.



5 Transform into direct speech.

- 1 He said that she would leave at six.
- 2 He said that Peter often went fishing.
- 3 Mary asked if she could come back later.
- 4 I said that I had just seen Mark.
- 5 Alan told me that Angela was watching TV.
- 6 They said that the cat had been sleeping on the sofa.
- 7 I said that we were late.
- 8 She asked what the boys were doing.

6 Put the questions into reported speech:

- 1 “How old are you?”
- 2 “Are you married?”
- 3 “Do you live nearby?”
- 4 “Where have you worked before?”
- 5 “Can you speak German or French?”
- 6 “Do you have a driving license?”
- 7 “How much money do you want?”

7 Rewrite the following commands.

- 1 "Sit down, please." - The teacher told the students _____.
- 2 "Give me some more money, please." " Bob begged his parents _____ .
- 3 "Don't play with my toys." - Michael said to his little brother _____.
- 4 "Don't forget to say your prayers." - Their brother advised them _____.
- 5 "Look at me and listen carefully to my words." - The Captain ordered his soldiers _____.
- 6 "Don't move and keep smiling." - The photographer went on saying to everybody _____.
- 7 "I forgot my pen, please lend me yours." - Peter told Jane _____.
- 8 "Don't go away, wait for me." - He told his friend _____.
- 9 "Give me another sandwich, please, but this time with a little more cheese." - She asked her husband _____.
- 10 "Just call me if there is anything you need." - The nurse said to the patient _____.



8 Report the following phrases using the verbs in the box.

promise	agree	deny	apologize	congratulate	advise
invite	offer	thank	admit	insist	warn
		remind		refuse	suggest

- 1 Wendy said to Mrs. Johnson, "Let me feed your cats"
- 2 Greg said to his brother, "Why don't we run a race?"
- 3 Mr. Nil said to his secretary, "If I were you, I wouldn't wear such striking colours"
- 4 David said to Andy, "Don't talk to my sister any more, or you'll regret it"
- 5 Val said to Laura, "Hey, come with us to see the sunset"
- 6 Paul said to Mrs. Black, "I will never say a bad word about your husband"
- 7 Terry said to Mr. Fandel, "I'm sorry, I damaged your flowerbeds"
- 8 Liam said to the policeman, "I didn't mug this old bag"
- 9 Sam said to Mrs. Clarens, "Well, it's me who put soap into your vegetable stew"
- 10 Henry said to Nick, "We definitely must tell the truth"
- 11 George said to Deborah, " I won't skate together with you"
- 12 John said to Hugh, "It's time to return the book to the library"
- 13 The film director said to the audience, "Thank you very much for such a wonderful reaction"
- 14 Finn said to Pete, "They say you got a university degree. Congratulations"
- 15 Susan said to her mother, "All right, I'll be back home before eleven"



MORE WORDS AND PHRASES TO KNOW

introduction – введение

conclusion – заключение

6b CYBER WARFARE

VOCABULARY

1 Read and learn the words and phrases.

cyber warfare	кибервойна
involve	содержать
alter classified data	изменять засекреченные данные
criminal	преступный
high-tech	высокотехнологичный
military	военный
cyber spy network	сеть кибершпионов
belong to	принадлежать
scope	масштаб
data breach	утечка данных
incident	случай
cause a tension	вызывать напряжение
reveal global surveillance	обнародовать массовую слежку
top security threat	наивысшая угроза безопасности
recognize	признавать
cyberspace	киберпространство
domain in	поле деятельности в
critical to	решающий для
vulnerable	уязвимый
possible	возможный

2 Find the synonyms to the following words.

- 1 change
- 2 offence
- 3 secret, confidential
- 4 vital, crucial, important
- 5 the Internet
- 6 field, sphere
- 7 event, chance
- 8 include, contain
- 9 probable
- 10 realize, become aware
- 11 range, size, scale
- 12 defenseless

j	h	x	a	l	t	e	r	x	j	h	k
m	k	q	j	w	b	r	e	a	c	h	z
j	c	l	a	s	s	i	f	i	e	d	h
x	k	h	m	c	r	i	t	i	c	a	l
w	c	y	b	e	r	s	p	a	c	e	h
j	x	k	m	m	d	o	m	a	i	n	w
m	q	j	w	i	n	c	i	d	e	n	t
x	q	h	i	n	v	o	l	v	e	j	q
q	p	o	s	s	i	b	l	e	k	k	m
r	e	c	o	g	n	i	z	e	q	q	m
w	s	c	o	p	e	k	h	q	j	w	k
h	v	u	l	n	e	r	a	b	l	e	x

3 Match the terms and their definitions.

belong to	classified	critical	cyber
cyberspace	cyberwarfare	global	high-tech
incident	military	spy	surveillance

- a using high technology
- b a bad or unusual event
- c relating to the whole world
- d officially kept secret by a government
- e relating to the army, navy, or air force
- f to be a member of a group or organization
- g very important for the way things will happen in the future
- h relating to electronic communications, especially the Internet
- i the use of computers to disrupt the activities of an enemy country
- j someone who secretly tries to discover information about a person or country
- k the Internet, as an imaginary area where you can communicate with people and find information
- l when someone is watched carefully, especially by the police or army, because they expected to do something wrong

4 Complete the sentences. Use the words from the right column.

ADJECTIVES

- 1 She was a _____ sixteen-year-old.
- 2 He has a _____ record.
- 3 I'll send the paper today, if _____.

*Criminal
possible
vulnerable*

NOUNS

- 4 Do we know the full _____ of the problem yet?
- 5 The police have kept the man under strict _____.
- 6 This information is in the public _____.
- 7 The mind cannot be always in a state of intellectual _____.

*domain
scope
surveillance
tension*

VERBS

- 8 They _____ to the same chess club.
- 9 The city _____ very much since 2010.
- 10 We _____ that the situation was hopeless.
- 11 She _____ the secret to us.
- 12 The loss of freedom and the growth of despotism _____ the ruin of the empire.

*has altered
belong
caused
recognized
revealed*

READING

5 Read and translate the information about cyber warfare.

Cyber warfare



Cyber warfare (or simply *cyber war*) is Internet-based conflict. It **involves** politically motivated attacks on information and information systems. Cyber warfare attacks can disable official websites and networks, disrupt or disable essential services, steal or **alter classified data**, etc.

Cyber warfare involves nation-states as well as such organizations as terrorist groups, companies, political or ideological extremist groups, hackers and transnational **criminal** organizations.

There are many examples of cyber warfare. Thus, in 2007, an unknown foreign group hacked into **high-tech** and **military** agencies in the United States and downloaded terabytes of information.

In 2009, the **cyber spy network** “*GhostNet*” accessed confidential information. It **belonged to** both governmental and private organizations in over 100 countries around the world.

In 2015, hackers stole the most sensitive information of 21 million people in the United States. The hack occurred at *the Office of Personnel Management (OPM)*. They believe that the **scope** of the **data breach** is the biggest in US history.

Cyber warfare consists of many different threats. They are cyberattacks and cyber espionage. Some espionage **incidents** can **cause** serious **tensions** between nations. For example, in 2013 *Edward Snowden revealed global surveillance* by the USA. In 2014 Russia let him stay in the country for three years. This has increased tensions between Russia and the United States.

People now believe that cyberattacks are one of the **top security threats**. In the US, the Pentagon formally **recognizes cyberspace** as a new **domain in** warfare as **critical to** military operations as land, sea, air, and space.

The most effective protection against cyberwarfare attacks is securing information and networks. If you want to protect your data, it is essential to apply security updates to all systems because attacks on any **vulnerable** system are **possible**.

6 Find the paragraphs in the text that tell about these things.

- A Cyberattacks
- B Cyber espionage
- C High-tech agencies
- D Cyber spy network
- E Cyber warfare organizations
- F The scope of the data breach
- G Protection against cyber warfare
- H Possibilities of cyber warfare attacks



7 Answer the questions.

- 1 What is cyber warfare?
 - 2 What can cyber warfare attacks do?
 - 3 What organizations does cyber warfare involve?
 - 4 What do you know about cyber warfare of the 2007 year?
 - 5 What happened in 2009?
 - 6 What did hackers do in 2015?
 - 7 What does cyber warfare consist of?
 - 8 Can cyber espionage cause a tension between countries?
 - 9 What is Edward Snowden famous for?
- 10 What does the Pentagon think about cyberspace?
 - 11 What is the most effective protection against cyber warfare attacks?
 - 12 What should people do to protect their data?

8 Translate the following words. Use the information about cyber warfare.

1 состоять	c _____	13 секретный	c _____
2 другой	d _____	14 необходимый	e _____
3 иностранный	f _____	15 увеличивать	i _____
4 правительство	g _____	16 нарушение	b _____
5 такой	s ____	17 обновлять	u _____
6 услуга	s _____	18 происходить	o _____
7 доступ	a _____	19 применять	a _____
8 угроза	t _____	20 красть	s _____
9 защита	p _____	21 отключать	d _____
10 террорист	t _____	22 безопасный	s _____
11 атака	a _____	23 загружать	d _____
12 шпионаж	e _____	24 нарушать	d _____

GRAMMAR

Relative clauses

We often join sentences with **who** or **which** ('relative pronouns'). We use **who** for **people** and **which** for **things**.

*I have a friend. **He** can speak three languages.* →

*I have a friend **who** can speak three languages.*

*There's a problem. **It** worries me.* → *There's a problem **which** worries me.*

We often use **that** instead of **which**, and instead of **who** in an informal style, but **who** is more usual.

*There's a problem **that** worries me.*

*I've got a friend **that** can speak three languages.*

9 Choose from the boxes and write sentences.

- 0 teacher
- 1 engineer
- 2 robotics engineer
- 3 programmer
- 4 security specialist
- 5 hacker
- 6 cracker
- 7 phreak
- 8 system administrator
- 9 analyst
- 10 web designer

- a teaches in a school or college
- b tricks a phone system, e.g. using a computer
- c produces computer programmes
- d hacks into other people's computer systems
- e designs websites, especially for businesses/organizations
- f looks after a computer system which has many users
- g designs or builds machines or electrical equipment
- h identifies and solves potential and actual security problems
- i designs software to control robotic systems
- j modifies software to disable copy protection features
- k studies or examines something in detail

Example: A teacher is **someone / a person who** teaches in a school or college.

We can also use **who(m)**, **which** or **that** as objects*. **Who** is very informal as an object; **whom** is more formal.

*Where's that man? I must help **him** with the report.* →

*Where's that man **who(m)** I must help with the report?*

*These are problems. You don't have **them**.* →

*These are problems **which/that** you don't have.*

We normally use **that**, not **which**, after **all**, **everything**, **nothing**.

*It's **all that** I can see.*

10 Put in *who*, *which* or *that*.

Example: A thief is a person *who* steals things.

- 1 What's the name of the river _____ flows through the city?
- 2 What's the name of the man _____ works with your father?
- 3 There's nothing _____ you can do about it.
- 4 Chinese is the language _____ people speak in China.
- 5 The people _____ live in Great Britain are the British.
- 6 You can have everything _____ you want.
- 7 Is this the train _____ goes to St Petersburg?
- 8 The other people _____ live in the house are really friendly.
- 9 These are principles _____ we all believe in.
- 10 She's one of those people _____ love to be the centre of attention.
- 11 Write a word _____ is similar in meaning to the underlined one.
- 12 A professor is a teacher _____ has the highest rank in a department of a university.
- 13 Do you know anybody _____ can repair a computer?
- 14 There's a sentence _____ I don't understand.
- 15 Crackers remove or disable features _____ they think undesirable.



11 Correct the mistakes where necessary.

Example: A student is someone *which* is learning in a college or university. *who*

The bag that he is carrying is very heavy. *OK*

- 1 You always ask questions that are difficult to answer.
- 2 That's the man which lives next door.
- 3 Do you know the woman who is sitting next to John?
- 4 Kate has a lot of friends at school which want to go on to university.
- 5 An economist is a person who studies or has a special knowledge of economics.
- 6 Jake keeps telling you things which you already know.
- 7 Our director is a person which I really respect.
- 8 They've got a machine that prints names on badges.
- 9 Is this the book in which he describes the experiment?
- 10 The job which he has isn't very interesting.
- 11 This is the version who I like most.
- 12 A web developer is someone which creates websites.

12 Join the sentences with *who(m)*, *which* or *that*.

Example: Somebody is very intelligent. He/she is a genius.

A genius is somebody who is very intelligent.

The people live in Germany. They speak German.

The people who live in Germany speak German.

- 1 Melinda lives in a house. It is 100 years old.
- 2 I know the man. He is driving that taxi.

- 3 This is the laptop. It isn't working.
- 4 An aeroplane is a machine. It flies.
- 5 I have a friend. He is very good at programming.
- 6 Do you know a shop? It sells computers and peripherals.
- 7 I know somebody. He/she specializes in computer security.
- 8 I'd like to speak to the person. He/she deals with information assurance.
- 9 Some students are taking the exam. Most of them will pass.
- 10 The girl can speak four languages. She is my sister.
- 11 The people work in the office. They are very friendly.
- 12 People speak the language in England. It is called English.



We can **leave out object pronouns *who(m)*, *which* and *that*.**

Where's the book that/ which I'm reading? – Where's the book I'm reading?

Do you know the man who(m) Robert is talking to? – Do you know the man Robert is talking to?

13 Join the sentences without using *who(m)/which/that*.

Example: That's the man. I want to see him. **That's the man I want to see.**

- 1 You can see a girl in the picture. The girl is my sister.
- 2 I'm reading an article. The article is very interesting
- 3 Have you got a pen? Can use it?
- 4 Eric wants a paper. Here's the paper.
- 5 There's something. I don't remember it.
- 6 Do you know the woman? Thomas is talking to her.
- 7 You don't know the words. You should translate them.
- 8 The woman is speaking a language. The language is probably Spanish.
- 9 The professor is doing scientific research. The research is very important.
- 10 They are developing a new computer technology. The technology is amazing.



14 Translate the sentences into English, using relative clauses.

- 1 Я знаю человека, который умеет говорить на четырёх языках.
- 2 Люди, которые живут в Нидерландах, говорят на нидерландском языке.
- 3 Начальник – это человек, который говорит другим, что делать.
- 4 У меня есть ноутбук, который сейчас не работает.
- 5 У меня есть друг, который умеет писать программы в JavaScript.
- 6 Книга, которую я читаю, очень интересная.
- 7 Нет ничего, что Вы бы не знали.
- 8 Всё, что ты можешь сделать сейчас, – это уйти.
- 9 Девушка, с которой разговаривает Алекс, – его однокурсница.
- 10 Компьютер – это устройство, которое люди используют для хранения информации, выполнения расчётов и контроля над другими устройствами.

MORE WORDS AND PHRASES TO KNOW

GhostNet – large-scale cyber spying operation discovered in March 2009

the Office of Personnel Management (OPM) – отдел кадров; независимые агентства и корпорации Федерального правительства США

Edward Joseph Snowden; born: June 21, 1983; occupation: system administrator

relative – относительный

leave out – пропускать

object pronouns – местоимения-дополнения

object – дополнение

6c NATIONAL SECURITY

VOCABULARY

1 Read and learn the words and phrases.

national security	национальная безопасность
promise a lasting peace	обещать продолжительный мир
propose	предлагать
subordinate	подчинять(ся)
struggle	усилие, борьба
overcome	преодолевать
external and internal threats	внешние и внутренние угрозы
early mention	ранее упоминание
in reference to one's relation with freedom	в связи с взаимоотношением с свободой
according to a typical definition	в соответствии с обычным определением
crisis (plural crises)	кризис
possess	обладать
authority	власти
environment	окружающая среда
stability of the social order	стабильность социального порядка
supply	снабжать, поставлять
disease and hunger	заболевание и голод
scarcity	нехватка
agriculture	сельское хозяйство

2 Choose the correct word *in italics* to complete the sentences.

- 1 According to / Agriculture / Authority our records, she was absent last Friday.
- 2 The country is in the midst of an economic crisis / definition / disease.
- 3 The new road may cause damage to the early / environment / external.
- 4 I felt such a sense of freedom / hunger / internal, up in the hills alone. I'm free.
- 5 May there be a lasting peace / mention / national between our nations.
- 6 Let's hope she national / order / overcomes her shyness.
- 7 He peace / possessed / promised to write to me every week.
- 8 She proposed / in reference to / relation to a boycott of the meeting.
- 9 The long hot summer has led to serious water scarcity / security / social.
- 10 It was a real stability / struggle / subordinate to stay awake during the film.
- 11 What is the supply / threat / typical definition of 'security'?
- 12 I am writing to you according to / in reference to / stability of the social order the job advertised in yesterday's newspaper.

3 Common adjective suffixes. Use the words from the box to complete the table.

Note!

sun – sunny	create – creative	politics – political	industry – industrial
fog – foggy	fame – famous	economics - economical	

attractive	cloudy	edible	energetic	enjoyable
famous	flexible	forgetful	furious	harmless
historic	homeless	industrial	musical	painful
productive	smallish	stylish	suitable	sunny

Noun or verb	Adjective suffix	Adjective
fame; fury	-ous	
music; industry	-al	
cloud; sun	-y	
attract; product	-ive	
small; style	-ish	
history; energy	-ic	
enjoy; suit	-able	
eat; flex	-ible	
pain; forget	-ful	
harm; home	-less	

4 Pay attention to the part of speech to complete the tables.

Noun	Translation	Adjective	Translation
availability		available	доступный
capability		capable	возможный
nature	природа	natural	
power	влияние	powerful	
safety		safe	безопасный
variety	разнообразие	various	

Noun	Translation	Verb	Translation
choice		choose	выбирать
creation		create	создавать
description	описание	describe	
origin		originate	происходить
protection	защита	protect	
prevention	предотвращение	prevent	
ruler		rule	править
threat	угроза	threaten	
replacement	замена	replace	

READING

5 Read and translate the information about national security.

National Security

The origin of the modern concept of **national security** as a philosophy of maintaining a stable nation state goes back to the 17th century. In 1651, the philosopher Thomas Hobbes said that people need a powerful ruler who **promises a lasting peace** without any kind of war. In 1795, the philosopher Immanuel Kant **proposed** a system. In this system, nation states **subordinate** their national interests to the common good and international law rules.

As an academic concept, national security *was first introduced* in the United States after World War II. It has replaced other concepts that described the **struggle** of states to **overcome** various **external and internal threats**. However, the **earliest mention** of the term *national security* goes back to 1790 in Yale University **in reference to its relation with** industries of the country.

There is no universal definition of national security. The concept still remains unclear, because it means the **freedom** from military threat and includes other forms of non-military security. **According to a typical definition**, national security is the protection of the safety of a country's secrets and its people; a government, together with its parliaments, should protect the state and its people against all kind of 'national' **crises**.

Accordingly, to **possess** national security, a nation needs to possess different security elements. **Authorities** differ in their choice of nation security elements. Besides, the military aspect of security, the aspects of politics, economics, society, **environment**, energy and natural resources *are commonly listed*.

- Military security means the capability of a nation to protect itself, and/or prevent military aggression.
- Political security is about the **stability of the social order**.
- Economic security. The creation and protection of jobs that **supply** different needs are important to national security.
- Human security defines people's safety from repression, **disease, and hunger**.
- Environmental security deals with environmental problems which threaten a nation; e.g. climate change, water **scarcity**, immigration *caused by* the **agricultural** problems.
- Security of energy and natural resources. Availability of natural resources is important for a nation to develop its industry and economic power.



6 Match the 10 national security elements and some information about them.



cyber security	economic security
energy and natural resources security	environmental security
food security	homeland security
military security	political security
society security	women's security

- a This is traditionally, the earliest form of national security.
- b It is the condition of having stable income to support a standard of living.
- c It is about making peace agreements so that people can live together.
- d A reason to environmental threats can be warfare.
- e Nations attempt to get the needed resources by force, agreements, and commerce.
- f governmental programmes provide money to people who need it.
- g It includes airport, port, border, transportation and other kinds of security.
- h It is a condition related to the supply of food, and people's access to it.
- i Unauthorized access to governmental companies can create a serious threat.
- j Women's rights and violence against women are important problems.

7 Answer the following questions.

- 1 When did the modern concept of national security originated?
- 2 What was the philosopher Thomas Hobbes famous for?
- 3 What was the philosopher Immanuel Kant famous for?
- 4 Where and when was national security as an academic concept first introduced?
- 5 When and where was the term *national security* first mentioned?
- 6 Is there a universal definition of national security?
- 7 What does the concept *national security* include?
- 8 What is a typical definition of national security?
- 9 What is necessary to do to possess national security?
- 10 What are important national security elements?



8 Write the synonyms instead the words *in italics*.

- 1 Thomas Hobbes *stated* that people need a powerful ruler and a lasting peace.
- 2 States overcome *different* external and internal threats.
- 3 There is no *single universally accepted* definition of national security.
- 4 The concept of national security still remains *ambiguous*.
- 5 National security is the protection a county's secrets and its *citizens*.
- 6 A government, *along with* its parliaments, should protect the state and its people.
- 7 Military security means the capability of a nation to *defend* itself.
- 8 The creation and protection of jobs are *vital* to national security.

GRAMMAR

Different types of questions

In questions, we normally put the first verb (an auxiliary verb or a modal verb) or the link verb **be** before the subject.

Am I late? What are you going to do after university?

Is he writing a report? When will they arrive?

Can you drive a car? What should we do?

If there is no other auxiliary or modal verb in the statement, we use **do**.

I live in Tomsk. – Do you live in Tomsk?

Security means ‘protection against threats’. – What does ‘security’ mean?

Sometimes **do** is also the main verb (**do** you **do** etc.):

What do you do? – I’m a student.

There are four main types of questions.

They are *yes/no* questions, special, alternative, and tag questions.

1 We call questions that need a *yes/no* answer **yes/no questions**.

We normally give short answers to *yes/no* questions.

Do you like London? – Yes, I do.

Is Michael learning English? – Yes, he is.

Are they going to move to the USA? – No, they aren’t.

Will Gina go to the lecture? – Yes, she will.

Can you program a computer? – No, I can’t.

9 Write *yes/no* questions. Give short answers.

Example: I go to university. And you? Do you go to university? – Yes, I do.

- | | |
|--|---------------------------|
| 1 I am a student. | And you? |
| 2 David is smart. | And Jacob? |
| 3 My parents work as programmers. | And your parents? |
| 4 Miranda lives in Atlanta. | And Ingrid? |
| 5 I’m not surfing the web at the moment. | And you? |
| 6 My friend and I are going to the seminar. | And Paul? |
| 7 Mason is going to buy a new USB flash drive. | And you? |
| 8 We are going to make a backup of all the data. | And Linda? |
| 9 Peter will become a brilliant specialist. | And your fellow students? |
| 10 I think I won’t go to university on Saturday. | And you? |
| 11 My sister can speak Chinese. | And your sister? |
| 12 Ann must be in time for the meeting. | And Stephen? |
| 13 Jennifer needs to be more careful. | And I? |

2 We call questions that begin with a question word **special questions**.

There are different question words: **how, what, when, where, which, who, why**.
They come first in the question.

How do you do? **When are you moving to the new flat?**

In the following questions, **who/what** is the subject:

Who works in this office? (=somebody works in it – who?)
(NOT ~~Who does work ...?~~)

What is happening?

In the following questions, **who/what** is the object:

Who does Jillian work with?

What do you know about it?

Common expressions with **what** include **what time, what sort/kind of, what colour, what make**.

What time do you have dinner? **What sort/kind of books** do you like?

What colour is your mobile? **What colour mobile** do you have?

What make is your laptop? **What make of laptop** do you want to buy?

Common expressions with **how** include **how many, how much and how often**.

How many faculties are there at TUSUR? **How much money** do you have?

How often do you phone your parents?

We often answer special questions with a full statement.

What make is your laptop? – It's a Dell.

10 Put the words in the right order. Answer the questions.

Example: (you / do / live / where?) **Where do you live? – I live in Tomsk, Russia.**

- 1 (you / old / are / how?)
- 2 (job / mother's / is / what / your?)
- 3 (name / best / your / is / friend's / what?)
- 4 (you / are / exam / taking / now / an?)
- 5 (your / you / change / do / how often / passwords?)
- 6 (of / phone / you / what make / have / do / mobile?)
- 7 (your / people / there / how many / in / are / group?)
- 8 (going to / are /where / after / you / live / university?)
- 9 (get up / usually / in / you / the / when / do / morning?)
- 10 (cost / how much / an / does / LED TV?)
- 11 (creator / the World Wide Web / is / who?)
- 12 (how / the / people / Internet / do / access?)
- 13 (the / of / what / Internet / consist / does?)
- 14 (people / web / use / why / browsers / do?)
- 15 (do / the / people / can / what / Internet / on?)
- (computer / personal / have / will / a / everybody / when?)



3 Alternative questions give a choice of two or more answers in the question and include **or**. We ask them without a question word.
We usually answer alternative questions with a full statement.

Will they move to England or stay in Scotland? – They'll move to England.

Are you a student or a teacher? I'm a student. OR I'm a teacher.

OR They'll stay in Scotland.

Are you a student or a teacher? – I'm a student. OR I'm a teacher.

11 In pairs, ask and answer alternative questions. Use the suggestions below.

Example: prefer – tea / coffee **Do you prefer tea or coffee? – I prefer tea.**

sit / stand *Are you sitting or standing? – I'm sitting.*

- 1 be – well / ill
 - 2 be – from Russia / Kazakhstan
 - 3 live – house / flat
 - 4 would like – live in Russia / move abroad
 - 5 work / study
 - 6 be – student / information security specialist
 - 7 speak – Russian / Japanese
 - 8 plan – work for a big / small company
 - 9 prefer – SMS / WhatsApp messages
 - 10 want – a new laptop / tablet computer



4 **Tags** are questions added to a clause to invite a response from the listener. They consist of an auxiliary or modal verb or the link verb *be* + a pronoun. We answer them like *yes/no* questions.

You're a security specialist, aren't you? – Yes, I am.

Jane will come back soon, won't she? – Yes, she will.

The computer shop opens at 9.00, doesn't it? – No, it doesn't.

William is going to Moscow, isn't he? – No, he isn't.

12 Make tag questions from these statements and answer them.

You are a student, aren't you? – Yes, I am.

- 1 You are at university.
 - 2 You are American.
 - 3 You have a mobile phone.
 - 4 Your friend lives in Scotland.
 - 5 You are having an English class.
 - 6 A web browser is a computer game.
 - 7 The Web is the most used service on the Internet.
 - 8 Most webpages are in the PDF format.
 - 9 Websites consist of pages that are linked by hyperlinks.
 - 10 People usually access the Internet free of charge.



MORE WORDS AND PHRASES TO KNOW

auxiliary verb – вспомогательный глагол

link verb – глагол-связка

subject - подлежащее

object – дополнение

clause – предложение (часть сложного)

invite – вызывать, побуждать

response – ответ

was first introduced – была впервые представлена

are commonly listed – обычно включаются в список

caused by – вызванная

6d ECONOMIC SECURITY

VOCABULARY

1 Read and learn the words and phrases.

economic security	экономическая безопасность
economic activity	экономическая деятельность
consumption of goods and services	потребление товаров и услуг
stable income	стабильный доход
standard of living	уровень жизни
solvency	кредитоспособность
cash flow	денежный поток
economic entity	экономическая единица
dwelling and health	жилище и дом
employment	трудоустройство
citizen	житель
monetary support	денежная поддержка
savings and money management	управление сбережениями и деньгами
international relations	международные отношения
conqueror	завоеватель
enlarge trade	увеличивать торговлю
interdependence	взаимозависимость
economic espionage	экономический шпионаж
illegal	незаконный
economic advantage	экономический успех

2 Choose the correct word *in italics* to complete the sentences.

- 1 The company's *citizens* and *conquerors* / *solvency* is not in question.
- 2 Many companies fail through poor *cash flow* / *economic security*.
- 3 *Health* / *Trade* between the two countries has increased.
- 4 Gas and oil *economic activity* / *consumption* always increases in cold weather.
- 5 In Russia, it is *illegal* / *standard of living* to sell cigarettes to anyone under 18.
- 6 We look for to improve *economic entity* / *relations* between our two countries.
- 7 Average *goods and services* / *incomes* have risen by 5 percent over the past year.
- 8 I spent all my *economic espionage* / *savings* on a new security system.
- 9 The development will consist of 66 *dwellings* / *interdependence* and offices.
- 10 The expansion of the factory will mean the *economic advantage* / *employment* of sixty extra workers.
- 11 In seven out of 10 households it's a woman who's now responsible for *monetary support* / *money management*.

3 Fill in the blanks with adjectives derived from the word in bold. Pay attention to the spelling and pronunciation.

Common adjective suffixes

<i>-able</i>	<i>-al</i>	<i>-ful</i>	<i>-ic</i>	<i>-ible</i>	<i>-ish</i>	<i>-ive</i>	<i>-less</i>	<i>-ous</i>	<i>-y</i>
--------------	------------	-------------	------------	--------------	-------------	-------------	--------------	-------------	-----------

- 1 The roads were _____ this morning: it was foggy and I couldn't see far. **DANGER**
- 2 He was very _____ when he said 'goodbye'. **EMOTION**
- 3 I'm afraid you'll have to clean the floor – it's very _____. **DIRT**
- 4 That clown has a very _____ face. **EXPRESS**
- 5 I've never had a problem with the car – it's very _____. **RELY**
- 6 Be _____! Don't spend all your money on a new video game! **SENSE**
- 7 Her advice was very _____. **HELP**
- 8 His work is full of _____ mistakes. **CARE**
- 9 He received the news with _____ enthusiasm. **BOY**
- 10 Ireland has a rich _____ tradition. **POET**

4 Find the English equivalent to each phrase.

- | | |
|---|-------------------------------|
| 1 определяется | a is defined |
| 2 предсказуемость | b scarcity and choice |
| 3 недостаток и выбор | c production and distribution |
| 4 состояние обладания | d the condition of having |
| 5 отдельное лицо и семья | e probable continued |
| 6 более широкое влияние | f predictability |
| 7 финансовая безопасность | g employment security |
| 8 гарантия наличия работы | h job security |
| 9 гарантия трудоустройства | i basic needs' infrastructure |
| 10 неработающий гражданин | j work-related security |
| 11 возможная продолжительная | k financial security |
| 12 производство и распределение | l broader effect |
| 13 экономика завоёванных наций | m society's production level |
| 14 инфраструктура базовых нужд | n non-working citizen |
| 15 гарантия наличия рабочих мест | o individual and family |
| 16 желаемый способ (метод, манера) | p the desired manner |
| 17 принудительный вид деятельности | q conquered nations' economy |
| 18 уровень развития средств производства в стране | r forced activity |

READING

5 Read and translate the information about economic security.

Economic Security



Economics is the social science. It studies **economic activity**: how people make choices to get what they want. Economics is defined as ‘the study of scarcity and choice’. It is basically about individual choice. Economics also studies what changes the production, distribution, and **consumption of goods and services** in an economy.

Economic security is the condition of having **stable income** and/or other resources to support a **standard of living** now and in the future. It includes:

- probable continued **solvency**;
- predictability of the future **cash flow** of a person or other **economic entity**, such as a country;
- employment security or job security.

Economic security consists of basic social security. It is defined by access to basic needs’ infrastructure. It relates to information and education, **dwelling and health**, social protection and work-related security. The creation and protection of jobs that supply military and other needs are important to national security. Third world countries are less secure because of scarcity of **employment** for their **citizens**.

Economic security differs from financial security. Economic security includes the broader effect of a society’s production levels and **monetary support** for non-working citizens. Financial security more often refers to individual and family **savings and money management**.

We can also speak about economic security in the context of politics and **international relations**. It is the ability of a state to follow its choice of policies to develop the national economy in the desired manner. Today economic security probably forms as an important part of national security as military security, political security, environmental security, energy and natural resources security and others.

Historically, **conquerors** were rich through stealing and access to new resources. They **enlarged trade through** controlling of the conquered nations’ economy. Today, there is a complex system of international trade of the world. Multinational agreements, **interdependence**, and availability of natural resources characterize it.

In Canada, threats to the country’s economic security are **economic espionage**. Economic espionage is **illegal**, secret and/or forced activity by a foreign government. Such government tries to gain unauthorized access to private information or technology of other countries for **economic advantage**.

6 Find the paragraphs in the text that tell about these things.

- A Basic needs' infrastructure
- B Economic espionage
- C Trade: historically and today
- D Economic security and financial security
- E Key concepts of stable income
- F Economics and its study
- G Politics and international relations



7 Are the statements TRUE or FALSE?



- 1 Economics studies only money.
- 2 An example of economic entity can be any country.
- 3 Employment doesn't influence economic security.
- 4 Economic security and financial security are different concepts.
- 5 Economic security is a vital part of national security.
- 6 There are no international agreements in the modern world at all.
- 7 Economic espionage is a threat to economic security.

8 Match the beginnings (1 – 5), the continuations (6 – 10), and the endings (11 – 15) to make 5 sentences. Use the information from the text.

The beginnings

- 1 Economics studies what changes
- 2 Information and education, dwelling and health,
- 3 Financial security refers to
- 4 Economic security is the ability of a state
- 5 Economic espionage is



The continuations

- 6 individual and family
- 7 to follow its choice of policies
- 8 social protection and work security
- 9 illegal, secret and/or forced activity by
- 10 the production, distribution, and consumption of



The endings

- 11 a foreign government.
- 12 savings and money management.
- 13 goods and services in an economy.
- 14 are important to economic security.
- 15 to develop the national economy in the desired manner.

GRAMMAR

Question tags

9 Write the correct question tags.

- 1 He can play golf well, ...?
- 2 You are the new secretary, ...?
- 3 Mr. Evans is speaking over the phone, ...?
- 4 You like black coffee, ...?
- 5 I'm busy, ...?
- 6 You aren't well enough. You should stay with either me or your son, ...?
- 7 I'm not ill, ...?
- 8 It's a nice day, ...?
- 9 There isn't a cloud in the sky, ...?
- 10 We haven't got much time, ...?
- 11 Sam doesn't work hard, ...?
- 12 Oh, there are a lot of photos in the album, ...?
- 13 There was nobody there, ...?
- 14 Your son didn't help you much, ..?
- 15 They sent a letter the day before yesterday, ...?
- 16 My Dad hasn't read the newspaper yet, ...?
- 17 There will be a nice film on TV tonight, ...?
- 18 Neither your parents nor mine can lend us some money, ...?
- 19 He never uses his car except when it's necessary, ...?
- 20 There's little point in doing anything about it, ...?

6e EDUCATION CLIP: HIGHER EDUCATION IN THE USA

VOCABULARY

1 Read and learn the words and phrases.

public	государственный
private	частный
course in	курс лекций (обучения) по
arts	искусства
humanities	гуманитарные науки
social and physical sciences	общественные и физические науки
most	большинство
cheap	дешёвый
than	чем
low-cost education	недорогое образование
grant a degree	присуждать учёную степень
like	как, подобно
such as	такой как
earn a credit	получить «кредит», зачёт
unit of study	зачётная единица трудоёмкости
term = semester (US)	семестр
week	неделя
tuition	обучение; плата за обучение
out of pocket	из собственного кармана
loan	заём, ссуда

1 Can you guess what words and phrases are here?

- 1 t _ _ m
- 2 t _ _ n
- 3 c _ _ _ p
- 4 g _ _ _ t
- 5 c _ _ _ _ e
- 6 p _ _ _ _ c
- 7 s _ _ _ _ _ e
- 8 t _ _ _ _ _ n
- 9 s _ _ _ _ _ _ r
- 10 o _ _ _ _ _ _ _ t
- 11 u _ _ _ _ _ _ _ y
- 12 l _ _ _ _ _ _ _ _ n

2 Match the words to make 8 phrases.

- | | |
|----------------|-----------------------|
| 1 earn | a as |
| 2 such | b loan |
| 3 unit of | c study |
| 4 low-cost | d a credit |
| 5 the arts and | e humanities |
| 6 social and | f education |
| 7 private and | g physical sciences |
| 8 student | h public universities |

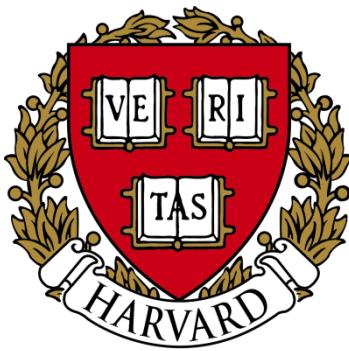
3 Complete the sentences.

- 1 The _____ are some activities such as painting, music, film, and dance.
A arts **B** cheap **C** course
- 2 Tim is doing a _____ in linguistics at Newcastle.
A cheap **B** course **C** credit
- 3 A teacher needs to _____ the respect of their students.
A course **B** credit **C** earn
- 4 The _____ are literature, history, philosophy, and other subjects.
A education **B** grant **C** humanities
- 5 She can't study well _____ her brother does.
A like **B** loan **C** low-cost
- 6 He has a bank _____.
A like **B** loan **C** low-cost
- 7 _____ of our students walk to university.
A Most **B** Out of pocket **C** Physical
- 8 Charles studies at a _____ university.
A private **B** semester **C** study
- 9 We have a test at the end of the _____.
A such as **B** term **C** than
- 10 I have got two exams this _____.
A tuition **B** unit **C** week

READING

4 Read and translate the information about the higher education in the USA.

Higher Education in the USA



The United States has many **public** and **private** institutions of higher education. There are public universities, private universities, *liberal arts colleges*, and *community colleges* in the USA.

Liberal arts institutions offer **courses in the arts, humanities, languages, and social and physical sciences**. **Most** liberal arts institutions are private. Private colleges and universities are usually smaller **than** public institutions.

Community colleges are often two-year colleges. They are **cheaper** than other institutions. Graduates get an *associate's degree* such as an *Associate of Arts (A.A.)*.

State colleges and universities provide a **low-cost education** to residents of the US. People also call them "public universities". These universities are very large. Universities are research-oriented education institutions. They provide both undergraduate and postgraduate programs.

In most undergraduate programs you obtain a **bachelor's degree in four academic years**. Postgraduate programs usually last two years. They **grant** a master's **degree (like)** the Master of Arts (M.A.), Master of Science (M.S.) or Master of Business Administration (M.B.A.) or a doctorate **such as** the Ph.D.

In the United States, students usually **earn credits** for courses they take. A *credit* is a **unit of study**. The US academic year usually is from September to May and consists of two academic **terms (semesters)** of 16-18 **weeks**.

Harvard University and the other seven Universities of *the Ivy League*, Massachusetts Institute of Technology (MIT) and Stanford University are among the top higher education institutions in the world.

Students do not pay all **tuition out of pocket**. They often get scholarships, student **loans**, or grants.

Notes

liberal arts college – колледж гуманитарных наук (в США)

community college – местный, «общинный» колледж

associate's degree – степень ассоциата

Associate of Arts (A.A.) – ассоциат искусств, ассоциат гуманитарных наук

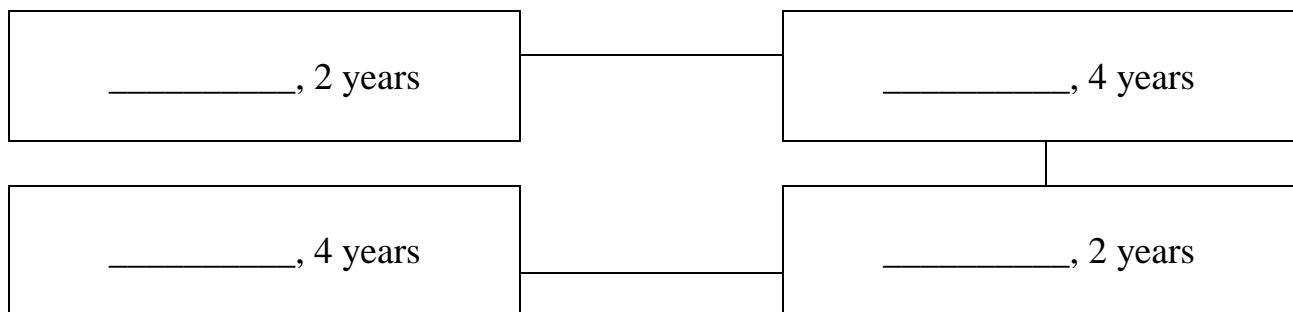
credit – «кредит» (= зачётная единица в ВУЗе)

the Ivy League – Лига плюща (ассоциация восьми частных американских университетов, расположенных в семи штатах на северо-востоке США, отличающихся высоким качеством образования)

5 Write a word or phrase that is similar in meaning to the underlined part.

- 1 Public universities are very big.
- 2 Graduate programmes usually continue two years.
- 3 Students usually earn credits for programmes they take.
- 4 Students often receive student loans, scholarships, or grants.
- 5 People name state colleges and universities “public universities”.
- 6 In the USA, a student gets a bachelor’s degree in four academic years.
- 7 Private colleges and universities are normally smaller than public ones.
- 8 There are a lot of public and personal higher education institutions in the USA.
- 9 Community colleges are less expensive than other higher education institutions.
- 10 Colleges and universities in the USA offer courses in the arts, languages, literature, history, philosophy, social and physical sciences.

6 Complete the scheme about the higher education system in the USA.



7 Complete the sentences.

- | | |
|---|------------|
| 1 About _____ students study at higher education institutions in the USA. | 8 |
| 2 Over _____ foreign students attend higher education institutions in the USA. | 30 |
| 3 A student of a private university in the USA pays for tuition about \$_____ per year. | 4,300 |
| 4 A student of a public university in the USA pays for tuition about \$_____ per year. | 41,000 |
| 5 There are over _____ higher education institutions in the country. | 500,000 |
| 6 About _____ percent of the adult population in the USA have a bachelor’s degree. | 18,000,000 |
| 7 The Ivy League consists of _____ private American universities. | 28,000 |
| 8 The Ivy League universities are situated in _____ states of the USA. | 7 |

GRAMMAR

9 Articles. Study the information. Write *a* or *an*.

We use ***a*** before a consonant (*p, l, s* etc.) and ***an*** before a vowel (*a, i, o* etc.).

But it depends on the **pronunciation** of the following word, not the spelling.

a film an umbrella an interesting film a useful idea

Example: a language

- | | |
|-------------------------|-----------------------------------|
| 1 <u> </u> republic | 6 <u> </u> European country |
| 2 <u> </u> event | 7 <u> </u> old clock |
| 3 <u> </u> animal | 8 <u> </u> new airport |
| 4 <u> </u> hour | 9 <u> </u> university student |
| 5 <u> </u> country | 10 <u> </u> economic problem |

10 Study the information. What are their jobs? Make sentences with the words from the box.

We use ***a/an*** ... when we say what a person or a thing is.

A/an = ‘one’. With plural nouns we use **no article**.

Sam is a nice person. They are nice people.

A rose is a flower. Roses are flowers.

We also use ***a/an*** ... for jobs etc.

She is a doctor. They are doctors.

Are you a student? Are you students?

A/an also means ‘any example of something’. In the plural we use **no article** or **some**.

A dog has four legs. Dogs have four legs.

I'd like a cup of tea. I'd like some sweets.

We **don't** normally use ***a/an*** with **uncountable nouns**. (NOT *a rain*)

doctor	teacher	photographer	musician	police officer
fire fighter	nurse	shop assistant	cook	taxi driver

Example: A is a nurse.



A



B



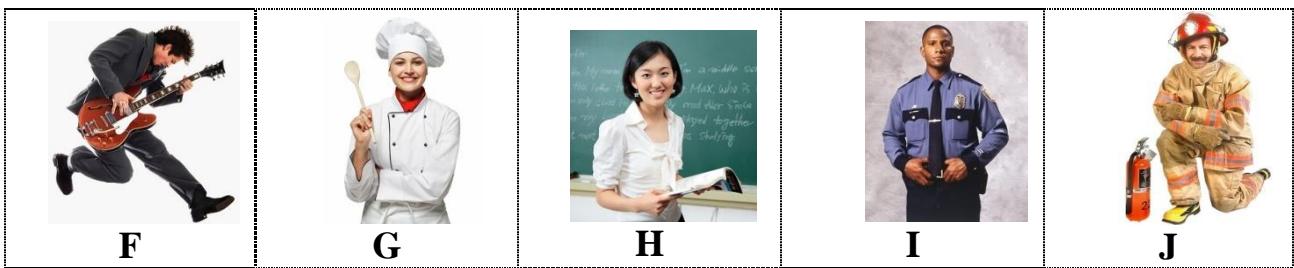
C



D



E



11 What are these things and people? Make sentences with the words from the boxes. Use *a/an* where necessary

Example: A pigeon is a bird.

mineral water	English	international language	bird
Nina	pigeon	university	cars
engineer	biathlon	student	city
cats	Tomsk	drink	game
undergraduate	volleyball	beautiful girl	sport
Ford and BMW	TUSUR	animals	job



12 Study the information. Put *a/an*, *the* or – (no article).

We use ***the*** when it is clear which thing or person we mean.

*I live far from ***the centre***. (= the centre of my town)*

Compare:

*I have ***a leather jacket***. ***The jacket*** is very expensive.*

*There is ***a kitchen*** in the flat. ***The kitchen*** is quite small.*

We normally use **no article** with **proper nouns** (people's names, days and months, names of places such as countries, cities/ towns, streets, squares, universities, etc.).

*A lot of tourists visit ***Trafalgar Square*** in ***London***.*

But we use ***the*** +:

- names with 'kingdom', 'states', 'federation':
****the United Kingdom (the UK), the United States of America (the USA), the Russian Federation****
- names of rivers, seas, oceans:
****the Tom (River), the North Sea, the Pacific (Ocean)****

*Example: 'Where's Alex?' 'He is in ***the*** kitchen.'*

- 1 Please turn off ____ light. I think I'll go to bed.
- 2 It is ____ fine weather: ____ sky is blue and ____ sun is bright.
- 3 Open ____ window, please. It is very hot in here.
- 4 I have got ____ car. ____ car is ____ black Toyota.

- 5 _____ Faculty of _____ Information Security is one of the 13 faculties of _____
TUSUR.

6 _____ Tomsk State University of _____ Control Systems and Radioelectronics is
_____ engineering university in _____ Russia.

7 _____ main building of _____ university is located in _____ Lenin Prospect.

8 There is _____ sports centre at TUSUR. _____ centre includes a gym with modern
fitness machines and a dancing aerobics class.

9 _____ students of _____ university celebrate Radio Day every year.

10 She lives in _____ centre of _____ Manchester.

13 Correct one mistake in each sentence.

Example: His girlfriend lives in the Oxford Street. ***in Oxford Street***

- 1 I like the classical music. I often go to the opera.
 - 2 There is the fountain in Novosobornaya Square, opposite the main building of TUSUR.
 - 3 TUSUR has big library.
 - 4 Buildings of TUSUR are situated in different streets.
 - 5 Tomsk is small railway centre.
 - 6 The Drama Theatre is located in the Lenin Square.
 - 7 President is the leader of a country.
 - 8 Russian Federation is the largest country in the world.
 - 9 Texas is a large state in the south of USA.
 - 10 London is a capital of Great Britain.



14 Study the information. Choose the correct variant.

* We also use *the*:

- with names of hotels, cinemas, theatres, museums, restaurants:
the Ritz, the Odeon (cinema), *the Globe* (Theatre), *the British Museum*
 - with musical instruments:
play the piano, play the guitar

BUT *play* *football* *basketball* *volleyball* } **no article** with sports and games

1 _____ Russian Federation is a member of the Council of Europe.

- a) a b) the c) –

2 _____ Red Square is _____ heart of _____ Moscow.

- a) a b) the c) –

3 The Savoy Hotel Moscow is in _____ Rozhdestvenka Street.

- a) a b) the c) –

4 _____ lot of Russian people go on holiday to _____ Black Sea.

- a) a b) the c) –

5 _____ Volga is the longest river in _____ Europe.

- a) an b) the c) –

6 _____ Tomsk is _____ old Siberian city.

- a) a b) an c) –

7 Is there _____ university in your town?

- a) a b) the c) an

8 There are _____ some useful books on the subject in
_____ university library.

- a) an b) the c) –

9 I often go to _____ Kinomax cinema with my friends.

- a) a b) the c) –

10 I have _____ PC and _____ notebook.

- a) a b) the c) –

11 I go to _____ university at 8 in _____ morning and get home in _____ evening.

- a) a b) the c) –



15 Put in the English equivalents of the nouns or phrases in brackets. Use *a/an* or *the* where necessary.

1 It's 9 p.m. It's time to (*идти домой*).

2 Lisa and her sister are (*продавцы*).

3 I usually go (*в университет*) (*на машине*).

4 ‘Where is Kate?’ ‘She is (*в университете*).’

5 (*Учебный год*) consists of two terms.

6 There are a lot of universities all over (*страна*).

7 Postgraduates in Russia study three years to get (*учёная степень кандидата наук*).

8 Moscow is (*столица*) of (*Российская Федерация*).

9 (*Большой театр*) is a historic theatre in Moscow, Russia.

10 Tomsk is located on (*река Томь*).

11 There is (*кинотеатр*) in the shopping mall. The name of (*кинотеатр*) is
(*«Гудвин»*)

6f REVISION

VOCABULARY & READING

1 Match the words and phrases and their Russian equivalents.

high level language	язык программирования
cyber warfare	язык высокого уровня
programming language	система управления базами данных
relational database manage system	кибервойна
reveal global surveillance	обнародовать массовую слежку
top security threat	наивысшая угроза безопасности
economic security	национальная безопасность
external and internal threats	внутренние и внешние угрозы безопасности
national security	стабильность социального порядка
consumption of goods and services	экономическая безопасность
stability of the social order	потребление товаров и услуг
monetary support	денежная поддержка

SPEAKING & WRITING

2 In pairs, discuss the following topics. Use one of the topics to write an essay in 10-15 sentences.

- 1 Programming languages
- 2 Cyber warfare
- 3 National security
- 4 Economic security

GRAMMAR

3 Finish each sentences so that it means the same as the one printed above it:

- 1 "True genius is very rare", said the expert. The expert said that ...
- 2 Frank told me he had bought a new computer. Frank said: ...
- 3 "Do you think I'll fail my driving test?", Sally asked. Sally asked me ...
- 4 "Mozart wrote music at the age of four", she said. She said that ...
- 5 "Alice, I'm leaving now", said Tom. Tom told ...
- 6 Mary asked, "How much is this painting?". Mary asked ...
- 7 "I made breakfast for you", said mom. Mom said ...

4 Report the questions.

- 1 Where does Belinda work?
- 2 How did Frank know?
- 3 Why didn't Jack go to the disco last night?
- 4 What time does the show start?
- 5 Who has finished the exercise?
- 6 What are you doing, Mark?
- 7 How did you do that?
- 8 Who was Carol talking to?
- 9 How often does Mary play tennis?
- 10 When did they leave?
- 11 How many cars do you have, Steven?

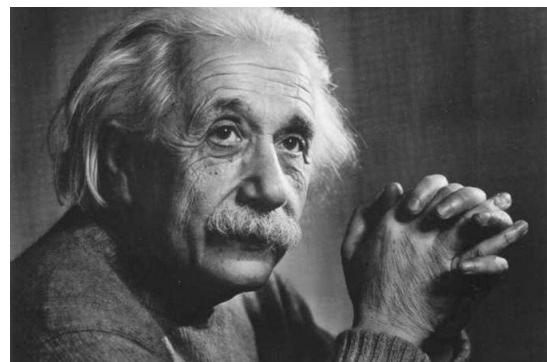


5 Use special structures to report these sentences.

- 1 Shall I open the door for you? (offer). Sam _____
- 2 You can go out after lunch, children (allow). Mum _____
- 3 How about sending an email to Paul? (suggest). Andy _____
- 4 Would you like to come for dinner tonight, Pam? (invite) We _____
- 5 I won't forget to send you a postcard, don't worry, Carol (promise) Alan _____
- 6 Can you please pass me the pen, Tim? (ask). Susan _____
- 7 Tidy your room, Pete or you'll be grounded. (tell) Father _____
- 8 I'm sorry, Meg! I forgot to invite you to the concert last Saturday. (apologize) Dan _____

6 Choose the correct relative pronoun (who, which).

- 1 This is the man _____ saved the kid.
- 2 The writer _____ won the Nobel Prize published that article.
- 3 He bought a car _____ is 10 years old.
- 4 He was wearing a sweater _____ was made in Norway.
- 5 I sold the car _____ my father bought last year.
- 6 She drank the juice _____ she made.



- 7 To calm his angry wife, Joey offered an apology _____ Francine did not accept.
- 8 Brian said goodnight to his roommate Justin, _____ continued to play video games until his eyes were blurry with fatigue.
- 9 The children _____ skateboard in the street are especially noisy in the early evening.
- 10 Kerry Ann, _____ hates spiders, wears bug-stomping boots wherever she goes.

7 Guess the name of the person, thing or place to answer the first part of the sentence. Then write the correct relative pronoun.

- 1 _____ was the Egyptian Queen _____ loved Julius Caesar and Marc Anthony.
- 2 _____ was the place _____ Napoleon was exiled.
- 3 _____ was the Russian princess _____ parents, brother and sisters were killed near Moscow.
- 4 _____ was the country _____ did not want to surrender during World War II, until two atom bombs killed thousands of its citizens.
- 5 _____ was the painter _____ ear became famous and now a band has got its name.
- 6 _____ was the volcano _____ erupted in Italy and killed thousands in Pompeii and Herculano.
- 7 _____ was the English King _____ wives were always accused of treason and therefore, beheaded.



8 Join these sentences to form a relative clause.

- 1 Billy The Kid was born in New York in 1869. His real name was William Bonney.
- 2 The house was built ten years ago. Its entrance is in the corner.
- 3 Alice had just killed her husband. Alice was planning her escape.
- 4 Madge found the lost book. Madge's best friend was Alice.
- 5 The woman is a doctor. She lives by the church.
- 6 The garden was full of flowers. We visited it last week.
- 7 The man went to the police. His car was stolen.
- 8 This is the neighbourhood. I grew up here.
- 9 The bed was uncomfortable. I was sleeping on that bed.
- 10 This is the time of the year. The flowers blossom then.

