



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

TENTO PROJEKT JE SPOLUFINANCOVÁN EVROPSKÝM SOCIÁLNÍM FONDEM A STÁTNÍM ROZPOČTEM ČESKÉ REPUBLIKY.

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INTRODUCTION

Dear student,

the material that you are about to start reading and studying is the first part of the three-semester course *English for specialisation degree* at the Department of Informatics and Computers, University of Ostrava.

I hope that this first part will give you a good basis for your further studies of grammar and vocabulary as well as help you be better and more self-confident at using the language in practical/professional life.

This semester, the topics will concern various topics ranging from your university, terms used in IT, history of computers to various types of computing machines. Each topic is based on a grammatical base. You should already know basics of English, alphabet, rules of word order.

How to work with this material.

The study material has a fixed structure. Each chapter presents a topic which is the base for studying the grammar of the chapter. The grammar part follows the texts and exercises placed at the beginning of the chapter. The final part of each chapter includes vocabulary of the unit and key to the exercises.

There are also two Assignments which you are supposed to work out. The assignments can help you improve your writing as well as pass the course successfully because they can bring you points for the final evaluation.

I wish you enjoyably spent hours studying this material.

author

The teacher can open you the door, but it is you who must enter.
unknown author

After you finish this course, you should know:

- Present simple and continuous tenses
- Past simple and continuous tenses
- Numerals
- Basic computer terminology
- Basic types of computers
- Fact of computer history
- Information about studies and university

You will acquire skills of:

- better reading
- finding specific information in a text
- writing a short paper about your studies
- writing a technical paper
- speaking about your studies and basic computer topics

1 INITIAL PLACEMENT TEST

\$Time: 2 hours\$

\$Study guide\$

A placement test serves to find out our level of English. The following 60 questions can give you an idea if you know English enough to start this course.

Good luck.

\$Questions 1-5\$

Where can you see these notices?

\$Please leave your room key at Reception.\$

- A in a shop
- B in a hotel
- C in a taxi

\$Foreign money changed here\$

- A in a library
- B in a bank
- C in a police station

\$Afternoon show begins at 2pm\$

- A outside a theatre
- B outside a supermarket
- C outside a restaurant

\$Closed for holidays - Lessons start again on 8th January\$

- A at a travel agent's
- B at a music school
- C at a restaurant

\$Price per night: £10 a tent, £5 a person\$

- A at a cinema
- B in a hotel
- C on a camp-site

\$Questions 6-10\$

In this section you must choose the word which best fits each space in the text below.

\$Scotland\$

Scotland is the north part of the island of Great Britain. The Atlantic Ocean is on the west and the North Sea on the east. Some people (6) ... Scotland speak a different language called Gaelic. There are (7) ... five million people in Scotland, and Edinburgh is (8) ...most famous city. Scotland has many mountains; the highest one is called 'Ben Nevis'. In the south of Scotland, there are a lot of sheep. A long time ago, there (9) ... many forests, but now there are only a (10) ...

Scotland is only a small country, but it is quite beautiful.

6 A on B in C at

- 7 A about B between C among
 8 A his B your C its
 9 A is B were C was
 10 A few B little C lot

\$Questions 11-20\$

In this section you must choose the word which best fits each space in the texts.

\$Alice Guy Blache\$

Alice Guy Blache was the first female film director. She first became involved in cinema whilst working for the Gaumont Film Company in the late 1890s. This was a period of great change in the cinema and Alice was the first to use many new inventions, (11) ... sound and colour. In 1907 Alice (12) ... to New York where she started her own film company. She was (13) ... successful, but, when Hollywood became the centre of the film world, the best days of the independent New York film companies were (14) ... When Alice died in 1968, hardly anybody (15) ... her name.

- 11 A bringing B including C containing D supporting
 12 A moved B ran C entered D transported
 13 A next B once C immediately D recently
 14 A after B down C behind D over
 15 A remembered B realised C reminded D repeated

\$UFOs - do they exist?\$

UFO is short for 'unidentified flying object'. UFOs are popularly known as flying saucers, (16) ... that is often the (17) ... they are reported to be. The (18) ... "flying saucers" were seen in 1947 by an American pilot, but experts who studied his claim decided it had been a trick of the light. Even people experienced at watching the sky, (19) ... as pilots, report seeing UFOs. In 1978 a pilot reported a collection of UFOs off the coast of New Zealand. A television (20) ... went up with the pilot and filmed the UFOs. Scientists studying this phenomenon later discovered that in this case they were simply lights on boats out fishing.

- 16 A because B therefore C although D so
 17 A look B shape C size D type
 18 A last B next C first D oldest
 19 A like B that C so D such
 20 A cameraman B director C actor D announcer

\$Questions 21 - 40\$

In this section you must choose the word or phrase which best completes each sentence.

- 21 The teacher encouraged her students ... to an English pen-friend.
 A should write B write C wrote D to write
 22 They spent a lot of time ... at the pictures in the museum.

- A looking B for looking C to look D to looking
23 Shirley enjoys science lessons, but all her experiments seem to ...
wrong.
A turn B come C end D go
- 24 ... from Michael, all the group arrived on time.
A Except B Other C Besides D Apart
- 25 She ... her neighbour's children for the broken window.
A accused B complained C blamed D denied
- 26 As I had missed the history lesson, my friend went ... the homework
with me.
A by B after C over D on
- 27 Whether she's a good actress or not is a ... of opinion.
A matter B subject C point D case
- 28 The decorated roof of the ancient palace was ... up by four thin
columns.
A built B carried C held D supported
- 29 Would it ... you if we came on Thursday?
A agree B suit C like D fit
- 30 This form ... be handed in until the end of the week.
A doesn't need B doesn't have C needn't D hasn't got
- 31 If you make a mistake when you are writing, just ... it out with your
pen.
A cross B clear C do D wipe
- 32 Although our opinions on many things ..., we' re good friends.
A differ B oppose C disagree D divide
- 33 This product must be eaten ... two days of purchase.
A by B before C within D under
- 34 The newspaper report contained ... important information.
A many B another C an D a lot of
- 35 Have you considered ... to London?
A move B to move C to be moving D moving
- 36 It can be a good idea for people who lead an active life to increase
their ... of vitamins.
A upturn B input C upkeep D intake
- 37 I thought there was a ... of jealousy in his reaction to my good
fortune.
A piece B part C shadow D touch
- 38 Why didn't you ... that you were feeling ill?
A advise B mention C remark D tell
- 39 James was not sure exactly where his best interests... .
A stood B rested C lay D centred
- 40 He's still getting ... the shock of losing his job.

A across B by C over D through

\$Questions 41 - 50\$

In this section you must choose the word or phrase which best fits each space in the texts.

\$The tallest buildings - SKYSCRAPERS\$

Nowadays, skyscrapers can be found in most major cities of the world. A building which was many (41) ... high was first called a skyscraper in the United States at the end of the 19th century, and New York has perhaps the (42) ... skyscraper of them all, the Empire State Building. The (43) ... beneath the streets of New York is rock, (44) ... enough to take the heaviest load without sinking, and is therefore well-suited to bearing the (45) ... of tall buildings.

- 41 A stages B steps C storeys D levels
 42 A first-rate B top-class C well-built D best-known
 43 A dirt B field C ground D soil
 44 A hard B stiff C forceful D powerful
 45 A weight B height C size D scale

\$SCRABBLE\$

Scrabble is the world's most popular word game. For its origins, we have to go back to the 1930s in the USA, when Alfred Butts, an architect, found himself out of (46) ... He decided that there was a (47) ... for a board game based on words and (48) ... to design one. Eventually he made a (49) ... from it, in spite of the fact that his original (50) ... was only three cents a game.

- 46 A earning B work C income D job
 47 A market B purchase C commerce D sale
 48 A lookup B set out C made for D got round
 49 A wealth B fund C cash D fortune
 50 A receipt B benefit C profit D allowance

\$Questions 51 - 60\$

In this section you must choose the word or phrase which best completes each sentence.

51 Roger's manager ... to make him stay late if he hadn't finished the work.

- A insisted B warned C threatened D announced

52 By the time he has finished his week's work, John has hardly ... energy left for the weekend.

- A any B much C no D same

53 As the game ... to a close, disappointed spectators started to leave.

- A led B neared C approached D drew

54 I don't remember ... the front door when I left home this morning.

- A to lock B locking C locked D to have locked

55 I ... to other people borrowing my books: they always forget to return them.

A disagree B avoid C dislike D object

56 Andrew's attempts to get into the swimming team have not ... with much success.

A associated B concluded C joined D met

57 Although Harry had obviously read the newspaper article carefully, he didn't seem to have ... the main point.

A grasped B clutched C clasped D gripped

58 A lot of the views put forward in the documentary were open to

A enquiry B query C question D wonder

59 The new college ... for the needs of students with a variety of learning backgrounds.

A deals B supplies C furnishes D caters

60 I find the times of English meals very strange - I'm not used ... dinner at 6pm.

A to have B to having C having D have

\$Key:\$

1B

2B

3A

4B

5C

6B

7A

8C

9B

10 A

11B

12A

13C

14D

15A

16A

17B

18C

19D

20A

21D

22A

23D

24D

25C

26C

27A

28C

29B

30C
31A
32A
33C
34D
35D
36D
37D
38B
39C
40C
41C
42D
43C
44A
45A
46B
47A
48B
49D
50C
51C
52A
53D
54B
55D
56D
57A
58C
59D
60B

2 COMPUTER SCIENCE

\$Time: 3 hours\$

\$Study guide\$

The introductory lesson deals with the field that is very popular these days and touches almost every part of human life – computer science. It provides basic facts about this science. It also provides an overview of the English tense system.

At the end of this chapter, the students should:

- state basic information about computer science
- be aware of the English tense system

\$Key words:\$ computation, computer, computer science, hardware, information processing, scientist, software.

*Task 1

Before reading the text below, match these words and phrases with their definitions.

- 1 an algorithm
- 2 computation
- 3 software
- 4 hardware
- 5 processing

- a finding a solution to a problem from given inputs by means of an algorithm
- b the performing of arithmetic or logical operations on information which has been input to a computer
- c a comprehensive term for all of the physical parts of a computer
- d the programs and data used in a computer
- e a set of precise rules or instructions for solving a problem

2.1 What is computer science

Computer science is a discipline that spans theory and practice. It requires thinking both in abstract terms and in concrete terms. The practical side of computing can be seen everywhere. Nowadays, practically everyone is a computer user, and many people are even computer programmers. Getting computers to do what you want them to do requires intensive hands-on experience. But computer science can be seen on a higher level, as a science of problem solving. Computer scientists must be adept at modeling and analyzing problems. They must also be able to design solutions and verify that they are correct. Problem solving requires precision, creativity, and careful reasoning.

Computer science also has strong connections to other disciplines. Many problems in science, engineering, health care, business, and other areas can be solved effectively with computers, but finding a solution requires both

computer science expertise and knowledge of the particular application domain. Thus, computer scientists often become proficient in other subjects.

Finally, computer science has a wide range of specialties. These include computer architecture, software systems, graphics, artificial intelligence, computational science, and software engineering. Drawing from a common core of computer science knowledge, each specialty area focuses on particular challenges.

Computer Science is practiced by mathematicians, scientists and engineers. Mathematics, the origins of Computer Science, provides reason and logic. Science provides the methodology for learning and refinement. Engineering provides the techniques for building hardware and software.

Computer science is a discipline that involves the understanding and design of computers and computational processes. In its most general form it is concerned with the understanding of information transfer and transformation. Particular interest is placed on making processes efficient and endowing them with some form of intelligence. The discipline ranges from theoretical studies of algorithms to practical problems of implementation in terms of computational hardware and software.

A central focus is on processes for handling and manipulating information. Thus, the discipline spans both advancing the fundamental understanding of algorithms and information processes in general as well as the practical design of efficient reliable software and hardware to meet given specifications. Computer science is a young discipline that is evolving rapidly from its beginnings in the 1940's. As such it includes theoretical studies, experimental methods, and engineering design all in one discipline. This differs radically from most physical sciences that separate the understanding and advancement of the science from the applications of the science in fields of engineering design and implementation. In computer science there is an inherent intermingling of the theoretical concepts of computability and algorithmic efficiency with the modern practical advancements in electronics that continue to stimulate advances in the discipline. It is this close interaction of the theoretical and design aspects of the field that binds them together into a single discipline.

Because of the rapid evolution it is difficult to provide a complete list of computer science areas. Yet it is clear that some of the crucial areas are theory, algorithms and data structures, programming methodology and languages, and computer elements and architecture. Other areas include software engineering, artificial intelligence, computer networking and communication, database systems, parallel computation, distributed computation, computer-human interaction, computer graphics, operating systems, and numerical and symbolic computation.

Source: <http://www.cs.mtu.edu/~john/whatiscs.html>,
http://www.csab.org/comp_sci_profession.html

*Task 2

Fill in the words for discipline, person and adjective:
discipline physics, person ..., adjective physical

discipline ..., person mathematician, adjective mathematical,
discipline astronomy, person ..., adjective ...
person scientist, adjective scientific, discipline ...
person programmer, adjective ..., discipline ...

2.2 Language work: The tense system

*Task 3

Study at the following sentences. There are highlighted verbs. What tense are they?

- 1 Computer scientists *study* what programs can and cannot do.
- 2 Since the last third of the 20th century computer science *has become* recognized as a distinct discipline.
- 3 The first computer science department in the United States *was founded* at Purdue University in 1962.
- 4 The scanner *is being calibrated*.
- 5 University of Ostrava was established in 1991 but the conditions for its establishment *had already been forming* in previous years.
- 6 The education programme *is divided* into Academic Years.
- 7 Most research in computer science *has been related* to von Neumann computers or Turing machines.

*Task 4

Complete the tense chart

Use the verb **work** for the active and **mend** for the passive in the third person singular in all possible tenses.

Note: the table has been removed

*Task 5

Do you know the difference between the following? Give examples.

1. Full verb
2. Auxiliary verb
3. Modal auxiliary verb

2.3 Summary

Computer science is a young discipline that touches every area of human activity, but it also needs other disciplines, such as mathematics, physics or biology, to evolve.

The English language is different from our language – it has, for example, 12 tenses, which makes it difficult to understand and use.

2.4 Vocabulary

algorithm algoritmus
computation výpočet
computer science věda o počítačích
computer software programové vybavení
distinct jasně odlišený
establish založit

hardware technické vybavení počítače
 information processing zpracování informací
 perform vykonávat, provádět
 research výzkum, bádání
 resemble podobat se
 retrieve vyhledávat (informace)
 scientific discipline vědní disciplína
 significantly významně, podstatně
 suffer být v nevýhodě, trpět
 topic téma
 dean děkan
 rector rektor
 examination zkouška
 an examination room zkušební místnost
 enrol for an examination přihlásit se na zkoušku
 entrance examination přijímací zkouška
 exam in the English language zkouška z anglického jazyka
 oral exam ústní zkouška
 written exam písemná zkouška
 pass examinations udělat zkoušky
 study for an exam učit se na zkoušku
 fail an exam neudělat zkoušku
 take an exam / sit for an exam dělat zkoušku
 finals závěrečné zkoušky

2.5 Key

*Task 1

- 1 an algorithm - a set of precise rules or instructions for solving a problem
computation finding a solution to a problem from given inputs by means of an algorithm
- 2 computation - finding a solution to a problem from given inputs by means of an algorithm
- 3 software - the programs and data used in a computer
- 4 hardware - a comprehensive term for all of the physical parts of a computer
- 5 processing - the performing of arithmetic or logical operations on information which has been input to a computer

*Task 2

@

discipline	person	adjective
physics	physicist	physical
mathematics	mathematician	mathematical
astronomy	astronomer	astronomical
science	scientists	scientific
programming	programmer	programmable

&

***Task 3**

- 1 Present Simple
- 2 Present Perfect
- 3 Past Simple (passive)
- 4 Present Continuous (passive)
- 5 Past Perfect Continuous
- 6 Present Simple (passive)
- 7 Present Perfect (passive)

***Task 4**

@

ACTIVE	PASSIVE
It works.	It is mended.
It is working.	It is being mended.
It worked.	It was mended.
It was working.	It was being mended.
It has worked.	It has been mended.
It has been working.	not used
It had worked.	It had been mended.
It had been working.	not used
It will work.	It will be mended.
It will be working.	not used
It will have worked.	It will have been mended.
It is going to work.	It is going to be mended.

&

***Task 5**

1. Full verb – take, write, process
2. Auxiliary verb – do, be, have
3. Modal auxiliary verb – can, could, must, should, ...

3 UNIVERSITY OF OSTRAVA

Time: 3 hours

\$Study guide\$

The third chapter focuses on the institution that you are studying at and your field of study. It deals with its history as well as present state.

At the end of this chapter, the students should:

- know basic information about the University of Ostrava
- be able to talk about their studies, duties, etc.
- learn basic information about computer science
- be aware of the English tense system

\$Key words\$: computer science department, dean, faculty, field of study, rector.

3.1 The University of Ostrava

\$The University of Ostrava was founded on 28 September 1991.\$ Its origins can be traced back to 1953, when a training college for future primary school teachers was opened in the nearby town of Opava. In 1959, all teacher training within the region was streamlined into a single institution – the newly established Pedagogical Institute in Ostrava. Five years later, the institute was awarded university status and became an independent Faculty of Education, offering four-year degree courses to future primary school teachers. Ostrava was now a fully-fledged university city. The Faculty's staff became actively involved in academic and cultural life not only within the region, but on a national level. The range of degrees was later extended to include a five-year programme for future teachers of higher year groups.

Today's University of Ostrava represents a natural continuation of this tradition. Since its foundation twenty years ago, the University has provided a much-needed focus for the study and research of humanities and social sciences, helping to redress a historic imbalance in a region traditionally dominated by heavy industry and technical studies. The University of Ostrava currently has six faculties: the Faculty of Social Studies, the Faculty of Fine Arts, the Faculty of Arts, the Faculty of Medicine, the Pedagogical Faculty, and the Faculty of Science. The University offers a wide spectrum of degrees at Bachelor's, Master's and doctoral levels, in addition to lifelong learning programmes. It is also involved in many European Union-funded projects enabling the general public to improve and update their skills and knowledge.

The University of Ostrava incorporates two independent research institutes. The Institute for Research and Application of Fuzzy Modeling develops specialist new mathematical methods, while the European Research Institute for Social Work supports the professional growth of young researchers in order to develop knowledge and skills among social work managers and practitioners across the continent.

A cornerstone of research in Ostrava is the University Library, a public institution which holds specialist stocks and information resources on all key areas of teaching and research across the University. Besides its standard lending services (including loans of books to and from other institutions), the Library also provides a range of other services including literature searches, reference resources, consultation, training courses and small-scale publishing; many of these services are available on-line. The Library has a meeting room for 50 people, with 28 PCs plus full Wi-Fi coverage. There are also areas where people can listen to music or take a break in a relaxation pod. The Library's unique Pyramid Centre provides support for students with special needs in all areas of University life.

The Centre for Information Technology is responsible for managing and maintaining information and telecommunication systems and equipment throughout the University, including the telephone system, internet provision, e-mail, the University website and a range of specialist information systems.

The University also organizes many events catering for the general public. Many of these events have become popular fixtures in the annual calendar. The Student Union organizes the traditional Majáles spring festival and a range of other events. The Faculty of Arts organizes cycles of lectures featuring fascinating personalities from all walks of life, and puts on exhibitions of art and photography in its 'Top Floor' gallery. The Faculty of Science is closely involved in a range of events bringing science to a wide general public, including the regular 'Chemistry at the Castle' festival. The Faculty of Fine Arts holds regular exhibitions in its own 'Student' gallery. Student conferences provide a forum for students from all faculties to present their own research work to their tutors and peers. Information on all these events and much more is available in the 'News' sections of the University's website.

The individual faculties of the University of Ostrava organize and stage a range of competitions, many of which have become internationally renowned. Every year, talented young mathematicians from all around the world compete at the Vojtěch Jarník International Mathematical Competition, run by the Faculty of Science. The same faculty also hosts an international chess competition. The annual Translation Competition organized by the Faculty of Arts is a holder of the prestigious Label 2009 award. These are just some of the many popular competitions held across the University.

Source: <http://www.osu.eu/index.php?kategorie=689>

*Task 1

Answer the following questions. If you get them wrong, read the text above once again or visit the university website:

- a) How many faculties does the University of Ostrava have? Name them.
- b) Who is it a *rector* or a *dean*?
- c) What study programmes are offered at the University of Ostrava?

- d) Can you name at least two university institutions providing various services for both students and teachers?
 e) What do you know about the Pyramid Centre?

For more information go to www.osu.cz.

3.2 University of Ostrava web pages

Note: image has been removed. They were only for illustrative purposes.

Web pages of a university are usually the first place to go for an applicant. Apart from information for applicants, web pages should also be a source of information for those already studying. Orienting in the structure of web pages and searching relevant information becomes a crucial part of their studies. The following lines will guide you through basic division of web pages.

The web pages of the University of Ostrava (UO) are to make the university present to the public. The applicants can become familiar with offered study programmes and fields, entrance examinations or their dates and times. Other visitors can find news and information creating the whole image of the institution.

\$How not to get lost?\$

\$Page heading\$

Page heading shows the name and logo of the university changing according to the selected faculty or institute.

Links placed in the page heading enable fast switching between the desired pages. Such useful links are:

- *\$Home\$* to go back to the main page
- *\$Portál OU\$* only for current UO students

Below the heading, there is an address of the university or a currently selected faculty or institute. Sometimes it is the fastest way to find out where to find the searched faculty or department.

Note: image has been removed

\$Main menu\$

Note: image has been removed

The main menu of the university web pages includes links, such as *\$Studium; Věda, výzkum, tvorba; Projekty; Zahraniční vztahy; Fakulty a ústavy; Součásti OU; Orgány OU; Obecné informace.\$*

When placing the cursor on the menu tab, the choice rolls down. Clicking on an item shows the information below.

\$Page content\$

The page itself is divided into three columns.

At the top, there might be some images – attracting the visitors to current information and news, plus other links, such as *Diploma Supplement Label* or quality assessment *\$Řízení kvality na Ostravské univerzitě v Ostravě\$*, etc.

Note: image has been removed

\$Left column – navigation stripe\$

Showing information in the left column, called navigation stripe, one can select faculties, departments or institutions. This stripe is always present and shows the structures of the available information. Follow the navigation line below the main menu to avoid getting lost.

Note: image has been removed

Each item in the navigation line is a link to the page the information has been taken from. It enables to easily find your way back.

\$Other information on the page\$

Displaying other information is either divided into two columns (e.g. home page of a department) or there is a text or links only in one column.

Students rather appreciate necessary information about faculty study offices. Select the desired faculty, link *\$Stodium\$* and *\$Studijní oddělení\$*.

You can find the name of the staff, email, office hours. Its address is also very important as faculties can have more buildings.

\$Faculties and departments\$

Faculties have a fixed structure in the left column. Other information displayed can vary. The main faculty page updates students on current news, applicants on entrance examinations, public on held or planned events. Department pages can also have various look. An important link can be *Personální složení*, which includes a list of department staff. You can find the name of the head of the department, secretary, and others who you might come across during your studies. One can also find handy contacts to external staff, doctoral students and other lecturers.

\$UO components\$

Among very important university bodies that you will use during your studies is the University Library (Univerzitní knihovna), Pyramid Centre (Centrum Pyramida) as well as Centre for Information technologies (Centrum informačních technologií) which secures services related to IT.

An overview of university components are to be found in the left navigation stripe in the main menu.

Note: image has been removed

\$Information\$

\$Main menu – Information\$ includes other links and documents which you might find useful.

Note: image has been removed

\$Faculty of Science noticeboard\$

Faculty of Science noticeboard is to be found at:

<http://fakulty.osu.cz/prf/rsk/index.php>

The noticeboard provides current information from your department or study office.

The given web pages of the Noticeboard can be also displayed after logging into Portal, select Fakulty a ústavy – Přírodovědecká fakulta – Nástěnka and any link from the offered links.

\$UO Portal\$

Having logged in, you can see the heading of the university portal and the main menu: Úvod, Moje stránka, Provoz a služby, Informační systémy, Dokumenty, etc.

\$Identification card\$

The identification card is necessary for entering buildings, ordering lunch, borrowing books from the library, or to be qualified for discounts if your card is also an ISIC student card. The card is also an important proof of student's identity for teachers and examiners.

Every new student is informed about the way how to get the card. If you are already a student, you can solve problems related to the identity card, such as getting a new card, prolonging the card validity, situation when the card is lost, non-functioning, etc.

The UO identification card is used for the following:

- Self-catering in the university restaurant in Reální street.
- Using services of the university library.
- Access to university premises, such as certain classrooms, buildings, study rooms, parking sites, etc.
- Student's card can be used for an automatic change of the Novell password in case of its expiry or forgetting.

There are two types of student's card – student's identification card and student's identification card with ISIC licence.

\$Student's identification card\$

It represents a standard student's card at the UO. Its validity is one academic year, then it is necessary to prolong it.

Note: image has been removed

\$Student's identification card with ISIC licence\$

It can be used as an international student's card. It can be issued only to students of the present form of studies. It extends its usage outside the UO with the following:

- Bank contribution of 200,- CZK
- Optional travel insurance valid for the whole validity of the card for 200,- CZK (excl. risky sports), 350,-CZK (incl. risky sports)
- Discounts all over the Czech republic (ski resorts, film festivals, travelling, culture, shopping, restaurants)
- 124 countries all over the world
- Certificate of study accepted by various offices and companies

It is valid for one academic year, then it must be prolonged.

Source: <http://www.osu.cz/index.php?id=4546>

for more information, go to <http://www.isic.cz/>

\$University library\$

The information pages about the library can be displayed on the university main page by selecting Univerzitní knihovna or directly by writing its address www.knihovna.osu.cz

The library is located in Bráfova street in the centre of Ostrava. The library includes loan services, study rooms, mediotheque, relax centre and the Pyramid centre. Moreover, each faculty can have there other premises for their use. Their list, location and office hours are available under the link Studovny.

Apart from book loans or studying journals, students can take advantage of other services – research service, interlibrary loans, reference service, and lots of others that are to be found under the link Služby.

***Task 2**

Answer the following questions about the University of Ostrava web pages:

- 1 What is the university web address?
- 2 Name at least 3 institutions that you can find information about?
- 3 What is it a student identity card and what are its variants?
- 4 Do you visit university web pages regularly?
- 5 Do you find browsing and looking for specific information easy?
- 6 What would you change?

3.3 Vocabulary

award	ocenění
dean	děkan
degree	stupeň
department	katedra
enable	umožnit
establish	založit
event	událost
expire	vypršet (platnost)
extend	rozšířit
faculty	fakulta
familiar with	znát (co)
get lost	ztratit se
improve	zlepšit
independent	nezávislý
involve	zahrnovat
offer	nabídnout
range	škála
rector	rektor

semester/term	semestr
skills	schopnosti
staff	zaměstnanci
streamline	vést (někam)
stripe	pruh
studies	studium
throughout	skrz

4 TERMINOLOGY OF COMPUTERS

\$Time: 3 hours\$

\$Study guide\$

This unit introduces the Present Simple tense and basic terms that an IT expert should be familiar with.

At the end of this chapter, the students should:

- form the Present Simple tense correctly in positive, negative and questions
- use adverbs of frequency correctly
- be able to use and explain basic terminology used in IT
- update their ability to form subject and object questions

\$Key words:\$ bit, byte, analog / digital / hybrid computer, multitasking, peripheral, drag and drop, ...

Present simple tense.

4.1 Basic Computer terminology

*Task 1

Read the following terms and their description. Choose two of them and ask your classmates to explain them. You have 10 minutes to study and choose.

\$Active matrix LCD panel\$ High-resolution color display for laptop computers.

\$Application software\$ Computer programs designed to directly deal with solving the user's problems. Examples would include programs for accounting, word processing, financial analysis, computer games, etc.

\$Backup\$ The act of making a second (backup) copy of the data stored on a disk or other storage device, to safeguard against loss of data if there is damage to the primary copy.

\$BASIC\$ Acronym for Beginner's All-purpose Symbolic Instruction Code. A general-purpose programming language, often used in computers.

\$Bit\$ Abbreviation for "binary digit," the most common unit computers use for representing data internally.

\$Byte\$ A group of eight bits, the most common unit computers use for internally representing individual characters, digits, or other data.

\$Cathode ray tube (CRT)\$ Another term for display screen.

\$CD-ROM\$ Abbreviation for Compact Disk-Read Only Memory. A small disk device capable of storing extremely large amounts of data, but which cannot be erased and reused for storing other data (the reason it is referred to as "read only").

\$Central processing unit (CPU)\$ The part of a computer that controls the entire system and does mathematical processing of data.

\$Character\$ A single digit, letter of the alphabet, or other symbol. Usually represented inside a computer by one byte.

\$Chip\$ Common term for very small silicon wafers upon which electronic circuits have been created for use in computers. Used for microprocessors, electronic memory, and other internal computer electronic components.

\$CPU\$ Central Processing Unit.

\$Cursor\$ A block, underline character, arrow, or other symbol used on a display screen to indicate a particular location on the screen.

\$Data\$ The symbols, writing, words, or other items used to represent facts, objects, events, or ideas. Accounting records and yield measurements are two examples of data.

\$Data base management system (DBMS)\$ General-purpose computer program that allows data to be stored, manipulated, organized, and retrieved in some logical manner. Sometimes referred to as an “electronic filing program.”

\$Demonstration program\$ Limited, incomplete version of a program offered for sale by a software company, used for demonstrating the complete program’s features and capabilities. Often given free to potential buyers of the complete program, or sold at low cost.

\$Disk drive\$ Device for recording onto and reading from one type of computer storage disk—either a diskette, or hard disk. Varying sizes and types of disks are not interchangeable among disk drives.

\$Diskette\$ A 3 1/2-inch or 5 1/4-inch floppy disk.

\$Expert system\$ A computer program for making a recommendation, which tailors its recommendation to the user’s situation by following a variable path of reasoning dependent upon data given it by the user. One example would be a program to recommend grain marketing strategies based on the user’s risk and profit goals, availability of storage, proximity to markets, etc.

\$File\$ A collection of related data existing upon a computer storage device.

\$Floppy disk\$ Flexible plastic disk coated with a magnetic material, upon which computer programs and data may be stored. Usually from 3 to 8 inches in diameter.

\$Hard disk\$ A type of computer storage disk, usually consisting of a metal platter coated with a magnetic material. Capable of storing larger amounts of data than floppy disks.

\$Hardware\$ The physical parts of a computer.

\$Information\$ The result of processing, manipulating, and organizing data in a way that adds to the knowledge of the person receiving it.

\$Kilobyte (K)\$ A unit for measuring computer memory and storage capacity, roughly equal to 1,000 characters or bytes of data. Technically, one K is 1,024 bytes.

\$Memory\$ Term usually referring to the electronic memory circuits of a computer; however, sometimes also extended to imply all memory and storage devices used by a computer.

\$Menu\$ A list of choices displayed on a computer display screen, from which the user may choose a program action.

\$Microcomputer\$ Any computer using a microprocessor as its central processing unit.

\$Minicomputer Term for computers intermediate in processing power between microcomputers and mainframe computers.

\$Modem\$ A device that allows a PC to communicate and exchange information with other modem-equipped computers via telephone lines.

\$MSDOS\$ Operating system program popular among users of the IBM-PC and compatible computers.

\$Operating system\$ A program or collection of programs that coordinates and controls the various devices making up a computer system.

\$Output\$ The act or result of printing or displaying information generated by a computer.

\$Peripherals\$ The add-on hardware devices used in conjunction with a computer, printer, display screen, disk drives, etc.

\$Program\$ A set of pre-defined commands or instructions that tells a computer how to go about solving a problem or doing some job.

\$Random-access memory (RAM)\$ Electronic memory circuits in a computer that may be both read from and written to, and which lose the data they contain whenever electricity is turned off to the computer. Sometimes referred to as volatile memory.

\$Read-only memory (ROM)\$ A memory device (usually electronic memory circuits) that may only be read by a computer. The data stored in ROM memory is permanent (non-volatile) and is not lost when electricity is turned off to the computer.

\$Surge protector\$ Electronic device for protecting a computer or other electronic device from the harmful effects of sharp surges of voltage in electric power lines.

\$Template\$ A pre-programmed set of instructions that may be used with an electronic worksheet or spreadsheet program for doing a particular job. Akin to a computer program.

\$Utility software\$ Computer programs for handling the organizational and “housekeeping” chores in running a computer, such as deleting files of old data, copying disks, printing a directory of the information stored on a disk, etc.

4.2 Basic Internet terminology

*Task 1

Read the following terms and their description. Try to think other terms related to the Internet that you know. You have 10 minutes to study and choose.

\$Bookmark\$ Most Web browsers give you an option of adding a URL to a list. By doing this, you can store the linking information (the URL) to any Web pages you plan to revisit.

\$Browser (Web browser)\$ A software application (either text-based or graphical) that lets you browse (surf) the World Wide Web.

\$Cookie\$ Small bits of data that a Web page asks a browser to store on a user’s computer, either in RAM or on the hard drive.

\$Dial-up\$ As opposed to a dedicated or leased line; a type of computer linkage using regular telephone lines, generally referring to the kind of connection one makes when using a terminal emulator and a regular modem.

\$Download\$ To receive a file sent from another computer via modem.

\$FAQ\$ Frequently Asked Questions.

\$Firewalls\$ Special computers that are set up on a network to prevent intruders from stealing or destroying confidential files.

\$Flame\$ To heap written abuse on other computer users or to excessively criticize them for their ideas, spelling, grammar, etc. Flaming is considered impolite, juvenile behavior, but it is not uncommon in some newsgroups.

\$Freeware\$ Noncopyrighted software made available free for public use by the author.

\$HTML (HyperText Markup Language)\$ The computer language used to create hypertext documents. A system of marking up, or tagging, a document so it can be published on the World Wide Web.

\$HTTP (HyperText Transfer Protocol)\$ The client-server protocol upon which the World Wide Web is based.

\$Hyperlink, hypertext\$ A link within one document connected to other documents, other places within the same document, pictures, or HTML pages. Think of a hyperlink as an invitation to visit another place. A simple click on the link will take you there.

\$Internet\$ The worldwide network of networks based on the TCP/IP protocol. A noncommercial, self-governing network devoted mostly to communication and research with roughly 66 million users worldwide.

\$Intranet\$ Internal networks, based on Internet technology, designed to connect the members of a specific group or single company (a closed-user group).

\$IP (Internet Protocol)\$ Main protocol upon which the Internet is based.

\$ISDN (Integrated Services Digital Network)\$ Telecommunications network that allows for digital voice, video, and data transmissions.

\$Login, logon\$ The process of identifying yourself to your computer or an online service. The initial identification procedure to gain access to a system as a legitimate user. The usual requirements are a valid user name (or user ID) and password.

\$Multimedia\$ Documents or platforms that combine different kinds of data (text, video, graphics, audio).

\$Netiquette\$ Guidelines to good manners on the Internet; for example, don't flame other users, don't leave your caps lock key on (that's like yelling), etc.

\$Newsgroup\$ Collection of information and users who get together to communicate about one particular subject.

\$Protocol\$ The "must follow" regulations that govern the transmission and receipt of information across a data communications link.

\$Search engine\$ A WWW site that serves as an index to other sites on the Web.

\$Server\$ A computer (or service) that provides information or a service to other computers on a network.

\$Shareware\$ Software that is sold by individuals or companies for a nominal fee. Typically the software is downloaded and tried out before buying and registering it.

\$Spam\$ Generally referred to as the Internet equivalent of junk mail, spam ranges from annoyances like mass e-mailings and advertisements, junk mail, and chain letters, to fraudulent product or service promotions, and harassing or threatening e-mails.

\$TCP/IP (Transmission Control Protocol/Internet Protocol)\$ A set of instructions that dictates how packets of information are sent across multiple networks. This includes SLIP and PPP. Also included is a built-in error-checking capability.

\$Upload\$ To send or transmit a file from one computer to another via modem.

\$URL (Universal Resource Locator)\$ A Web site's address

\$Virus\$ A piece of programming code inserted into other programming to cause some unexpected and usually undesirable event, such as deleting or damaging files.

\$Web site\$ A group of related pages, images, and files on a Web server.

\$WWW (World Wide Web)\$ One of several features of the Internet. It contains graphics, video, audio, text, and much, much more.

Source: <http://www.extension.iastate.edu/agdm/wholefarm/html/c6-30.html>

4.3 Language work – Present Simple

4.3.1 Present Simple – positive

@

GET UP	COME	GO
I get up	I come	I go
you get up	you come	you go
he/she/it gets up	he/she/it comes	he/she/it goes
we get up	we come	we go
you get up	you come	you go
they get up	they come	they go

&

\$Example:\$

We work at school. Pracujeme ve škole.

She comes from the UK. Pochází ze Spojeného království.

\$Notes:\$

- all verbs have the same form, only the 3rd person singular has “-s” at the end. Well, it is very easy to use the Present Simple
- for use of the 3rd person singular, see below

\$Use:\$

The Present Simple is used:

- to express an action or fact valid for a long time or always:

He goes to work by car. Do práce jezdí autem.
Computers process data. Počítače zpracovávají data.

- 2) to express a habit, repeated action:
Windows gets frozen sometimes. Windows občas zamrzne.

\$Use of ending “-s”:\$

- 1) most verbs add “-s”: get – gets walk – walks write – writes
- 2) do and go have “-es”: does, goes
- 3) verbs ending in –s, –sh, –ch, –x add “-es”: relax – relaxes catch – catches
- 4) verbs ending in a consonant + „-y”, the ending is “-ies”: worry – worries marry – marries
- 5) verbs ending in a vowel + „-y” do not change: stay - stays
- 6) have is irregular: have – has
- 7) some verbs change their pronunciation: say –says /sei - sez/, BUT
pay –pays /pei - peiz/ do – does /du: - daz/

4.3.2 Present Simple – negative

The English language expresses negative using
Do - don't
Does – doesn't

\$Example:\$

I do not meet famous people. I don't meet famous people.
You do not meet famous people. You don't meet famous people.
He does not meet famous people. He doesn't meet famous people.
She does not meet famous people. She doesn't meet famous people.
It does not meet famous people. It doesn't meet famous people.
We do not meet famous people. We don't meet famous people.
You do not meet famous people. You don't meet famous people.
They do not meet famous people. They don't meet famous people.

\$Notes:\$

- a) auxiliary verb DO doesn't have the meaning “dělat”, it only helps form negative!!!
- b) be careful about the 3rd person singular and the final “-s”
He talks a lot. – He doesn't talks a lot.

4.3.3 Present Simple - question

As in negative, we also use do/does in question.

\$Example:\$

Do I meet famous people? Yes, I do. No, I don't.
Do you meet famous people? Yes, you do. No, you don't.
Does he meet famous people? Yes, he does. No, he doesn't.

Does she meet famous people? Yes, she does. No, she doesn't.
Does it meet famous people? Yes, it does. No, it doesn't.
Do we meet famous people? Yes, we do. No, we don't.
Do you meet famous people? Yes, you do. No, you don't.
Do they meet famous people? Yes, they do. No, they don't.

\$Note:\$

- a) the word order is almost the same as in the positive- use only do/does at the beginning. You live at home. Do you live at home?
- b) but in the 3rd person singular: He lives at home. Does he live at home?

\$Frequency adverbs\$

0% never rarely sometimes often usually always 100%

\$Read these examples\$

He isn't usually late. They never visit us. We often drive to work. I'm always busy. I don't always get up early. They're never on time.

4.4 Practice

***Task 3**

Mark the following correct or incorrect. Provide correct version of the incorrect sentences.

1. They come every day.
2. Speak you German?
3. He does not study French.
4. I not go to school.
5. We like the Internet.
6. Mr. Finch live in London.
7. Does she know John?
8. Where does she lives?
9. The dog don't like fish.

***Task 4**

Answer the questions about you:

How often do you get up before 7am?

Do you ever have lessons at the weekend?

How often do you help your schoolmates work out homework?

Do you ever listen to the radio?

Do you have a desktop?

Where do you go for lunch?

***Task 5**

Note: Exercise has been removed for its inconvenience.

***Task 6**

Write questions for these answers. Use the question word in brackets.

\$Example\$

Computers process texts. (What?) *\$What do computers process\$?*

- 1 Computers control manufacture processes. (What?)
- 2 The digital computers prevail nearly in all areas of computer applications. (Where?)
- 3 This device accepts data. (What?)
- 4 We classify digital computers in various ways. (How?)
- 5 Hybrid computers put together the advantages of both above-mentioned types. (What?)

***Task 7**

Turn the following statements into questions using the question-words in brackets:

1. She comes from a town in Pennsylvania (Where).
2. They are going to the National Theatre (Which theatre).
3. He is pointing at that building (What).
4. She is looking for the book (What).
5. He wants to talk with John (Who).
6. I always give the book to Mary (Who).
7. They talk about politics (What).
8. They are looking at some old family photographs (What).
9. He often talks about his home (What).
10. My husband likes to speak about his hobby (What).
11. They are laughing at your remark (What).

4.5 Summary

Computer: is

1. a device that accepts data, processes it in accordance with a stored program, generates results, and usually consists of input, output, storage, arithmetic, logic, and control units.
2. a functional unit that can perform computation, including numerous arithmetic or logic operations.

Computers in general fall into two main classes: digital computers and analog computers, according to the kind of data they process. Combined analog-and-digital computers are hybrid computer systems. Digital computers may be classified in various ways, for example according to their generations, i.e. according to their architecture and components.

\$Present simple\$

@

Positive	Negative
I/You/We/They work.	I/You/We/They don't (do not) work.
He/She/It works.	He/She/It doesn't (does not) work.
Question	Answer
Do you work?	Yes, I do. / No, I don't.
Does he work?	Yes, he does. / No, he doesn't.

Use	Examples
Long-term situations	He lives in Prague.
Habits and routines	How often do you go abroad?
Feeling and opinions	I don't like snakes.
Facts	It rains a lot in the spring.
Timetable and programmes.	The train arrives at 8:25.

&

4.6 Vocabulary

aim	cíl
below	níže, pod
bug	chyba, brouk
bus	sběrnice
combustion	spalovací
comparable	srovnatelný
consist (of)	skládat se (z)
consonant	souhláska
constitute	tvořit
discontinuity	přerušeni
drag	táhnout
drop	pustit
enhanced	pokročilý
etch	vrýt, vyleptat
failure	selhání
fluctuation	kolísání
folder	složka
fuel	palivo
guidance	návod
hauling	přeprava
charge	nabít
irregular	nepravidelný
ledger	účetní kniha
make up	tvořit
missile	raketa
object	předmět (gramaticky)
partition	oddíl
pathway	cesta
perform	vykonat
peripheral	vnější, okrajový
platter	plotna (disku)
plug	zapojit
portion	část
predict	předpovídat
pronunciation	výslovnost

purpose	účel
reduce	omezit
redundancy	nadbytečnost
significant	významný
smoothly	jemně
spinning	rotující
spreadsheet	tabulkový procesor
stock	trh (finanční)
stroke	úder
subject	podmět (gramatický)
target	cíl
threat	hrozba
uninterruptible	nepřerušitelný
vowel	samohláska

4.7 Key

*Task 1

Subject to a class discussion

*Task 2

Subject to a class discussion

*Task 3

1. correct
2. **\$Do you speak German? \$**
3. correct
4. I **\$do \$** not go to school.
5. correct
6. Mr. Finch **\$lives \$** in London.
7. correct
8. Where does she live?
9. The dog **\$doesn't \$** like fish.

*Task 5

removed

*Task 6

- 1What do computers control?
- 2Where do the digital computers prevail?
- 3What does this device accept?
- 4How do we classify digital computers?
- 5What do hybrid computers put together?

*Task 7

1. Where does she come from?
2. Which theatre are they going to?
3. What is he pointing at?
4. What is she looking for?

5. Who does he want to talk to?
6. Who do you always give the book to?
7. What do they talk about?
8. What are they looking at?
9. What does he often talk about?
10. What does he like to speak about?
11. What are they laughing at?

5 TRENDS IN ICT

\$Time: 3 hours\$

\$Study guide\$

This part introduces the Present Continuous tense and basic trends that are occurring in this decade.

At the end of this chapter, the students should:

- form the Present Continuous tense correctly in positive, negative and questions
- differ it from the usage of the Present Simple
- be able to enlist and describe some of the trends in ICT that are currently on the rise

\$Key words:\$ cloud computing, data management, social networking, mobile devices

Present continuous tense.

5.1 The things that are „in“

In the fast-moving world of information and communications technology (ICT), today's trend can quickly become tomorrow's 'fail'. For a trend to become truly entrenched in the public's consciousness, it should have business potential, whether by offering a useful service and/or by appealing to a wide demographic.

The three following trends identified as being able to last the distance are driven by the business communities, and hence have the best chance of being indispensable or in wide usage in the future.

5.1.1 Cloud computing

The Accenture's report Technology Vision 2011 identifies cloud computing as one of the top trends in the years to come, saying that it is becoming so 'pervasive to the point that the term "cloud computing" itself could become superfluous'.

Cloud computing allows users to carry out tasks remotely, where data, applications and even entire platforms and infrastructure are stored in a remote data centre, and accessed via an Internet connection. The desired hardware and software is not required to be locally present.

Graduates may wish to get involved in data centre management as companies are eventually moving away from hiring in-house systems administrators. Traditionally, an in-house systems administrator is expected to be hands-on in the installation, configuration, administration and maintenance work in IT systems.

With the cloud on the horizon, data centres and service providers are the main employers of data management professionals. For entry-level

positions, in addition to the technical skills needed for installation, configuration et al, graduates should focus on acquiring service industry skills.

5.1.2 Data management and analytics

With the increasing surge towards cloud computing, the question of data management is becoming increasingly relevant to application and platform developers, and data centres as well as business entities.

As with cloud computing, this segment of the IT industry is driven by business organisations. Firstly, as they move their databases and platforms over to the cloud, there will be a concern over the vulnerability of sensitive data.

However, business organisations are also driving the development of more sophisticated data management systems that can keep track and make sense of the vast volume of data.

An improvement in analytical literacy must go hand in hand with the greater computational power, almost unlimited storage space and sophisticated data management systems that ease and quicken the process of retrieving and preparing data for analysis.

The International Institute of Analytics lists eight industries where analytic techniques and technologies have been profitably used to build competitive advantage:

- banking
- insurance
- health care and life sciences
- telecommunications
- retail
- energy and utilities
- media and entertainment
- transportation.

5.1.3 Mobile devices and social networking

Five to ten years ago, 'going mobile' still held novelty value, even though the mobile movement was gaining momentum with the dropping prices of laptops and mobile phones. The evolution of mobile Internet aided the expansion of the mobile device's role in consumers' lives.

Nowadays, mobile is so pervading that the word itself is in danger of becoming redundant, much like the 'personal' in 'personal computers' is dropping from common parlance.

With tablets and smartphones filling yet another niche in a young, gadget-crazed market, and with more and more powerful technology occupying smaller and smaller devices, communications and computing on the go are not set to slow down.

Tying the penetration of mobile devices into enriching social connections seems so natural now – but the speed and scale with which social media took off is breathtaking.

Facebook reached the 700 million-user milestone in the middle of 2011, yet it was only in late 2009 that Mark Zuckerberg, its founder, thanked 300 million Facebook users for their support. Similarly, it took Twitter three years and two months to achieve their first billion tweets, yet in 2011 there are one billion tweets posted per week!

For aspiring mobile application developers, knowledge of a range of programming languages is essentially, including Java, C++, CSS, Objective-C, Visual Basic, Python and most importantly for the future, HTML5.

Since mobile applications are user-driven, graduates are attempting to familiarise themselves with design and user experience (UX) skills. UX has been identified as a main differentiator in the future, with natural interfaces, touch-screen, synchronisation across multiple devices and platforms, voice and gesture input, customisation and user engagement being important areas for mobile application developers to get to grips with.

Adapted from: <http://www.gradmalaysia.com/career-sector/article/current-and-future-trends-ict-2012>

*Task 1

Decide whether the statements are true or false.

1. Cloud computing enables to use both hardware and software over any distance.
2. When tablets and smartphones appeared, the pace of developing mobile devices decreased.
3. Owners of mobile devices are the main factor in their development.
4. Both cloud computing and data management is user-driven.

*Task 2

Match these expressions 1-5 from the text with their explanations or synonyms a-e:

1. to pervade
 2. to get to grips
 3. vulnerability
 4. sensitive
 5. consciousness
- a. susceptibility to physical or emotional injury
 - b. emotional
 - c. to be found in every part
 - d. awareness
 - e. to deal with something

*Task 3

Find examples of the Present Continuous tense in the text above.

*Task 4

Prepare a piece of news concerning some of the latest ICT achievements.

5.2 Language work – Present continuous

\$Positive and negative:\$

I am working in the bank.
You are working in the bank.
He is working in the bank.
She is working in the bank.
It is working in the bank.
We are working in the bank.
You are working in the bank.
They are working in the bank.

I am not working in the bank. I'm not working in the bank.
You are not working in the bank. You aren't working in the bank.
He is not working in the bank. He isn't working in the bank.
She is not working in the bank. She isn't working in the bank.
It is not working in the bank. It isn't working in the bank.
We are not working in the bank. You aren't working in the bank.
You are not working in the bank. We aren't working in the bank.
They are not working in the bank. They aren't working in the bank.

\$Question and short answer:\$

Am I working in the bank? Yes, I am. No, I am not.
Are you working in the bank? Yes, you are. No, you are not.
Is he working in the bank? Yes, he is. No, he is not.
Is she working in the bank? Yes, she is. No, she is not.
Is it working in the bank? Yes, it is. No, it is not.
Are we working in the bank? Yes, we are. No, we are not.
Are you working in the bank? Yes, you are. No, you are not.
Are they working in the bank? Yes, they are. No, they are not.

\$Present Continuous is used:\$

- a) to express an action happening now: I am having a break now.
She is watching TV.
- b) to express an action happening for a limited period of time (but not right now): We are working on a very important project at work these days. Paul usually sits in office n.325, but this week he is sitting in n.168.
- c) to express near planned future: Dave and Helen are coming for dinner tonight. Guy is playing golf with me this afternoon.

\$Changes to spelling of verbs in "-ing" forms:\$

- a) no change: lend-lending speak-speaking
- b) the verb drops the final "e" and adds "-ing": make-making give-giving
- c) the final "y" does not change: study-studying play-playing
- d) the final consonant doubles if there is a consonant + vowel + consonant at the end: sit-sitting beg-begging begin-beginning

\$Note:\$

We can help with the following expressions: now – right now - at the moment - today – this month - ...

5.2.1 *Special verbs*

Some verbs can be in both tense:

\$THINK\$

I think – Myslím si.

I am thinking about it. – Přemýšlím o tom.

\$SEE\$

I see you.– Vidím tě.

I am seeing you on Monday. – Setkám se s tebou v pondělí.

\$HAVE\$

I have two cars. – Mám dvě auta.

I'm having breakfast now. – Ted' snídám.

\$COME\$

I come from UK. – Pocházím ze Spojeného království.

I am coming from UK. – Přijíždím ze Spojeného království.

5.2.2 *Present tenses – practical use*

What do you do?

What are you doing?

If you answered the questions correctly you understand the difference.

But it is not as easy as it seems to be.

5.3 **Practice**

*Task 1

Complete the following radio news commentary by using the verbs from the box in the Present continuous.

Part 1

Verbs to use: blow – come – ask - shine - shout – smile - speak – stand - take - wait

Well, listeners, it is a beautiful day here in the centre of the city. I ... from the steps of the President's Palace. The sun ... and a gentle breeze... from the sea. There is a large crowd here in the Central Square. They ... patiently for the President. Ah, here is the President! He ... out of the Palace now. He ... beside his wife at the top of the steps. Some reporters ... him questions, and photographers ... pictures. He and his wife They are very happy. Everyone ... 'Henry! Henry!' - you can hear them!

Part 2

Verbs to use: get - listen - run - hit - take - lie - look - walk - wave

The President and his wife ... into their car. But, just a minute! A man ... down the steps and now they ... into their quickly out of the crowd! Now he ... the President on the head with an umbrella! This is terrible! The President ... on the ground beside the car and the Police ... the man away. The President is not hurt! He ... up. His wife ... at his head, and now he ... his hand. All is well. You ... to TRC Radio News. More in a minute.

***Task 2**

Complete the following by using the verbs from the box in the Present continuous:

Verbs to use: write - collect - take - sell - watch - knit - do - paint - play – experiment

- 1 '... you ... the new series on TV? It's very good.'
- 2 '... you ... your Ford?' 'Yes, do you want to buy it? It's a vintage model.'
- 3 'I can't come for lunch. I ... money for the Red Cross this week.'
- 4 'We ... many photographs these days. We're just too busy.'
- 5 'What sort of pictures ... these days?' 'Mostly landscapes. I ... with some new techniques now.'
- 6 'John and I ... a lot of tennis this year. He usually beats me, but I sometimes win.'
- 7 'Mary ... her second novel. Her first was quite a success.'
- 8 'The garden looks rather untidy.' 'Yes, Bob ... much gardening at the moment. He has much work.'
- 9 '... (still) that sweater for Charles?' 'Yes, I must do some after lunch.'

***Task 3**

Translate:

1. S kým mluví pan Evans?
2. Na co ukazuješ?
3. Ve které zemi ses narodil?
4. Na co myslíš?
5. Na které přístroje se chceš podívat?
6. Čemu se smějete?
7. Na koho vždycky čekáš?
8. O čem rád mluví?
9. S kým hráváš tenis?
10. Komu píšete?

5.4 Summary**\$Positive\$**

- I'm working on my report.
- Tomorrow we are visiting the Royal Bank.

\$Negative\$

- Today I'm not learning French.

\$Question and short answer\$

- Are you studying French? Yes, I am. /No, I'm not.

\$Use the Present continuous to talk\$

- about current activities;
- fixed future arrangements;
- changes.

To make the Present continuous, use am/is/are + -ing form of the verb.

Some verbs are not normally used in continuous forms:

be, believe, belong, care, concern, consider (uvažovat), consist, contain, cost, depend, deserve, desire, dislike, doubt, equal, find, fit, feel, forget, guess, hate, have, hear, hope, imagine, include, intend, involve, know, lack, like, love, matter, mean, mind, need, notice, obtain, owe, own, possess, prefer, realize, receive, recognize, refuse, regard, remember, remain, require, resemble, satisfy, see, seem, smell, suppose, taste, trust, think (domnívat se), understand, want, wish, wonder

5.5 Vocabulary

acquire	dosáhnout, obdržet
appeal	oslovit
aspire	usilovat
attempt	pokusit se
awareness	povědomí
broadband	širokopásmové připojení
competitive	konkurenční
consciousness	vědomí
employer	zaměstnavatel
enlist	vyjmenovat
enrich	obohatit
entire	celý
entrenched	zakořeněný
hence	tedy
increasing	vzrůstající
incredible	neuvěřitelný
indispensable	nezbytný
literacy	gramotnost
maintenance	údržba
pervasive	všudypřítomný
provider	poskytovatel
redundant	nadbytečný
relevant	důležité
remotely	na dálku
retail	maloobchod
sensitive	citlivý
solid	pevný, hmatatelný
superfluous	nadbytečný
susceptibility	náchylnost, tendence k
value	hodnota
vast	široký
volume	množství
vulnerability	zranitelnost

5.6 Key

*Task 1

... Well, listeners, it is a beautiful day here in the centre of the city. I **\$am speaking\$** to you from the steps of the President's Palace. The sun **\$is shining\$** and a gentle breeze **\$is blowing\$** from the sea. There is a large crowd here in the Central Square. They **\$are waiting\$** patiently for the President. Ah, here is the President! He **\$is coming\$** out of the Palace now. He **\$is standing\$** beside his wife at the top of the steps. Some reporters **\$are asking\$** him questions and photographers **\$are taking\$** pictures. He and his wife **\$are smiling\$**. They are very happy. Everyone **\$is shouting\$** 'Henry! Henry!' - you can hear them!

The President and his wife **\$are getting\$** into their car. But, just a minute! A man **\$is walking\$** down the steps and now they **\$are walking\$** quickly out of the crowd! Now he **\$is hitting\$** the President on the head with an umbrella! This is terrible! The President **\$is lying\$** on the ground beside the car and the Police **\$is taking\$** the man away. The President is not hurt! He **\$is getting\$** up. His wife **\$is looking\$** at his head, and now he **\$is waving\$** his hand. All is well. You **\$are listening\$** to TRC Radio News. More in a minute.

*Task 2

- 1 **'\$Are you watching\$** the new series on TV? It's very good.'
- 2 **'\$Are you selling\$** your Ford?' 'Yes, do you want to buy it? It's a vintage model.'
- 3 'I can't come for lunch. I **\$am collecting\$** money for the Red Cross this week.'
- 4 'We **\$are taking\$** many photographs these days. We're just too busy.'
- 5 'What sort of pictures **\$are you painting\$** these days?' 'Mostly landscapes. I **\$am experimenting\$** with some new techniques now.'
- 6 'John and I **\$are playing\$** a lot of tennis this year. He usually beats me, but I sometimes win.'
- 7 'Mary **\$is writing\$** her second novel. Her first was quite a success.'
- 8 'The garden looks rather untidy.' 'Yes, Bob **\$is doing\$** much gardening at the moment. He has much work.'
- 9 **'\$Are you still knitting\$** that sweater for Charles?' 'Yes, I must do some after lunch.'

*Task 3

1. Who is Mr. Evans talking to?
2. What are you pointing at?
3. Which country were you born in?
4. What are you thinking about?
5. Which devices do you want to look at?
6. What are you laughing to?
7. Who do you always wait for?
8. What does he like to talk about?

9. Who do you like to play tennis with?
10. Who are you writing to?

6 REVISION 1

\$Time: 1 hour\$

\$Study guide\$

This revision unit summarises what you know about the present simple and continuous. The exercises combine them and you should be able to use them correctly.

*Task 1

Put the following verbs into ING form:

Note: Table has been modified

- | | | | |
|--------------|------------|------------|-------------|
| 1 have ... | 2 go ... | 3 swim ... | 4 fly ... |
| 5 carry ... | 6 take ... | 7 play ... | 8 make ... |
| 9 try ... | 10 sit ... | 11 hit ... | 12 send ... |
| 13 agree ... | 14 do ... | 15 ski ... | 16 come ... |

*Task 2

Read the following and use the present continuous tense:

1. Listen! The telephone ... (ring).
2. She ... (wear) a yellow sweater and a brown skirt today.
3. Look! John ... (cross) the street.
4. Look at the man who ... (run) after the bus.
5. I see that you ... (wear) your new suit today
6. Don't make too much noise. The baby ... (sleep).
7. John ... (do) his homework now.
8. At present Mr. and Mrs. Smith ... (travel) in South America.
9. They usually spend their winters in Miami, but they ... (spend) this winter in Mexico.
10. Listen! I believe the baby ... (cry).
11. Look! The cat ... (try) to climb that tall tree.
12. Listen! Someone ... (knock) at the door.
13. The little dog ... (bark) at the big dog. "
14. His secretary says that Mr. Smith ... (have) lunch at present.
15. Look at the bird that ... (build) a nest in the tree.

*Task 3

Read this extract from the conference. Put the verbs into the present simple or the present continuous.

Remarks by Bill Gates, Chairman and Chief Software Architect, Microsoft Corporation at 2004 International Consumer Electronics Show.

Bill Gates: Well, it's fantastic to be here at CES and see all the energy around the advances taking place. It's really phenomenal the things that 1... (happen). You can just look at flatscreen TVs and say, wow, that 2... (improve) the TV-viewing experience. You can look at the rise of broadband, connecting up these devices to all the information in the world in a very rich and speedy way. You can look at digital cameras,

digital video and say, that 3... (become) mainstream. Every single one of these things is really fascinating and moving at an incredible speed.

One thing I 4... (love) about this is a period where the reality 5 ... (drive) the expectation. In the '90s people got ahead of themselves - the companies' valuations, the way they thought all the pieces would come together, but now those things are really being delivered and they are being delivered through solid products that 6... (stand) the test of the marketplace, you 7 ... (know), exactly which products are the best out there. It's an incredibly competitive environment. It's an environment where the big winner is the consumer buying these products.

Adapted from <http://www.microsoft.com/billgates/speeches/2004/>

*Task 4

Make questions asking about the underlined words:

1. They live \$in Chicago\$.
2. He is leaving for Los Angeles \$on Tuesday\$.
3. He is arriving \$on the five o'clock train\$.
4. He works in the \$sales\$ department.
5. They know each other \$perfectly\$.
6. He comes to work by \$bike\$.
7. They get up \$at five o'clock\$ every morning.
8. They are going \$to the zoo\$.
9. She lives \$in Hudley Street.\$
10. They come here \$once\$ a week.
11. He has \$three\$ courses a week.
12. My boss rings me \$four or five times\$ a day.
13. \$Olivia\$ is studying law.
14. Olivia is studying \$law\$.
15. Olivia is studying law \$in Manchester\$.

6.1 Key

*Task 1

- | | | | |
|-------------|------------|------------|------------|
| 1 having | 2 going | 3 swimming | 4 flying |
| 5 carrying | 6 taking | 7 playing | 8 making |
| 9 trying | 10 sitting | 11 hitting | 12 sending |
| 13 agreeing | 14 doing | 15 skiing | 16 coming |

*Task 2

1. Listen! The telephone **\$is ringing\$**.
2. She **\$is wearing\$** a yellow sweater and a brown skirt today.
3. Look! John **\$is crossing\$** the street.
4. Look at the man who **\$is running\$** after the bus.
5. I see that you **\$are wearing\$** your new suit today
6. Don't make too much noise. The baby **\$is sleeping\$**.
7. John **\$is doing\$** his homework now.
8. At present Mr. and Mrs. Smith **\$are travelling\$** in South America.

9. They usually spend their winters in Miami, but they **\$are spending\$** this winter in Mexico.
10. Listen! I believe the baby **\$is crying\$**.
11. Look! The cat **\$is trying\$** to climb that tall tree.
12. Listen! Someone **\$is knocking\$** at the door.
13. The little dog **\$is barking\$** at the big dog. "
14. His secretary says that Mr. Smith **\$is having\$** lunch at present.
15. Look at the bird that **\$is building\$** a nest in the tree.

***Task 3**

Bill Gates: Well, it's fantastic to be here at CES and see all the energy around the advances taking place. It's really phenomenal the things that 1 **\$are happening\$**. You can just look at flatscreen TVs and say, wow, that 2 **\$improves\$** the TV-viewing experience. You can look at the rise of broadband, connecting up these devices to all the information in the world in a very rich and speedy way. You can look at digital cameras, digital video and say, that 3 **\$is becoming\$** mainstream. Every single one of these things is really fascinating and moving at an incredible speed.

One thing I 4 **\$love\$** about this is a period where the reality 5 **\$is driving\$** the expectation. In the '90s people got ahead of themselves - the companies' valuations, the way they thought all the pieces would come together, but now those things are really being delivered and they are being delivered through solid products that 6 **\$stand\$** the test of the marketplace, you 7 **\$know\$**, exactly which products are the best out there. It's an incredibly competitive environment. It's an environment where the big winner is the consumer buying these products.

***Task 4**

1. Where do they live?
2. When is he is leaving for Los Angeles?
3. Which train is he arriving on?
4. Which department does he work in?
5. How do they know each other?
6. How does he come to work?
7. When do they get up?
8. Where are they going?
9. Which street does she live in?
10. How often do they come here?
11. How many courses does she have a week?
12. How often does your boss ring you?
13. Who is studying law?
14. What is Olivia studying?
15. Where is Olivia studying law?

7 PERSONAL COMPUTING HISTORY

\$Time: 3 hours\$

\$Study guide\$

This part brings you to the past and history of computers. It presents the Past simple tense.

At the end of this chapter, the students should:

- learn how to form the Past Simple and Continuous correctly
- know the difference between regular and irregular verbs
- be able to talk about past activities
- be familiar with the history of computers, computer generations

\$Key words:\$ bit / binary digit, evolve, chip, integrated circuit, kit, semiconductor, switch, transistor, UNIX, vacuum tube.

Past tenses

7.1 The roots of personal computers

PERSONAL COMPUTERS FROM THE VERY BEGINNING

Personal computers are now a very common item in many houses yet in 1955, there were only 250 computers in use throughout the world. In 1980, more than one million personal computers had been sold and by the mid-1980's, this figure had risen to 30 million. How did this come about?

A computer in 1955 was very large and could not fit into a normal room in a normal sized house. They frequently burned out and had a tendency to attract moths into the system which short-circuited them. (Getting a computer 'bug' now refers back to the time when moths were a problem to the early computers).

In the late 1950's, computers got smaller because one of its main components - the valve - was replaced by the much smaller transistor. These made computers far more reliable and therefore businesses took a much greater interest in them. Firms such as IBM could sell a mainframe computer for just under £½ million pounds in today's money.

By the mid-1960's, the microchip was replacing the transistor. A microchip had several transistors on it. But being smaller, it led again to a decrease in the size of computers. By 1965, there were 20,000 computers in the world. The most famous was the IBM System/360.

The microchip also led to computers made small enough to get into the average sized room in a house. By 1970, one microchip contained 1000 transistors on it. In 1970, a home personal computer would have cost nearly £70,000 in today's money.

In 1971, the microprocessor went on sale. Developed by Ted Hoff of Intel, the Intel 4004 was to revolutionise home computing. The 4004 cost just over £3000 in today's money but by 1972, Intel had produced the 8008 which was far more powerful than the 4004 but cost a tenth of the price of the 4004.

Microprocessors had a multitude of uses but they could be used at the heart of true personal computers.

In the early 1970's personal computers were used only by hobbyists. The first 'hobby' personal computer was the Altair 8800 which cost just under £900 in today's money. It had the same power as a computer of the 1950's that cost \$1 million.

In 1975, Bill Gates and Paul Allen developed a program for the Altair that allowed people to write their own programs in BASIC program language (Beginner's All-Purpose Symbolic Instruction Code). Their newly formed company was called Micro-Soft which was later changed to Microsoft.

In 1975, Apple Computers was founded by Steve Jobs and Steve Wozniac. Apple created the "home/personal computer" that could be used by anybody. The computer - Apple II - was launched in 1977 and was an immediate success. The personal computer was sealed in a neat plastic case, it had a keyboard, video unit and used removable floppy discs. Above all, it only cost £2400 in today's money. The success of Apple II established Apple Computers as the main player in the field of personal computers. By 1980, there were 1 million personal computers in the world.

The personal computer moved into the world of business when Dan Bricklin created a spreadsheet program. His program - called VisiCalc - was designed for the Apple II. It went on sale in 1979 and within 4 years it sold 700,000 copies at \$250 a time.

IBM launched its own personal computer in 1981. Eventually 85% of all personal computers were to be IBM compatible. Microsoft won the contract to write the operating system for the IBM personal computer. Microsoft called its new OS (Operating System) MS-DOS (Disk Operating System). Each copy earned the company \$10. During the 1980's, MS-DOS was installed in over 30 million personal computers.

Adapted from: http://www.historylearningsite.co.uk/personal_computer.htm

*Task 1

What do these abbreviations from the texts above and below mean?

BASIC

BIOS

AI

DOS

IC

OS

PC

7.2 Computer generations

Note: Images from the following article have been removed.

\$In the beginning ...\$

A generation refers to the state of improvement in the development of a product. This term is also used in the different advancements of computer technology. With each new generation, the circuitry has gotten smaller and

more advanced than the previous generation before it. As a result of the miniaturization, speed, power, and memory of computers has proportionally increased. New discoveries are constantly being developed that affect the way we live, work and play.

\$The First Generation: 1946-1958 (The Vacuum Tube Years)\$

The first generation computers were huge, slow, expensive, and often undependable. In 1946 two Americans, Presper Eckert, and John Mauchly built the ENIAC electronic computer which used vacuum tubes instead of the mechanical switches of the Mark I. The ENIAC used thousands of vacuum tubes, which took up a lot of space and gave off a great deal of heat just like light bulbs do. The ENIAC led to other vacuum tube type computers like the EDVAC (Electronic Discrete Variable Automatic Computer) and the UNIVAC I (UNIVersal Automatic Computer).

The vacuum tube was an extremely important step in the advancement of computers. Vacuum tubes were invented the same time the light bulb was invented by Thomas Edison and worked very similar to light bulbs. Its purpose was to act like an amplifier and a switch. Without any moving parts, vacuum tubes could take very weak signals and make the signal stronger (amplify it). Vacuum tubes could also stop and start the flow of electricity instantly (switch). These two properties made the ENIAC computer possible. The ENIAC gave off so much heat that they had to be cooled by gigantic air conditioners. However even with these huge coolers, vacuum tubes still overheated regularly. It was time for something new.

\$The Second Generation: 1959-1964 (The Era of the Transistor)\$

The transistor computer did not last as long as the vacuum tube computer lasted, but it was no less important in the advancement of computer technology. In 1947 three scientists, John Bardeen, William Shockley, and Walter Brattain working at AT&T's Bell Labs invented what would replace the vacuum tube forever. This invention was the transistor which functions like a vacuum tube in that it can be used to relay and switch electronic signals. There were obvious differences between the transistor and the vacuum tube. The transistor was faster, more reliable, smaller, and much cheaper to build than a vacuum tube. One transistor replaced the equivalent of 40 vacuum tubes. These transistors were made of solid material, some of which is silicon, an abundant element (second only to oxygen) found in beach sand and glass. Therefore they were very cheap to produce. Transistors were found to conduct electricity faster and better than vacuum tubes. They were also much smaller and gave off virtually no heat compared to vacuum tubes. Their use marked a new beginning for the computer. Without this invention, space travel in the 1960's would not have been possible. However, a new invention would even further advance our ability to use computers.

\$The Third Generation: 1965-1970 (Integrated Circuits - Miniaturizing the Computer)\$

Transistors were a tremendous breakthrough in advancing the computer.

However no one could predict that thousands even now millions of transistors (circuits) could be compacted in such a small space. The integrated circuit, or as it is sometimes referred to as semiconductor chip, packs a huge number of transistors onto a single wafer of silicon. Robert Noyce of Fairchild Corporation and Jack Kilby of Texas Instruments independently discovered the amazing attributes of integrated circuits. Placing such large numbers of transistors on a single chip vastly increased the power of a single computer and lowered its cost considerably.

Since the invention of integrated circuits, the number of transistors that can be placed on a single chip has doubled every two years, shrinking both the size and cost of computers even further and further enhancing its power. Most electronic devices today use some form of integrated circuits placed on printed circuit boards-- thin pieces of bakelite or fiberglass that have electrical connections etched onto them -- sometimes called a mother board. These third generation computers could carry out instructions in billionths of a second. The size of these machines dropped to the size of small file cabinets. Yet, the single biggest advancement in the computer era was yet to be discovered.

\$The Fourth Generation: 1971-Today (The Microprocessor)\$

This generation can be characterized by both the jump to monolithic integrated circuits (millions of transistors put onto one integrated circuit chip) and the invention of the microprocessor (a single chip that could do all the processing of a full-scale computer). By putting millions of transistors onto one single chip more calculation and faster speeds could be reached by computers. Because electricity travels about a foot in a billionth of a second, the smaller the distance the greater the speed of computers.

However what really triggered the tremendous growth of computers and its significant impact on our lives is the invention of the microprocessor. Ted Hoff, employed by Intel (Robert Noyce's new company) invented a chip the size of a pencil eraser that could do all the computing and logic work of a computer. The microprocessor was made to be used in calculators, not computers. It led, however, to the invention of personal computers, or microcomputers.

It wasn't until the 1970's that people began buying computer for personal use. One of the earliest personal computers was the Altair 8800 computer kit. In 1975 you could purchase this kit and put it together to make your own personal computer. In 1977 the Apple II was sold to the public and in 1981 IBM entered the PC (personal computer) market.

Today we have all heard of Intel and its Pentium® Processors and now we know how it all got started. The computers of the next generation will have millions upon millions of transistors on one chip and will perform over a billion calculations in a single second. There is no end in sight for the computer movement

Source: <http://www.crews.org/curriculum/ex/compsci/articles/generations.htm>

*Task 2

Answer each of the questions after reading the article above. Write in complete sentences. You must think and be creative with your answers.

- 1 In each of the 4 generations what was the cause for the increase of speed, power, or memory?
- 2 Why did the ENIAC and other computers like it give off so much heat? (Be very specific)
- 3 What characteristics made the transistors better than the vacuum tube?
- 4 How was space travel made possible through the invention of transistors?
- 5 What did the microprocessor allow the computers to do? and What was the microprocessor's original purpose?
- 6 When was the first computer offered to the public and what was its name?
- 7 What was Robert Noyce and Jack Kilby known for?
- 8 Intel was started by who?
- 9 What is monolithic integrated circuits?
- 10 How do you think society will be different if scientists are able to create a chip that will perform a trillion operations in a single second?

7.3 Language work - Past Simple – regular verbs

English has two kinds of verbs – **regular** and **irregular**. Now, let's have a look at regular verbs.

It is similar to the Present Simple, but we need to add **ED**

Positive

I finished the university studies.
 You finished the university studies.
 He finished the university studies.
 She finished the university studies.
 It finished the university studies.
 We finished the university studies.
 You finished the university studies.
 They finished the university studies.

Negative

I did not finish the university studies. I didn't finish the university studies.
 You did not finish the university studies. You didn't finish the university studies.
 He did not finish the university studies. He didn't finish the university studies.
 She did not finish the university studies. She didn't finish the university studies.
 It did not finish the university studies. It didn't finish the university studies.
 We did not finish the university studies. We didn't finish the university studies.

You did not finish the university studies. You didn't finish the university studies.

They did not finish the university studies. They didn't finish the university studies.

\$Question\$

Did I finish the university studies? Yes I did. No, I didn't.

Did you finish the university studies? Yes you did. No, you didn't.

Did he finish the university studies? Yes he did. No, he didn't.

Did she finish the university studies? Yes she did. No, she didn't.

Did it finish the university studies? Yes it did. No, it didn't.

Did we finish the university studies? Yes we did. No, we didn't.

Did you finish the university studies? Yes you did. No, you didn't.

Did they finish the university studies? Yes they did. No, they didn't.

\$Note:\$

Spelling of regular verbs:

1. usually there is -ed with no changes: climb – climbed, wash - washed
2. if the verb ends in -y with a consonant before, the ending is -ied: worry – worried, marry – married (but played)
3. if the verb ends in -e, add only -d: divided – divided, agree - agreed
4. if the verb has a vowel and a consonant at the end or only one syllable, the end consonant is doubled: stop – stopped, travel – travelled

7.4 Past Simple – irregular verbs

\$Positive:\$

I came to London in 1995.

You came to London in 1995.

He came to London in 1995.

She came to London in 1995.

It came to London in 1995.

We came to London in 1995.

You came to London in 1995.

They came to London in 1995.

\$Negative:\$

I did not come to London in 1995. I didn't come to London in 1995.

You did not come to London in 1995. You didn't come to London in 1995.

He did not come to London in 1995. He didn't come to London in 1995.

She did not come to London in 1995. She didn't come to London in 1995.

It did not come to London in 1995. It didn't come to London in 1995.

We did not come to London in 1995. We didn't come to London in 1995.

You did not come to London in 1995. You didn't come to London in 1995.

They did not come to London in 1995. They didn't come to London in 1995.

\$Question and short answer:\$

Did I come here? Yes I did. No, I didn't.

Did you come here? Yes you did. No, you didn't.

Did he come here? Yes he did. No, he didn't.

Did she come here? Yes she did. No, she didn't.

Did it come here? Yes it did. No, it didn't.

Did we come here? Yes we did. No, we didn't.

Did you come here? Yes you did. No, you didn't.

Did they come here? Yes they did. No, they didn't.

You can find a list of irregular verbs on the following web page:

<http://kubu.wz.cz/lng/en/irregular-verbs.php>

\$Use:\$

a) to express an action that happened and finished in the past:

She showed me the way, but I got lost anyway.

Christopher Columbus discovered America in 1492.

b) with certain time expressions (finished period):

Our lesson started at 4 pm, yesterday, last month, in spring, in 2010.

7.5 Practice

***Task 3**

Complete the two parts of the text with verbs in the Past Simple. If there is no verb in the bracket, choose one the offered verbs:

Verb to use: spend - build - show - offer - meet – have

Entrepreneur Bill Gates, born on October 28, 1955, in Seattle, Washington, 1 ... (begin) to show an interest in computer programming at the age of 13. Through technological innovation, keen business strategy, and aggressive competitive tactics, he and his partner Paul Allen 2 ... the world's largest software business, Microsoft. In the process, Bill Gates 3 ... (become) one of the richest men in the world.

Bill Gates 4 ... (grow up) in an upper middle-class family with two sisters: Kristianne, who is older, and Libby, who is younger. Their father, William H. Gates, Sr., was a promising, if somewhat shy, law student when he 5 ... his future wife, Mary Maxwell. She was an athletic, outgoing student at the University of Washington, actively involved in student affairs and leadership. The Gates family atmosphere was warm and close, and all three children 6. ... (be) encouraged to be competitive and strive for excellence. Bill 7 ... early signs of competitiveness when he coordinated family athletic games at their summer house on Puget Sound. He also relished in playing board games (Risk was his favorite) and excelled in Monopoly.

Bill 8 ... a very close relationship with his mother, Mary, who after a brief career as a teacher devoted her time to helping raise the children and working

on civic affairs and with charities. She also served on several corporate boards, among them First Interstate Bank in Seattle (founded by her grandfather), the United Way, and International Business Machines (IBM). She often 9 ... (take) Bill along on her volunteer work in schools and community organizations.

While at Lakeside School, a Seattle computer company 10 ... to provide computer time for the students. The Mother's Club used proceeds from the school's rummage sale to purchase a teletype terminal for students to use. Bill Gates became entranced with what a computer could do and 11 ... much of his free time working on the terminal.

Adapted from: <http://www.biography.com/people/bill-gates-9307520>

Task 4

Answer the following question

Did you do any of these things last week?

shopping

cooking

washing up

sightseeing

swimming

work

reading

letter writing

gardening

travelling

7.6 Past Continuous

\$Positive:\$

I was working in the garden.

You were working in the garden.

He was working in the garden.

She was working in the garden.

It was working in the garden.

We were working in the garden.

You were working in the garden.

They were working in the garden.

\$Negative:\$

I was not working in the garden. I was not working in the garden.

You were not working in the garden. You weren't working in the garden.

He was not working in the garden. He wasn't working in the garden.

She was not working in the garden. She wasn't working in the garden.

It was not working in the garden. It wasn't working in the garden.

We were not working in the garden. You weren't working in the garden.

You were not working in the garden. We weren't working in the garden.

They were not working in the garden. They weren't working in the garden.

\$Question and short answer:\$

Was I sleeping? Yes, I was. No, I wasn't.
 Were you sleeping? Yes, you were. No, you weren't.
 Was he sleeping? Yes, he was. No, he wasn't.
 Was she sleeping? Yes, she was. No, she wasn't.
 Was it sleeping? Yes, it was. No, it wasn't.
 Were we sleeping? Yes, we were. No, we weren't.
 Were you sleeping? Yes, you were. No, you weren't.
 Were they sleeping? Yes, they were. No, they weren't.

\$Use:\$

- to express an action that took some time in the past:
I am sorry that I was making such noise last night.
They got married when they were studying abroad.
- to express two actions taking place at the same time:
Mike was driving while Janet was sleeping.
- to express an action in progress before the action in past simple:
I was having dinner when my wife called me.
- to describe a situation, scene, state. (Past simple describes an action):
When I woke up, the sun was shining, my dad was cutting wood, and my sister was writing a text-message.

7.7 Practice

***Task 5**

Use Past continuous to complete the following sentences:

1. My brother and sister ... (play) tennis at 11am yesterday.
2. ... you still ... (work) at 7pm last night?
3. Why ... he ... (have) lunch at 4pm?
4. At 8.30am today I ... (drive) to work.
5. We ... (sleep) at 11pm.

\$PAST SIMPLE vs. PAST CONTINUOUS\$

When using Past simple or continuous, there are no rules as for using Present simple or continuous. The rules are as above or see the following examples:

What were you doing when it happened?	I was sleeping.
What did you do when it happened?	I ran away.

7.7.1 Past simple vs. continuous

***Task 6**

Complete the following with verbs from the boxes with Past simple or continuous:

Part1

Verbs to use: have - sleep - leave - shut - catch - feel

- ... you ... a good holiday, Mary?
- Yes, we did.
- Tell me about it.
- Well, we ... the 7.55 ferry to Santander. The crossing wasn't very nice because we ... an hour late, and I ... ill on the boat. However, I took a pill, and I ... my eyes and ... for an hour or so.

Part2

Verbs to use: make - tell - learn - cost (2) - lose (2) - sleep - spend

- John ... at all, which was a pity, because he was very tired.
- How much ... the tickets ...?
- Well, they ... us anything, but John's father ... a lot of money on the
- trip.
- Did you have any trouble with customs and immigration?
- Well, last time I ... my passport and had terrible problems, but this time I ... it, so it was all right.
- Where did you stay?
- John's father ... reservations for us in this nice old hotel near San
- Sebastian; the manager ... us it was 200 years old.
- And ... you ... any Spanish?
- A little. Enough to understand the people at the hotel and shopkeepers.

*Task 7

Complete the following, with verbs from the box:

Verbs to use: leave – buy – catch - think – sell – say – cost – lose - put - keep

1 In the 14th century millions of people in England ... the plague and died.

2 General Custer ... the battle of the Little Big Horn; he and all his men died.

3 In 1803 the United States ... Louisiana from Napoleon for 15 million dollars.

4 Young George Washington ... 'I cannot tell a lie'.

5 Many Indians ... the first white men in America were gods!

6 Columbus ... Spain in August 1492 and discovered America on October 12th.

7 Russia ... Alaska to the United States in 1867.

8 This deal ... the American government \$7,200,000.

9 For centuries the Incas ... llamas as domestic animals.

10 In the old days a person ... his or her seal on important letters.

7.8 Questions

*Task 8

Form questions asking about underlined expressions

Example: He threw up his hands. \$ _ \$What\$ did he throw up?

- 1 She went to \$London\$ and lost her way.
- 2 We need \$some butter and eggs\$ from the grocer's.
- 3 \$His election\$ made him very conceited.
- 4 The Great Fire of London started \$in a bakery\$.
- 5 The idea occurred to them \$while the chairman was speaking\$.
- 6 \$Tom\$ has given a vivid account of it.
- 7 You will cure that cold with \$a drink of hot lemon\$.
- 8 \$Mr. Ferguson\$ saw the accident and Miss Black saw it too.
- 9 \$Three inches of rain\$ fell last night.
- 10 \$This engineer\$ did not design the dam.
- 11 \$He dropped the \$ash\$ on the carpet.
- 12 \$The ship\$ sank in the Malaga Straits.
- 13 I did not feel any pain \$in the wrist\$.
- 14 \$Caruso\$ never sang that aria.
- 15 We enjoyed \$walking in the rain\$.
- 16 \$The heavy rain\$ prevented the semi-finals from taking place.
- 17 The dog spoilt \$my\$ dress.
- 18 He stammered out an answer \$with difficulty\$.
- 19 \$The villain\$ wept and repented his deeds.
- 20 \$Five\$ people lost their lives in the outbreak of violence.

*Task 9

Tell your classmates at least two pieces of news that happened yesterday, last week, ...

7.1 Summary

\$The history of computers\$ is divided into several generations. Each generation has its specific characteristics. The main generations were the first with vacuum tubes and the second with the invention of a transistor.

\$Past simple tense\$

We use the Past simple for finished actions and situations in the past;

To make the Past Simple of regular verbs, add –ed.

Many verbs are irregular.

Positive subject + –ed (regular verbs); irregular verbs – past simple does not end in –ed, you can find past tense in a dictionary.

Negative subject + did + not (didn't) + infinitive

Question did + subject + infinitive

7.2 Vocabulary

above all	nadevše
accessible	přístupný
affair	záležitost
appearance	vzhled
attract	přitahovat
average	průměrný

awkwardly	divně
competitive	konkurenční
contain	obsahovat
core	jádro
corporate board	správní rada
drum	buben
efficient	výkonný, účinný
entrepreneur	podnikatel
evolve	vyvíjet se
facilitate	usnadnit
figure	hodnota, počet
fit	sedět, pasovat
goal	cíl
great deal of	hodně
heat	teplo
instead of	místo (něčeho)
integrated circuit	intergovaný obvod
interface	rozhraní
keen	nadšený
kit	souprava
leadership	vedení
less	méně
mainframe	sálový počítač
malfunction	negungovat
moth	můra
multitude	velké množství
neat	elegantní
palm	dlaň
predecessor	předchůdce
reliable	spolehlivý
relish	mít radost z
result	mít za následek
semiconductor	polovodič
short-circuit	zkratovat
shy	plachý
strive for	nažít se
switch	spínač
throughout	skrz
vacuum tube	elektronka

7.3 Key

*Task 1

BASIC – Beginners' All-Purpose Symbolic Instruction Code

BIOS – Basic Input/Output System

AI – Artificial Intelligence
 DOS – Disk Operating System
 IC – Integrated Circuit
 OS – Operating System
 PC – Personal Computer

*Task 2

Subject of a class discussion

*Task 3

1 began
 2 built
 3 became
 4 grew up
 5 met
 6 were
 7 showed
 8 had
 9 took
 10 offered
 11 spent

*Task 4

Subject of a class discussion

*Task 5

1. My brother and sister **\$were playing\$** tennis at 11am yesterday.
2. **\$Were\$** you still **\$working\$** at 7pm last night?
3. Why **\$was\$** he **\$having\$** lunch at 4pm?
4. At 8.30am today I **\$was driving\$** to work.
5. We **\$were sleeping\$** 11pm.

*Task 6

- **\$Did you have\$** a good holiday, Mary?
- Yes, we did.
- Tell me about it.
- Well, we **\$took\$** the 7.55 ferry to Santander. The crossing wasn't very nice because we **\$left\$** an hour late, and I **\$felt\$** ill on the boat. However, I took a pill, and I **\$shut\$** my eyes and **\$slept\$** for an hour or so.
- John **\$didn't sleep\$** at all, which was a pity, because he was very tired.
- How much **\$did the tickets cost\$**?
- Well, they **\$didn't cost\$** us anything, but John's father **\$spent\$** a lot of money on the trip.
- Did you have any trouble with customs and immigration?

- Well, last time I **\$lost\$** my passport and had terrible problems, but this time I **\$didn't lose\$** it, so it was all right.
- Where did you stay?
- John's father **\$made\$** reservations for us in this nice old hotel near San Sebastian; the manager **\$told\$** us it was 200 years old.
- And **\$did you learn\$** any Spanish?
- A little. Enough to understand the people at the hotel and shopkeepers.

*Task 7

- 1 In the 14th century millions of people in England **\$caught\$** the plague and died.
- 2 General Custer **\$lost\$** the battle of the Little Big Horn; he and all his men died.
- 3 In 1803 the United States **\$bought\$** Louisiana from Napoleon for 15 million dollars.
- 4 Young George Washington **\$said\$**: 'I cannot tell a lie'.
- 5 Many Indians **\$thought\$** the first white men in America were gods!
- 6 Columbus **\$left\$** Spain in August 1492 and discovered America on October 12th.
- 7 Russia **\$sold\$** Alaska to the United States in 1867.
- 8 This deal **\$cost\$** the American government \$7,200,000.
- 9 For centuries the Incas **\$kept\$** llamas as domestic animals.
- 10 In the old days a person **\$put\$** his or her seal on important letters.

*Task 8

- 1 Where did she go to?
- 2 What do we need from the grocer's?
- 3 What made him very conceited?
- 4 Where did the Great Fire of London start?
- 5 When did the idea occur?
- 6 Who has given a vivid account of it?
- 7 What will you cure that cold with?
- 8 Who saw the accident and Miss Black saw it too?
- 9 How much rain did it fall last night?
- 10 Who did not design the dam?
- 11 What did he drop on the carpet?
- 12 What sank in the Malaga Straits?
- 13 Where did you not feel any pain?
- 14 Who never sang that aria?
- 15 What did you enjoy?
- 16 What prevented the semi-finals from taking place?
- 17 Whose dress did the dog spoil?
- 18 How did he stammer out an answer?
- 19 Who wept and repented his deeds?
- 20 How many people lost their lives in the outbreak of violence?

8 REVISION 2

\$Time: 1 hour\$

\$Study guide\$

This revision unit summarises what you know about the Past simple and continuous. The exercises combine them with the Present tenses and you should be able to use them correctly.

*Task 1

Rewrite this passage, putting the verbs in brackets into a suitable form. In some cases no change is needed. Use Present and Past *tenses*

The farmer ... (stare) down at the dog. He simply ... (can) not ... (understand) such peculiar behaviour.

'Perhaps it ... (be) because the poor thing ... (have) only one ear,' he ... (think) to himself. Anyway, he ... (begin) to spend all his spare time ... (train) the dog, until eventually it ... (do) everything he ... (order) - as long as he ... (say) the opposite of what he ... (want).

A horse, which ... (watch) these strange events, finally ... (ask) the dog 'Why ... (do) you always do the opposite of what he ... (tell) you to ... (do)? Is it because you ... (have) only one ear?'

'Of course not,' ... (reply) the dog. 'I ... (start) to ... (do) it because I ... (not/think) he ... (be) interested in an ordinary dog, do you?' And, indeed, the farmer ... (be) no longer lonely or bored: he now ... (have) very interesting company.

Moral: There ... (be) nothing peculiar about ... (be) peculiar.

8.1 Key

*Task 1

The farmer **\$was staring\$** down at the dog. He simply **\$could\$** not **\$understand\$** such peculiar behaviour.

'Perhaps it **\$is\$** because the poor thing **\$has\$** only one ear,' he **\$thought\$** to himself. Anyway, he **\$began\$** to spend all his spare time **\$training\$** the dog, until eventually it **\$did\$** everything he **\$ordered\$** - as long as he **\$said\$** the opposite of what he **\$wanted\$**

A horse, which **\$was watching\$** these strange events, finally **\$asked\$** the dog 'Why **do** you always do the opposite of what he **tells\$** you to **do\$**? Is it because you **have\$** only one ear?'

'Of course not,' **\$replied\$** the dog. 'I **\$started\$** to **do\$** it because I **don't think\$** he **is\$** interested in an ordinary dog, do you?' And, indeed, the farmer **\$is\$** no longer lonely or bored: he now **has\$** very interesting company.

\$Mora\$: There **\$is\$** nothing peculiar about **\$being\$** peculiar.

9 TYPES OF COMPUTERS

\$Time: 2 hours\$

\$Study guide\$

This unit deals with various devices that are available to use for their specific purposes. The unit also put emphasis on numerals.

At the end of this unit, the student should:

- be familiar with terminology of various computer types
- know how to correctly use numerals

\$Key words\$: mainframe, palmtop, supercomputer, wearable, server, personal computer

Numerals

Note: Three images have been taken out

\$What are the different types of computers?\$

*Task 1

Fill in the gaps with these words:

Desktop / laptop / mainframe / minicomputer / palmtop / PC / server / supercomputer / wearable / workstation

There are a lot of terms used to describe computers. Most of these words imply the size, expected use or capability of the computer.

- 1 ... It is a computer designed for general use by a single person. Most people relate this term with systems that run the Windows operating system. They were first known as microcomputers because they were built on a smaller scale than the huge systems in use by most businesses.
- 2 ... A PC that is not designed for portability. The expectation with these systems is that you will set them in a permanent location. Most of them offer more power, storage and versatility for less cost than their portable brethren.
- 3 ... They are portable computers that integrate the display, keyboard, a pointing device or trackball, processor, memory and hard drive all in a battery-operated package slightly larger than an average hardcover book.
- 4 ... More commonly known as Personal Digital Assistants (PDAs), they are tightly integrated computers that often use flash memory instead of a hard drive for storage. These computers usually do not have keyboards but rely on touch screen technology for user input. They are typically smaller than a paperback novel, very lightweight with a reasonable battery life. A slightly larger and heavier version is the handheld computer.

- 5 ... A desktop computer that has a more powerful processor, additional memory and enhanced capabilities for performing a special group of task, such as 3D Graphics or game development.
- 6 ... A computer that has been optimized to provide services to other computers over a network. It usually has powerful processors, lots of memory and large hard drives.
- 7 ... In the early days of computing, they were huge computers that could fill an entire room or even a whole floor! As the size of computers has diminished while the power has increased, the term has fallen out of use in favour of enterprise server. You'll still hear the term used, particularly in large companies to describe the huge machines processing millions of transactions every day.
- 8 ... Another term rarely used anymore, these computers fall in between microcomputers (PCs) and mainframes (enterprise servers). They are normally referred to as mid-range servers now.
- 9 ... This type of computer usually costs hundreds of thousands or even millions of dollars. Although some of them are single computer systems, most are comprised of multiple high performance computers working in parallel as a single system.
- 10 ... The latest trend in computing. Essentially, common computer applications (e-mail, database, multimedia, calendar) are integrated into watches, cell phones, visors and even clothing!

*Task 2

Decide what sort of computer is best for each of these users.

- 1 The Northwestern technical college needs a computer to look after its accounts. Its network, the records of all students and staff, and to help with scientific research.
- 2 Ken Parsley is a sales person and he spends a lot of time visiting customers. He wants a computer to carry with him so he can access data about his customers and record his sales.
- 3 Alice Pierce is a personal officer. She needs a computer to keep staff records and to keep a diary of appointments. She also needs a computer for writing emails.

9.1 Language work – numerals

9.1.1 And

In British English, and is used before the last two figures (tens and units) of a number. (in American English, this is unusual.)

325 three hundred and twenty-five (US: three hundred twenty-five)

719 seven hundred and nineteen (US: seven hundred nineteen]

3,077 three thousand and seventy-seven (US: three thousand seventy-seven)

Note that in writing, commas (not full stops) are used to separate thousands.

9.1.2 A and one

Typical mistake: I want to live for hundred years.

The words hundred, thousand and million can be used in the singular with a or one, but not alone. A is more common in an informal style; one is used when we are speaking more precisely.

Compare:

I want to live for a hundred years.

The journey took exactly one hundred days.

I've saved a thousand pounds.

Pay the inspector of taxes one thousand pounds only. (On a cheque)

“A” is also common in an informal style with measurement.

Compare:

A pint of beer will soon cost a pound. Mix one pint of milk with one pound of flour.

Note that a is only used with hundred, thousand, etc. at the beginning of a number.

Compare:

146 a hundred and forty-six

3,146 three thousand, one hundred and forty-six

We can say a thousand for the 'round number' 1,000, and we can say a thousand before and, but we say one thousand before a number of hundreds.

Compare:

1,000 a thousand

1,031 a thousand and thirty-one

1,100 one thousand, one hundred

1,498 one thousand, four hundred and ninety-eight

Compare also:

a mile one mile, six hundred yards

a pound one pound twenty-five (£1.25)

a foot one foot four (inches)

an hour and seventeen minutes one hour, seventeen minutes

9.1.3 Hundreds and thousands

We often say eleven hundred, twelve hundred, etc. instead of thousand one hundred etc. This is most common with round numbers between 1,100 and 1,900.

9.1.4 Fractions

Simple fractions are expressed by using 'ordinal numbers' (fifth, etc).

$1/8$ an eighth (or one eighth)

$1\ 5/9$ one and five ninths

More complex fractions are often expressed by using the word over.

$317/509$ three hundred and seventeen over five hundred and nine.

Expressions like $3/4$ hour, $7/10$ mile are said three quarters of hour, seven tenths of a mile. Note that one and a half take plural noun (e.g. one and a half kilometres).

9.1.5 Decimals

Decimal fractions are said with each figure separate. We use a full stop (called 'point'), not a comma, before the fraction.

0.5 (= $\frac{1}{2}$) nought point five, or point five (US : zero point five)

3.375 (= $3\frac{3}{8}$) three point three seven five

9.1.6 Nought, zero, nil, etc

The figure 0 is normally called nought in British English, and zero in American English.

When numbers are said figure by figure, 0 is often called like the letter O.

My account number is four one three two six o six nine. In measurements (for instance, of temperature), 0 is called zero.

Zero degrees Fahrenheit — 17.8 degrees below zero Centigrade.

Zero scores in team-games are usually called nil in British English (American zero). In tennis, table-tennis and similar games, the word love is used. This is derived from the French l'oeuf, meaning the egg, presumably because zero can be egg-shaped (0).

Manchester three; Liverpool nil.

Five-love; your service.

9.1.7 Dates

Typical mistake: My birthday's on seventeen June.

There are two ways of saying dates.

The first of January. January the first.

The seventeenth of June. June the seventeenth.

(in American English, dates are generally said January first, June seventeenth, etc.) When dates are written, the, of, and often the ordinal ending (-th, etc.) are dropped.

1st) January 1976. February 16th), 1978.

When dates are expressed entirely in figures, Americans put the month before the day. 8/6/79 means June the eighth in Britain, but August the sixth in the United States. The numbers of years are usually said in two halves.

1066 ten sixty-six

1789 seventeen eighty-nine

1984 nineteen eighty-four

921 nine twenty-one

1900 nineteen hundred

1905 nineteen o five

9.1.8 Telephone numbers

In phone numbers, we say each figure separately, 0 is called Oh. Instead of six six, two two, etc, British speakers usually say double six, etc.

307-4922 three o seven - four nine double two. (US: two two.)

52816 five two eight one six

9.1.9 9 Kings and Queens

Ordinal numbers are used for kings and queens.

Henry VIII Henry the Eighth (Not: *Henry Eight)

Louis XIV Louis the Fourteenth

Catherine II Catherine the Second

9.1.10 Areas

In giving dimensions, we say, for example, that a room is twelve feet by fifteen feet (12' x 15') or that a garden is thirty feet by forty-eight feet (30' x 48').

A room twelve feet by twelve feet can be called twelve feet square; the total area is 144 square feet (12' x 12').

In an informal style, foot is often used instead of feet in measurements.

'How tall are you?' - 'Five foot eight.'

My bedroom's about eight foot by twelve.

9.1.11 Money

The singular of pence is penny.

1p one penny (Informal: one p)

5p five pence (Informal: five p)

In sums which consist of pounds and pence together, the letter p dropped from the writing, and the word pence is usually dropped from the spoken form.

£3.75 three pounds seventy-five

When sums of money are used as adjectives, singular forms are usual.
a five-pound note

However, pence is sometimes used in adjective expressions.

a five pence stamp (or a fivepenny stamp)

Examples of American usage:

1 ¢ one cent (or a penny]

23¢ or \$0.23 twenty-three cents

\$1.95- a dollar ninety-five (or one ninety-five)

Does this machine take pennies? (one-cent coins)

Does this machine take nickels? (five-cent coins)

Does this machine take dimes? (ten-cent coins)

Does this machine take quarters? (twenty-five-cent coins)

Does this machine take half-dollars? (fifty-cent coins)

9.1.12 Calculations

1 Addition

How do you say '2 + 2 = 4', or '712 + 145 = 857'?

In small additions, we usually say and for +, and is or are for =.

Two and two are four.

Six and five is eleven.

What's eight and six?

In larger additions, (and in more formal style) we use plus for +, and equals or is for =.

Seven hundred and twelve plus a hundred and forty-five is/equals eight hundred and fifty-seven.

2 Subtraction

How do you say ' $7-4=3$ ', or ' $619-428=191$ '?

In conversational style, dealing with small numbers, people say four from seven leaves/is three, or seven take away four leaves/is three. In a more formal style, or dealing with larger numbers, minus and equals are used.

Six hundred and nineteen minus four hundred and twenty-eight equals a hundred and ninety-one.

3 Multiplication

How do you say ' $3 \times 4=12$ ', or ' $17 \times 381=6477$ '?

In small calculations, the most common approach is to say three fours, six sevens, etc, and to use are for =.

Three fours are twelve. Six sevens are forty-two.

In larger calculations, there are several possibilities. One way is to say times for \times , and is or makes for =.

Seventeen times three hundred and eighty-one is/makes six thousand, four hundred and seventy-seven.

In a more formal style, we say multiplied by and equals.

17 multiplied by 381 equals 6477.

4 Division

How do you say ' $9 \div 3=3$ ', or ' $261 \div 9=29$ '? The simplest way is to use divided by and equals.

Two hundred and sixty-one divided by nine equals twenty-nine.

But in smaller calculations, people might say, for example, three into nine goes three (times).

5 Example of a spoken calculation

Here is a multiplication (146×281), together with all its steps, in the words that an English speaker might say as he was doing it.

A hundred and forty-six times two hundred and eighty-one

- 1 Put down two noughts.
- 2 Two sixes are twelve; put down 2, and carry 1; two fours are eight and one are nine; two ones are two.
- 3 (Next line) Put down one nought.
- 4 Eight sixes are forty-eight; put down 8 and carry 4; eight fours are thirty-two and four is thirty-six; put down 6 and carry 3; eight ones are eight and three is eleven.
- 5 (Next line) One times 146 is 146.

6 (The addition) Six and nought and nought is six; eight and four and nought is twelve; put down 2 and carry 1; six and two are eight and one is nine and one is ten; put down 0 and carry 1; nine and one are ten and one is eleven; put down 1 and carry 1; two and one are three and one are four.

7 (Total) forty-one thousand and twenty-six.

(Note how is and are are used interchangeably.)

9.2 Summary

\$Dates and numbers\$

16 November: The sixteenth of November

November 16: November the sixteenth

- When we say the date, we use ordinal numbers. May fifteenth or May the fifteenth.
- In the short form, the month is written before the day in American English.

6/2/04: 2 July 2004 (American); 6/2/04: 6 February 2004 (British)

\$Fractions, decimals, and percentages\$

2/3 two thirds

15.6% fifteen point six per cent

25.84 twenty-five point eight four

After decimal point we say each number separately.

9.3 Vocabulary

account	účet
addition	sčítání
appointment	schůzka
bottleneck	malá průchodnost
brethren	bratři
capability	schopnost
comprised of	složený z
decimal	desetné číslo
diminish	zmenšit se
division	dělení
enhanced	pokročilý
entire	celý
expectation	očekávání
expected	očekávaný
fill	vyplnit, zaplnit
fraction	zlomek
hardcover	pevná vazba
imply	naznačit
increase	zvýšit
lightweight	lehký
measurement	měření

multiplication	násobení
numeral	číslovka
ordinal numeral	řadová číslovka
package	balík
particularly	zejména
permanent	trvalý
portable	přenosný
precisely	přesněji
relate to	vztahovat se k
rely on	spoléhat na
scale	měřítka
slightly	jemně
staff	zaměstnanci
subtraction	odčítání
versatility	všestrannost
visors	sluneční clona

9.4 Key

*Task 1

1PC, 2desktop, 3laptop, 4palmtop, 5workstation, 6server, 7mainframe, 8minicomputer, 9supercomputer, 10wearable

*Task 2

- 1 mainframe
- 2 laptop
- 3 PC

10 The way to your career

\$Time: 4 hours\$

\$Study guide\$

The last part discusses the choice of your career, the way your life will turn.

At the end of this chapter, the students should:

- be able to talk about their upbringing
- identify the decisions which led to their profession
- know how to express past events

\$Key words:\$ career, qualification, CV

*Task 1

Are you able to describe your parents' job? Choose your mother or father (or even one of your grand-parents, aunts or uncles if appropriate for your case), tell us about:

- what is the scope of their work
- what hours do they work (long, flexible working hours, etc.)
- is there anything special about the job
- the type of their job – blue collar, white collar, pink collar

*Task 2

Note: this exercise has been adapted. Images have been replaced by text.

Study the following professions and decide

- what positive and negative sides each job has
- what education and qualification is required or necessary to perform the job

Professions: teacher – baker – astronaut – gardener

*Task 3

Fill in the words from the box in correct place:

apply
lunch break
notice
pay rise
promotion
unemployed
dole money
self-employed
job satisfaction
curriculum vitae
redundant
interview

1. If you haven't got a job, you are said to be
2. As compensation you will receive

3. If you see a job advert that interests you, you might decide to ... for the post.
4. Your job application should include details of your qualifications and work experience. This is usually included in a ..., or CV for short.
5. Your potential employer might ask you to come along for an
6. If you prove yourself responsible and efficient, you may be considered for ... to a higher post.
7. If you feel you can't live off your salary, you can always ask your boss for a
8. Some very busy office workers often work during their
9. More and more people believe that ... is more important than a high salary.
10. In times of recession, many companies are forced to cut down on their workforce and make people
11. Working from home as a ... person has its advantages and disadvantages.
12. In most companies, you have to hand in your ... three months before you leave.

10.1 Job for the disabled

In the modern era there should be no jobs for disabled people that those with a disability should not be able to do as well as a non disabled person. This is partly due to the fact that currently in the UK there are many disability aids and assistance out there that that can help them to do their work as well as other employees.

Although disabled people may be hindered physically by a certain disability, much research and many studies have shown that they are just as capable as performing well at their work as everyone else. In practise in any work environment there should be no barriers or glass ceilings for a disabled person.

There is much legislation ensuring that everyone is treated equally, so suitable qualified jobseekers should feel confident when applying for any disability jobs. Today many responsible employers are committed to serving best practise when dealing with recruitment and applications from minority groups. Most tend to have in place a framework of procedures to offer help for disabled jobseekers from the wider community, these are in place to combat any discrimination. Public sector employers tend to monitor their recruitment and employment of BME staff as well as their retention rates.

In the United Kingdom a disabled person or those with a long term illness preventing them from work are also likely to get incapacity benefit. They can also get other allowances to assist them in getting back to work. These could be in the form of disabled grants or tax allowances depending on the salary of the job. All of these are designed to give more freedom and choice to those looking for disabled employment.

\$Advice for responsible UK employers\$

As an employer you should develop practises that are friendly towards

disabled staff to assist them in their workplace activities. This could be simple things like providing a ramp for wheelchair users. You should also ensure that your employees get fair treatment in their career development and promotion prospects.

Government and local authorities can provide assistance to companies to encourage them to recruit more disabled persons. A good example of the resources available is the Access to Work scheme launched by the government which compensates employers financially for any expenses they have incurred in assisting a disabled person into work.

Source: <http://www.dayjob.com/content/jobs-for-disabled-people-196.htm>

*Task 4

Think of a job that you would like to have and try to identify problems that you might have (also with respect to your disorder, disability)

10.2 Language work

10.2.1 Do vs. Make

*Task 5

Use do or make:

- 1 The best cloth is said to ... in England.
- 2 Harry ... his best to help us.
- 3 George ... his homework yet.
- 4 If you take this medicine, it ... you good.
- 5 She ... no disguise of her feelings.
- 6 It's all right, I (only) ... my duty.
- 7 Don't ... so much noise.
- 8 ...whatever you like.
- 9 They're going to ... a journey round the world.
- 10 Paul doesn't ... his exercises very carefully.
- 11 We ... another date yesterday.
- 12 The nightclubs on Broadway aren't ... the business they ... some years ago.
- 13 Alcohol and barbiturates ... a bad combination.
- 14 The road ... a wide turn to the right.
- 15 My wife would take it as a personal favour, if you would ... us the honour to come.
- 16 Joan, you should have your hair ...
- 17 We ... the acquaintance of professor Corder in Edinburgh.
- 18 It ... bad blood between Fred and George for a long time.
- 19 The stay at the seaside ... wonders for my nerves.
- 20 It's funny how easily a woman like her can ... a fool of a man.
- 21 Ted didn't ... the mistake of underestimating his rival.
- 22 It wouldn't ... sense.
- 23 The police had to ... inquiries.
- 24 Jane's boss said he couldn't ... without her, but she decided to marry Fred and ... a home for him in the country.
- 25 Eileen...a lot of work for us.

26 I wanted to ... sure that everything was all right.

10.2.2 Prepositions

*Task 6

Complete the sentences:

Part 1

Words to use: for - in front of - across - along - out of - at - by opposite
- from - under - near - to - on

We left home (1) ... nine o'clock (2) ... Monday morning, and walked (3) ... the station. We went (4) ... the centre of the city (5) train. (6) ... the main line station, we had to wait (7) ... two and a half hours next train to Bristol, which was due to leave (8) ... 3.15. we did not want to waste our time so we bought our tickets (9) ... The booking office. We decided to be back (10) ... 3 o'clock at the latest, and walked (11) ... the station to explore the surrounding area.

Fortunately the station was (12) ... the river; we walked (13) ... the river bank (14) ... a while, watching the steamers going (15) ... the bridge and the little ferry which was going (16) ... the river (17) ... and one side (18) ... the other (19) ... us. (20) ... us, on the other side of the river, we could see two big buildings.

Part 2

Words to use: down - beyond - in – beside - after – under - among
towards - on - from – up - below - to - until

We had lunch (21) ... some trees (22) ... a stream. (23) ... lunch, we walked (24) ... the hill (25) ... the lookout point on top. (26) ... this point, we could see the little town (27) ... us (28) ... the valley. (29) ... the houses there was a small church. (30) ... the town, in the far distance, we could see a ruined castle (31) ... a hill. We stayed (32) ... three o'clock, when we reluctantly left, and started walking (33) ... the hill (34) ... the station.

Task 7

Complete the following with appropriate prepositions:

Temple was all ready to make his escape. He had lain there quietly (1) ... his sleeping bag pretending to be asleep until the guard went (2) ... the room and (3) ... the stairs to the bottom floor. Now Temple crawled (4) ... bed and (5) ... the room to the other side, his heart thumping (6) ... his chest. His clothes were (7) ... a chair standing (8) ... the window and the locked door. He pulled his trousers on (9) ... his pyjamas and slipped the small tube of explosive (10) ... his right pocket. Using a bottle top as a screwdriver, Temple took a large metal ventilation grill (11) ... the wall. Then he tied one end of a rope made of pieces of sheet (12) ... the bed and the other end (13) ... his waist and climbed (14) ... the hole (15) ... the ventilation shaft. Gradually he lowered himself (16) ... the narrow shaft (17) ... the dim light he could see (18) ... the bottom of the shaft. When he finally arrived (19) ... the bottom he put his

shoulders (20) ... the metal grill and pushed with all his strength. Then he was (21) ... the boiler room. (22) ... the door, on the other side of the room, was the large boiler, and (23) ... it, just half a metre to the left, was the iron door that led (24) ... the coal shed . . . and freedom. It was bolted from the outside. Temple put the tube of explosive carefully just (25) ... the handle, about two centimetres higher. Then he pushed the detonator carefully (26) ...the soft plastic, and, holding the wires (27) ... his hand, he lay (28) ... the floor (29) ... a thick metal partition. He pressed the wires to a small battery and there was a deafening explosion. Immediately Temple rushed (30) ... the dust and smoke (31) ...the door. Thank God: it had a large hole (32) ... it. He climbed (33) ... it and ran (34) ... the lights on the other side of the valley as fast as he could. He was free at last... or was he?

10.3 Vocabulary

behaviour	chování
consider	brát v úvahu
dole money	podpora (v nezaměstnanosti)
inherit	zdědit
literally	doslovně
live off	vyžít
perceive	vnímat
predetermine	předurčit
promotion	povýšení
redundant	nadbytečný (zde nezaměstnaný)
scope of work	náplň práce
slate	tabulka
thus	tedy
upbringing	výchova

10.4 Key

*Task 1

Subject of a class discussion

*Task 2

Subject of a class discussion

*Task 3

1. If you haven't got a job, you are said to be *\$unemployed\$*.
2. As compensation you will receive *\$dole money\$*.
3. If you see a job advert that interests you, you might decide to *\$apply\$* for the post.
4. Your job application should include details of your qualifications and work experience. This is usually included in a *\$curriculum vitae\$*, or CV for short.

5. Your potential employer might ask you to come along for an *interview*.
6. If you prove yourself responsible and efficient, you may be considered for *promotion* to a higher post.
7. If you feel you can't live off your salary, you can always ask your boss for a *pay rise*.
8. Some very busy office workers often work during their *lunch break*.
9. More and more people believe that *job satisfaction* is more important than a high salary.
10. In times of recession, many companies are forced to cut down on their workforce and make people *redundant*.
11. Working from home as a *self-employed* person has its advantages and disadvantages.
12. In most companies, you have to hand in your *notice* three months before you leave.

*Task 4

Subject of a class discussion

*Task 5

- 1 The best cloth is said to **be made** in England.
- 2 Harry **did** his best to help us.
- 3 George **hasn't done** his homework yet.
- 4 If you take this medicine, it **will make** you good.
- 5 She **does** no disguise of her feelings.
- 6 It's all right, I **am only doing** my duty.
- 7 Don't **make** so much noise.
- 8 **Do** whatever you like.
- 9 They're going to **make** a journey round the world.
- 10 Paul doesn't **do** his exercises very carefully.
- 11 We **made** another date yesterday.
- 12 The nightclubs on Broadway aren't **doing** the business they **did** some years ago.
- 13 Alcohol and barbiturates **make** a bad combination.
- 14 The road **makes** a wide turn to the right.
- 15 My wife would take it as a personal favour, if you would **do** us the honour to come.
- 16 Joan, you should have your hair **done**.
- 17 We **made** the acquaintance of professor Corder in Edinburgh.
- 18 It **makes** bad blood between Fred and George for a long time.
- 19 The stay at the seaside **does** wonders for my nerves.
- 20 It's funny how easily a woman like her can **make** a fool of a man.
- 21 Ted didn't **make** the mistake of underestimating his rival.
- 22 It wouldn't **make** sense.
- 23 The police had to **do** inquiries.
- 24 Jane's boss said he couldn't **do** without her, but she decided to marry Fred and **make** a home for him in the country.
- 25 Eileen **does** a lot of work for us.
- 26 I wanted to **make** sure that everything was all right.

***Task 6**

We left home (1) at nine o'clock (2) on Monday morning, and walked (3) to the station. We went (4) to the centre of the city (5) by train. (6) At the main line station, we had to wait (7) for two and a half hours next train to Bristol, which was due to leave (8) at 3.15. We did not want to waste our time so we bought our tickets (9) in the booking office. We decided to be back (10) at 3 o'clock at the latest, and walked (11) out of the station to explore the surrounding area.

Fortunately the station was (12) near the river; we walked (13) along the river bank (14) for a while, watching the steamers going (15) under the bridge and the little ferry which was going (16) across the river (17) from one side (18) to the other (19) opposite us. (20) In front of us, on the other side of the river, we could see two big buildings.

We had lunch (21) under some trees (22) beside a stream. (23) After lunch, we walked (24) up the hill (25) to the lookout point on top. (26) From this point, we could see the little town (27) below us (28) in the valley. (29) Among the houses there was a small church. (30) Beyond the town, in the far distance, we could see a ruined castle (31) on a hill. We stayed (32) until three o'clock, when we reluctantly left, and started walking (33) down the hill (34) towards the station.

***Task 7**

Temple was all ready to make his escape. He had lain there quietly (1) in his sleeping bag pretending to be asleep until the guard went (2) past the room and (3) down the stairs to the bottom floor. Now Temple crawled (4) out of bed and (5) across the room to the other side, his heart thumping (6) in his chest. His clothes were (7) on a chair standing (8) by the window and the locked door. He pulled his trousers on (9) over his pyjamas and slipped the small tube of explosive (10) in his right pocket. Using a bottle top as a screwdriver, Temple took a large metal ventilation grill (11) off the wall. Then he tied one end of a rope made of pieces of sheet (12) to the bed and the other end (13) around his waist and climbed (14) into the hole (15) of the ventilation shaft. Gradually he lowered himself (16) in the narrow shaft. (17) With the dim light he could see (18) to the bottom of the shaft. When he finally arrived (19) at the bottom he put his shoulders (20) against the metal grill and pushed with all his strength. Then he was (21) in the boiler room. (22) Next to the door, on the other side of the room, was the large boiler, and (23) beside it, just half a metre to the left, was the iron door that led (24) to the coal shed ... and freedom. It was bolted from the outside. Temple put the tube of explosive carefully just (25) above the handle, about two centimetres higher. Then he pushed the detonator carefully (26) into the soft plastic, and, holding the wires (27) in his hand, he lay (28) down the floor (29) behind a thick metal partition. He pressed the wires to a small battery and there was a deafening explosion. Immediately Temple rushed (30) though the dust and smoke (31) to the door. Thank God: it had a large hole (32) in it. He climbed (33) through it and ran (34) to the

lights on the other side of the valley as fast as he could. He was free at last... or was he?

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