

2 Types of computers, characteristics to consider, verbs

Topic

Various types of computers and characteristics to consider when you want to buy a new computer

Learning objectives

Students will be able:

- to define various types of computers and explain differences between them and their use
- to learn how to enquire about computers in a shop
- to understand the technical specs of different computers
- to select the most suitable computers for particular users
- to use basic vocabulary frequently occurring in IT texts

Key words

mainframe, desktop PC, laptop, notebook, tablet PC, PDA = Personal Digital Assistant, USB = A Universal Serial Bus, USB port, bus

process, store,

Types of Computers

A computer is an electronic machine that accepts, processes, stores and outputs information. There are various types of computers from the largest ones called the mainframes to a computer which can be held in one's palm. The size of computers is being reduced all the time.

A Mainframe

A mainframe is the most powerful type of computer. It can process and store large amounts of data. It supports multiple users and more simultaneous processes at the same time. The central system is a large server which provides information and computing facilities for hundreds of terminals connected together in a network.

Mainframes are used for large-scale computing purposes in banks, big companies, universities, etc.

A Desktop PC

A desktop PC has its own processing unit (CPU), a monitor and a keyboard. It is designed to be placed on a desk. It is used as a personal computer at home or as a workstation for group work.

A Laptop

A laptop is a portable computer that has a flat LCD screen and uses batteries for mobile use. Small laptops are also called **notebooks**. It can work as fast as a desktop PC, with similar processors, memory capacity. Instead a mouse they have a touchpad built into the keyboard. They offer a lot of connectivity options: USB ports, slots for memory cards, etc.

A Tablet PC

A tablet PC is a type of notebook computer that has an LCD screen on which you can write with a stylus or a digital pen. You can fold and rotate the screen easily. Your handwriting can be recognized and converted into editable text. You can also type at the detached keyboard or use speech recognition.

A PDA

A personal digital assistant (PDA) is a tiny computer which can be held in one hand. The term PDA refers to a variety of handheld devices including palmtops, and pocket PCs. For input, you type at a small keyboard or use a stylus – a special pen used with a touch screen. PDAs can be used as mobile phones, personal organizers or media players. They also let you access the internet via Wi-Fi networks, and some include a GPS navigation system.

Buying a computer

The basic characteristics:

- **Processor type**
- **Processor speed** measured in GHz
- **Bus speed**
- **Memory capacity** measured in GB
- **Memory speed**
- **Hard drive capacity** measured in GB
- **Screen size** measured in inches (``)
- **Screen resolution**
- **Components**
- **Connectivity options**
- **Operating system**
- **Price**

Vocabulary

	Definition	Translation
bus	an electrical channel which carries signals between units inside the computer	sběrnice
desktop PC	a computer designed to be placed on a desk, used as a home computer or as a workstation for group work	stolní počítač
laptop	a portable computer	laptop, přenosný počítač
mainframe	the largest and most powerful type of computer, used to process enormous amounts of data	střediskový počítač
notebook	a light portable computer that is generally thinner than a laptop	notebook, přenosný počítač
PDA = Personal Digital Assistant	a tiny computer which can be held in one hand	
tablet PC	a type of notebook computers that has an LCD screen on which you can write with a stylus or a digital pen.	
USB = A Universal Serial Bus	a hardware interface that allows peripheral devices to be easily connected to a computer	univerzální externí sběrnice
USB port	a USB socket on a computer device into which you can plug a USB cable	konektor USB

Summary

A computer is an electronic machine that accepts, processes, stores and outputs information. There are various types of computers from the largest ones called the mainframes, then desktop PCs, laptops, tablet PCs to a computer which can be held in one's palm, generally called PDAs.

Tasks

1. Look at the computer advertisement and answer the following questions:

1. What type of computer is advertised?
2. What type of processor does it have?
3. What is the processor speed?
4. What is the memory capacity?
5. What kind of screen does it have?
6. What size of screen does it have?
7. Which pointing device replaces the mouse?
8. What sort of power supply does it have?
9. What components does it have?
10. What is the weight?

A. Acer aspire 5530G



Genuine Windows® 7 Home Premium
15.6" 16:9 HD LCD (720p - 1366x768)
Intel® Core™ i5-460M processor (2.53GHz - 3MB L3 cache) - 4 GB
500 GB HDD
Blu-ray Disc™/Super-Multi DL combo drive
ATI Mobility Radeon™ HD 5650
Bluetooth® 3.0+HS
4 USB 2.0
1.3 megapixel webcam
8-cell Li-ion battery
3.3 kg
Part Number LX.PWG02.039

B. AS5745-5453G32MNKS



Genuine Windows® 7 Home Premium - 15.6" 16:9 HD LCD (720p - 1366x768) - Intel® Core™ i5-450M processor (2.4GHz - 3MB L3 cache) - 3 GB - 320 GB HDD - DVD-Super Multi DL drive - UMA - 4 USB - 1.3 megapixel webcam - 6-cell Li-ion battery - 2.6kg
Part Number LX.PTW02.051

2. Roleplay

Work in pairs. Imagine the following situation. One of you is a shop assistant and the other wants to buy a computer. Enact the conversation, follow the stages below.

Shop assistant		Customer
Greet the customer and offer help	→	Explain what you are looking for
Show the customer two possible models.	→	Ask for some technical specs .
Give technical specifications, compare the two models	→	Ask about two other technical specs .
Give the information required	→	Ask about the price.
Answer and give any more details to persuade the customer.	→	Decide which computer to buy.
Ask about the form of payment.	→	Answer. Pay.
Thank, say goodbye.	→	Thank, say goodbye.

Useful phrases in a computer shop

Asking for technical specifications:

- *What is the storage capacity of the hard drive?*
- *Does it have a DVD drive?*
- *Which of the computers has more memory?*
- *What about the operating system?*

Giving technical specifications:

- *The ... has a processor running at gigahertz*
- *The... have ... gigabytes of RAM (expandable to... GB*
- *The... is a desktop computer with an Intel Core 2 Duo Processor operating at ... gigahertz*
- *The ... is suitable for...*
- *The ... has a storage capacity of ... Gb*
- *The... comes with the latest version of ... that includes ...*

3. Writing 1: Recommending a computer

A friend has asked you to recommend a computer that suits his needs. He needs to be able to access the Internet, play games and work with graphics, music and video files. Write an email describing its technical features and saying why you recommend it.

4. Writing 2: A magazine article

Write a short article to a magazine in which you give advice to a person who wants to buy a new computer.

Start with: "The first question you have to ask yourself is what you will use the computer for. Then you can decide what computer will fit your needs by considering the following factors:"

- The quality you need and the price you are willing to pay
- Three basic features make a big difference: the CPU speed, the RAM capacity and the size of the hard drive. To run highly demanding applications you will need a fast processor, a spacious disk and RAM.
- If you already have peripherals and software, you will have to ensure they are compatible
- Ensure if the computer is expandable, i.e. it should allow you to add on new peripherals
- Finally make sure that the system is reliable, check that you will receive the warranty and good technical support.

Questions

1. What types of computers do you know?
2. What is a mainframe?
3. What is a desktop computer?
4. What is a laptop?
5. What is a tablet PC?
6. What is a tablet PDA?
7. What characteristics should you consider when you are buying a new computer?

Literatura

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