

МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РФ  
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ  
БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ  
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«ВОРОНЕЖСКИЙ ГОСУДАРСТВЕННЫЙ  
УНИВЕРСИТЕТ»

## **THE DIGITAL AGE**

Учебно-методическое пособие для вузов

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## Unit1

### Living with computers

**1a. Make a list of the ways you and your family use computers at work and in your free time.**

**1b. Swap opinions with your group mates.**

**2a. Read the text. Which computer uses didn't you mention in 1b?**


#### The digital age


We are now living in what some people call *the digital age*, meaning that computers have become an essential part of our lives. Young people who have grown up with PCs and mobile phones are often called *the digital generation*. Computers help students to **perform** mathematical **operations** and improve their maths skills. They are used to **access the Internet**, to **do** basic **research** and to communicate with other students around the world. Teachers use projectors and interactive whiteboards to **give presentations** and teach sciences, history or language courses. PCs are also used for administrative purposes – schools use word processors to **write letters**, and databases to **keep records** of students and teachers. A school website allows teachers to publish **exercises** for students to **complete** online. Students can also enroll for courses via the website and parents can download official reports.


Mobiles let you **make** voice **calls**, **send texts**, email people and download logos, ringtones or games. With a built-in camera you can send pictures and make video calls in *face-to-face* mode. New smartphones combine a telephone with web access, video, a games console, an MP3 player, a personal digital assistant (PDA) and a GPS navigation system, all in one. In banks, computers **store information** about the money held by each customer and enable staff to **access** large **databases** and to **carry out** financial transactions at high speed. They also control the cashpoints, or ATMs (automatic teller machines), which **dispense money** to customers by the use of a PIN-protected card. People use a Chip and Pin card to pay for goods and services. Instead of using a signature to verify

3. a large computer used for intensive data processing and often linked to many terminals
4. a small computer that fits into items of clothing
5. a portable computer that can be closed up like a briefcase, but it can be as powerful as a desktop PC
6. a full-function PC, though it only weighs 1.2 kg – you can go to a meeting and write your notes on it, like a paper notepad; its screen mode can be from portrait to landscape

### From mainframes to wearable computers

A **mainframe**  is the most powerful type of computer. It can process and store large amounts of data. It supports multiple users at the same time and can support more simultaneous processes than a PC. The central system is a large server connected to hundreds of terminals over a network. Mainframes are used for large-scale computing purposes in banks, big companies and universities.

A **desktop PC**  has its own processing unit (or CPU), monitor and keyboard. It is used as a personal computer in the home or as a workstation for group work. Typical examples are the IBM PC and the Apple Macintosh. It's designed to be placed on your desk. Some models have a vertical case called a tower.

A **laptop** (also  called a **notebook PC**) is a lightweight computer that you can transport easily. It can work as fast as a desktop PC, with similar processors, memory capacity, and disk drives, but it is portable and has a smaller screen. Modern notebooks have a **TFT** (Thin Film Transistor) **screen** that produces very sharp images. Instead of a mouse, they have a **touchpad** built into the keyboard – a sensitive pad that you can touch to move the pointer on the screen. They offer a lot of connectivity options: **USB** (Universal Serial Bus) **ports** for connecting peripherals, slots for memory cards, etc. They come with **battery packs**, which let you use the computer when there are no electrical outlets available.

A **tablet PC** which you can write and rotate the screen



looks like a book, with an LCD screen on using a special digital pen. You can fold 180 degrees. Your handwriting can be recognized and converted into editable text. You can also type at the detached keyboard or use voice recognition. It's mobile and versatile.

A **personal digital assistant** or **PDA** is a tiny computer which can be held in one hand. The term **handheld** devices, palmtops small keyboard or use



PDA refers to a wide variety of **hand-** and pocket PCs. For input, you type at a **stylus** – a special pen used with a **touch**

**screen** to select items, draw pictures, etc. Some models incorporate **handwriting recognition**, which enables a PDA to recognize characters written by hand. Some PDAs recognize spoken words by using **voice recognition** software. They can be used as mobile phones or as personal organizers for storing notes, reminders and addresses. They also let you access the Internet via **wireless** technology, without cables.

A **wearable computer** runs on batteries and is worn on the user's body, e.g. for mobile or hands-with a wireless mod-



**computer** runs on batteries and is worn on on a belt, backpack or vest; it is designed free operation. Some devices are equipped em, a small keyboard and a screen; others

## 2. Look at the computer advertisement and find this information.

1. What type of computer is advertised?
2. What kind of screen does it have?
3. Which pointing device replaces the mouse?
4. What type of ports does it have for connecting cameras and music players?
5. What sort of power supply does it use?

### ***Toshiba Satellite***

- *Intel Centrino processor*
- *1,024 MB RAM, 100 GB hard disk drive*
- *DVD SuperMulti (+/- R double layer) drive*
- *15.4" widescreen TFT active-matrix LCD display*
  - *85-key keyboard and touchpad*
- *2 memory slots, 1 PC Cards or PCMCIA slot*
- *Wireless communications: Wi-Fi compliancy and Bluetooth*
- *4 USB ports for connecting peripherals: digital camera, MP3 player, modem, etc.*
- *6-cell rechargeable Lithium-ion battery pack*

**3. Read this interview with Adam Hawkins, an IT manager, and complete it with words from the PDA section of the text above.**

**Interviewer:** What are the basic features of a PDA?

**Adam:** Well, a typical PDA is a (1) ..... device that runs on batteries and combines computing, phone and Net capabilities.

**Interviewer:** And how do you enter information?

**Adam:** For input, you use a (2) ..... or pen to write and make selections on a (3) ..... They also have buttons for launching programs. Some models have a small keyboard. They may have a (4) ..... system that reacts to the user's voice.

**Interviewer:** Do they need special software?

**Adam:** Yes, most of them run on *Windows Mobile*. Palmtops supported by Palm Inc. use *Palm OS*. Pen-based systems include (5) ....., so you write on the screen and the computer recognizes your handwriting and inserts the appropriate letters.

**Interviewer:** What sort of things can you do with a PDA?

**Adam:** You can store personal information, take notes, draw diagrams and make calculations. Many PDAs can access the Net via (6).....technology.

**4. In pairs, discuss the following questions.**

1. How can laptops be beneficial to business people?
2. How can tablet PCs be used in the classroom?