

English for

Information Technology

and Telecommunications



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1 Computer architecture

Vocabulary: Types of computers. Peripherals
Reading: How computers work

Grammar: Revision of the present tense
Listening: Characteristics of a computer

Speaking: Buying and selling a computer
Writing: A for and against essay

Vocabulary

Types of computers



a



b



c



f



g



Work in pairs. Ask your partner the following questions:

- Have you got a computer at home, school or work?
- What type is it?
- What do you use it for?



d



e



h

1 Label the pictures with the correct names of types of computers. Can you add more to the list?

mainframe - laptop - desktop computer -
 smartphone - tablet PC - workstation -
 supercomputer - wearable computer

2 Complete the table with the missing information. There may be more than one correct answer.

USER	TYPE OF COMPUTER	USE
		Keep in touch with his office, receive calls, send orders and budgets.
Graphic artist		
		Perform highly-detailed climate calculations.
Student	Desktop PC	
		Host large databases of customer accounts which can be easily accessed by any ATM nationally or worldwide.

3 Read the following statements. What kind of computer does each one refer to? Write down the names.

- a) It is the fastest computer in the world performing complex mathematical calculations.
- b) It is for individual use but it is faster and more capable than a personal computer.
- c) It is intended for home or recreational use and it is not portable.
- d) It combines a cell phone with a hand-held computer, typically offering Internet access, data storage, e-mail capability, etc.
- e) It is worn by a user, including clothing, watches, glasses, shoes and similar items.
- f) It is a hybrid between a personal digital assistant and a notebook PC.
- g) It is portable but it doesn't fit into the palm of your hand.
- h) It can handle thousands of connected users simultaneously and can store large amounts of data.

Peripherals

4 Write down the names of the peripherals that you can see in the picture. Classify them into input, output and storage devices.



5 Read these comments posted on an online computer shop. Complete the sentences with the correct names of the peripherals.

- a) If you've always wanted an inkjet _____ with stylish good looks, I strongly recommend the HP 120 All-in-One.
- b) Buying the 550 _____ is a simple way to improve the way you video chat with your loved ones.
- c) You can choose the wired Z4000 _____ with customizable keys, and an integrated palm rest or the wireless Z7000 model with LED battery life indicator, and an ergonomic laser mouse.
- d) The 24-inch Dell UltraSharp _____ is perfect for gamers because of its crisp display, built-in speakers and headphone jack.
- e) With its ergonomic design and compatibility with Windows and Mac alike, the H400 Touch _____ is a versatile choice both for left- and right-handed users regardless of which operating system they use.
- f) The Bluewire 720 _____ is the perfect solution for making VoIP or Bluetooth calls with your PC or mobile phone in an office.
- g) If you are looking for an affordable PC _____ plus subwoofer system, the DH-Micro 5.1 won't disappoint you. It delivers outstanding sound quality for such a compact package.

6 Match the adjectives in column A to the nouns in column B.

A	B
Crisp	Printer
Inkjet	Speakers
Ergonomic	Mouse
Built-in	Display

7 Choose four peripherals that you have got at home and write a comment about each of them.



1 Read the following text.

HOW COMPUTERS WORK: THE MOTHERBOARD AND THE CPU

THE MOTHERBOARD

- 1 The motherboard is a circuit board that allows the CPU, RAM and other computer hardware components to communicate with each other.
- The front of the motherboard contains ports which all the internal components are connected to either directly or via cables. A single socket houses the CPU and multiple slots allow for one or more memory modules to be attached.
- 5 Other ports allow the hard drive and optical drive to connect, and the power, reset and LED lights to function.
- Also on the front of the motherboard are several peripheral card slots. These slots are where most sound cards and video cards are connected to the motherboard. They are also used to install expansion cards adding features like sound memory and network capabilities.
- 10 On the left side of the motherboard, there are other ports which allow most of the computer's external peripherals such as the monitor, keyboard, mouse, speakers or network cable to connect. Most motherboards also include USB and FireWire ports that allow compatible devices like digital cameras to connect to your computer.

THE CPU

- 15 The Central Processing Unit, also called the CPU or processor, is the brain of the computer. It is generally a 2-inch ceramic square with a silicon chip whose job is to carry out commands and coordinate the activities that take place within the computer system. Whenever you press a key, click the mouse, or start an application, you are sending instructions to the CPU.
- The CPU is attached to a CPU socket on the motherboard, which is covered by the heat sink and a fan in order to absorb the heat from the CPU.
- 20 The processor consists of two main parts: the control unit (CU) and the arithmetic logic unit (ALU). The control unit causes the circuits and the rest of the components of the computer to execute stored program instructions. The arithmetic logic unit performs mathematical calculations (addition, subtraction, multiplication and division) and logical operations, which can test for three conditions: equal to (=), less than (<), and greater than (>).
- 25 The power and performance of a computer is partly determined by the speed of its processor. A system clock sends out signals to measure and synchronise the flow of data. Clock speed is measured in megahertz (MHz), or millions of instructions per second, and gigahertz (GHz), or billions of instructions per second.
- 30 A faster processor can execute instructions more quickly.



Reading comprehension

- 2 Answer the following questions according to the information in the text. Use your own words.
- What are peripheral card slots used for?
 - What is the CPU of a computer?
 - What are the two major components of a CPU?

1 Read the following text.

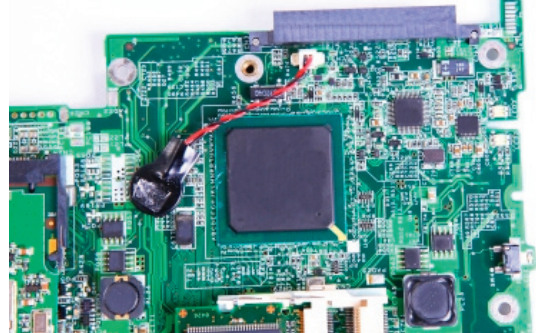
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