**30.03.24**

**Иностранный язык**

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**Тема:** Свойствa цифровых компьютеров. Косвеннaя речь.

**Тип занятия:** Практическое занятие.

**Основные вопросы:**

1.Читать и переводить текст.

2.Выполнить упрaжнения (письменно).

"Digital computers"

There are two fundamentally different types of computers: analog and digital. The former type solver problems by using continuously changing data such as voltage. In current usage, the term "computer" usually refers to high-speed digital computers. These computers are playing an increasing role in all branches of the economy.

Digital computers based on manipulating discrete binary digits (1s and 0s). They are generally more effective than analog computers for four principal reasons: they are faster; they are not so susceptible to signal interference; they can transfer huge data bases more accurately; and their coded binary data are easier to store and retrieve than the analog signals.

For all their apparent complexity, digital computers are considered to be simple machines. Digital computers are able to recognize only two states in each of its millions of switches, "on" or "off", or high voltage or low voltage. By assigning binary numbers to there states, 1 for "on" and 0 for "off", and linking many switches together, a computer can represent any type of data from numbers to letters and musical notes. It is this process of recognizing signals that is known as digitization. The real power of a computer depends on the speed with which it checks switches per second. The more switches a computer checks in each cycle, the more data it can recognize at one time and the faster it can operate, each switch being called a binary digit or bit.

A digital computer is a complex system of four functionally different elements: 1) the central processing unit (CPU), 2) input devices, 3) memory-storage devices called disk drives, 4) output devices. These physical parts and all their physical components are called hardware.

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The power of computers greatly on the characteristics of memory-storage devices. Most digital computers store data both internally, in what is called main memory, and externally, on auxiliary storage units. As a computer processes data and instructions, it temporarily stores information internally on special memory microchips. Auxiliary storage units supplement the main memory when programmes are too large and they also offer a more reliable method for storing data. There exist different kinds of auxiliary storage devices, removable magnetic disks being the most widely used. They can store up to 100 megabytes of data on one disk, a byte being known as the basic unit of data storage.

Output devices let the user see the results of the computer's data processing. Being the most commonly used output device, the monitor accepts video signals from a computer and shows different kinds of information such as text, formulas and graphics on its screen. With the help of various printers information stored in one of the computer's memory systems can be easily printed on paper in a desired number of copies.

Programmes, also called software, are detailed sequences of instructions that direct the computer hardware to perform useful operations. Due to a computer's operating system hardware and software systems can work simultaneously. An operating system consists of a number of programmes coordinating operations, translating the data from different input and output devices, regulating data storage in memory, transferring tasks to different processors, and providing functions that help programmers to write software. In large corporations software is often written by groups of experienced programmers, each person focusing on a specific aspect of the total project. For this reason, scientific and industrial software sometimes costs much more than do the computers on which the programmes run.

Ex.1

По плaну перескaжите текст.

* Digital computer
* Types of digital computer
* Examples of digital computers
* Advantages & disadvantages of digital computers
* Features & classification of digital computers
* Use, and evolution of digital computers

Ex.2

* [What is a Digital Computer?](https://www.classmate4u.com/digital-computer/#What_is_a_Digital_Computer)
* [Components of Digital Computer](https://www.classmate4u.com/digital-computer/#Components_of_Digital_Computer)
* [Types of Digital Computer](https://www.classmate4u.com/digital-computer/#Types_of_Digital_Computer)
* [Examples of Digital Computer](https://www.classmate4u.com/digital-computer/#Examples_of_Digital_Computer)
* [Classification of Computers](https://www.classmate4u.com/digital-computer/#Classification_of_Computers)
* [Advantages and Disadvantages of Digital Computer](https://www.classmate4u.com/digital-computer/#Advantages_and_Disadvantages_of_Digital_Computer)
* [Advantages and Disadvantages of Analog Computers](https://www.classmate4u.com/digital-computer/#Advantages_and_Disadvantages_of_Analog_Computers)
* [Characteristics of Digital Computer](https://www.classmate4u.com/digital-computer/#Characteristics_of_Digital_Computer)
* [Uses of Digital Computers](https://www.classmate4u.com/digital-computer/#Uses_of_Digital_Computers)
* [Evolution of Digital computer](https://www.classmate4u.com/digital-computer/#Evolution_of_Digital_computer)
* [What is the Difference between Digital Systems and Digital Computer?](https://www.classmate4u.com/digital-computer/#What_is_the_Difference_between_Digital_Systems_and_Digital_Computer)
* [Who invented the First Electronic Digital Computer?](https://www.classmate4u.com/digital-computer/#Who_invented_the_First_Electronic_Digital_Computer)