Тема занятия: «Этапы создания компьютеров»

Цель занятия: выучить новый лексический материал по теме «Этапы создания компьютеров»; совершенствовать навыки чтения и перевода текста профессионального направления; систематизировать знания, ответив на контрольные вопросы по теме занятия.

Уважаемые студенты! Ознакомьтесь с материалами лекционного занятия на тему «Этапы создания компьютеров». Конспект занятия выполняйте **в рабочей тетради письменно**, **обязательно указывая дату занятия, тему занятия, номер упражнения.** Ответы предоставить преподавателю на проверку **до 24. 03. 2023 г.** в электронном виде **(фотоотчёт)** на e-mail mikagol2605@mail.ru. Телефон преподавателя для консультации и возникающих вопросов: 072-14-15-816.

С уважением, Голодюк Марина Викторовна.

1. **Запишите новую лексику в словарь, выучите новую лексику.**
2. **Прочитайте и устно переведите текст «Steps in the Developing of Computers».**
3. **Подготовьте презентацию на тему «Этапы создания компьютеров».**

Steps in the Developing of Computers

Vocabulary:

the possibility – возможность

vacuum tube – электронная (вакуумная) трубка (лампа)

reliable – надежный

crystallic solid material – кристаллический прочный материал

semiconductor – полупроводник

resistor – резистор

inductor – индуктор

capacitor – конденсатор

elimination – устранение, отмена

hardware – аппаратное обеспечение

software – программное обеспечение

In 1948 due to the invention of transistors there appeared **the possibility** to replace **vacuum tubes**. The transistor occupied an important place on the way to computer development. The potential advantage of the transistor over the vacuum tube was almost as great as that of the vacuum tube over the relay. A transistor can switch flows of electricity as fast as the vacuum tubes used in computers, but the transistors use much less power than equivalent vacuum tubes, and are considerably smaller. Transistors are less expensive and more **reliable**. They were mechanically rugged, had practically unlimited life and could do some jobs better than electronic tubes. Transistors were made of **crystallic solid material** called **semiconductor**.

With the transistor came the possibility of building computers with much greater complexity and speed.

The integrated circuit constituted another major step in the development of computer technology. Until 1959 the fundamental logical components of digital computers were the individual electrical switches, first in the form of relays, then vacuum tubes, then transistors. In the vacuum tubes and relay stages, additional discrete components, such as **resistors, inductors and capacitors** were required in order to make the whole system work. These components were generally each about the same size as packaged transistors. Integrated circuit technology permitted the **elimination** of some of these components and integration of most of the others on the same chip of semiconductor that contains the transistor. Thus the basic logic element — the switch, or "flip-flop', which required two separate transistors and some resistors and capacitors in the early 1950s, could be packaged into a single small unit in 1960. The chip was an important achievement in the accelerating step of computer technology.

In 1974 a company in New Mexico, called Micro Instrumentation Telemetry System (MITS) developed the Altair 8800, a personal computer (PC) in a kit. The Altair had no keyboard, but a panel of switches with which to enter the information.

Its capacity was less than one per cent that of the 1991 Hewlett-Packard handheld computer. But the Altair led to a revolution in computer electronics that continues today. **Hardware** manufacturers soon introduced personal computers, and **software** manufacturers began developing software to allow the computers to process words, manipulate data, and draw. During the 1980s computers became progressively smaller, better and cheaper.

Today the personal computer can serve as a work station for the individual. A wide array of computer functions is now accessible to people with no technical background.

Подготовьте презентацию на тему «Этапы создания компьютеров»