Тема занятия: «Первые компьютеры»

Цель занятия: выучить новый лексический материал по теме «Первые компьютеры»; совершенствовать навыки чтения и перевода текста профессионального направления; систематизировать знания, выполнив задания по теме занятия.

Уважаемые студенты! Ознакомьтесь с материалами практического занятия на тему «Первые компьютеры». Конспект практического занятия выполняйте **в рабочей тетради письменно**, **обязательно указывая дату занятия, тему занятия, номер упражнения.** Ответы предоставить преподавателю на проверку **до 17. 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 «The first computers».**
3. **Дайте письменно ответы на вопросы к тексту.**

The first computers.

Vocabulary:

analog computer — аналоговый компьютер

digital computer — цифровой компьютер

to aim guns — наводить орудия на цель

to figure out — вычислять

at a fast rate — с высокой скоростью

memory / storage — запоминающее устройство

to store data and instructions — запоминать информацию и команды

stored program computer — компьютер с занесенной в память программой

binary code — двоичный код

condition — режим, состояние, условие

vacuum tube — электронная (вакуумная) трубка (лампа)

to amplify — усиливать

to perform computations — выполнять вычисления

In 1930 the first **analog computer** was built by American named Vannevar Bush. This device was used in World War II to help **aim guns**. Many technical developments of electronic **digital computers** took place in the 1940s and 1950s. Mark I, the name given to the first digital computer, was completed in 1944. The man responsible for this invention was Professor Howard Aiken. This was the first machine that could **figure out** long lists of mathematical problems **at a very fast rate.**

In 1946 two engineers at the University of Pennsylvania, J. Eckert and J. Maushly, built their digital computer with **vacuum tubes**. They named their new invention ENIAC (the Electronic Numerical Integrator and Calculator).

Another important achievement in developing computers came in 1947, when John von Neumann developed the idea of keeping instructions for the computer inside the computer's **memory**. The contribution of John von Neumann was particularly significant. As contrasted with Babbage's analytical engine, which was designed to store only data, von Neumann's machine, called the Electronic Discrete Variable Computer, or EDVAC, was able **to store both data and instructions.** He also contributed to the idea of storing data and instructions in a **binary code** that uses only ones and zeros. This simplified computer design. Thus computers use two **conditions**, high voltage, and low voltage, to translate the symbols by which we communicate into unique combinations of electrical pulses. We refer to these combinations as codes.

Neumann's **stored program computer** as well as other machines of that time was made possible by the invention of the vacuum tube that could control and **amplify** electronic signals. Early computers, using vacuum tubes, could **perform computations** in thousandths of seconds, called milliseconds, instead of seconds required by mechanical devices.

Дайте письменно ответы на вопросы.

Answer the questions:

1. When was the first analog computer built?
2. Where and how was that computer used?
3. When did the first digital computers appear?
4. Who was the inventor of the first digital computer?
5. What could that device do?
6. What is ENIAC? Decode the word.
7. What was J. Neumann's contribution into the development of computers?
8. What were the advantages of EDVAC in comparison with ENIAC?
9. What does binary code mean?
10. Due to what invention could the first digital computers be built?