

**Переведите текст и ответьте на вопросы на английском языке. Обратите внимание на новые слова и выражения. Для контроля ваших работ, вышлите их по адресу электронной почты [english.tech.121@mail.ru](mailto:english.tech.121@mail.ru).**

***Задание рассчитано на 2 пары!***

*Study new words and word-combinations.*

calculating device— вычислительное устройство;

multiple — кратный;

abacus — счеты;

slide rule — логарифмическая линейка;

logarithm table— логарифмическая таблица;

calculus— исчисление, математический анализ;

general-purpose — общего назначения, универсальный;

to cut out the human being altogether- полностью исключить человека;

to manipulate — обрабатывать, преобразовывать, управлять;

data processing — обработка данных (информации);

tabulate the census — занести данные по переписи (населения) в таблицу;

means of coding — средства кодирования (шифровки);

to punch the holes — пробивать отверстия;

punched card — перфокарта;

to perform — выполнять, производить (действие), осуществлять;

unit of data — единица информации;

keyboard terminals — терминал (вывод) с клавишным управлением;

proliferation — размножение, быстрое увеличение.

## **HISTORY OF COMPUTERS**

### **THE FIRST CALCULATING DEVICES**

Let us take a look at the history of computers that we know today. The very first calculating device used was the ten fingers of a man's hands. This, in fact, is why today we still count in tens and multiples of tens.

Then the abacus was invented. People went on using some form of abacus well into the 16th century, and it is still being used in some parts of the world because it can be understood without knowing how to read. During the 17th and 18th centuries many people tried to find easy ways of calculating. J. Napier, a Scotsman, invented a mechanical way of multiplying and dividing, which is now the modern slide rule works. Henry Briggs used Napier's ideas to produce logarithm tables which all mathematicians use today. Calculus, another branch of mathematics, was independently invented by both Sir Isaac Newton, an Englishman, and Leibnitz, a German mathematician. The first real calculating machine appeared in 1820 as the result of several people's experiments.

Charles Babbage, a gifted English mathematician, proposed to build a general-purpose problem-solving machine that he called "the analytical engine". This machine, which Babbage showed at the Paris Exhibition in 1855, was an attempt to cut out the human being altogether, except for providing the machine with the necessary facts about the problem to be solved. He never finished this work, but many of his ideas were the basis for building today's computers.

By the early part of the twentieth century electromechanical machines had been developed and were used for business data processing. Dr. Herman Hollerith, a young statistician from the US Census Bureau successfully tabulated the 1890 census. Hollerith invented a means of coding the data by punching holes into cards. He built one machine to punch the holes and others — to tabulate the collected data. Later Hollerith left the Census Bureau and established his own tabulating machine company. Through a series of merges the company eventually became the IBM Corporation.

Until the middle of the twentieth century machines designed to manipulate punched card data were widely used for business data processing. These early electromechanical data processors were called unit record machines because each punched card contained a unit of data.

In the mid—1940s electronic computers were developed to perform calculations for military and scientific purposes. By the end of the 1960s commercial models of these computers were widely used for both scientific computation and business data processing. Initially these computers accepted their input data from punched cards. By the late 1970s punched cards had been almost universally replaced by keyboard terminals. Since that time advances in science have led to the proliferation of computers throughout our society, and the past is but the prologue that gives us a glimpse of the future.

### **Answer the questions to the text.**

1. What was the very first calculating device?
2. What is the abacus?
3. What is the modern slide rule?
4. How did Newton and Leibnitz contribute to the problem of calculation?
5. When did the first calculating machine appear?