- 1. to count in tens and multiples of tens считать десятками и кратными десяткам
- 2. without knowing how to read не зная, как читать
- 3. calculus исчисление
- 4. to save a great deal of time экономить много времени
- 5. to cut out the human being altogether исключить человеческое существование в целом
- 6. advancement развитие
- 7. to perform thousands of calculations per second выполнение тысяч вычислений в секунду
- 8. extra speed дополнительная скорость
- 9. tiny integrated circuits крошечные встроенные схемы
- 10. approximately приблизительно

Task 3

- 1. изобретать счеты invent abacus
- 2. продолжать использовать went on using
- 3. механический способ умножения и деления mechanical way of multiplying and dividing
- 4. уменьшать вероятность ошибок reduces the possibility of making mistakes
- 5. вычислять длинные списки математических задач could figure out long lists of mathematical problems
- 6. хранить инструкции для компьютера внутри компьютерной памяти keeping instructions for the computer inside the computer's memory
- 7. предшественник predecessor
- 8. более надежный more dependable
- 9. прямоугольный кусочек кремния rectangular piece of silicon
- 10. устарелый obsoleted

Task 4

- 1. I agree (he 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.)
- 2. I disagree (During the 17th and 18th centuries many people tried to find easy ways of calculating. J. Napier, a Scotsman, devised a mechanical way of multiplying and dividing, which is how the modern slide rule works.)
- 3. I disagree (The first real calculating machine appeared in 1820 as the result of several people's experiments.)
- 4. I agree (He never finished his work, but many of his ideas were the basis for building today's computers.)
- 5. I agree (In 1930, the first analog computer was built by an American named Vannevar Bush.)
- 6. I disagree (Another important advancement in computers came in 1947, when John von Newman developed the idea of keeping instructions for the computer inside the computer's memory)
- 7. I disagree (The reason of this extra speed was the use of transistors instead of vacuum tubes.)

- 8. I agree (The second generation computers were smaller, faster and more dependable than first generation computers.)
- 9. I agree (Unlike the second generation computers, these are controlled by tiny integrated circuits and are consequently smaller and more dependable.)
- 10. I disagree (At the rate computer technology is growing, today's computers might be obsolete tomorrow.)

- 1. 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.
- 2. Then the abacus was invented, a bead frame in which beads are moved from left to right. People went on using abacus till the 16th century and they sometimes use it now because it can be understood without knowing how to read.
- 3. Mechanical calculation is where human intervention is needed.
- 4. This type of machine, which saves a great deal of time and reduces the possibility of making mistakes, depends on a series of ten-toothed gear wheels.
- 5. In 1830 Charles Babbage, an Englishman, designed a machine that was called "The Analytical Engine". This machine, which Babbage showed at the Paris.
- 6. This device was used in World War II.
- 7. In 1930
- 8. In 1947, when John von Newman developed the idea of keeping instructions for the computer inside the computer's memory.

9.

- a. The first generation computers, which used vacuum tubes
- b. The second generation of computers was developed and these could perform work ten times faster then their predecessors. The reason of this extra speed was the use of transistors instead of vacuum tubes.
- c. The third generation computers appeared on the market in 1965. These computers could do a million calculations a second, which is 1000 times as many as the first generation computers. Unlike the second generation computers, these are controlled by tiny integrated circuits and are consequently smaller and more dependable.
- d. The fourth generation computers integrated circuits have been greatly reduced in size. This is due to microminiaturization, which means that the circuits are much smaller than before; as many as 1000 tiny circuits now fit onto a single chip.
- 10. A chip is a square or rectangular piece of silicon, usually from 1/10 to ½ inch, upon which several layers of an integrated circuit are etched or imprinted, after which the circuit is encapsulated in plastic, ceramic or metal.
- 11. At the rate computer technology is growing, today's computers might be obsolete tomorrow.

Synonyms

- 1. Device
- 2. Invented
- 3. Great deal
- 4. Mistakes
- 5. Decided

Antonyms

- 1. Modern
- 2. Many
- 3. Exclude
- 4. Predecessors
- 5. Don't use

Task 7

- 1. e
- 2. i
- 3. d
- 4. h
- 5. c
- 6. g
- 7. f
- 8. j
- 9. a
- 10. b

Task 8

- 1. Today we still count tens and numbers as multiples of ten, because the first computing device was ten fingers of a human hand
- 2. Accounts are very easy to use, you don't even need to be able to count.
- 3. Logarithmic tables are used by all mathematicians.
- 4. The first real computer saved a lot of time and reduced the probability of error.
- 5. Charles Babbage invented the "Analytical Engine" in 1820.
- 6. The first analog computer was used in World War II to guide weapons.
- 7. The first digital computer could calculate long lists of mathematical problems at very high speed.
- 8. The use of transistors instead of vacuum tubes was the reason for the additional speed of second-generation computers.
- 9. The third generation computers were controlled by tiny integrated circuits and were therefore smaller and more reliable than their predecessors.
- 10. In fourth-generation computers, integrated circuits have been greatly reduced in size.
- 11. Computer technology is developing very quickly, and today's computers may become obsolete tomorrow.

- 1. Today we still count in tens and multiples of tens because the very first calculating device used was the ten fingers of a man's hands.
- 2. The slide rule was invented in 1620.
- 3. The first real calculating machine could figure out long lists of mathematical problems, all at a very fast rate..
- 4. This machine was an attempt to cut out the human being altogether.
- 5. This device was used in World War II to help aim guns.
- 6. The first digital computer was called Mark I.
- 7. The first generation computers appeared in 1950.
- 8. In the second generation of computers instead of vacuum tubes were used of transistors.
- 9. Integrated circuits have been greatly reduced in size in the fourth generation computers.

Task 10

In the text, first they talk about the first methods of calculation such as abacus, then they give examples of inventions by people who wanted to speed up this process. The text also tells about the generations of computers and their differences from their predecessors.

Task 11

- 1. The first computing devices
- 2. Finding simple ways to calculate
- 3. The first real calculating machine
- 4. First analog computer
- 5. Generations of computers
 - a. The first generation computers
 - b. The second generation of computers
 - c. The third generation computers
 - d. The fourth generation computers
- 6. Fast development of computers