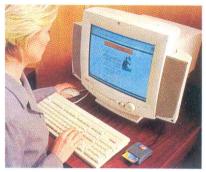
## ELECTRONIC COMMUNICATION



The electronic computer has affected life more than any other invention since the automobile. Although machines for performing mathematical calculations had existed since ancient times, it was not until the 1940s that these machines became electronic rather than mechanical. An important advance was John von Neumann's realisation, in the 1940s, that a computer could store in its memory not only the numbers to be worked on, but also a programme of instructions telling it what calculations to perform. This made computers tremendously more versatile.

In 1971, Intel Corporation introduced the microprocessor, an integrated circuit (IC) containing the entire central processing unit (CPU) of a computer.

The same year, Intel also introduced a computer memory IC, and it became possible to build small, cheap micro-computers.

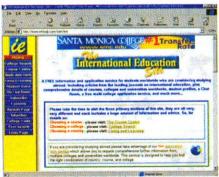
The impact of microprocessors was immense. Computers were suddenly much smaller, cheaper, and easier to use.

This led to new computer applications.

The computers of the 1950s and 1960s had been so large and expensive that they were used only for large computations that could not be done any other way. But the late 1970s saw the advent of the personal computer, a device no larger than a typewriter and only slightly more expensive. Personal computers were used for word processing, simple bookkeeping, video games, and other tasks for which older computers would never have been cost-effective. Microprocessors also provided computerised control functions in other kinds of equipment, such as automobile engines, video tape recorders, "intelligent" thermostats, and even wristwatches.







# ELECTRONIC NETWORKS

The first computer network began 25 years ago as an exclusive for the US Department of Defense. Since then it has grown into a powerful information exchange, the first true incarnation of the global village. It has become such an important datagathering\* and communication source that few can afford to ignore it. National computer networks in 72 countries have "full connections" to the Internet. You can use the mail service of the Net to get linked to 239 countries and territories by the end of the century.

Despite the explosion of the Net across the Globe, Americans make up the majority of users.

The European-Union-sponsored CITED project

is currently developing a framework for the transmission of paid-for electronic publications.

No doubt those who can communicate fastest can influence events. But the Net faces an uncertain future - is it the real world or is it virtual reality? Will it always be possible to separate the two?

## THE EFFECTS OF TECHNOLOGY



Modern technology has had a tremendous effect on the lives of people throughout the world. Inventions such as the automobile influenced where people lived and worked and how they spent their leisure time. Radio and television changed people's entertainment habits and brought them information about world events as they happened while the telephone revolutionised communications. Today, technology has brought goals into reach that few would have dreamed were possible 100 years ago. Humans have the capability to conquer hunger, cure and prevent many diseases, and transport goods and people swiftly and easily all over the world.

Even space travel has become a reality.

Sources: We Americans; ZCl Concise Encyclopedia CD-Rom; Geographical, 1995

#### 1) Find synonyms:

#### a) Electronic communication:

influenced:	rapidly:
cars:	big:
discovery:	rising:
development:	
immensely:	a little:
b) Electronic networks:	c) Effects of technology:
only:	free time:
have money to pay:	
to be in touch:	

#### 2) Underline the verbs in the following sentences or phrases:

- a) The electronic computer has affected life more than any other invention since the automobile.
- b) ...it has grown into a powerful information exchange...
- c) It has become such an important data-gathering...
- d) Modern technology has had a tremendous effect on the lives of people throughout the world.
- e) Today, technology has brought goals into reach that few would have dreamed were possible 100 years ago.
- f) Even space travel has become a reality.

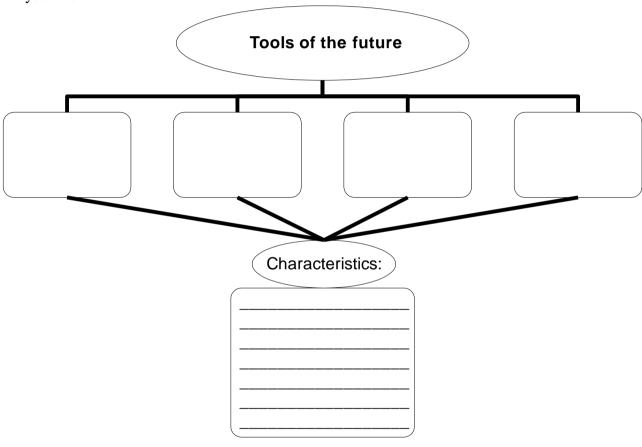
NOTE:

PRESENT PERFECT = Auxiliary (to have in the Present Simple) + Main Verb (Past Participle)

To have  $\rightarrow$  I have; you have; he/she/it <u>has</u>; we have; you have; they have Past Participle  $\rightarrow$  3<sup>rd</sup> form of the verb  $\rightarrow$  ex: to go, went, <u>gone</u>

### Now answer these questions about the text:

- 1. When did mathematical calculating machines become electronic?
- 2. Why was the impact of the micro-computer so great?
- 3. What's a personal computer (PC)?
- 4. What are the main consequences of the explosion in the use of the Net across the Globe?
- 5. How does modern technology change people's lifestyles and habits? Give examples to support your view.



Write a comment about the importance of the Internet for today's working life.		