They changed the world



"I find out what the world needs. Then I go ahead and try to invent it."

The inventions of both Thomas Edison (1847-1931) and Henry Ford (1863-1947) changed the world.

Edison's best-known inventions

1877 The phonograph *(a way of recording sound)*
1879 The electric light bulb
1894 The kinetoscope *(first machine to produce motion pictures)*
1909 The alkaline battery



Henry Ford first met his hero, Edison, in 1897.

BIOGRAPHY

Thomas Edison's brilliant career as an inventor started when he was just a young boy. He had been at school for only three months when his teacher declared that eight-year-old Thomas was "addled" (confused). His mother decided to teach him at home and gave him a science book which described a variety of chemistry experiments. When he had carried out every experiment in the book, he built a science laboratory in the basement, labelling all his bottles "poison".

At the age of 12, young Thomas got his first job, serving newspapers, food and drinks on a train, but, whenever he had a moment, he carried on with his experiments in the baggage compartment. Unfortunately, during one of these experiments, he accidentally set fire to the compartment and he lost his job.

In 1863 he became a telegraph assistant in Canada. His job was to report to Toronto every hour by telegraph. Thomas thought this was a waste of time so he invented a gadget that sent a signal automatically, even if he was asleep! This was his first real invention but his boss found him asleep on the job and he nearly lost his job again!

By the age of twenty-two, Edison had become a full-time inventor. In 1882, only three years after he had invented the light bulb, the first Central Power Station in New York was built to bring electric light to city streets and homes. By 1889 he had formed his company, the "Edison General Electric Company". By 1913 he had combined his "phonograph" and "kinetoscope" to produce the first *talking* "movie".

During his lifetime Edison took out a record number of 1,093 patents, and it is often said that he "invented" the 20th century. At the time of his birth, many scientists had already experimented with electricity, but no one had been able to do anything very useful with it! At his death, his electrical inventions had changed life not only in America but also in all corners of the world. On the day of his funeral, lights were turned down at 10 pm all over the United States in his honour.

LIVEWORKSHEETS

1- Read about Thomas Edison and look at the list of his best-known inventions

What happened when. Match the dates and the ten events

a. He got his first job	1847 :
b. He invented the light bulb	1855 :
c. He made his first invention	1859 :
d. The first Central Power station was built	1863 :
e. He was born	1877 :
f. He made his first talking movie	1879 :
g. He left school	1882 :
h. He died	1909 :
i. He invented the phonograph	1913 :
j. He invented the alkaline battery	1931 :

Decide whether these statements are false or true and say why (fill in the boxes with x)

1- Edison went to school for a few years True False

Justify :

2- By the age of 12 he had already shown an interest in scientific experiments

True False Justify :

3- He lost his job because he didn't work hard enough True False

Justify :

4- By the age of sixteen he had already invented something True False

Justify :

5- He didn't become a full-time inventor until he was quite old True False

Justify :

6- By 1890 it was possible to use electric light in private houses True False

Justify :

7- Before Edisonn no one had invented as many things True False

Justify :

8- Edison was the first to experiment with electricity True False

Justify :

LIVEWORKSHEETS

Bill Gates ..... in 1955 in Seattle, Washington. Bill was a clever but difficult ..... After ..... to a state school for a few years, his parents ..... him to a private school, Lakeside. When Bill was about 12, the Mother's Club ..... the pupils a computer with money ..... from a charity sale. At that time desk computers with screens ..... and the computer was like an enormous typewriter. ..... , Bill and his best friend, Paul Allen, ... their own games for the computer. They also ..... their evenings at a local company that ..... a big computer. The computer ..... so the company ..... the boys experiment with it. Soon they were so keen that they ..... in secret to the offices at night after their parents ..... to sleep !

By the age of 16, Bill and Paul ..... their first company to calculate road traffic. At 18, Bill ..... to Harvard University to study economics, but ..... computer programmes.

By 1975, Bill and Paul ..... a much simpler language for computer programming. To protect their invention, they ..... their famous company Microsoft, known today all over the world. Since then Bill Gates ..... on his dream of 'a computer on ebery desk and in every home.'

By 1980, home computers ..... a reality and, by 1996, Bill Gates ..... the richest man in the world.

LIVEWORKSHEETS