



A Time Line of Edison and His Era

MATERIALS:

All you need is the enclosed time line of Edison's life (which should be copied for the students) and a few rolls of adding machine paper if you prefer them to looseleaf. Other materials are optional. Many, many books written for children, Hollywood movies ("Young Tom Edison," "Edison the Man") and even documentaries contain myths and legends about Edison. You probably have some of these materials at your school! Myths about Edison were made up by publicists, screen writers and even by Edison himself.

DESCRIPTION OF ACTIVITY:

There are several ways to use the time line. After reading the time line, students can fill out the worksheet on the next page. Another option is for students to use adding machine paper to draw a time line of Edison's life. Students should choose what is most important in Edison's life, not simply list everything. You might want students to add selected events in United States history such as the Civil War, the Nineteenth Amendment (giving women the right to vote) and the Great Depression. Students can also look up words that are underlined in the handout and write out the definitions.

THOMAS ALVA EDISON: A TIME LINE

When Thomas Edison was born railroads were still new, most Americans lived on farms and millions of people still lived as slaves in the southern United States. By the time he died a Civil War and a World War had been fought, the airplane and automobile had been invented and most Americans lived in cities lit by electric lights.

The following is a brief time line of a very busy life.

1847

Thomas Alva Edison is born in Milan (pronounced MI-lan), Ohio, on February 11. He is the seventh, and youngest, child of Samuel and Nancy Elliott Edison. At this time, the Industrial Revolution is just beginning. New inventions like the railroad and telegraph make life easier for people.

1854

The Edison family moves to Port Huron, Michigan.

Thomas Edison spent the rest of his childhood there.

1857

"Al," as he was called, organizes his first chemistry laboratory in his home cellar. "He spent the greater part of his time in the cellar," said his father.

1855 to 1859

"Al" goes to school for a short time. His teachers think that he is not very bright. His mother spends time teaching him at home. He also begins to read and to teach himself. Also, Al Edison loses much of his hearing. No one really knows how Edison became "deaf." In 1885 he wrote, "I haven't heard a bird sing since I was twelve years old."

1862

Edison, now a teenager, saves a little boy from being hit by a train. The boy's father, a station master, thanks him by teaching him how to use the telegraph. Edison gets work as a "tramp" telegraph operator, moving several times across the country. During the Civil War, telegraphers like Edison also send messages for the Union Army. He amuses himself by taking things apart and seeing how they work, even making something to kill cockroaches with electricity.

1868

He files his first patent for the **electric vote recorder**, but no one wants to buy it. He tells himself he will only invent things people want to buy from then on.

1870

After moving to New York City, he improves the **stock ticker**. It is his first successful invention. Edison opens a shop in Newark, New Jersey. He hires workers to manufacture his stock tickers to sell them. Some of these men, or "muckers," help Edison all his life. During this time, he improves the telegraph many times.

1871

On Christmas Day Edison marries Mary Stilwell, who works in his Newark shop. They will have three children: daughter Marion and sons Thomas Alva, Jr., and William. The marriage lasts until Mary dies on August 9, 1884 at the age of 29.

1876

In March, Edison moves to a new laboratory at Menlo Park, New Jersey. Many of his workers go with him. Edison promised "a minor invention every ten days and a big thing every six months or so."

1877

In early December Edison wraps a piece of tin foil around a cylinder and speaks into it, saying, "Mary had a little lamb." The **phonograph** plays his words back to him. Later, he calls the phonograph his favorite invention: "This is my baby and I expect it to grow up and be a big feller and support me in my old age." It does. Edison makes many changes to it and sells them for 52 years.

1878

In late summer, Edison and his team of muckers start work on an **incandescent light**, or light bulb. At the same time, they try to build all the other inventions to make the bulbs light up - wires, switches and fuses. This is what we call the **electric light system**.

1879

After hundreds of experiments, Edison and his team of muckers make a light bulb that lasts for more than thirteen hours. Now they work on ways to bring their incandescent lights into many homes all at once.

1882

On September 4, Edison opens the first **commercial electric power station** for incandescent lighting in the United States at 255-257 Pearl Street, New York City.

1886

Two years after his first wife dies, Edison marries Mina Miller in Akron, Ohio, on February 24. They spend their honeymoon at Edison's new winter home in Fort Myers, Florida. Then they move into Glenmont, a 13.5 acre estate with a 29 room home in West Orange, New Jersey. Edison lives at Glenmont with his family for the rest of his life. Three children are born at Glenmont: Madeleine, Charles and Theodore. This home is now part of Thomas Edison National Historical Park.

1887

Edison opens his new laboratory at West Orange, close to his new home. This is also part of Thomas Edison National Historical Park, and what you will explore when you visit. During his 44 years there, Edison invents the **motion picture camera** and improves the phonograph. Inventions are manufactured in factories, which surround the laboratory buildings.

1890s

Edison spends most of his time at his iron ore mine in Ogdensburg, New Jersey. The mine loses him millions of dollars, making it his biggest failure. He comes close to bankruptcy, but bounces back.

1894

The first public showing of motion pictures takes place on April 14 with the opening of a "peephole" **Kinetoscope** parlor at 1155 Broadway, New York City. People pay a nickel to look through a small hole at a very short movie. Movies are filmed in a strange building called the **Black Maria**, located at his West Orange lab.

1900s

Falling in love with the automobile, Edison and his family go on road trips throughout New Jersey. Meanwhile, Edison starts work on an improved **storage battery** for electric cars. Instead, his batteries are used for lighting railroad cars and mine shafts.

1914

On December 9, fire sweeps through most of the factories all around the West Orange laboratories. Edison says, "I am 67, but I'm not too old to make a fresh start." Workers fix up the factories and Edison goes back to work.

1915

With World War I going on in Europe, Edison works with the US Navy to invent weapons.

1916

Famous friends go with Edison on the first of several camping trips. The friends include car manufacturer Henry Ford, tire manufacturer Harvey Firestone and naturalist John Burroughs.

1925

For the first time, half of the people living in cities have electric power in their homes.

1927

The inventor begins his last major work, trying to find a new way to make rubber. Edison works on this until his death in 1931.

1928

On May 21, the United States Congress awards Edison a special honorary medal.

1931

Edison dies at his home, Glenmont, on October 18 at the age of 84.

Worksheet: Thomas Edison and His Era

Using the time line of Thomas Edison's life, answer the following questions:

1. As a child, what does "Al" Edison organize in his home cellar?
2. When Edison is 15 he is already moving around the country and working. What is his job?
3. How old is Edison when he receives his first patent? What is it and is it a success?
4. Where does he build his shop for manufacturing stock tickers?
5. Where does Edison move in 1876?
6. Name two of Edison's greatest achievements at the lab where he moved in 1876.
7. What does he call the men who worked with him in his laboratory?
8. When Edison is 39, he remarries and buys an estate in West Orange, New Jersey. What is it called?
9. Name three of Edison's projects at the West Orange lab.
10. What was Edison's age at his death?

Now ...Just for fun! Edison played a major part in American History. Let's test your knowledge of American history. (The answers are in the time line if you look hard enough.)

1. Why could Edison not hear a bird singing?

2. Edison never fought in a war, but he played a major role in a "Revolution." Which one?

3. As World War I is fought in Europe, what does Edison do for the United States Navy?