

The Wizard of Menlo Park

Thomas Alva Edison 1847-1931

Thomas Edison is one of the greatest inventors and businessmen in history. He is credited with 1093 inventions and these inventions helped to lay the foundation for our modern world. In addition, he also helped start 14 corporations including General Electric (GE). Thomas Edison was born in the USA on February 11, 1847. Edison only attended school for 12 weeks because **his** teacher at school thought that Edison's brain was **addled** (gone bad or confused). Instead he was taught at home by his mother who encouraged him to ask questions and then discover the answer himself by reading or doing experiments. His ability for independent learning was a skill that would help him throughout his life.

Edison got his first job when he was 12 years old selling newspapers on a train. By the age of 15 he was writing his own newspaper and using his money to buy equipment to do experiments. One day while at the train station, the station master's 3 years old boy ran in front of a train, and Edison ran out and saved him. The boy's father was so **grateful**, that is thankful, that **he** showed Edison how to use the telegraph. By learning how to use the telegraph Edison not only was able to get a job as a telegraph operator but also learned about the science of electricity. By the age of 19, he was working for the Associated Press as a telegraph operator and in his off time experimenting with the telegraph. In 1868 Edison moved to Boston to work for Western Union, the largest telegraph company at that time. While in Boston, Edison invented and patented his first invention - a vote counting machine. Unfortunately no one wanted to buy **it**. From this mistake Edison learned an important lesson: to never waste his time inventing things people would not want to buy.



Edison as a boy

In 1869 Edison moved to New York City with one dollar in his pocket and was sleeping in the basement of a business. This business had a machine called a stock ticker which provided up-to-date information on the price of stocks. The stock ticker suddenly stopped working and Edison volunteered to repair **it**. Edison not only repaired it, but then later improved upon the design. The owner of the business paid Edison 40,000 dollars (equal to 690,000 dollars today) for the rights to Edison's new design. Edison used this money to set up a research laboratory in Menlo Park, New Jersey. His first invention from his new laboratory was the quadruplex telegraph which he sold to

The Wizard of Menlo Park

his old bosses at Western Union for 100,000 dollars (1,725,000 dollars in today's money). These inventions made him rich, but Edison's next invention made him famous.

Edison became famous in 1878 when he invented the **phonograph**, a device to record sound. With **this** device he created the first ever recording of a human voice when he said the nursery rhyme "Mary had a Little Lamb". Edison became even more famous in 1879 when he invented the first practical incandescent light bulb. He then spent the next decade designing and building the necessary **infrastructure** - the systems or structures needed to make something work - such as switches, generators, distribution systems etc. Because of this work he became known as the "Father of the Electric Age" and the "Wizard of Menlo Park."

Edison went on to invent many more devices or improve technology such as the first movie projector, the first talking movie, and a talking doll. He also helped to develop electric car batteries, x-ray technology and the vacuum tube, from which the transistor and the microchip evolved. During World War I Edison worked on a device to help detect submarines and in the 1920's he tried to find a substitute for natural rubber. Edison continued to work until his death at the age of 84 from diabetes on October 18, 1931 in his home in New Jersey. During his funeral people around the world dimmed or turned off their lights out of respect for the Wizard of Menlo Park: Thomas Alva Edison.



Edison with phonograph



The Wizard of Menlo Park

Short Answer: Answer the questions from the reading. Use capital letters when necessary.

1. Who is considered one of the greatest inventors of all time? _____
2. How many inventions is Edison credited with? _____
3. How many corporations did he help start? _____
4. Who taught Edison? _____
5. What skill would help Edison throughout his life? _____
6. How old was Edison when he got his first job? _____
7. What was Edison's first patented invention? _____
8. How much would \$40,000 in 1869 be worth in today's money? _____
9. What was said on the first ever recording of a human voice? _____
10. After what invention was Edison called the "Father of the Electric Age" and the "Wizard of Menlo Park"? _____
11. What did the microchip and transistor evolve from? _____
12. When did Edison try to find a substitute for natural rubber? _____

Vocabulary in Context: Write the meaning of the word as found in the text.

1. What does addled in paragraph 1 mean? _____
2. What does grateful in paragraph 2 mean? _____
3. What does phonograph in paragraph 4 mean? _____
4. What does infrastructure mean in paragraph 4? _____

True False and Not Given: Type T, F, or N for the following statements.

1. Edison helped start the corporation General Electric. _____
2. Edison was taught in a school by his mother. _____
3. Edison spent a lot of time at the library. _____
4. Edison wrote his own newspaper and used his money to buy science equipment. _____
5. Edison learned about the science of chemistry from his job as a telegraph operator. _____
6. A stock ticker provides information on the price of stocks. _____
7. The first recorded human voice was of Edison's wife. _____
8. Edison tried over 1000 different times to get the light bulb to work. _____
9. During WWI Edison invented the submarine. _____
10. Edison died from Diabetes. _____

The Wizard of Menlo Park

Pronoun Reference: *in the blank type what the pronoun refers to. Use Capital letters when necessary.*

1. **his** in paragraph 1 _____
2. **he** in paragraph 2 _____
3. **it** in paragraph 2 _____
4. **it** in paragraph 3 _____
5. **this** in paragraph 4 _____

Dictionary Definition: *In the Blank type the letter for the correct dictionary definition for the word patent as used in the sentence: While in Boston, Edison invented and **patented** his first invention - a vote counting machine. Answer _____*

- A. *Noun:* government authority or license conferring a right or title for a set period, especially the sole right to exclude others from making, using, or selling an invention: *He **took out a patent** for an improved steam hammer.*
- B. *Adjective:* easily recognizable; obvious: *She was smiling with patent insincerity.*
- C. *Adjective:* (of a parasitic infection) showing detectable parasites in the tissues or feces.
- D. *Adjective:* made and marketed under a patent; proprietary: *patent milk powder*
- E. *Verb:* obtain a patent for (an invention): *An invention is not your own until it is patented.*

Menlo Park Laboratory

