Thomas Edison

A Reading A–Z Level O Leveled Book
Word Count: 691

Connections

Writing

Research to learn more about one of Thomas Edison's inventions. Create a brochure about the invention to share with your classmates.

Social Studies

Make a timeline of Thomas Edison's life. Include at least five of his inventions on your timeline.

Reading A–Z

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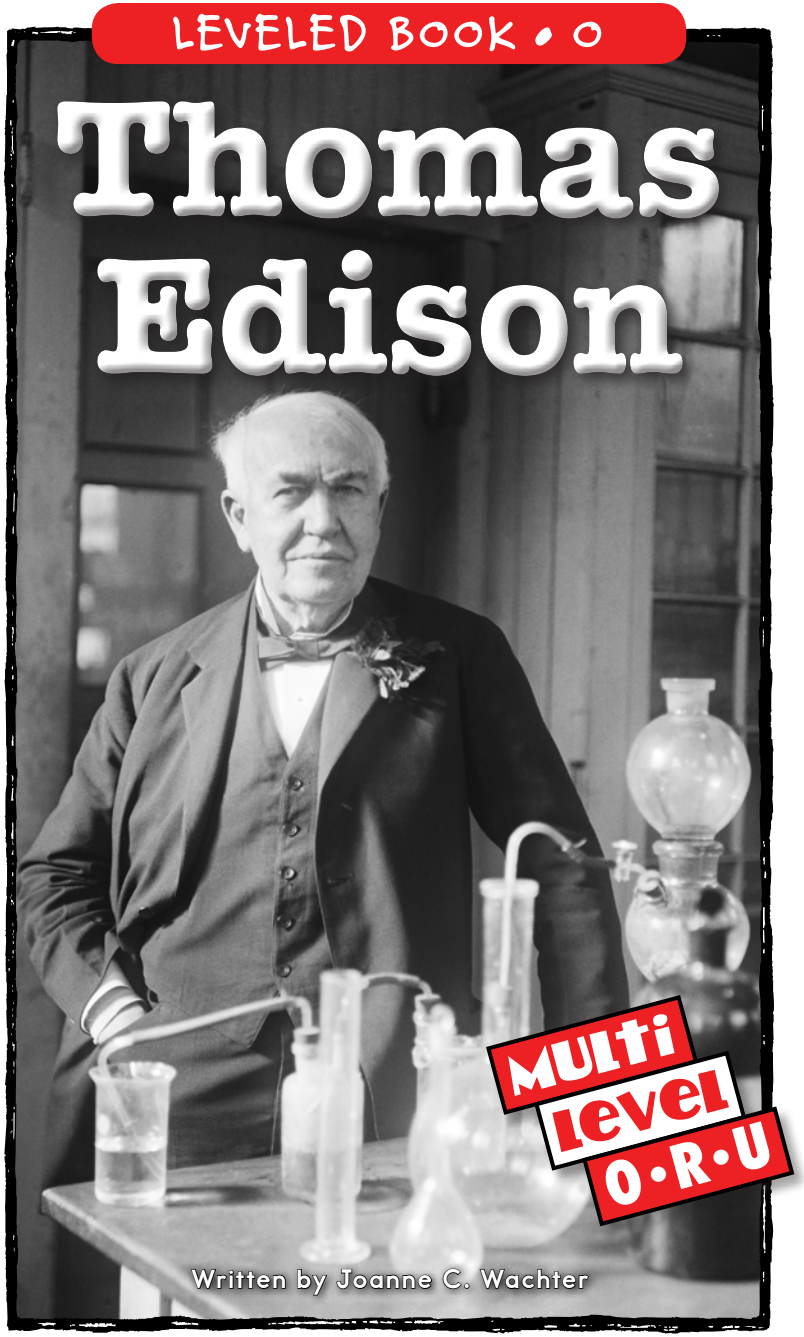

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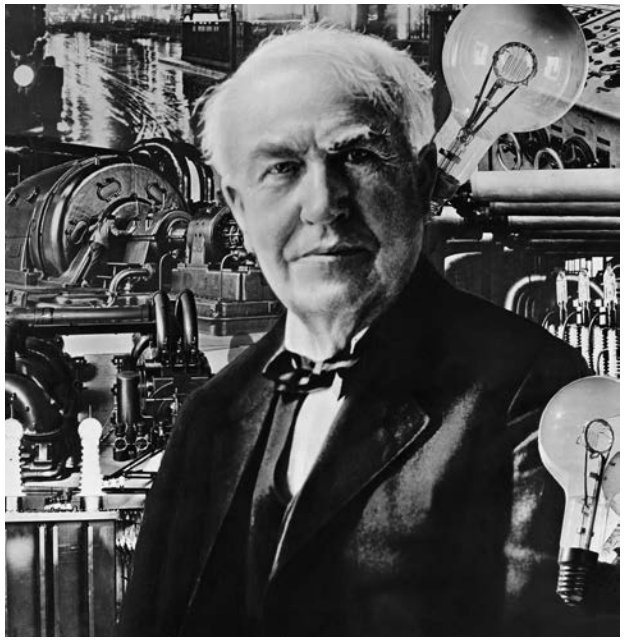
Thomas Edison



Written by Joanne C. Wachter

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Focus Question

What traits describe Thomas Edison, and how did they affect his actions?

Words to Know

experiments	operator
filament	patent
inventors	research

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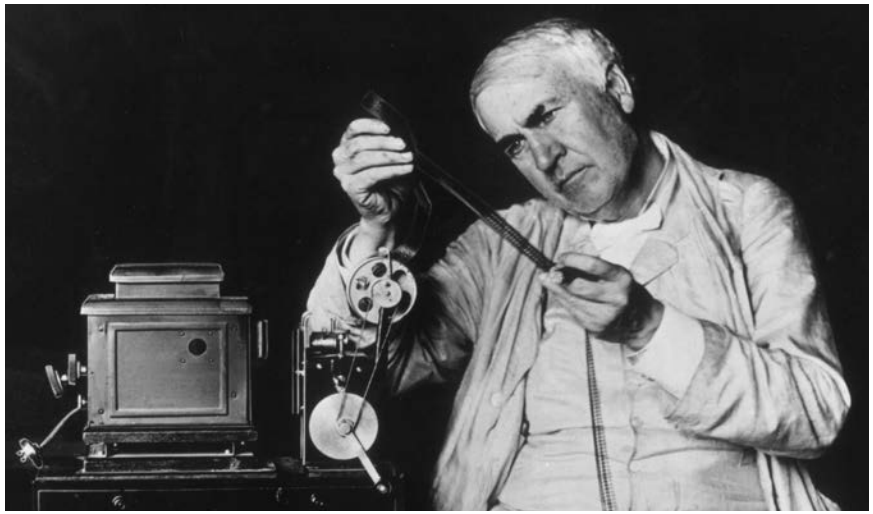
Correlation

LEVEL O	
Fountas & Pinnell	M
Reading Recovery	20
DRA	28



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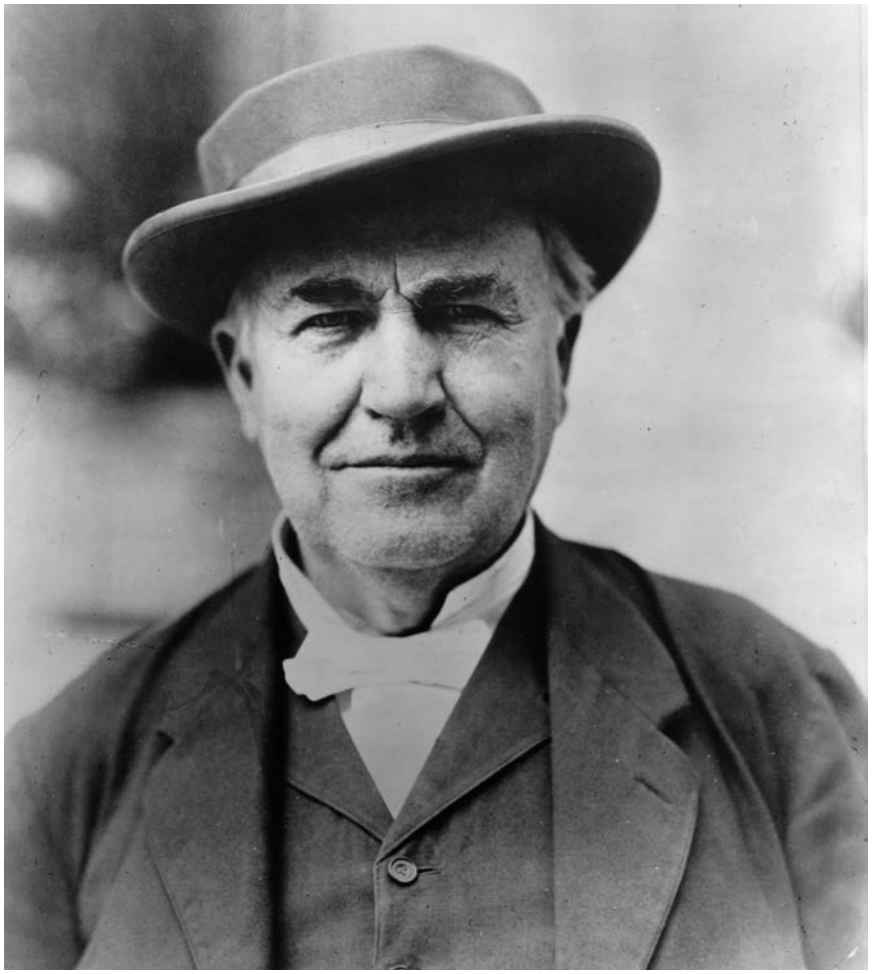


Thomas Alva Edison in 1914

A Curious Boy

Thomas Edison loved to question things. He loved to learn how things worked. He also loved to make things work better. Many people think of him as one of the greatest **inventors** of all time.

Thomas Edison at fourteen years old

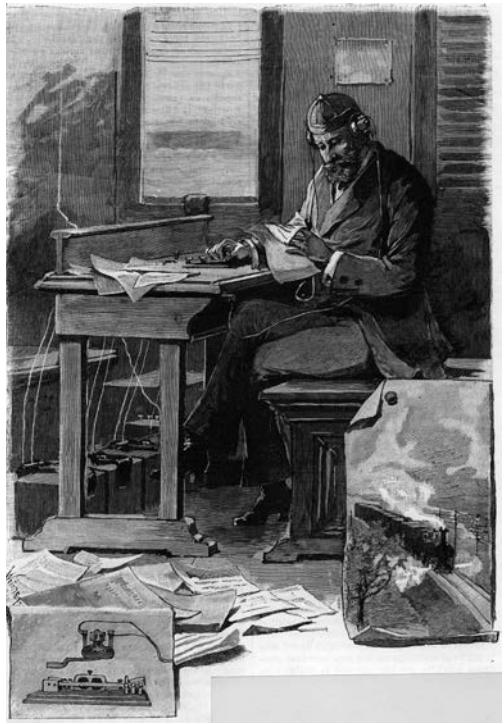
Young Al

Thomas Alva Edison was born on February 11, 1847. Al, as he was called, did not do well in school. He wanted to question and explore. At that time, school was mostly about remembering facts. Al's mom took him out of school and taught him at home. She taught him to love to read.

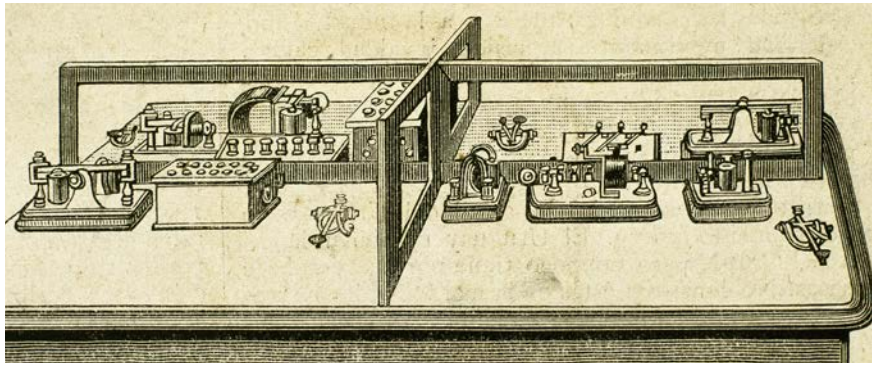
Al sold food and newspapers on trains when he was twelve years old. He used the money he earned to buy books and materials for **experiments**. He set up a lab in a train car. Also around this time, Al lost most of his hearing.

When he was fifteen, Al saved a boy's life. The boy was about to be run over by a boxcar when Al grabbed him. The child's father offered to teach Al how to be a telegraph **operator**.

As Al grew older, he traveled around as a telegraph operator. He continued to be interested in science.



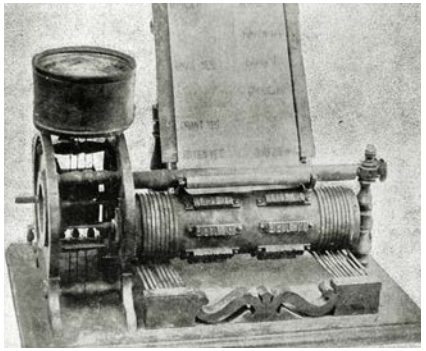
A drawing of a train telegraph operator



Edison's improved telegraph

Edison the Inventor

Edison wanted to invent things full-time. He invented ways to make the telegraph better. He earned his first **patent**, for an electric vote counter, in 1869. The invention did not do well. Edison continued to invent. He said he would not give up, no matter what happened.



Edison's electric vote counter

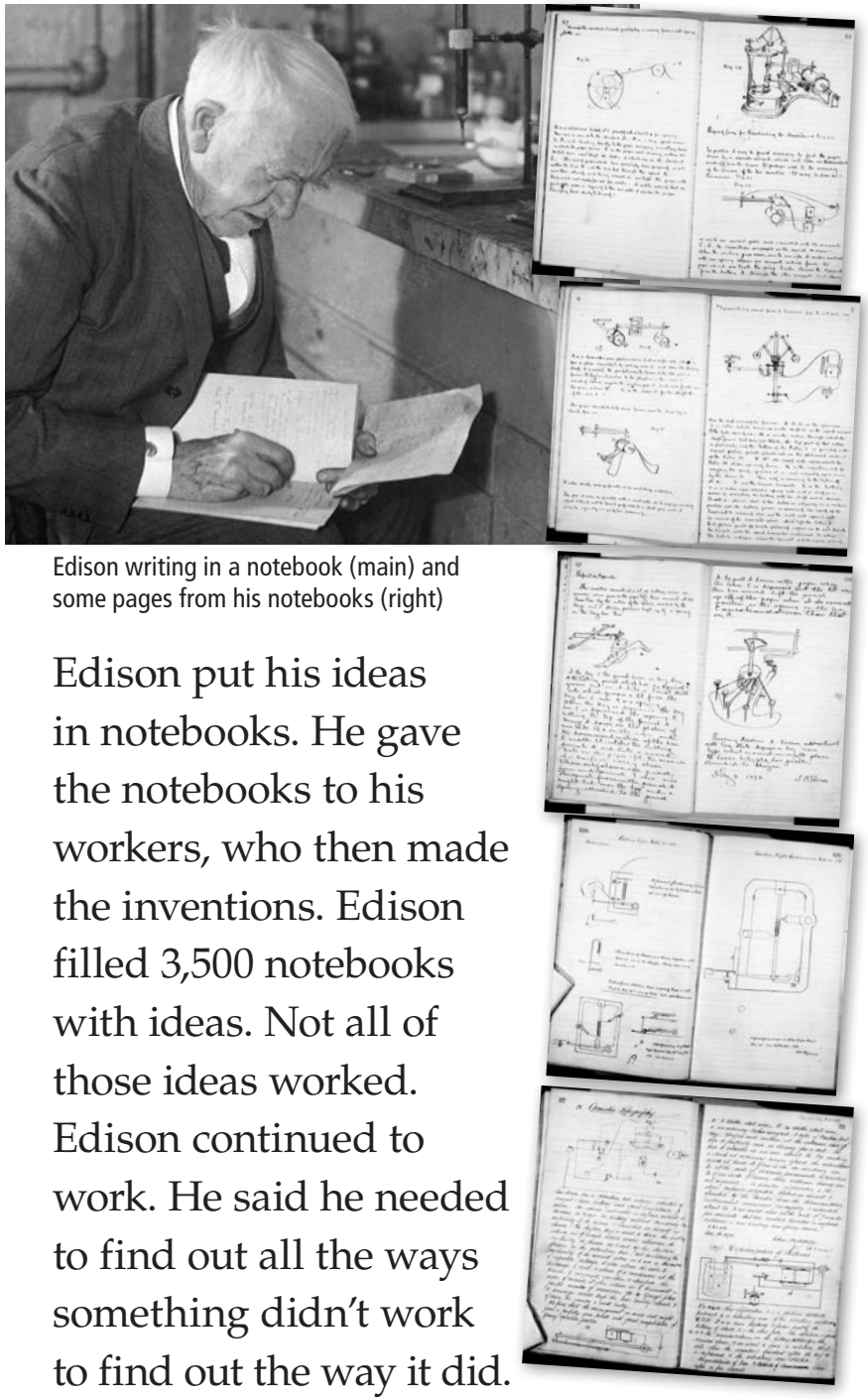
Do You Know?

The telegraph let people communicate before the invention of the telephone. It used a code of dots and dashes, or short and long beeps, to form letters.

Edison at work in his Menlo Park lab (top) and the outside of the lab (bottom)

A New Lab

Edison began building and selling some of his inventions. In 1876, he built a lab in Menlo Park, New Jersey. It was the first **research** lab in the world built to make money. Many people called it the "invention factory." Edison and his workers were there many hours each day.



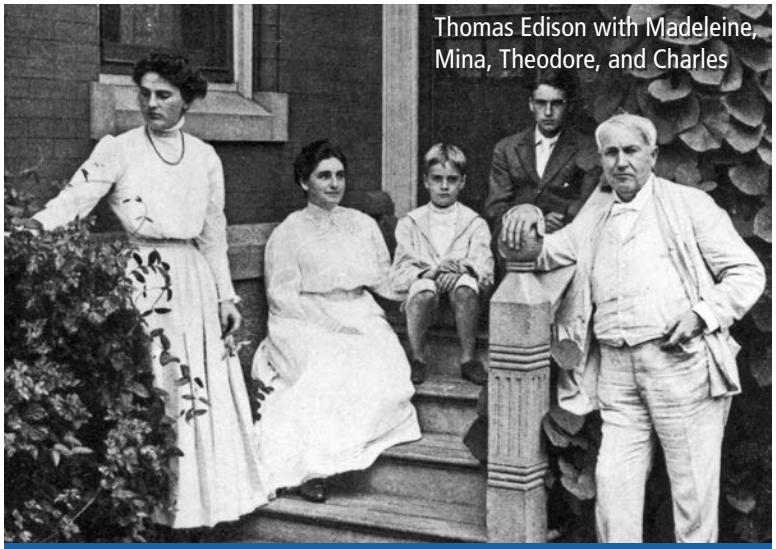
Edison writing in a notebook (main) and some pages from his notebooks (right)

Edison put his ideas in notebooks. He gave the notebooks to his workers, who then made the inventions. Edison filled 3,500 notebooks with ideas. Not all of those ideas worked. Edison continued to work. He said he needed to find out all the ways something didn't work to find out the way it did.

Important Inventions

The telephone was invented in 1876, but it didn't work well. People had to yell into the phone to be heard. In 1877, Edison and his team invented a way to make the telephone work better.

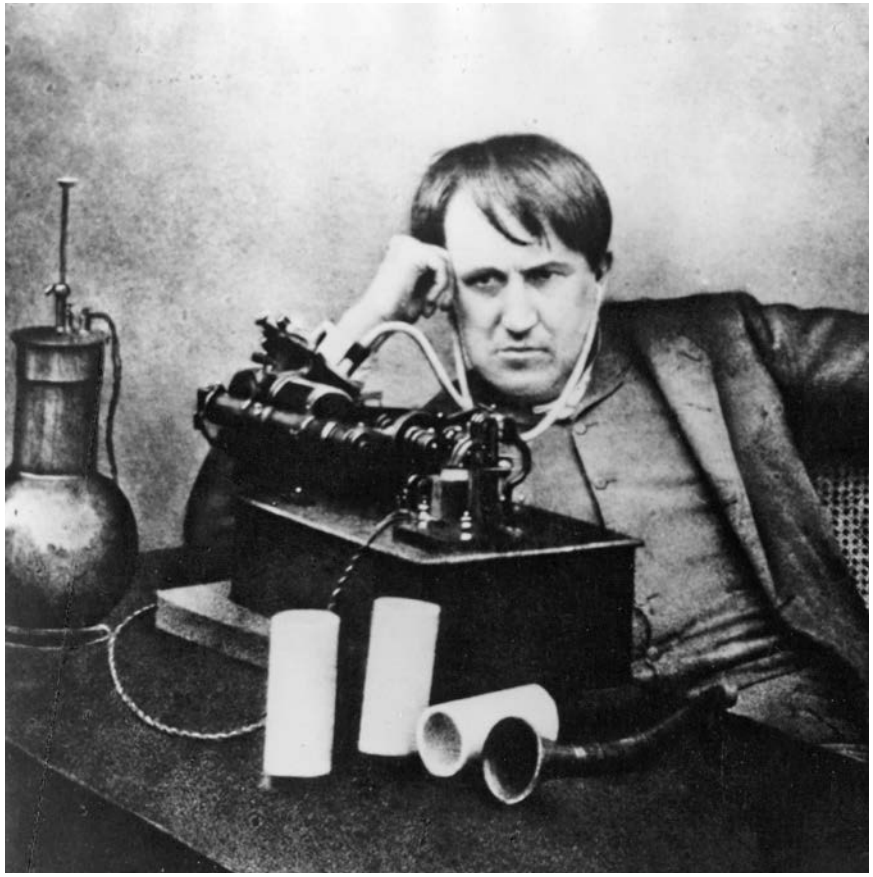
A telephone from 1877 with Edison's improvements



Thomas Edison with Madeleine, Mina, Theodore, and Charles

Edison's Family

Edison married Mary Stilwell in 1871. They had three children—Marion, Thomas Jr., and William. Mary died in 1884. Edison married his second wife, Mina Miller, in 1886. They had three children—Madeleine, Charles, and Theodore.



Edison working on an early phonograph

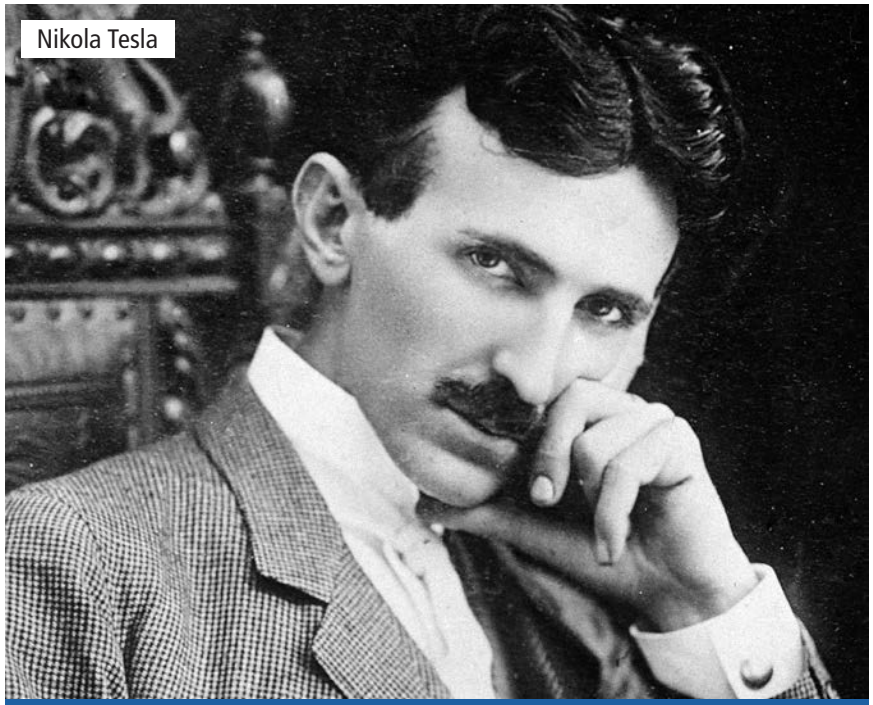
Edison also invented a machine that could record words and then play them back. The first thing Edison recorded was "Mary Had a Little Lamb." Some people didn't believe the machine worked. They thought someone was talking in another room! The phonograph made Edison famous.

A Special Project

For years, people had tried to make a safe light bulb that most people could buy. Many inventors had tried and failed. First, Edison and his team had to find the right **filament**—the part of a light bulb that glows. They tried thousands of materials. They finally found one that worked. People were amazed by Edison's electric lights.

One of Edison's first electric light bulbs

Edison then had to make a system that could light a building and even a city. In 1881, Edison moved to New York City. He helped start the first electric power plant. In time, many places began to use electric lights.


Nikola Tesla

The War of the Currents

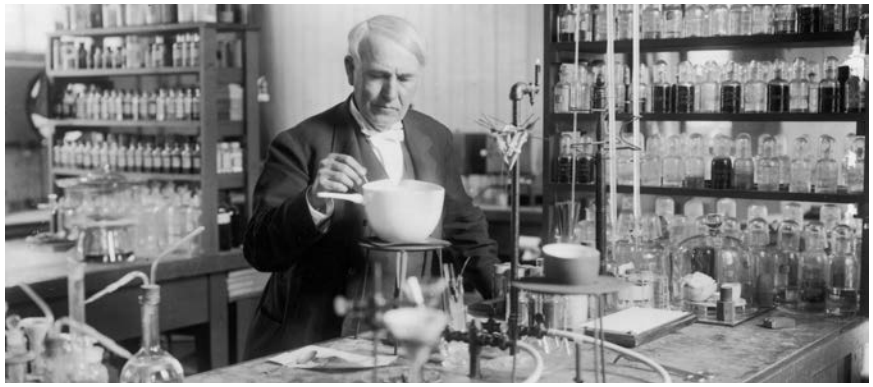
In the 1880s and 1890s, Edison competed with another electric company. Edison's method of delivering electricity was called *direct current*, or DC. The other company said the method called *alternating current*, or AC, was better. AC was invented by Nikola Tesla. AC would later win the competition.


Edison's movie camera (left) and his machine that showed movies (right)

Other Exciting Ideas

In 1887, Edison moved to a new lab in New Jersey. Around that time, he saw a machine that quickly played many images one after another. The things in the images looked as if they were moving!

Edison had his team work on two machines. One machine would record the images, and the other would show them. Edison and his team invented a movie camera. They also invented a machine to show the images. Edison tried to put sound with the images, but it did not work.



Edison doing an experiment in 1910

A Remarkable Man

Edison continued to invent. Some of his other inventions included machines to mine materials, better batteries, and new uses for cement.

During his life, Edison had 1,093 patents, which was a record at the time. He worked until he was more than eighty years old.

Thomas Edison died on October 18, 1931. President Herbert Hoover asked people to turn out their lights for a short time. He asked them to think about the great changes Thomas Edison had made in their lives.

Glossary

experiments *(n.)* scientific tests (p. 6)

filament *(n.)* a thread or threadlike object that conducts electricity, such as that found in a light bulb (p. 12)

inventors *(n.)* people who create, design, or build things that did not exist before (p. 4)

operator *(n.)* a person who controls a machine or other equipment (p. 6)

patent *(n.)* a document giving someone the right to make money from an invention (p. 7)

research *(n.)* a detailed study of a subject, especially to discover new information or to find facts (p. 8)