## Logic Module Supplements

## **Thomas Edison Biography**

Thomas Alva Edison was born February 11, 1847 in Milan, Ohio (pronounced MY-lan). "Al," as he was called as a boy, went to school only a short time. He did so poorly that his mother, a former teacher, taught her son at home. Al learned to love reading, a habit he kept for the rest of his life. He also liked to make experiments in the basement.

Al not only played hard, but also worked hard. At the age of 12 he sold fruit, snacks and newspapers on a train as a "news butcher." He even printed his own newspaper, the *Grand Trunk Herald*.

In his spare time, he took things apart to see how they worked. Finally, he decided to invent things himself. After the failure of his first invention, the electric vote recorder, Edison moved to New York City. There he improved the way the stock ticker worked. This was his big break. By 1870 his company was manufacturing his stock ticker in Newark, New Jersey. He also improved the telegraph, making it send up to four messages at once.

Wanting a quieter spot to do more inventing, Edison moved from Newark to Menlo Park, New Jersey, in 1876. There he built his most famous laboratory.

The *phonograph* was the first machine that could record the sound of someone's voice and play it back. In 1877, Edison recorded the first words on a piece of tin foil. He recited the nursery rhyme "Mary Had a Little Lamb," and the phonograph played the words back to him. This was invented by a man whose hearing was so poor that he thought of himself as "deaf"!

Starting in 1878, Edison and the muckers worked on one of his greatest achievements. The *electric light system* was more than just the incandescent lamp, or "light bulb." Edison also designed a system of power plants that make the electrical power and the wiring that brings it to people's homes. Imagine all the things you "plug in." What would your life be like without them?

Later, Edison built a laboratory in West Orange that was ten times larger than the one in Menlo Park. In fact, it was one of the largest laboratories in the world, almost as famous as Edison himself. Well into the night, laboratory buildings glowed with electric light while the Wizard turned his dreams into inventions.

But Edison did more than invent. Here Edison could think of ways to make a better phonograph, for example, build it, test it and make it work, then manufacture it in the factories that surrounded his laboratory. This improved phonograph could then be sold throughout the world.

Not only did Edison improve the phonograph several times, but he also worked on X-rays, storage batteries, and the first talking doll. At West Orange he also worked on one of his greatest ideas: *motion pictures,* or "movies." The inventions made here changed the way we live even today. He worked here until his death on October 18, 1931, at the age of 84.

By that time, everyone had heard of the "Wizard" and looked up to him. The whole world called him a genius. But he knew that having a good idea was not enough. It takes hard work to make dreams into reality. That is why Edison liked to say, "Genius is 1% inspiration and 99% perspiration." People often say Edison was a genius. He answered, "Genius is hard work, stick-to-it-iveness, and common sense."

