## Biography of a Scientist

**Generic Structure** 

**Albert Einstein (1879 – 1955)** 

Albert Einstein was one of the greatest scientists of all time. He is best known for his Theory of Relativity and his many other contributions to Science.

Born in Ulm, Germany, in 1879, he was the son of Herman and Paulina Koch Einstein. At five years of age he was fascinated by a compass that His father showed him. Because of this, he became interested in science. He attended public school at Munich, then at Switzerland where he showed no scholastic ability. He later studied Mathematics and Physics at the Swiss polytechnic Institute in Zurich and in 1900, he graduated. Einstein worked at the Swiss Patent Office in Berlin, in 1902, as an examiner, so he had more free time for his scientific investigations. A year later, he married his first wife and they had two sons. They later separated and Einstein married his first cousin Elsa, who gave him two stepdaughters. He became a Swiss citizen in 1905.

In the same year, Einstein contributed three papers "Annals of Physics", a German periodical, which was the basis of three new branches of Physics. The first paper was on the Quantum Theory, which was about light particles. The second was on his Theory of Relativity, which consisted of the famous equation,  $E = mc^2$ . The third was a paper on the Brownian motion, which is the irregular movement of particles. He accomplished all this before he held any academic position.

In 1909 he became Professor of Theoretical Physics at the University of Zurich. He held the same position at the University at Prague in Germany, in 1911. A year later, he returned to a similar post at the Federal Institute of Technology in Zurich. In 1914, Einstein accepted the professorship at the University of Berlin.

Einstein completed his Theory of Relativity in 1915, and it was published in the following year. During 1929, he developed his Unified Field Theory which was aimed at combining gravitational and electro-magnetic equations. Einstein spent the last twenty-five years of his life trying to prove this theory to other scientists.

In 1933, Einstein visited England and the United States. While he was overseas, the Nazi government confiscated his property, his positions and German citizenship. Before this had happened, Einstein had already accepted a position in the United States. He became director of the School of Mathematics at Princeton, New Jersey.

During 1939 he wrote a letter to President Roosevelt warning that the German government was experimenting

Section A

Section B

with nuclear fission. As a result of this, the United States government financed research into atomic energy, Einstein became an American citizen in 1940, and two years later the American scientists split the atom. The first atomic bomb was dropped on Japan in 1945, to end World War II.

Because Einstein was a pacifist, he was disappointed that his experiments had led to destruction. After World War II he was a supporter of World Government. He believed that peace could be kept in the atomic age, if all nations were brought together under a system of world law.

Einstein lived a quiet life. He was fond of classical music and played the violin. He was not rich, but he refused large sums of money from publishers to write his autobiography. He gave support to people who were poor and politically oppressed. He supported Zionism and in 1952, Einstein was offered the presidency of Israel. He refused, saying that he wasn't worthy. In 1955, this great man died.

As a result of Einstein's intelligence and contributions to science, he is famous throughout the world today. His Theory of Relativity allowed man to split the atom. He was disappointed about the atomic bomb, but his research on nuclear fission enabled man to use atomic energy as the greatest source of power. Einstein was one of the fathers of the atomic age.

Section C

Section D

Section E