



## **Bio4Kids: Albert Einstein** (1879-1955)

### Brief Outline

Albert Einstein is one of the most notable and influential scientists of the twentieth century. Although he became known as a genius of science, he was slow in learning to speak as a child. Einstein also rebelled in school, which left many teachers to believe he would amount to little. His interest in science and math was inspired by a compass, his "sacred little geometry book," and classical music. By the age of sixteen, he wrote his first research science paper.

Einstein attempted to skip the last few years of high school to enter the Swiss institute of Technology. But he failed the entrance exam. His most famous discovery is the theory of relativity,  $E=mc^2$ . This theory overturned Isaac Newton's laws by explaining the relation of energy and mass as a consequence of space and time. It was first introduced in a three-page paper in 1905. So ahead of its time, the theory could not be proven until years later.

Born in Germany and raised in the Jewish faith, Einstein strongly opposed injustices of race and religion. He helped out however he could. Einstein supported the American civil rights movement and efforts of the Zionist movement to preserve and cultivate the Jewish faith. He played an important role in setting up the Hebrew University of Israel.

Many people have thought that Einstein was the creator of the atomic bomb. But this is not true. During World War II, he wrote a letter to President Roosevelt warning of Germany's possible use of nuclear weapons. Einstein was actually barred from helping the United States to make the atom bomb.

Albert Einstein was more than a world-famous scientist. His name and image have come to represent genius and intellect.

## Quotes

- "With fame I become more and more stupid, which of course is a very common phenomenon."
- "Why is it that nobody understands me, yet everybody likes me?"
- "I'm doing just fine, considering that I have triumphantly survived Nazism and two wives."
- "I have no special talents. I am only passionately curious."
- "Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world."

## Factoids

- Einstein wrote his first scientific paper, "On the Investigation of the State of the Ether in a Magnetic Field," in 1895 at the age of 16. It was never published but sent to his uncle for critique.
- Einstein was a member of the Princeton chapter of the NAACP and served as co-chair of the American Crusade to End Lynching, which was headed by his friend Paul Robeson.
- Efforts were made by reputable German scholars and government officials to debunk Einstein's work and to stop the teaching of his theories because of his Jewish heritage.
- While Einstein was considered a genius, at times he was more of an absent-minded professor. He was notorious for forgetting dates and numbers, losing things, and had problems spelling in the English language.
- Einstein attributes his interest in science to a compass that his father gave to him when he was 10 years old.
- From 1901 to 1954 Albert Einstein published more than 300 scientific works.
- In 1944 a handwritten copy of Einstein's work on electrodynamics is sold for \$6 million to finance war bonds.
- In 1946 Einstein accepted an honorary degree from Lincoln University in Pennsylvania, the first school to grant college degrees to African Americans in the United States and gave a speech addressing racism.

- In 1952 Einstein was offered the position of president of Israel, but he declined.
- After his death, Einstein's brain was donated to the Princeton Medical Center.

### Awards and Honors

- Awarded the 1921 Nobel Prize for Physics (1922)
- Awarded the Copley Medal of the Royal Society of London (1925)
- Awarded a gold medal by the Royal Astronomical Society of England (1926)
- Awarded the Max Planck medal for extraordinary achievements in theoretical physics (1929)
- Awarded the Franklin Medal by the Franklin Institute (1935)
- The 99th element, a metallic synthetic element is named "einsteinium" in honor of Albert Einstein. (1955)
- The Albert Memorial, a bronze and marble sculpture, is erected in the Washington, D.C. National Mall by the U.S. National Academy of Sciences (1979)