

This image shows a side of Einstein most people don't think of. Einstein had a much less serious side to his character. So much is made of Einstein as a physicist, we often overlook Einstein's effect on society as a voice of wisdom.



"Only two things are infinite, the universe and human stupidity, and I'm not sure about the former." —Albert Einstein



Albert Einstein 1879-1955 German-born American theoretical physicist

"Imagination is more important than knowledge."

To learn more about the life and work of Albert Einstein, please visit the following Web pages--



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Einstein, Albert (1879-1955), Germanborn American physicist, best known as the creator of the special and general theories of relativity and for his bold hypothesis concerning the particle nature of light.

Born in Ulm, Einstein finished secondary school in Switzerland. [Einstein] then entered the Swiss National Polytechnic in Zürich. He graduated in 1900 and in 1902 secured a position in the Swiss patent office in Bern. In 1903 he married Mileva Mariç, who had been his classmate at the polytechnic. In 1905 Einstein received his doctorate from the University of Zürich for a dissertation on the dimensions of molecules.



In 1905 Einstein published three papers of central importance to 20th-century physics. He made predictions about the motion of particles, he hypothesized that light consisted of particles, and he created the special theory of relativity.

## Special Theory of Relativity

Since the time of English mathematician and physicist Sir Isaac Newton, scientists had been trying to understand the nature of matter and radiation and trying to find an explanation for the way radiation and matter interact when viewed from different inertial frames of reference-that is, simultaneously by an observer at rest and an observer moving at uniform speed. In early 1905 Einstein realized that the heart of the problem lay not in a theory of matter but in a theory of measurement. He developed a theory based on two assumptions: the principle of relativity, that physical laws are the same in all inertial reference systems, and the principle of the invariance of the speed of light, that the speed of light in a vacuum is a universal constant. He was able to provide a consistent and correct description of physical events in different inertial frames of reference without making special assumptions about the nature of matter, radiation, or their interaction. Virtually no one understood Einstein's argument.



## General Theory of Relativity

Einstein's chief early patron was German physicist Max Planck. After several academic appointments, in 1913 Einstein was appointed director of the Kaiser Wilhelm Institute for Physics in Berlin. There, he published the general theory of relativity, which linked gravitation, acceleration, and four dimensional space-time. Einstein accounted for previously unexplained variations in the orbital motion of the planets and predicted the bending of starlight in the vicinity of a massive body such as the sun. The confirmation of this prediction during a solar eclipse in 1919 became a media event, and Einstein's fame spread worldwide. For the rest of his life, Einstein worked to generalize his theory further. He accrued honors and awards, including the Nobel Prize in physics in 1921.

