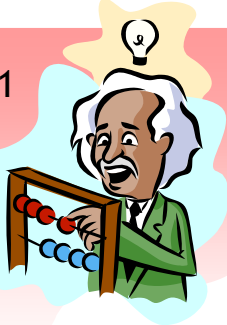


1



Albert Einstein

according to = as someone said...

amount = how much of something

attracted = to pull to someone or something

claim = to say that something is true

connect = there is a relationship between them

construction = the building of something

continue = to go on

create = make, write

gravity = the power that makes something fall to the ground

develop = here: work out

destroy = damage so that you can not use it any more

discovery = to find out about something that you have not known before

divorce = when a marriage ends because two people do not want to live together any more

energy = power

horrified = to feel shocked, sad and afraid

equation = a statement in mathematics that shows that two things are equal

follow = go after

invent = to make something new

mass = an amount of something

matter = material that everything in the universe is made of

meantime = the time in-between

mystery = something that you cannot understand and cannot explain because you don't know enough about it

Nobel Prize = the prize given to people who have done important work each year

patent office = you get a document here that lets you make or sell something new

path = a line along which something moves

peaceful purposes = not for war

possible = it can happen

prove = show

receive = get

related = to be connected in some way

scientist = a person who is trained in science

speed = how fast something is

square = a geometrical shape with four straight sides with 90° angles at the corners

suggest = to tell someone what they should do

Albert Einstein was a famous **scientist** who completely changed the way that people saw our world and the universe. Einstein **created** many theories which **proved** that things like **gravity**, light, energy and **matter** were **connected** with each other. At first, very few scientists could understand Einstein's theories but as time passed other scientists showed that he was correct.

Albert Einstein was born in Ulm, Germany in 1879 and grew up in Munich. He wasn't a good student at school and only did things he was interested in, like **science** and mathematics. At a very early age young Albert started wondering about the **mysteries** of the universe.

After school Einstein went to Switzerland and tried to become a teacher there, but he couldn't find a job. He went to work at the Swiss **patent office** in Bern where he studied what other people had **invented**.

After **divorce** from his first wife, a classmate of his, Albert went to Berlin where he married his cousin Elsa. He lived in Berlin for a long time and there he **developed** many of his scientific theories. Einstein became so well known that he was invited to universities around the world to talk about his **discoveries**. In 1921 he **received** the **Nobel Prize** for Physics.

In the **meantime** things were starting to change in Germany. Einstein was against the Nazis and their ideas of controlling the world and killing Jews. The Nazis, in return, hated him and his theories and they burned most of his books.

Einstein decided to leave Germany and go to the United States. When World War II broke out in 1939 Einstein **discovered** that German **scientists** were working on a bomb that could kill thousands of people. He wrote a letter to the American president to warn him and **suggested** that the Americans start building one too.

In 1941 the American government started the Manhattan project which led to the **construction** of the atomic bomb. Two of these bombs were dropped over Hiroshima and Nagasaki to end the war against Japan. Einstein was **horrified** when he heard the news. He wanted the world to use atomic **energy** for **peaceful purposes**.

For the last twenty years of his life, Einstein lived in Princeton where he continued his scientific work. He died on April 18, 1955

One of the most famous **equations** ever written came from Albert Einstein : $E = mc^2$. Energy is **mass** times the **squared speed** of light. This **equation** shows that **mass** can be turned to energy. Because the speed of light **square** is such a high number even a small **amount** of **mass** can be turned into a lot of energy.

This means, for example, that there is enough energy in a glass of water to give power to a city like London for a whole week. The problem is how to get the energy out of the **mass**. This **equation** led to the building of the atomic bomb. The first bomb only had 0.6 grams of **mass** but scientist turned it into enough energy to **destroy** a whole city.

Einstein also thought that space and time were closely **related** to each other. He thought that there were not three dimensions to objects but four—the fourth one was time. Other scientists, who **continued** his work, **claimed** that it is **possible** to travel into the past and into the future. Black holes might be tunnels that could take you back and forth in time .

According to Einstein all objects **followed** curved **paths** and get **attracted** by the **gravity** of an object. Time would pass more slowly if you are close to a very large object like a planet. This means that the clock of a plane goes faster than a clock at an airport because the plane is farther away from the earth.