

Name: _____

Great Minds: Albert Einstein

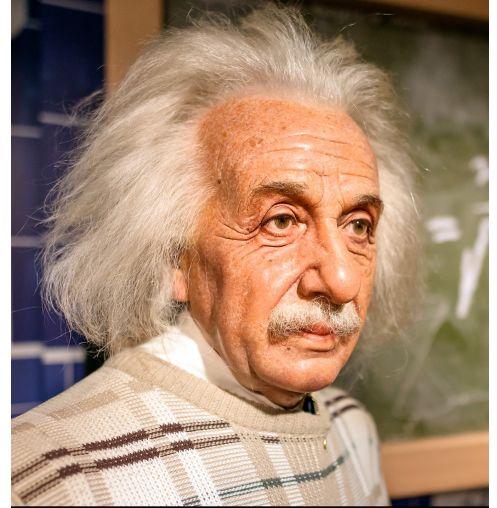
by Lydia Lukidis

You would probably recognize Albert Einstein from his photos. Yep, he was the guy with the crazy hair! But he also had some great ideas. He was more than just a scientist. He was a genius who changed our lives. He made some of science's biggest discoveries. He also developed some important theories. Some of these theories may seem complicated. But they concern everybody. Science is everywhere and affects us every day. Einstein's discoveries made things like television, DVD players, and garage door openers possible.

Einstein was born in Germany in 1879. When he was five years old, his dad gave him a compass. It became his favorite toy. He would stare at the needle of the compass as it moved. It seemed like magic at first. Einstein wanted to understand how the needle moved. So he learned about magnetism. Magnetism is about the invisible force of magnets. It can make objects stick together or move away. Einstein also learned a lot about science and electronics because of his dad. His dad owned an electronics company. It was no surprise that Einstein ended up loving math and science. He started performing experiments at a very young age.

Einstein performed extremely well in school. He quickly advanced to higher level math and science topics, and his teachers were impressed by his grasp of college-level physics concepts by the time he was eleven. When he was young, he met a Polish medical student named Max Talmud. Talmud became his tutor. He showed Einstein a children's textbook about science. Einstein became curious about light and other things.

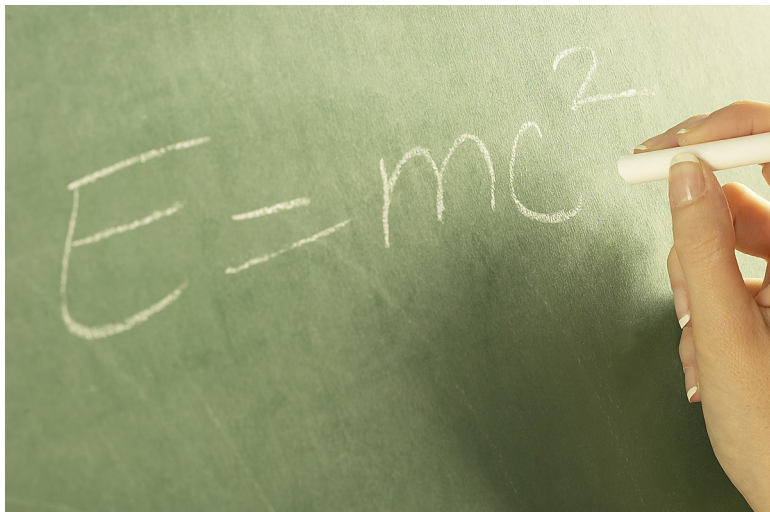
Einstein later attended school in Switzerland. He made many friendships. He also met his future wife, Mileva Maric. She was a Serbian physics student. Einstein received his



**"I am enough of an artist to draw
freely upon my imagination.
Imagination is more important than
knowledge. Knowledge is limited.
Imagination encircles the world."**
- Albert Einstein

doctorate in 1905. That same year, he published many important scientific papers.

After that, Einstein became a professor in Germany. But times were tough back then. Hitler and his Nazi party started a war against Jewish people. Einstein was Jewish. So he decided to leave and go to the United States. That was in 1933. And it's a good thing he did. The world needed him to be free and pursue his passions.



Einstein was not an inventor like Thomas Edison or Alexander Graham Bell. But his theories and discoveries changed the way we look at things. Some examples are time, space, matter, energy, and gravity.

Einstein is best known for his Theory of Relativity. You probably heard of the equation $E=mc^2$. E stands for energy, m stands for mass, and c stands for speed of light. But what does this all mean? Yes, it is as complicated as it sounds! Here's the most basic way to explain it. The theory is a scientific explanation about how space relates to time. This was very important. It changed the way scientists looked at the universe. This theory also brought on inventions like the nuclear bomb and nuclear energy.

Einstein made many other discoveries. For example, he figured out that light is made up of many little particles called photons. He called this the quantum theory of light. At the time, some other scientists did not agree with this theory. But later, it was proven. This was an important discovery. It led to many inventions such as television.

Here's one more example of an important discovery Einstein made. Along with scientist Satyendra Bose, he discovered a new state of matter. Regular states of matter are gas, liquid, and solid. Einstein and Bose found another one. They named it the Bose-Einstein Condensate. Today, it's used in cool things like lasers.

Einstein's work was and is valuable to the world. This is one of the reasons he eventually won the Nobel Prize in Physics. The Nobel Prize is a very famous award given to someone who has done outstanding work in different subjects like science or medicine. Einstein died in 1955. He was later named "Person of the Century" by TIME Magazine.

Name: _____

Great Minds: Albert Einstein

by Lydia Lukidis



1. Based on the information in the article, which statement is true about Albert Einstein's younger years?
 - a. Einstein's teachers were disappointed in his lack of interest in math and science.
 - b. Einstein was tutored by a Polish medical student, Max Talmud.
 - c. Einstein wanted to be a physics professor like his father.
 - d. Einstein's first time traveling abroad was when he fled Germany for the U.S. in 1933.

2. Even though Albert Einstein wasn't an inventor, his discoveries paved the way for many inventions. Name **six** things that were invented because of Einstein's work in math and science.

1. _____ 2. _____ 3. _____

4. _____ 5. _____ 6. _____

3. Einstein is very famous for his Theory of Relativity. His equation, $E=mc^2$, is a scientific explanation for how space relates to time. What does each part of the equation stand for?

E - _____ m - _____ c - _____

4. In addition to Einstein's Theory of Relativity, describe **two** other important discoveries Einstein made during his life.

5. What honor was bestowed on Albert Einstein later on in his career?

Name: _____

Great Minds: Albert Einstein

by Lydia Lukidis

The following terms are vocabulary words from the article. Match the vocabulary word with its correct definition by writing the corresponding letter on the line.

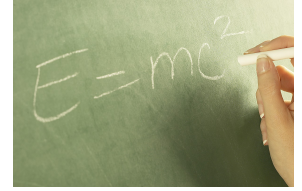


1. _____ genius
 2. _____ century
 3. _____ theory
 4. _____ gravity
 5. _____ doctorate
 6. _____ complicated
 7. _____ universe
 8. _____ compass
 9. _____ curious
 10. _____ outstanding
- a. a force that pulls a body toward the center of the earth
 - b. an instrument that displays the direction of magnetic north
 - c. complex; difficult to understand
 - d. eager to learn about or know something
 - e. everything in existence; the cosmos
 - f. mastermind; brilliant person
 - g. excellent; exceptional
 - h. a set of ideas that is intended to explain something
 - i. the highest degree that is awarded by a college, university, or other institution of learning
 - j. a period of one hundred years

ANSWER KEY

Great Minds: Albert Einstein

by Lydia Lukidis



- Based on the information in the article, which statement is true about Albert Einstein's younger years? **b**
 - Einstein's teachers were disappointed in his lack of interest in math and science.
 - Einstein was tutored by a Polish medical student, Max Talmud.**
 - Einstein wanted to be a physics professor like his father.
 - Einstein's first time traveling abroad was when he fled Germany for the U.S. in 1933.
- Even though Albert Einstein wasn't an inventor, his discoveries paved the way for many inventions. Name **six** things that were invented because of Einstein's work in math and science.
 - television**
 - DVD players**
 - garage door openers**
 - nuclear bomb**
 - nuclear energy**
 - lasers**
- Einstein is very famous for his Theory of Relativity. His equation, $E=mc^2$, is a scientific explanation for how space relates to time. What does each part of the equation stand for?

E - **energy** m - **mass** c - **speed of light**
- In addition to Einstein's Theory of Relativity, describe **two** other important discoveries Einstein made during his life.

Einstein discovered that light is made up of photons. Einstein also discovered a new state of matter along with Satyendra Bose, called Bose-Einstein Condensate.
- What honor was bestowed on Albert Einstein later on in his career?

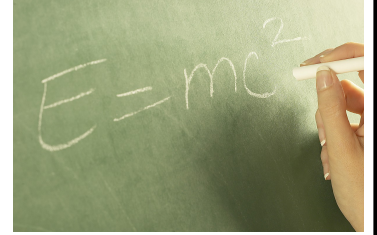
He was awarded the Nobel Prize in Physics.

ANSWER KEY

Great Minds: Albert Einstein

by Lydia Lukidis

The following terms are vocabulary words from the article. Match the vocabulary word with its correct definition by writing the corresponding letter on the line.



1. **f** genius **a.** a force that pulls a body toward the center of the earth
2. **j** century **b.** an instrument that displays the direction of magnetic north
3. **h** theory **c.** complex; difficult to understand
4. **a** gravity **d.** eager to learn about or know something
5. **i** doctorate **e.** everything in existence; the cosmos
6. **c** complicated **f.** mastermind; brilliant person
7. **e** universe **g.** excellent; exceptional
8. **b** compass **h.** a set of ideas that is intended to explain something
9. **d** curious **i.** the highest degree that is awarded by a college, university, or other institution of learning
10. **g** outstanding **j.** a period of one hundred years