



The Biography of Albert Einstein

1. Albert Einstein was one of the greatest scientists in history. He made significant contributions to **theoretical** physics. His discoveries about time, light and **gravity** have **transformed** our understanding of the world. In 1922, he was awarded the Nobel Prize in physics.

Background

2. Einstein was born in Germany in 1879. His parents were middle-class Jews. His father and his uncle ran a business that sold electrical **equipment**. His mother was a housewife. He had a younger sister.

Early life and education

3. Einstein attended elementary school and high school in Germany. He did not like the high school that he studied. The teachers there were strict. He was expected to memorise what was taught but not to think. He dropped out of school in 1894 and went to Italy to join his family. Later Einstein re-entered high school in Switzerland. In 1896, he enrolled in the four-year mathematics and physics teaching diploma programme in Swiss Federal Institute of Technology in Zurich.



Career path and achievements

4. After graduation, Einstein could not find a teaching job. Instead, he worked as a **patent** officer in Switzerland in 1902. Einstein was good at his job. He completed his work quickly and left time for his **thought experiments** during the long office hours.

5. With steady work at the patent office, Einstein wrote a lot of **remarkable** articles on physics. 1905 was an amazing year for Einstein. In that year, he was awarded his doctorate and he published four **groundbreaking** papers on topics on photoelectric effect, Brownian motion, special relativity, the equivalence of mass and energy ($E=MC^2$). Einstein's publications gained the attention of the **academic** world.

6. Einstein left the patent office in 1909 and became a professor at the University of Zurich. He taught at different universities in different countries since then. He became a world-famous scientist. He received his Nobel Prize in 1922 for his contributions to theoretical physics. Einstein also received a lot of honours, prizes and awards from different countries. Many people think that Einstein was a **genius**.

7. Einstein went to the United States in 1933. He settled in Princeton and worked in the Institute for Advance Study. Einstein was so devoted to theoretical physics that he kept working until the last days of his life even when he was hospitalised. He died on 18 April 1955.



8. Einstein left the world with a rich **legacy** of his discoveries. Some of them were applied to make inventions that changed our daily life while some help us better understand the universe.

Other information (Hobby)

Apart from physics, Einstein liked music when he was small. He enjoyed playing the violin. His mother was good at playing the piano. They enjoyed playing duets together. Einstein would bring his violin with him when he travelled around the world.

Other information (Inspiring quotes)

Einstein left us with inspiring quotes, which help us stay positive and proactive. The following are some of his quotes:

- “The important thing is not to stop questioning.”
- “Imagination is more important than knowledge.”
- “It’s not that I’m so smart, it’s just that I stay with problems longer.”
- “Life is like riding a bicycle. To keep your balance, you must keep moving.”

Glossary

1. theoretical: (adjective) based on the ideas that relate to a particular subject rather than practice and experiment
2. gravity: (noun) the force that attracts objects towards each other, especially the force that attracts a body towards the centre of the Earth
3. transformed: (verb) changed completely
4. equipment: (noun) tools for a particular purpose
5. a patent: (noun) an official document that gives a person the right to make or sell an invention
6. thought experiments: (noun) a thought experiment is a logical argument or mental model in the context of an imaginary scenario
7. remarkable: (adjective) unusual or surprising in a way that is likely to be noticed
8. groundbreaking: (adjective) making new discoveries
9. academic: (adjective) relating to schools and education
10. a genius: (noun) a very intelligent person who has exceptional skill in a certain area / certain areas, e.g. Mathematics
11. a legacy: (noun) something that comes from someone after they die or something that is left to descendants, e.g. money, property.



A. The following text boxes are about the life events of Albert Einstein. They are in random order. Read the biography of Albert Einstein and fill in the missing information.

Year of birth: _____ Place of birth: _____
 Mom: housewife Dad: _____
 Siblings: a _____

A

- made significant contributions to _____
- his discoveries have transformed our _____

B

- "The important thing is _____."
- "_____ is more important than knowledge."
- "It's not that I'm so smart, it's just that I _____"
- "Life is like riding a bicycle. To keep your balance, you must _____."

C

- received the _____ for his contributions to theoretical physics in _____

D

- kept working on theoretical physics until _____
- died in _____

E

- did not like the school that he studied
- dropped out of _____ and went to _____ in 1894
- graduated from Swiss Federal Institute of Technology in Zurich in _____

F

- went to the United States and settled in _____ in _____
- taught in the Institute for Advance Study

G

- was awarded his doctorate and published _____ in 1905
- became a professor at _____ in 1909
- taught at different universities in different countries since then

H

- worked as a _____ in Switzerland in _____
- completed his work quickly and conducted his _____ during the long office hours
- published a lot of remarkable _____

I

B. Match the text boxes in Part A with the headings. For the important events #1-4, arrange the text boxes in chronological order. The first one has been done as an example.

Why was Einstein an important person?

e.g. (B)

Background information – Einstein's family

()

Early life

()

Important events #1

()

**Albert
Einstein**

What were his accomplishments?

()

Important events #2

()

Important events #3

()

Important events #4

()

Quotes

()

C. Fill in each blank with a word from the reading text. You can find the word in the given paragraph.

1. Charles Kao's findings about optical fibre technology _____ telecommunications and paved way for the Internet. (para 1)
2. Nowadays, many people plan to start an online _____ through which they can reach a wider market. (para 2)
3. In order to test the effectiveness of the new drug, the scientists have to conduct a lot of _____. (para 4)
4. Stephen Hawking's _____ theory about black holes enriches our understanding of the universe. (para 5)
5. Apart from Albert Einstein, there are also other scientists who made great _____ to the world, e.g. Isaac Newton and Marie Curie. (para 6)
6. Mother Teresa was a great person. She _____ her life to helping numerous people in need. (para 7)
7. Thomas Edison was a prolific inventor with more than 1,000 _____. (para 8)
8. Before the spread of COVID-19, my father often _____ to other countries to attend business meetings. ("Other information (Hobby)")

D. Answer the following questions by circling the best option(s).

1. Einstein was famous for ____.
 - a his Jewish parents
 - b his understanding of the Nobel prize
 - c his contributions to theoretical physics
 - d his father's business on electrical equipment

2. Why didn't Einstein like his high school in Germany? It was because ____.
(You can choose more than one answer.)
 - a the teachers were strict
 - b he was not expected to think
 - c he re-entered high school in Switzerland
 - d he wanted to go to Italy to join his family

3. When did Einstein graduate from Swiss Federal Institute of Technology in Zurich?
 - a 1896
 - b 1900
 - c 1902
 - d 1905

4. Why could Einstein write a lot of remarkable articles on physics during his stay in the patent office? It was because he ____.
 - a was good at his job
 - b completed his work quickly
 - c had time to study physics during the long office hours
 - d all of the above

5. What was one of Einstein's papers published in 1905 about?
 - a time
 - b gravity
 - c general relativity
 - d photoelectric effect

6. Einstein received the Nobel Prize for his contributions to ____.
 - a the patent office
 - b inventing gadgets
 - c theoretical physics
 - d the University of Zurich

7. What was Einstein possibly doing during the last days of his life? He was possibly ____.
- a writing his will
 - b reading books about Princeton
 - c working on equations about physics
 - d teaching at the Institute for Advance Study
8. Apart from physics, what did Einstein like? He liked playing ____.
- a the violin
 - b the piano
 - c duets with his sister
 - d the violin and the piano
9. In what ways does Einstein's legacy of discoveries help us?
- a They are used to make inventions useful in our daily life.
 - b His discoveries about time, light and gravity change our understanding of the universe.
 - c He had made particular contributions to theoretical physics.
 - d all of the above

E. Answer the following question.

What made Albert Einstein a great scientist?

(Answer Key)

A. The following text boxes are about the life events of Albert Einstein. They are in random order. Read the biography of Albert Einstein and fill in the missing information.

Year of birth: 1879 Place of birth: Germany
Mom: housewife Dad: businessman
Siblings: a younger sister

A

- made significant contributions to theoretical physics
- his discoveries have transformed our understanding of the world

B

- “The important thing is not to stop questioning.”
- “Imagination is more important than knowledge.”
- “It’s not that I’m so smart, it’s just that I stay with problems longer.”
- “Life is like riding a bicycle. To keep your balance, you must keep moving.”

C

- received the Nobel Prize for his contributions to theoretical physics in 1922

D

- kept working on theoretical physics until the last days of his life
- died in 1955

E

- did not like the school that he studied
- dropped out of school and went to Italy to join his family in 1894
- graduated from Swiss Federal Institute of Technology in Zurich in 1900

F

- went to the United States and settled in Princeton in 1933
- taught in the Institute for Advance Study

G

- was awarded his doctorate and published four groundbreaking papers in 1905
- became a professor at the University of Zurich in 1909
- taught at different universities in different countries since then

H

- worked as a patent officer in Switzerland in 1902
- completed his work quickly and conducted his thought experiments during the long office hours
- published a lot of remarkable articles on physics

I

(Accept any reasonable answers.)

B. Match the text boxes in Part A with the headings. For the important events #1-4, arrange the text boxes in chronological order. The first one has been done as an example.

Why was Einstein an important person?

e.g. (B)

Background information – Einstein’s family

(A)

Early life

(F)

Important events #1

(I)

**Albert
Einstein**

What were his accomplishments?

(D)

Important events #2

(H)

Important events #3

(G)

Important events #4

(E)

Quotes

(C)

C. Fill in each blank with a word from the reading text. You can find the word in the given paragraph.

1. Charles Kao's findings about optical fibre technology transformed telecommunications and paved way for the Internet. (para 1)
2. Nowadays, many people plan to start an online business through which they can reach a wider market. (para 2)
3. In order to test the effectiveness of the new drug, the scientists have to conduct a lot of experiments. (para 4)
4. Stephen Hawking's remarkable/groundbreaking/amazing theory about black holes enriches our understanding of the universe. (para 5)
5. Apart from Albert Einstein, there are also other scientists who made great contributions to the world, e.g. Isaac Newton and Marie Curie. (para 6)
6. Mother Teresa was a great person. She devoted her life to helping numerous people in need. (para 7)
7. Thomas Edison was a prolific inventor with more than 1,000 inventions. (para 8)
8. Before the spread of COVID-19, my father often travelled to other countries to attend business meetings. ("Other information (Hobby)")



D. Answer the following questions by circling the best option(s).

1. Einstein was famous for ____.
c his contributions to theoretical physics

(Prompt: You can find clues in paragraph 1.)

2. Why didn't Einstein like his high school in Germany? It was because ____.
(You can choose more than one answer.)

- a the teachers were strict
b he was not expected to think

(Prompt: You can find clues in paragraph 3.)

3. When did Einstein graduate from Swiss Federal Institute of Technology in Zurich?

- b 1900

(Prompt: You can find clues in paragraph 3.)

4. Why could Einstein write a lot of remarkable articles on physics during his stay in the patent office? It was because he ____.

- a was good at his job
b completed his work quickly
c had time to study physics during the long office hours
d all of the above

(Prompt: You can find clues in paragraph 4.)

5. What was one of Einstein's papers published in 1905 about?

- d photoelectric effect

(Prompt: You can find clues in paragraph 5.)

6. Einstein received the Nobel Prize for his contributions to ____.

- c theoretical physics

(Prompt: You can find clues in paragraph 6.)

7. What was Einstein possibly doing during the last days of his life? He was possibly ____.

- c working on equations about physics

(Prompt: You can find clues in paragraph 7.)

8. Apart from physics, what did Einstein like? He liked playing ____.
- a the violin

(Prompt: You can find clues in the text box about “Other information (hobby)”.)

9. In what ways does Einstein’s legacy of discoveries help us?
- a They are used to make inventions useful in our daily life.
- b His discoveries about time, light and gravity change our understanding of the universe.
- c He had made particular contributions to theoretical physics.
- d all of the above

(Prompt: You can find clues in paragraphs 1 & 8.)

E. Answer the following question.

What made Albert Einstein a great scientist?

Albert Einstein was a genius. He had a passion for physics and devoted all his time to studying the subject. He was hardworking and determined. His discoveries about time, light and gravity have transformed/changed our understanding of the universe.

(Accept any reasonable answers.)

