

Directions

Read this article then answer questions 1-4.

Stephen Hawking was a famous scientist and author. He researched and wrote about physics¹.

Excerpt from *Stephen Hawking: His Life and Legacy*

By Emily Schlesinger

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- 1 Stephen Hawking was getting clumsy. Sometimes he would trip and fall. This happened more and more. One time was on the stairs. Another happened when he was ice skating. After a fall, Hawking could not get up. That seemed strange.
- 2 Doctors did tests. X-rays were done too. Muscle samples were taken from his arm. The doctors realized something was very wrong.
- 3 Doctors told Hawking the news. His case was unusual. He had a disease. It was called ALS. This attacks the muscles. They stop working over time. People with ALS become paralyzed².
- 4 Hawking could only write a few words a minute. Still, he was determined to share his ideas. Many would have given up. He did not.
- 5 It took patience. But there was no stopping him. The physicist³ took it one word at a time. All the words added up. Hawking wrote over ten books. He published paper after paper. His lectures⁴ and talks continued.
- 6 Hawking worked with top physicists. But he wanted to reach beyond that. Ordinary people should know about the universe too, he believed. After all, it was their home.
- 7 This gave him an idea. He would write a book. It would not be for scientists. Instead, it would be for the public. The book would tell all about the universe. He would start from the beginning of time. Simple language would be used. Anyone could read it.
- 8 Publishers thought the book would not sell. Normal people will not care, they said. The ideas are too hard. Few would read it.
- 9 Hawking proved them wrong. In 1988, he wrote the book. The title was *A Brief History of Time*. It was an instant best seller. Over ten million copies were sold.

- 10 In one story, there are twin brothers. One goes on a trip. He travels at the speed of light. When he comes back, he is still young. But his twin is old.
- 11 Another story tells of an astronaut. He visits a black hole⁵. Gravity⁶ is stronger at his feet than at his head. This stretches him out like a piece of spaghetti.
- 12 Hawking also talked about time travel. A ship takes a shortcut through space. This is called a wormhole. It allows the ship to go back in time.
- 13 Readers loved these ideas. They wanted to learn more. It was the start of a new trend. Cosmology⁷ grew popular. Science became cool. Hawking proved that physics was for everyone.
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¹**physics**: the branch of science that deals with matter and energy

²**paralyzed**: unable to move or feel one's body

³**physicist**: someone who studies physics

⁴**lectures**: talks given to teach something

⁵**black hole**: an area in space where the force of gravity sucks everything in

⁶**gravity**: the force of attraction between two objects; the force that pulls things toward the center of a moon, planet, or black hole

⁷**cosmology**: the study of the universe and how it began

1. Which sentence best summarizes the author’s main point?
 - A Visiting a black hole will stretch you out like a piece of spaghetti.
 - B Stephen Hawking had a disease.
 - C All people can be interested in science if it is explained well.
 - D Stephen Hawking was an ice skater, lecturer, author, and scientist.

2. Why does the author include details about ALS (paragraph 3) in the article?
 - A to explain some of the extra challenges Stephen Hawking faced
 - B to teach the reader that even famous people have problems
 - C to emphasize that doctors should be careful when sharing bad news
 - D to suggest that studying physics can paralyze muscles

3. In the article “Excerpt from *Stephen Hawking: His Life and Legacy*,” how do paragraphs 6, 7, and 13 support the author’s central idea? Use **two** details from the article to support your response.

4. In the article “Excerpt from *Stephen Hawking: His Life and Legacy*,” how does the author indicate that Hawking was determined to share his ideas? Use **two** details from the article to support your response.
