**Stephen Hawking**

As you all may have heard, a little while ago, one of the brightest men who lived in this era, died peacefully at his home in the early hours of the morning of 14th of March. Stephen Hawking, one of the most influential physicists of the 20th century and perhaps the most celebrated icon of contemporary science, has sparked an outpouring of grief from the scientific community and the wider public. Today, instead of talking about science, we are going to tell you more less known facts about his life.

**LIFE AND EDUCATION**

**Early life**

Stephen William Hawking was born on 8 January 1942. While he was a young boy, he and his parents were often spending meals with each person silently reading a book. The family were considered highly intelligent, they placed a high value on education and somewhat eccentric.

Hawking was initially not successful academically, but he was known at school as “Einstein”. With time, he began to show considerable aptitude for scientific subjects. Hawking built a computer with friends as a teenager, and demonstrated a tremendous capacity for grasping issues of space and time. He started his university education at University College, Oxford, but for the first year and a half he was bored and lonely, finding the academic work "ridiculously easy". Hawking estimated that he studied about 1,000 hours during his three years at Oxford and was concerned that he was viewed as a lazy and difficult student. He was held in higher regard than he believed, receiving a first-class BA degree in natural science and his dream of going to Cambridge was fulfilled.

**Q/A: Do you know some interesting facts about Stephen’s birthday? (Elvis Presley and Kim Jong-un were born on the same day. His birthday was the 300th anniversary of the death of astronomer and physicist Galileo Galilei); Did you know that his parents both attended the University of Oxford? He also had two sisters and one brother?**

**Diagnosis and family**

Unfortunately, in 1963, while he was a graduate student at Cambridge, he was diagnosed with motor neurone disease (ALS) and was given two years to live. Shortly before this happened, he met Jane Wilde and after two years they got married. Stephen Hawking said that the engagement gave him "something to live for". In the late 1960s, Hawking's physical abilities declined: he began to use crutches and ceased lecturing regularly, he also needed a wheelchair. As he slowly lost the ability to write, he developed compensatory visual methods, including seeing equations in terms of geometry.

Hawking was fiercely independent and unwilling to accept help or make concessions for his disabilities. He preferred to be regarded as "a scientist first, popular science writer second, and, in all the ways that matter, a normal human being with the same desires, drives, dreams, and ambitions as the next person."

He had two marriages and three children: two boys and one girl from the first one. The impact of his celebrity was challenging for colleagues and family members. His first wife, Jane, felt overwhelmed by the intrusion into their family life of the required nurses and assistants. Hawking's views of religion also contrasted with her strong Christian faith and resulted in tension. After they divorced, he got married again in 1995 with one of his nurses, declaring, "It's wonderful – I have married the woman I love.". In 2006, Hawking and Mason quietly divorced and Hawking resumed closer relationships with Jane, his children, and his grandchildren.

**PUBLICATIONS, CHALLENGES AND REWARDS**

**Publications & challenges**

A few years before his death, in 2013, he expressed support for the legalisation of assisted suicide for the terminally ill. He also accepted the Ice Bucket Challenge to promote ALS/MND awareness and raise contributions for research, even if he was advised not to have ice poured over him because of the pneumonia he had in 2013, but his children volunteered to accept the challenge on his behalf.

There were written two books about him by his first wife and the revised version of the first one, called ”Travelling to Infinity: My Life with Stephen”, was made into a film, ”The Theory of Everything”. British actor Eddie Redmayne won an Oscar in 2015 for playing Hawking in it. Hawking wrote a few books and some of them became widely popular, as “A Brief History of Time”, or “The Universe in a Nutshell”. His book, “A Brief History of Time”, appeared on the British Sunday Times best-seller list for a record-breaking of 237 weeks. What is interesting is that Hawking said that pope told him not to study the beginning of universe; he quoted the pope as saying, "It's OK to study the universe and where it began. But we should not inquire into the beginning itself because that was the moment of creation and the work of God."

**Q/A: How many of you knew that when he was young he was a member of Oxford's rowing team? Do you know what rowing is? He joined the rowing team of the college because he initially felt lonely there, as it was said before.**

He also collaborated with Roger Penrose while working on gravitational singularity theorems and on the theoretical prediction that black holes emit radiation. They are now often called Hawking radiation. He was the first to set out a theory of cosmology explained by the general theory of relativity and quantum mechanics, which he was a vigorous supporter of. He achieved commercial success with works of popular science in which he discussed his own theories and cosmology in general. One of Stephen Hawking’s biggest achievements is coming up with the theory that the universe is boundless, with partner Jim Hartle in 1983.

**Q/A: Did you know that he once lost a bet on black holes? (He considered that information that goes inside a black hole gets destroyed after its evaporation. He made a bet on this with fellow scientists, but later came the 'information paradox' which says that what he said conflicted with the rules of quantum mechanics. Technically, the bet is still on but we'll probably never know whether he won it or not.)**

At Google's Zeitgeist Conference in 2011, Hawking said that "philosophy is dead". He believed that philosophers "have not kept up with modern developments in science" and that scientists "have become the bearers of the torch of discovery in our quest for knowledge". He said that philosophical problems can be answered by science, particularly new scientific theories which "lead us to a new and very different picture of the universe and our place in it”.

Hawking stated that he was "not religious in the normal sense" and he believed that "the universe is governed by the laws of science": “There is a fundamental difference between religion, which is based on authority, and science, which is based on observation and reason. Science will win because it works.”.

In a 2010 interview with ABC's "World News Tonight", Hawking was asked about the best fatherly advice he'd given. "Here are the most important pieces of advice that I've passed on to my children," he said. "One, remember to look up at the stars and not down at your feet. Two, never give up work. Work gives you meaning and purpose and life is empty without it. Three, if you are lucky enough to find love, remember it is rare and don't throw it away."

Until now, Stephen Hawking is known to be the longest ALS survivor. In 2016, he said in a BBC interview: "I never expected to reach 75, so I feel very fortunate to be able to reflect on my legacy". During his lifetime, he had over 400 publications: articles, books, thesis, theories and so on. In 2002, he was ranked number 25 in the BBC's poll of the 100 Greatest Britons. He made several major discoveries throughout his career, and once said his greatest achievement was his discovery that black holes are not entirely black.

**Rewards**

During the years, the scientist received numerous awards and honors:

* Elected an Honorary Fellow of the Royal Society of Arts;
* A lifetime member of the Pontifical Academy of Sciences,
* A recipient of the Presidential Medal of Freedom, the highest civilian award in the United States.
* Director of Research at the Centre for Theoretical Cosmology within the University of Cambridge.
* the Lucasian Professor of Mathematics at the University of Cambridge between 1979 and 2009, which is one of the most prestigious academic posts in the world.
* was awarded the Julius Edgar Lilienfeld Prize of the American Physical Society

Astrophysicist Neil DeGrasse Tyson, the director of the Hayden Planetarium in New York City, wrote on Twitter: "His passing has left an intellectual vacuum in his wake. But it's not empty. Think of it as a kind of vacuum energy permeating the fabric of spacetime that defies measure."

His physics tutor, Robert Berman: "It was only necessary for him to know that something could be done, and he could do it without looking to see how other people did it."

It is testament to how he defied the odds, and helped define our understanding of the universe.

The British scientist was famed for his work with black holes and relativity, and wrote several popular science books including A Brief History of Time.

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“When you are faced with the possibility of an early death, it makes you realize that life is worth living and that there are a lot of things you want to do,” Hawking was quoted often as saying.

* An English theoretical physicist, cosmologist and author