

KUEPE SAMPLE - SHORT READING

- (1) Scientists have long struggled to find the connection between two branches of physics. One of these branches deals with the forces that rule the world of atoms and subatomic particles. The other branch deals with gravity and its role in the universe of stars and galaxies. Physicist Stephen Hawking has set himself the task of discovering the connection. Leading theoretical physicists agree that if anyone can discover a unifying principle, it will certainly be this extraordinary scientist.
- (2) Dr. Hawking's goal, as he describes it, is simple. "It is complete understanding of the universe, why it is as it is and why exist at all." Quantizing gravity means combining the laws of gravity and the laws of quantum mechanics into a single universal law. Dr. Hawking and other theoretical physicists believe that with such a law, the behavior of all matter in the universe, and the origin of the universe as well, could be explained.
- (3) Dr. Hawking's search for a unifying has led him to study one of science's greatest mysteries: black holes. A black hole is an incredibly dense region in space whose gravitational pull attracts all nearby objects, virtually "swallowing them up." A black hole is formed when a star uses up most of the nuclear fuel that has kept it burning. During most of its life as an ordinary star, its nuclear explosions exert enough outward force to balance the powerful inward force of gravity. But when the star's fuel is used up, the outward force comes to an end. Gravity takes over, and the star collapses into a tiny core of extremely dense materials, possibly no bigger than the period at the end of this sentence. Hawking has already proved that black hole can emit a stream of electrons. Before this discovery, scientists believed that nothing, not even light, could escape from a black hole. So scientists have hailed Hawking's discovery as "one of the most beautiful in the history of physics."
- (4) Exploring the mysteries of the universe is no ordinary feat. And Stephen Hawking is no ordinary man. Respected as one of the most brilliant physicists in the world, Hawking is also considered of the most remarkable as he suffers from a serious disease of the nervous system that has confined him to a wheelchair, barely able to move or to speak. Although Dr. Hawking gives numerous presentations and publishes countless articles and papers, his speeches must be translated and his essays written down by other hands.
- (5) Hawking became ill during his first years at Cambridge University in England. The disease progresses quickly and caused the young scholar to become depressed. He even considered giving up research, as he thought he would not live long enough to receive his PhD. But in 1965, Hawking's life changed. He married Jane Wilde, a fellow student and language scholar. Suddenly life took on new meaning. "That was the turning point," he says. "It made me determined to live, and it was about that time that I began making professional progress." Hawking's health and spirits improved. His studies continued and reached new heights of brilliance. Today, Dr. Hawking is professor of mathematics at Cambridge University and a husband and father who leads a full and active life.
- (6) Dr. Hawking believes that his illness has benefited his work. It has given him more time to think about physics. Therefore, although his body is failing him, **his mind is free to soar**. Considered to be one of the most brilliant physicists of all time, Dr. Hawking has taken some of the small steps that lead science to discovery and understanding. With time to think over the questions of the universe, it is quite likely that Stephen Hawking will be successful in uniting the world of the tiniest particles with the world of stars and galaxies.

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- 1) The chief theoretical physicists of the world believe that _____.
a) Hawking is the only person who has the potential to unite the laws of gravity with the forces governing the world of atoms.
b) in order to discover the relation between the two branches of physics, they must unite and work together
c) Hawking's discovery of the connection between the two branches of physics makes him a great physicist.
d) the task of discovering a unifying principle will make Hawking an extraordinary scientist.
- 2) Which of the following TRUE according to the text?
a) When a star's nuclear fuel is mostly consumed, a black hole is formed.
b) Stephen Hawking has proved that black holes swallow up everything, even electrons.
c) When the life of a star comes to an end, so does its inward force of gravity
d) The outward force of an ordinary star is more powerful than its inward force.
- 3) Which of the following is the main idea of paragraph 4?
a) Dr. Hawking is regarded as an extraordinary man because of his efforts to quantize gravity.
b) Dr. Hawking is a brilliant physicist despite his serious disease
c) Dr. Hawking cannot move or speak because of his serious disease of the nervous system.
d) Dr. Hawking speeches must be translated as he is unable to speak.
- 4) After Stephen Hawking became ill, _____.
a) he gave up his studies and research for a while
b) he became a language scholar and his life changed
c) he went to Cambridge University and worked toward his Ph.D.
d) he got married and became even more successful in his studies
- 5) The phrase "**his mind is free to soar**" in paragraph 6 probably means _____.
a) he often changes his mind about the discoveries he makes
b) his mind is always open to questions about his illness
c) his mind is open to professional development
d) because of his illness, his mind is gradually losing its capacity