

中国石油职称英语考试通用教材电子版（2007年）五十一

PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/266/2021_2022__E4_B8_AD_E5_9B_BD_E7_9F_B3_E6_c91_266175.htm

51. Einsteins Inspiring Heir (爱因斯坦的激励人心的继承人) 1. He is almost totally paralyzed, speechless and wheelchair-bound, able to move only his facial muscles and two fingers on his left hand. He cannot dress or feed himself, and he needs round-the-clock nursing care. He can communicate only through a voice synthesizer, which he operates by laboriously tapping out words on the computer attached to his motorized chair. Yet at age 50, despite these crushing adversities, Stephen Hawking has become, in the words of science writers Michael White and John Gribbin, "perhaps the greatest physicist of our time." His 1988 book, A Brief History of Time, has sold 1.7 million copies around the world. 1、他几乎完全瘫痪，不能说话，离不开轮椅，能够活动的只有他面部的肌肉和他左手的两个指头。吃饭穿衣他不能自理，白天夜晚都需要人照顾。他只能通过一个发声合成器同别人交流。这个计算机式的发声合成器固定在他那装有马达的轮椅上；他吃力地操作键盘，把要说的话一个词一个词地打出来。尽管他遭此极度厄运，斯蒂芬霍金在他年已半百的时候还是成了“也许是当代最伟大的物理学家”。(科技作家迈克怀特和约翰格里宾语)他1988年出版的《时间简史》一书，在世界各地共销售了170万册。2. Hawkings choice of career was most fortunate, for himself as well as for science. Rejecting the urging of his physician father to study medicine, Hawking chose instead to concentrate on math and

theoretical physics, first at Oxford and then at Cambridge. But at age 21 he developed the first symptoms of amyotrophic lateral sclerosis (ALS), a disorder that would inevitably render him paralyzed and incapable of performing most kinds of work. As the authors note, theoretical physics was "one of the very few jobs for which his mind was the only real tool he needed."

2、霍金选择了这一职业，对科学事业和他本人都是件极大的好事。他父亲是个医生，曾敦促他学医，但他没有从命，而是先后在牛津大学和剑桥大学专攻数学和理论物理。可是他在21岁的时候，出现了肌萎缩性(脊髓)侧索硬化的征兆；这一疾病不可避免地要导致瘫痪，使他很多事都不能做。用本书的两位作者的话来说，“研究理论物理是他能做的屈指可数的几件工作之一这些工作实际需要的工具仅是他的大脑。”

3. He has used that tool with consummate skill. While still a graduate student, Hawking became fascinated by black holes, the bizarre objects created during the death throes of large stars. Working with mathematician Roger Penrose and using Einstein's relativity equations, he developed new techniques to prove mathematically that at the heart of black/holes were singularities infinitely dense, dimensionless points with irresistible gravity. He went on to demonstrate that the entire universe could have sprung from a singularity and, in his 1966 Ph.D. thesis, wryly noted that "there is a singularity in our past."

3、他娴熟地使用了这一工具。还在当研究生的时候，他就对研究黑洞现象巨大星体湮灭过程中产生的奇怪物体入了迷。他同数学家罗杰潘罗斯合作，运用爱因斯坦的相对论等式找到了新的计算方法来证明：在黑洞的中心是一堆密密麻麻的、无边无

际的、具有巨大引力的奇异小点。他继而证明，整个宇宙都有可能是从某个奇点演变而来的。他在1966年写的博士学位论文中略带讽刺意味地写道：“我们过去的历史中就有一个奇点。”

4. Gathering momentum as a fellow at Cambridge, Hawking calculated that the Big Bang, which gave birth to the universe, must have created tiny black holes, each about the size of a proton but with the mass of a mountain. Then, upsetting the universal belief that nothing, not even light, can escape from a black hole, he used the quantum theory to demonstrate that these miniholes (and larger ones too) emit radiation. Other scientists eventually conceded that he was correct, and the black-hole emissions are now known as Hawking radiation.

4、在剑桥当研究员时，他再接再厉，并推测出：可能是产生宇宙的大爆炸同时也产生了那些小黑洞，其大小同质子差不多，但质量却重如一座大山。后来，他用量子理论证明这些小洞(还有大一些的)能发出射线，从而推翻了认为任何东西(包括光在内)都不能逃脱黑洞的普遍看法。其他科学家最终还是承认他是正确的，而且现在人们还把黑洞射线称为霍金射线。

5. Engrossed as Hawking is with his work, the authors say, "ALS is simply not that important to him." He certainly does not dwell on his handicap. His succinct, synthesized voice comments are often laced with humor, he enjoys socializing with his students and colleagues, attends rock concerts and Sometimes takes to the dance floor at discos, wheeling his chair in circles. But he can be stubborn, abrasive and quick to anger, terminating a conversation by spinning around and rolling off, sometimes running one of his wheels over the toes of an offender.

5

、由于霍金一心扑在工作上，本书的两位作者说：“瘫痪对他显得并不那么重要。”他肯定没有老是想着自己的残疾。他那通过发声合作器说出来的简单话语，时不时还带着点幽默的味道。他喜欢和学生、同事们一起参加社交活动，参加摇滚音乐会，有时还到迪斯科舞厅去，坐在轮椅上转圈子。可他有时也很执拗，对别人有些生硬粗暴，爱发脾气，有时他突然中断同别人的谈话，坐着轮椅转个圈，然后悻悻地离去。他甚至还会用轮椅的一个轮子轧冒犯者的脚趾。 6.

Hawking can also be wrong. In 1985, for example, he brashly proclaimed that when and if the universe stopped expanding and began to contract, time would reverse and everything that had ever happened would be rerun in reverse. Eighteen months later, he sheepishly admitted his mistake. Earlier, after trashing another scientist's notion that the 19th century theory of thermodynamics could be applied to black-hole theory, he recanted and began

applying it himself. 6、霍金也有出错的时候。例如他在1985年草率宣布，如果宇宙停止扩大并开始缩小时，时间就会逆转，凡是发生过的一切事情就会逆时间顺序重演一遍。但过了18个月之后，他难为情地承认了自己看法的错误。在这之前，他曾对另一位科学家提出的可以把19世纪的热力学理论应用于黑洞理论研究的这一观点(抱着)不屑一顾(的态度)。但他后来改变了态度，并在他的研究工作中加以应用。 7.

Without his wife Jane, Hawking has always emphasized, his career might never have soared. She married him shortly after he was diagnosed with ALS, fully aware of the dreadful, progressive nature of the disease, giving him hope and the will to carry on with his

studies. They had three children in the early stages of their marriage, and later, as he became increasingly incapacitated, she devoted herself to catering to his every need.

7、霍金一直强调，没有他的妻子珍妮，他的事业是不会腾飞的。珍妮是在他确诊患了肌萎缩性侧索硬化之后不久同他结婚的。她完全了解他那不断恶化的病情及其可怕的严重后果；她这时同他结婚给了他继续进行研究工作的希望和毅力。婚后早期的一段时间里，他们有了3个孩子。后来，随着他的自理能力越来越差，她就全力以赴地、无微不至地照顾他。

8. After years of apparently harmonious marriage, however, rifts began appearing. As the accolades and awards poured in for Stephen, Jane competent and intelligent herself began to resent living in his shadow. Deeply religious, she was also offended by his apparent atheism. Particularly galling to her was his concept, enunciated first before the Pope at a scientific meeting at the Vatican, that the universe might be completely self-contained, having no boundary or edge, no beginning or end. If that were true, he asked provocatively, "What place, then, for a creator?" Still, friends were shocked in 1990 when Hawking abruptly ended their 25-year marriage, moving in with one of his nurses.

8、然而，在经过多年显然和谐的婚姻生活之后，他们之间开始出现裂痕。随着他获得的表彰和奖励越来越多，能干和富有才智的珍妮不甘心长期生活在他盛名的荫庇之下。另外，她是个虔诚的教徒，对丈夫不信教也深为不满。尤其令她恼火的是，他在梵蒂冈的一次科学会议上竟首次当着教皇的面宣布说，宇宙是自成一体的，无边无界无始无终。他用挑衅性的口吻问道：如果情况确实如此，那么“哪

儿还有创世者的位置？”1990年他突然结束了同她25年的婚姻而投向了一名护士的怀抱。这使他的朋友们大为震惊。9.

What this book brings to the already crowded domain of Hawking lore is a rather successful merger of biography and physics. As it traces the course of Hawking's life, it pauses occasionally to prepare the reader for the mind-boggling complexities of relativity theory and the even more bizarre notions of quantum physics twin pillars on which Hawking has constructed his theories which he is currently attempting to unite in an all-encompassing theory. The authors characterize their early review of Newton's classical theory of gravitation, for example, as "a gentle workout in the foothills before we head for the dizzy heights." 9、这本书里充满了关于霍金的传说与故事，其特点是把传记同物理学成功地融合在一起。在叙述霍金生平的过程中，作者不时地穿插进一些物理知识(作为铺垫)，以帮助读者对那深奥莫测的复杂的相对论以及那更为稀奇古怪的量子物理学理论有所了解。这两个理论是霍金构筑他自己理论的两根支柱，目前他正试图把二者兼容为一个总括性的理论。书中一开始就介绍了牛顿的经典的万有引力理论，作者们把这比作是“攀登那令人头晕目眩的顶峰之前在山脚下进行的轻松的准备活动。”10. The exercise works.

By the time the higher elevations are reached, such strange notions as Einsteinian curved space-time and the quantum uncertainty principle, heavy meals indeed, seem not so difficult to digest. 10、这个准备锻炼很有效。当攀登到一定高度时，像爱因斯坦的时空卷曲论和量子不确定原理等概念就出现了；而这些难以咀嚼的食物也就变得不那么难于消化了。11. Still, it is the man,

more than the science, who dominates this book, with his triumph over a terrible affliction, his courage, his humor and his admirable lack of self-pity. As Hawkings computer voice declared during the final scene in a BBC TV show, "I have a beautiful family, I am successful in my work, and I have written a best seller. One really cant ask for more." 11、不过，书中叙述还是以人为主，科学内容位居其次，写出了主人公战胜残疾的极大折磨，他的勇气，还有他的诙谐幽默和他那令人敬佩的毫不自怜的精神。正如他在英国广播公司的一个电视节目的末尾通过他的发声合成器所说的话，“我有一个美满的家庭，我在研究上取得了成就，我出版了一本畅销书。一个人实在不能有更多地希求了。” 100Test 下载频道开通，各类考试题目直接下载。详细请访问 www.100test.com