

2011年6月英语四级听力第一部分外站原文 PDF转换可能丢失图片或格式，建议阅读原文

https://www.100test.com/kao_ti2020/647/2021_2022_2011_E5_B9_B46_E6_9C_c83_647135.htm 本文文章为2011年6月英语四级考试听力部分的第一个模块文章的听力原稿，节选该文章的前五段内容。 点击进入：#ff0000>2011年6月英语四六级考试试题答案专题 编辑推荐：#0000ff>2011年6月英语六级考试试题(图片版) #0000ff>2011.6英语六级试题及答案解析汇总 外刊文章来源pastebin.com

Contrary to the old warning that time waits for no one, time slows down when you are on the move. It also slows down more as you move faster, which means astronauts someday may survive so long in space that they would return to an Earth of the distant future. If you could move at the speed of light, 186,282 miles a second, your time would stand still. If you could move faster than light, your time would move backward. Although no form of matter yet discovered moves as fast or faster than light, scientific experiments have confirmed that accelerated motion causes a voyager, or traveler, time to be stretched. Albert Einstein predicted this in 1905, when he introduced the concept of relative time as part of his Special Theory of Relativity. A search is now under way to confirm the suspected existence of particles of matter that move faster than light and therefore possibly might serve as our passports to the past. An obsession with time-saving, gaining, wasting, losing, and mastering it-seems to have been part of humanity for as long as humans have existed. Humanity also has been obsessed with trying to capture the meaning of time. Einstein used a definition of time, for

experimental purposes, as that which is measured by a clock. Thus, time and times relativity are measurable by any sundial, hourglass, metronome, alarm clock, or an atomic clock that can measure a billionth of a second. Scientists have demonstrated that an ordinary airplane flight is like a brief visit to the Fountain of youth. In 1972, for example, scientists who took four atomic clocks on an airplane trip around the world discovered that the moving clocks moved slightly slower than atomic clocks which had remained on the ground. If you fly around the world, preferably going eastward to gain the advantage of the added motion of the Earth's rotation, the atomic clocks show that you'll be younger by only 40 billionths of a second. Even such an infinitesimal saving of time proves that time can be stretched.

Moreover, atomic clocks have demonstrated that the stretching of time increases with speed. Here is an examples of what you can expect if tomorrows space-flight technology enables you to move at ultrahigh speeds. Imagine you're an astronaut with a twin who stays home. If you travel back and forth to the nearest star at about half the speed of light, you'll be gone for 18 Earth years. When you return, your twin will be 18 years older, but you'll have aged only 16 years. Your body will be two years younger than your twins because time aboard the flying spaceship will have moved more slowly than time on Earth. You will have aged normally, but you have been in a slower time zone. If your spaceship moves at about 90% of lightspeed, you'll age only 50% as much as your twin. If you whiz along at 99.86% of lightspeed, you'll age only five percent as much. These examples of time-stretching, of course, cannot be tested with any existing

spacecraft. They are based on mathematical projections of relativity science. Speed is not the only factor that slows time. so does gravity. Einstein determined in his General Theory of Relativity that the force of an objects gravity "curves" the space in the objects gravitational field. When gravity curves space, Einstein reasoned, gravity also must curve time, because space and time ar linked. Numerous atomic clock experiments have confirmed Einsteins calculation that the closer you are to the Earths center of gravity, which is the Earths core, the slower you will age. In one of these experiments, an atomic clock was taken from the National Bureau of Standards in Washington, D.C., near sea level, and moved to mile-high Denver. The results demonstrated that people in Denver age more rapidly by a tiny amount than people in Washington. If you would like gravitys space-time warp to extend your life, get a home at the beach and a job as a deep-sea dever. Avoid living in the mountains or working in a skyscraper. That advice, like the advice about flying around the world, will enable you to slow your aging by only a few billionths of a second. Nevertheless, those tiny fractions of a second add up to more proof that time-stretching is a reality. According to scientific skeptics, time reversal —travel to the past —for humans would mean an unthinkable reversal of cause and effect. This reversal would permit you to do something in the past that changes the present. The skeptics worry that you even might commit an act that prevents your own birth. Some scientists believe we should keep an open mind about time reversal. Open-minders speculate that time-travelers who change the past would be opening doors to alternative histories,

rather than interfering with history as we know it. For example, if you prevented the assassination of Abraham Lincoln, then a new line of historical development would be created. The alternative history — the one without Lincoln's assassination — would have a completely separate, ongoing existence. Thus, no change would be made in anybody's existing history. Another possibility is that nature might have an unbreakable law preventing time travelers from changing the past. If we did discover a source of energy that would enable us to travel beyond lightspeed, we might have access not only to the past, but also to the future. Suppose you went on a super-lightspeed trek to the Spiral Nebula in the Andromeda Galaxy. That location is separated from Earth by 1,500,000 lightyears, the distance light travels in 1,500,000 years. Suppose you make the round trip in just a few moments. If all goes well, you'll return to the Earth 3,000,000 years into its future, because that's how much Earth time will have elapsed. Time is an abstraction. In other words, it cannot be seen, touched, smelled, or tasted. It seems to have no existence apart from the events it measures, but something tells us that time is out there, somewhere. "When we pursue the meaning of time," according to the time-obsessed English novelist-playwright J.B. Priestley, "We are like a knight on a quest, condemned to wander through innumerable forests, bewildered and baffled, because the magic beast he is looking for is the horse he is riding." What about our quest for particles that travel faster than light? If we find them, will we be able to control their energy to tour the past? If we find them, will we be able to control their out mistakes and suffer the same consequences? Or will we be

able to use our experience to make everything turn out better the second time around? Will we ever be able to take instant trips to the distant future, the way people do in the movies, with a twist of a dial and a "Zap!, Zap!" of sound effects? One cannot resist the temptation to respond that only time will tell. 考后，我们将为大家提供#0000ff>2011年6月英语四级考试试题答案在线估分平台，敬请关注！2011年英语四级成绩查询时间：英语四级考试成绩将会在#ff0000>考后两个月内公布（8月下旬）。#0000ff>点击进入2011年6月英语四级成绩查询时间 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