

Nevertheless, those tiny fractions of a second add
 100 up to more proof that time-stretching is a reality. The
 proof involving gravity suggests that you could have
 an unforgettable rendezvous with a black hole, where
 gravity is believed to be so powerful that it imprisons
 light. In a black hole—a huge, burned-out star that has
 105 collapsed into infinite density and, therefore, infinite
 gravity—the object’s extreme warp of space-time
 would make your time stand still. Granted, a black hole
 would be an awfully dark and dreary place to spend
 eternity, but think of all the time you’d have to redeco-
 110 rate.

31. According to the theories in this article, in order for time to move backward, an object must move:
- A. fast enough to break the time barrier.
 - B. at 186,282 miles a second.
 - C. at the speed of light.
 - D. faster than the speed of light.
32. The results of the atomic-clock experiment show that time:
- F. flies when you’re having fun.
 - G. continues at a normal pace.
 - H. slows down.
 - J. speeds up.
33. Which of the following theories was NOT developed by Einstein?
- A. Space-time continuum
 - B. General Theory of Relativity
 - C. Special Theory of Relativity
 - D. None of the above theories were developed by Einstein.
34. According to the information in this passage, people in Denver age more rapidly than people in Washington, D.C., because:
- F. people in Washington, D.C., understand Einstein’s theory.
 - G. the climate is better for people on the East Coast.
 - H. Washington, D.C., is closer to sea level than Denver.
 - J. the Rocky Mountains are dangerous for those living on them.
35. Time for humans is NOT affected by:
- A. gravity.
 - B. life expectancy.
 - C. speed of travel.
 - D. closeness to Earth’s center.
36. Which of the following statements best reflects the author’s main point in this passage?
- F. Black holes are very dangerous.
 - G. Atomic clocks are unreliable indicators of time.
 - H. Einstein was the greatest scientist in history.
 - J. Time can be affected by factors such as speed and gravity.
37. In its context in line 66, the word “projections” means:
- A. visual images on a television screen.
 - B. predicted outcomes.
 - C. objects that stick out of the ground.
 - D. objects that fly.
38. In a place of infinite gravity, time:
- F. speeds up dramatically.
 - G. slows down slightly.
 - H. reverses completely.
 - J. stops completely.
39. The author mentions redecorating while living in a black hole (lines 109–110):
- A. because when the sun dies, all humans will live in a black hole.
 - B. to demonstrate that the concept of black holes is ridiculous.
 - C. to prove that life can exist in a place of infinite density.
 - D. to add a playful note to an otherwise serious scientific discussion.
40. If one 20-year-old woman travels in space at 90 percent of the speed of light for 10 years and her twin stays on Earth, the space traveler’s age when she returns will be:
- F. 30.
 - G. 35.
 - H. 25.
 - J. 20.

END OF TEST 3