

14. The plans for that building were drawn up in 1965, but _____ .
 a. their implementation were not put into action by 1970
 b. the plans for that building were not implemented since 1970
 c. not implemented and started before 1970
 d. were not implemented until 1970
15. Excess sodium in the diet may lead to high blood pressure or hypertension _____.
 a. is a disease affecting one out of four Americans
 b. one in four Americans are affected by this disease
 c. a disease affecting one in four Americans
 d. it is a disease affecting one in four Americans

B. Identify the one underlined word or phrase that must be changed in order for the sentence to be correct. Then mark your answer sheet.

16. John stayed up all night long trying to solve a physic problem.
 A B C D
17. By the beginning of next year, much of the people who live in that area may have difficulty finding employment.
 A B C D
18. Approving of my choice of colleges, my father said that he was willing to completely pay for all the costs of my education.
 A B C D
19. We all laughed when Ali said he could not remember what day was it.
 A B C D
20. Our company looks forward to have you on staff, and we will assist you in any way possible in order to make your move pleasant.
 A B C D
21. If Ali and Ahmad had been in better physical condition, they might enjoyed the hike more.
 A B C D
22. The coach said that they should have gone to the gym every day next week to get in shape for the tournament game.
 A B C D
23. The crops are already showing signs of dehydration and probably cannot survive another week without no rain.
 A B C D
24. Let's take one of this pamphlets and look up the special flights to London in November.
 A B C D
25. She was determined to leave the office by 4:30 for catch the early train home.
 A B C D

26. Having lost his job, Tom was only able to finish one semester of work before he
 A B C
was forced to leave school.
 D
27. Their free trip, which they won on a television game show, include four days in
 A B C
 London and a week in Paris.
 D
28. It is essential that the temperature is not elevated to a point where the substance
 A B
 formed may become unstable and decompose into its constituent elements.
 C D
29. The first postage stamp, issued on May 6th 1860, in England it was the Penny
 A B C
 Black, which featured a profile of Queen Victoria.
 D
30. The fossil represent animals or plants that had hard and usually well-developed
 A B C D
 body structure.
31. Aluminum has a hard impervious coating which protects the metal from corrode.
 A B C D
32. The size of the pupil, according to psychologists, is effected by mental activity.
 A B C D
33. Not have passed the law exam, the state refused to issue him a license to practice.
 A B C D
34. Gorillas live in largely permanently family groups like humans.
 A B C D
35. Even though Wallace and Darwin conceived the idea of natural selection at the
 A B
 same time, Darwin was credited because his earlier papers.
 C D
36. Graphology, the science of handwriting analysis, has interested people
 A B C
as far back as the 2nd century.
 D
37. The range of plant life on a mountainside is a results of differences in temperature
 A B C
 and precipitation at varying altitudes.
 D
38. Despite of many attempts to introduce a universal language, notably Esperanto,
 A B C
 the effort has met with very little success.
 D
39. One should always avoid to change lanes without first signaling.
 A B C D
40. Some methods to prevent soil erosion are plowing parallel with the slopes of hills,
 A B C
to plant trees on unproductive land, and rotating crops.
 D

D. Read the following passages carefully. Then choose the best answer to each question and mark your answer sheet.

The Educational Testing Service claims that the Scholastic Aptitude Test is not a measurement of students' accomplishments in mathematics and language. It is a test of students' aptitude for learning. Educators disagree and have devised a new program for preparing students to take the SAT.

The program covers the basic high school curriculum with workbooks, video-tapes, and a computer program. Whether or not the program is sold to prepare students for college entrance exams or to add to their subject matter achievement is beside the point. Every student should master the skills emphasized in the program.

71. You can infer that the teachers who devised the new program think the SAT
- a. measures students' aptitude for learning
 - b. measures student's' grasp of mathematical and verbal skills
 - c. measures students' mastery of subject matter
 - d. all of the above
72. The author feels that this program
- a. will not help students do well on the SAT
 - b. will be outdated shortly
 - c. cannot fail to help students, whatever they do
 - d. cannot teach aptitude for intellectual pursuits
73. This program would probably be bought by
- a. colleges
 - b. individuals
 - c. professors
 - d. high schools
74. This new study program is supported by
- a. students
 - b. teachers
 - c. the Educational Testing Service
 - d. the high school curriculum

Statistics regarding cigarette smoking are anything but encouraging. The Federal Trade Commission recently announced that in 1980 Americans purchased 628.2 billion cigarettes, an awfully greater number than ever before. The average smoker consumed 11,633 cigarettes, of which 44.8 percent were low-tar cigarettes containing less than 15 milligrams of tar. In 1968 the average tar content was 22 milligrams.

Despite the fact that every cigarette pack has a printed warning from the Surgeon General, those who still smoke are smoking more heavily. Many people have forsworn smoking in fear of lung cancer. The American Cancer Society reports that death rates from lung cancer have escalated, whereas those for other major cancers have leveled off or declined. Last year 111,000 Americans died of lung cancer, while it is estimated that 117,000 will succumb this year. Lung cancer heads the list in killing 35 percent of males who die from cancer. Lung cancer accounts for 17 percent of women's cancer deaths. An estimated 440,000 deaths from cancer will occur this year, 9,000 more than the previous year. Lung cancer accounts for two thirds of the increase. Although many cancer patients have survived the disease, the prognosis for lung cancer patients is most disheartening. Ninety-one percent of all diagnosed cases of lung cancer do not survive.

75. You may infer that low-tar cigarettes
- a. reduce the dangers of smoking
 - b. appeal to a majority of smokers
 - c. cause lung cancer
 - d. have the Surgeon General's approval

76. Statistics show average smokers smoke
- a. less than they did in the past
 - b. more than they did in the past
 - c. the same as they did in the past
 - d. none of the above
77. It is predicted that the number of deaths from lung cancer this year will be
- a. reduced from the number last year
 - b. the same as the number last year
 - c. 6,000 more than last year
 - d. 111,000
78. The percentage of women's lung cancer deaths is
- a. about half the percentage of men's cancer deaths
 - b. rising annually
 - c. equal to that of men's lung cancer deaths
 - d. an indication that women are not susceptible to lung cancer
79. You may infer from the passage that lung cancer
- a. can be treated effectively
 - b. is always related to smoking
 - c. will cause cigarettes to be taken off the market
 - d. currently has no infallible cure

Few men have influenced the development of American English to the extent that Noah Webster did. Born in West Hartford, Connecticut, in 1758, Webster graduated from Yale in 1778. He was admitted to the bar in 1781 and thereafter began to practice law in Hartford. Later, when he turned to teaching, he discovered how inadequate the available schoolbooks were for children of a new and independent nation. In response to the need for truly American textbooks, Webster published *A Grammatical Institute of the English Language*, a three-volume work that consisted of a speller, a grammar, and a reader. The first volume, which was generally known as *The American Spelling Book*, was so popular that eventually it sold more than 80 million copies and provided him with a considerable income for the rest of his life. While teaching, Webster began work on the *Compendious dictionary of the English Language*, which was published in 1806, and was also very successful.

In 1807, Noah Webster began his greatest work, *An American Dictionary of the English Language*. In preparing the manuscript, he devoted ten years to the study of English and its relationship to other languages, and seven more years to the writing itself. Published in two volumes in 1828, *An American Dictionary of the English Language* has become the recognized authority for usage in the United States. Webster's purpose in writing it was to demonstrate that the American language was developing distinct meanings, pronunciations, and spelling from those of British English. He is responsible for advancing simplified spelling forms: *develop* instead of *develop*; *plow* instead of *plough*; *jail* instead of *gaol*; *color* instead of *colour*.

Webster was the first author to gain copyright protection in the United States by being awarded a copyright for his *American Speller*. He continued, for the next fifty years, to lobby for improvements in the protection of intellectual properties, that is, author's rights. In 1840 Webster brought out a second edition of his dictionary, which included 70,000 entries instead of the original 38,000. The name Webster has become synonymous with American dictionaries. This edition served as the basis for the many revisions that have been produced by others, ironically, under the uncopyrighted Webster name.

80. Which of the following would be the best title for the passage?
- Webster's Work
 - Webster's Dictionaries
 - Webster's School
 - Webster's Life
81. Why did Webster write *A Grammatical Institute of the English Language*?
- He wanted to supplement his income
 - There were no books available after the Revolutionary War
 - He felt that British books were not appropriate for American children
 - The children did not know how to spell
82. From which publication did Webster earn a lifetime income?
- Compendious Dictionary of the English Language*
 - An American Dictionary of the English Language*
 - An American Dictionary of the English Language: Second Edition*
 - The American Spelling Book*
83. The word "considerable" in paragraph 1 most nearly means
- large
 - prestigious
 - steady
 - unexpected
84. The word "it" in paragraph 2 refers to
- language
 - usage
 - authority
 - dictionary
85. The word "distinct" in paragraph 2 is closest in meaning to
- new
 - simple
 - different
 - exact
86. According to this passage, which one of the following spellings would Webster have approved in his dictionaries?
- develope*
 - theatre*
 - color*
 - honour*

Seismologists have devised two scales of measurement to enable them to describe and record information about earthquakes in quantitative terms. The most widely known measurement is the Richter scale, a numerical logarithmic scale developed and introduced by American seismologist Charles R. Richter in 1935. The purpose of the scale is to measure the amplitude of the largest trace recorded by a standard seismograph one hundred kilometers from the epicenter of an earthquake. Tables have been formulated to demonstrate the magnitude of any earthquake from any seismograph. For example, a one-unit increase in magnitude translates into an increase of times thirty in released energy. To put that another way, each number on the Richter scale represents an earthquake ten times as strong as one of the next lower magnitude. Specifically, an earthquake of magnitude 6 is ten times as strong as an earthquake of magnitude 5.

On the Richter scale, earthquakes of 6.75 are considered great and 7.0 to 7.75 are considered major. An earthquake that reads 4 to 5.5 would be expected to have caused localized damage, and those of magnitude 2 may be felt.

The other earthquake-assessment scale, introduced by the Italian seismologist Giuseppe Mercalli, measures the intensity of shaking, using gradations from 1 to 12. Because the effects of such shaking dissipate with distance from the epicenter of the earthquake, the Mercalli rating depends on the site of the measurement. Earthquakes of Mercalli 2 or 3 are basically the same as those of Richter 3 or 4; measurements of 11 or 12 on the Mercalli scale can be roughly correlated with magnitudes of 8 or 9 on the Richter scale. In either case, the relative power or energy released by the earthquake

can be understood, and the population waits to hear how bad the earthquake that just passed really was.

It is estimated that almost one million earthquakes occur each year, but most of them are so minor that they pass undetected. In fact, more than one thousand earthquakes of a magnitude of 2 or lower on the Richter scale occur every day.

87. Which of the following is the main topic of the passage?
- Earthquakes
 - The Richter scale
 - Charles F. Richter
 - Seismography
88. According to information in the passage, what does the Richter scale record?
- the distance from the epicenter
 - the amplitude of the largest trace
 - the degree of damage
 - the location of the epicenter
89. What is the value of the tables?
- they allow us to interpret the magnitude of earthquakes
 - they help us to calculate our distance from earthquakes
 - they record all earthquakes
 - they release the energy of earthquakes
90. How does each number on the Richter scale compare?
- each number is one hundred times as strong as the previous number
 - the strength of each magnitude is one less than the previous magnitude
 - each magnitude is ten times stronger than the previous magnitude
 - the scale decreases by five or six for each number
91. What does the author mean by the statement "Because the effects of such shaking dissipate with distance from the epicenter of the earthquake, the Mercalli rating depends on the site of the measurement"?
- the Mercalli rating will vary depending on the location of the measurement
 - the results of the Mercalli rating are less accurate at greater distances from the epicenter
 - the stronger shaking of the earthquake at the center is not detected by the Mercalli rating
 - the Mercalli rating is useful because it is taken farther away from the center of the earthquake
92. The word "undetected" in paragraph 4 is closest in meaning to
- with no damage
 - with no notice
 - with no name
 - with no problem
93. With which of the following statements would the author most probably agree?
- only the Richter scale describes earthquakes in quantitative terms
 - both the Richter scale and the Mercalli scale measure earthquakes in the same way
 - most earthquakes are measurable on either Richter or the Mercalli scale
 - the Mercalli and the Richter scales are different but they can be compared
94. The passage discusses all of the following in the explanation of the Richter scale EXCEPT
- it was introduced in 1935
 - it was developed by an American seismologist
 - it has a scale of 1 to 12
 - it measures the magnitude of earthquakes

It is notorious that breakthroughs in science often come in tandem: The same, or almost the same, theoretical advance is made simultaneously by two or more investigators. Watson and Crick "raced" Linus Pauling to verify the helical structure of DNA; Darwin and Alfred Wallace announced the essentials of evolutionary theory simultaneously in 1858. Why should this occur? Why – to take another example – should Newton and Leibniz have worked out the differential calculus independently and in isolation from one another, when they were not even working on the same sorts of problems?

Newton's work on the calculus stemmed from his interest in the physical problem of the measurement of continuously changing quantities. Take, for example, the problem of determining the velocity of a freely falling body at a given instant. The body is constantly accelerating due to gravity. An approximate velocity at any time may be found by measuring the distance traveled over a very brief time interval, such as a hundredth of a second; if one reduces the time interval measured until it approaches zero, the approximate velocity over the interval approaches the actual velocity at any instant as a limit. Newton's genius was to grasp how to calculate such a change over an infinitesimal time period through a mathematical operation known as differentiation.

For various reasons, Newton delayed publishing a clear account of his calculus for nearly forty years. In the meantime, Leibniz approached the calculus from a completely different standpoint, that of the formal geometric problem of determining the tangent to a curve (later, for the integral calculus, the area under a curve). This geometric problem was mathematically equivalent to Newton's consideration of bodies in motion, however, since the changing position of such a body over time can be plotted graphically as a curve in which the tangent to the curve at any point represents the velocity of the body at a given instant. Thus, Leibniz's formal geometric approach duplicated Newton's results.

This phenomenon of simultaneous discovery is surprising only to a public that views such breakthroughs as solitary acts of genius. In reality, Newton and Leibniz's ground had been thoroughly prepared in advance. In the century before Newton's birth, Europe had seen an explosion of scientific inquiry. Copernicus, Kepler, and others had formulated the laws of planetary motion and celestial mechanics. More specifically, when he began his mathematical work, Newton was already familiar with Descartes' coordinate geometry, the mathematics of infinitesimal intervals recently developed by John Wallis, and the method of finding tangents through differentiation worked out by Isaac Barrow. Thus, both the scientific problems and the conceptual tools that stimulated and facilitated Newton's astonishingly rapid development of the differential calculus were already the common property of science. Given Newton's delay in publishing his work, an independent discovery of the calculus by some other genius became not only possible but likely.

95. The primary purpose of this passage is to
- a. present mathematical discoveries
 - b. clarify a recurring phenomenon in scientific history
 - c. solve a long-standing puzzle in intellectual history
 - d. describe a period of rapid scientific change
96. According to the author, Newton devised the differential calculus in an attempt to understand
- a. why falling bodies accelerate
 - b. how to measure continuously varying quantities

- c. how to measure the area under a curve
 - d. the relationship between average and actual speeds
97. It can be inferred that the author regards the development of the calculus as
- a. an outgrowth of previous intellectual developments
 - b. an achievement whose significance has been overestimated
 - c. an unusual case of near-simultaneous discovery
 - d. a breakthrough that solved a classic scientific problem
98. The passage implies that Newton and Leibniz arrived at similar results because ...
- a. they used similar approaches
 - b. they knew of each other's work
 - c. no one had previously considered the problem of continuous motion
 - d. the problems they considered were mathematically equivalent
99. The author suggests that cases of simultaneous discovery
- a. cannot really be called breakthroughs, since the important work has been done by others
 - b. are made by individuals unaware of the historical influences on their thought
 - c. seem remarkable to a public influenced by an inaccurate notion of genius
 - d. usually occur when one discoverer delays publication of his results
100. In the final paragraph the author draws connections between the work of Leibniz and Newton and the work of Copernicus and Kepler primarily in order to
- a. provide support for the "great man" view of scientific history
 - b. argue that the work of most scientific geniuses reveals unusually coincidental patterns of discovery
 - c. expose the myth of independent scientific discovery
 - d. describe the evolutionary nature of scientific achievement

GOOD LUCK!