PRACTICE TEST 2: Reading Section

(p. 481)

Note: If you answered an item incorrectly, complete the exercises listed for that item.

1. (B) When something "alters," it "changes" or takes a different form. See Exercises R1–R3.
2. (A) The passage states that the rate of decay is constant, regardless of conditions. See Exercises R9–R14.
3. (B) The element's half-life is the time necessary for one-half of the original number of radioactive atoms in a sample to decay. See Exercises R4–R8.
4. (B) The rate at which a radioactive element decays, its half-life, is used as a way to calculate its age. See Exercises R9–R14.
5. (B) According to the passage, "Rocks as old as 4.6 billion years can be dated with some degree of reliability." This implies that dating rocks that are older than this is probably less reliable. See Exercises R15–R21.
6. (A) The phrase "from this point" refers to the separation of rubidium and strontium that occurs when the minerals crystallize from magma or metamorphic rock. That point is when the elements are incorporated into the minerals. See Exercises R4–R8.
7. (D) When something is "essential," it is "vital" or necessary. See Exercises R1–R3.
8. (C) According to the passage, when an organism dies, "no more carbon dioxide is absorbed." See Exercises R9–R14.
9. (A) According to the passage, the nitrogen-14 isotope leaks out so it cannot be used for comparisons. See Exercises R9–R14.
10. (D) The passage states that the amount of carbon-14 in the dead organism becomes less over time. See Exercises R9–R14.
11. [C] The information about the kinds of isotopes taken in from the atmosphere would follow the fact that the isotopes are in the same amount in the atmosphere as in the organism. It would precede the information about what happens after an organism dies. See exercises R4–R8.
12. **Rubidium-87**

    (D) Rubidium-87 has a half-life of nearly 48.8 billion years.

    (E) Rubidium-87 is incorporated into minerals as they crystallize from magma or metamorphic rock.

    (I) Rubidium-87 is formed when the rock is formed.

    Carbon-14

    (A) Bones or wood are organic materials.

    (C) Carbon-14 is an essential element of the cells being incorporated into living tissue.

    (F) Carbon-14 has the progeny nitrogen-14, which is a gas that leaks out of the organism and, therefore, is not useful for dating.

    (H) Trees are organic.

    See Exercises R22–R24.
13. (D) The number of births is divided by the total population. See Exercises R4–R8.
14. (A) Demographers use the model because it helps to explain changes in population. See Exercises R9–R14.
15. (B) When something is "portrayed," it is shown or "represented" in a visual or verbal form. See Exercises R1–R3.

16. (D) There is no information given as to the number of women who died while giving birth. See Exercises R9–R14.

17. (B) The fluctuations in total population due to epidemics indicate a drop followed by a rise. There was a gradual rise overall. See Exercises R15–R21.

18. (C) "Agrarian" occupations refer to those that are agricultural, in other words, occupations dealing with "farming." See Exercises R1–R3.

19. (C) The increased urbanization reduced the incentive to have a large number of children. See Exercises R9–R14.

20. (A) The birth rate may fall below the death rate (deaths exceed births) and without immigration (there is no immigration) the total population may slowly decrease (the population gradually declines). See Exercises R9–R14.

21. (B) Something that is at an "equilibrium" level is at a "stable" level or is balanced. See Exercises R1–R3.

22. (A) The improvements in health have caused an imbalance of births over deaths. See Exercises R9–R14.

23. (A) The earlier "pessimistic" predictions were that the population explosion would continue were based on the length of time the demographic transition took place in Europe (200 years). However, the transition in less developed countries seems to be occurring faster then predicted. See Exercises R15–R21.

24. [A] The information about why in cities there was less incentive for large numbers of children would follow the statement that industrialization had led to urbanization. See Exercises R4–R8.

25. (B), (C), and (E) In the preindustrial era, there were high birth and death rates with only a gradual population increase. This was followed by dramatic increases in population as improved health caused a decline in the death rate. Economic pressures reduced the birth rate, bringing the population to zero growth. See Exercises R22–R24.

26. (A) When something is put into an underground "chamber," it is put into a large "cavity" or hole that forms a roomy area. See Exercises R1–R3.

27. (B) The commission understood that the waste may be hazardous for people thousands of years in the future and that these future generations need to be warned of the danger. See Exercises R4–R8.

28. (D) The author mentions different circumstances to help the reader understand that even though we think that future societies may be sophisticated, they may not be, and therefore we cannot leave the matter to chance. See Exercises R15–R21.

29. (C) A "scourge" is a source of extensive "affliction" and devastation. See Exercises R1–R3.

30. (A) The message must be understandable to any person no matter what his or her cultural background or knowledge is. See Exercises R9–R14.

31. (B) The author mentions the second law of thermodynamics to explain why materials can't endure. See Exercises R15–R21.

32. (C) The word "its" refers to the *committee* formed to guard a certain kind of knowledge. See Exercises R4–R8.

33. (D) The committee that guards and passes on specialized knowledge has been called an "atomic priesthood" because it is rather like a priesthood in its exclusiveness and its monopoly of knowledge about nuclear waste sites. See Exercises R15–R21.

34. (D) A "sanction" is a "penalty" used to obtain conformity to someone's wishes. People who do not observe sanctions are punished through legal or moral pressure. See Exercises R1–R3.

35. (A) The idea of a relay system is to pass on information over just a few generations. This would help to prevent the breakdown of communication over long periods of time. See Exercises R9–R14.

36. (A) The author points out that those who have exclusive knowledge could use it to control those who are ignorant. See Exercises R9–R14.

37. (D) While the exclusiveness of the atomic priesthood might lead to other problems, it is not mentioned as a difficulty in devising a communication system with the future. Rather, it is the main proposal put forward for making that communication possible. See Exercises R9–R14.

38. [B] Finding efficient ways to deactivate nuclear waste materials is an example of a technological advance that could be made to solve this problem. See Exercises R4–R8.

39. (A), (D), and (F) All of the various means of storing and passing on information pose a problem in communicating with the future because of the physical decay of storage media. A relay system could be used in which the knowledge is passed by a selected group of people. However, the proposal has potential problems of creating a divided society. See Exercises R22–R24.

PRACTICE TEST 2: Listening Section

(p. 502, script on p. 643)

1. (D) The professor explains the way various creatures deal with the change of water and salt concentrations in the estuarine environment. See Exercises L9–L12.

2. (A) The professor thinks that the students know the definition of osmosis and is confirming that belief. See Exercises L18–L23.

3. A and D The professor states that crabs keep out both water and salt with their hard shells and that they may have internal organs that can regulate salt intake and excretion. See Exercises L13–L17.

4. (D) The professor has just explained the migration pattern in blue crabs. He is giving the students an opportunity to ask for more explanation if they do not understand. See Exercises L18–L23.

5. **Physiological**

   (B) osmoregulating

   (C) dropping leaves

   Behavioral

   (A) migrating

   (D) burrowing into mud

   See Exercises L13–L17.

6. (B) Although the professor mentions birds as predators of invertebrates in the estuaries, he doesn't talk about any adaptation birds have made in order to live in the estuarine environment. See Exercises L13–L17.

7. (B) The man states that he was told to see the professor to get advice about switching majors. See Exercises L9–L12.

8. (C) The man wants to change majors, and the professor assumes that he is changing to linguistics. Since the man has been sent to this particular professor, it can be inferred that she is an advisor for students in the Linguistics Department. See Exercises L18–L23.

9. (C) The man explains to the professor that he taught English in Peru to earn money. He enjoyed the experience and is considering going into this field of study. See Exercises L13–L17.

10. (A) She does not know if the man's courses in American Sign Language can be used as a second language credit for the Linguistics Department requirements. She would prefer to tell him the wrong answer than to allow him to make a decision based on this point. See Exercises L18–L23.

11. (A) The man's answer to the professor's question indicates that he is concerned about graduating on schedule. He later states that he might be able to get more funding and mentions looking into grant and loan possibilities. This indicates that finances are a factor in his decision on changing majors. See Exercises L18–L23.

12. (B) The professor elicits the kinds of pressures that keep students from asking questions in classroom situations. See Exercises L9–L12.

13. (B) The professor is listing the questions he asks himself after class. He does this in order to set the stage for a discussion on why students don't ask questions in class. See Exercises L18–L23.

14. (D) The woman agrees with the man's reason for considering the class size as a negative pressure but provides her own reason for class size being a negative pressure. See Exercises L18–L23.

15. (B) When the professor asks Lisa to explain what she means by time pressure, she gives the name of Professor Clarkson. Although the professor doesn't understand how this can be an example, the other students do. See Exercises L18–L23.

16. (A) *No* Fear of asking too many questions is not one of the reasons discussed.

    (B) *Yes* The students mention fear of being considered stupid by classmates.

    (C) *Yes* Being the victim of a professor's sarcastic joke is one of the reasons elicited.

    (D) *No* Fear of making a mistake is not discussed in the class.

    (E) *Yes* Fear of wasting a professor's time with a mere question is discussed.

    See Exercises L13–L17.

17. (D) The professor is letting the students know that there are other pressures that did not come up during the conversation but probably will during the discussions. See Exercises L18–L35.

18. (C) The professor discusses the theory of phrenology, an early method of psychological analysis. See Exercises L9–L12.

19. B and C According to the professor, Gall (the founder of phrenology) said the brain faculties had separate organs placed in a separate part of the brain and that the shape of the brain determined the shape of the skull. See Exercises L13–L17.

20. (B) The professor explains the popularity of the practice and then indicates through the question that nowadays this is considered a strange theory. See Exercises L18–L23.

21. (C) The professor states that the phrenologists looked for confirmation for their hypotheses and ignored anything that went against their hypotheses. See Exercises L13–L17.

22. (A) The professor discusses the widespread practice of phrenology. Today its practice has largely disappeared. See Exercises L18–L23.

23. (D) The professor states that phrenologists were important in arguing that brain functions were localized. See Exercises L13–L17.

24. (B) The professor mentions the differences between the conditions on Mars and Earth, the necessity of human migration, and the ethical problems as part of the issues to be dealt with in radically transforming the conditions on Mars. See Exercises L9–L12.

25. (C) By comparing terraforming to science fiction, the professor is pointing out that technologically it will be a difficult task to undertake. See Exercises L18–L23.

26. (B) The professor states that pressure on resources of a rapidly expanding population has always forced people to migrate in search of new territory. He mentions the migration of Europeans to the Americas as an example of such a migration. See Exercises L18–L23.

27. C and D The professor states that the other planets are unsuitable and that Mars has water and a solid surface. See Exercises L13–L17.

28. (A) The professor wants to leave aside the ethical considerations and concentrate on the practicalities, which would be those technological considerations. See Exercises L18–L23.

29. (D) The professor mentions greenhouse gas being produced by the ammonia-rich asteroids, not by factories. See Exercises L13–L17.

30. (C) The student has seen an announcement on the bulletin board asking for participants in a research project. She wants to volunteer to participate. See Exercises L9–L12.

31. (A) The coordinator needs to make certain that the student meets the requirements for the experiment. See Exercises L18–L23.

32. (B) The student is indicating that even though she is well this week, no one can be certain about their health later. See Exercises L18–L23.

33. (C) The coordinator does not ask the student her preferences for snacks, but states the snacks will be "typical." See Exercises L13–L17.

34. (D) The coordinator states that the breakfasts will consist of the normal things, and gives eggs and cereal as examples. See Exercises L13–L17.

There is no answer key for the Speaking and Writing sections of Practice Test 2. See Calculating Scores for Practice Tests on p. XXIII for information about how to evaluate your responses. Also use the scored sample essays and speaking responses for CD-ROM Test 4 as a guide.