More than at any other time in history, America is plagued by the influence of cults, exclusive groups that present themselves as religions devoted to the worship of a single individual. Initially, most Americans were not terribly concerned with the growth of cults, but then in 1979 more than nine hundred cult members were senselessly slaughtered in the steamy jungles of a small South American country called Guyana. The reason for the slaughter was little more than the wild, paranoid fear of the leader, the Reverend Jim Jones, who called himself father and savior. Since that time, evidence has increased that another cult leader, the Reverend Sun Myung Moon, has amassed a large personal fortune from the purses of his followers, male and female “Moonies,” who talk of bliss while peddling pins and emblems preaching the gospel of Moon. Cults, with their hypnotic ritual and their promises of ecstasy, are a threat to American youth, and it is time to implement laws that would allow for a thorough restriction of their movements.

1. Which of the following phrases best identifies the problem that is the focus of the passage?
   a. The rising incidence of cults in America
   b. Street peddlers
   c. Homelessness
   d. Immigrants

2. Which of the following phrases best identifies the purpose of the paragraph?
   a. The purpose is to describe the slaughter of a group of cult members.
   b. The purpose is to describe the bizarre behavior of Moonies.
   c. The purpose is to criticize two cults that have recently sprung up in America.
   d. The purpose is to demonstrate that the current rise in cult membership is dangerous.

3. The reported cause of the deaths of over 900 cult members in Guyana was:
   a. Hypnotic rituals of the cult
   b. Paranoid fear of the cult’s leader
   c. Devotion to the leader Sun Myung Moon
   d. None of the above

4. Which of the following sentences is the best statement of the paragraph’s main conclusion?
   a. “Cults, with their hypnotic ritual and their promises of ecstasy, are a threat to American youth.”
   b. “The reason for the slaughter was little more than the wild, paranoid fear of the leader, the Reverend Jim Jones, who called himself father and savior.”
   c. “More than at any other time in history, America is plagued by cults, exclusive groups that present themselves as worshippers of a single terrible individual.”
   d. “Since that time, evidence has increased that another cult leader, the reverend Sun Myung Moon, has amassed large personal fortune from the purses of his followers, who talk of bliss while peddling pins and emblems of the gospel of Moon.”

5. Which of the following lists most corresponds to the historical order of events referred to in the text?
   a. Guyana tragedy, little concern about cults, growth of “Moonies” membership
   b. Little concern about cults, Guyana tragedy, growth of “Moonies” membership
   c. Growth in “Moonies” membership, Guyana tragedy, little concern about cults
   d. Little concern about cults, growth of “Moonies” membership, Guyana tragedy
Frequently when women tell men, “You aren’t listening” and the men protest, “I am,” the men are right. The impression of not listening results from misalignments in the mechanics of conversation. The misalignment begins as soon as a man and a woman take physical position. This became clear to Deborah Tannen, a sociolinguist, when she studied psycholinguist Bruce Dorval’s videotapes of children and adults talking to their same-sex best friends. Tannen found that at every age, the girls and women faced each other directly, their eyes anchored on each other’s faces. At every age, the boys and men sat at angles to each other and looked elsewhere in the room, periodically glancing at each other. They were obviously attuned to each other, often mirroring each other’s movements. But the tendency of men to face away can give women the impression they aren’t listening even when they are. A young woman in college was frustrated; whenever she told her boyfriend she wanted to talk to him, he would lie down on the floor, close his eyes, and put his arm over his face. This signaled to her, “He’s taking a nap.” But he insisted he was listening extra hard. Normally, he looks around the room, so he is easily distracted. Lying down and covering his eyes helped him concentrate on what she was saying.

6. What assumption did Tannen make when she argued that men were paying attention to each other despite their lack of eye contact?
   a. As males get older they are less likely to make eye contact with each other
   b. Women should ignore men during conversations
   c. When people sitting together make similar movements, they are paying attention to each other
   d. People are better able to hear and understand conversations when they are not directly facing each other

7. Which of the following pairs of people are most likely to have communication difficulties due to misalignment?
   a. Two young brothers
   b. Mother and daughter
   c. Father and son
   d. Mother and son

8. Which of the following details specifically supports the paragraph’s main idea?
   a. Many children have poor conversational skills.
   b. The conversational style of children on the video resembled that of the adults.
   c. Many adults have poor conversational skills.
   d. The young woman in Tannen’s study misread her boyfriend’s signals.

9. Which of the following sentences most effectively identifies the purpose of Tannen’s experiment?
   a. Tannen wants to find out if men secretly think that women are boring.
   b. Tannen wants to find out why women frequently say that men aren’t listening when men claim that they are listening.
   c. Tannen wants to find out if men lie to women.
   d. Tannen wants to find out if men are easily distracted.

10. Which of the following items best describes the method that Tannen used in her research?
    a. She interviewed and observed a college-aged woman who was frustrated with her boyfriend.
    b. She videotaped and interviewed same-sex best friends
    c. She analyzed existing videotapes of same-sex best friends
    d. She videotaped and interviewed different pairs of same-aged best friends from childhood through adulthood.
Seeds are tested for their ability to produce substances that kill microorganisms. Each seed is placed on a culture of the microorganism. Seeds are classified on a scale of 0 (no effect) to 5 (strong effect), according to the amount of microorganism-free space that develops around the seed.

Experiment 1
Seeds of two members of the Lily family are tested against four different microorganisms:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Lily Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Garlic</td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>4</td>
</tr>
<tr>
<td>Escherichia</td>
<td>5</td>
</tr>
<tr>
<td>Bread Mold</td>
<td>2</td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>3</td>
</tr>
</tbody>
</table>

Experiment 2
The same experiment is repeated using seeds of two members of the Composite family:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Composite Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dandelion</td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>5</td>
</tr>
<tr>
<td>Escherichia</td>
<td>4</td>
</tr>
<tr>
<td>Bread Mold</td>
<td>4</td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>2</td>
</tr>
</tbody>
</table>

Experiment 3
The experiment is then done with two members of the Legume family:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Legume Family</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Soybean</td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>0</td>
</tr>
<tr>
<td>Escherichia</td>
<td>4</td>
</tr>
<tr>
<td>Bread Mold</td>
<td>2</td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>3</td>
</tr>
</tbody>
</table>

11. Seeds that receive a rating of 1:
   a) Are very effective in killing the specific microorganism.
   b) Are very effective in creating microorganism-free space around themselves in the culture.
   c) Are not very effective in killing the specific microorganism.
   d) Produce chemicals that are effective in treating diseases.

12. Which of the microorganisms is most susceptible to attacks by the chemicals produced by seeds?
   a. *Staphylococcus*
   b. *Escherichia*
   c. Bread mold
   d. *Penicillium* mold

13. Of the following, which kind of seed is more effective against molds than against bacteria?
   a. Alfalfa
   b. Daylily
   c. Thistle
   d. Garlic
14. To find an antibiotic that will protect oranges against *Penicillium* mold, a scientist would concentrate on:
   a. Seeds of the thistle and its close relatives
   b. A variety of members of the Composite family
   c. Members of the Legume family
   d. Seeds of the daylily and its relatives

15. What hint might a scientist trying to find an antibiotic to control Staphylococcus infections get from these experiments?
   a. Looking for seeds that produce such an antibiotic would be a wasted of effort
   b. It would be inadvisable to concentrate on seeds of the Legume family
   c. It would be wise to concentrate on *Penicillium* mold and its close relatives
   d. The scientist should not waste time trying the bread mold and its close relatives.

16. For which microorganism are garlic seeds least effective?
   a. *Staphylococcus*
   b. *Escherichia*
   c. Bread Mold
   d. *Penicillium* mold

The United States is often ranked near the bottom of international comparisons of mathematics and science achievement. Experts differ in the significance they attach to comparisons of achievement outcomes across countries. Bishop (1992) uses international test data to argue that the low mathematics and science performance of U.S. 17- and 18-year olds relative to students in other countries is a major problem for the nation’s future productivity. Basing his results on both the growing importance of the technical elements in these fields for the changing economy and the connection between test performance and productivity, Bishop sees a threat to U.S. competitiveness. Levin and Kelley (1994) view the situation differently. They assert the achievement tests behind such comparisons do not reflect the kinds of skills that are likely to increase productivity. They argue that teamwork and work habits are more influential than academic skills on worker productivity. Levin and Kelley believe that basic competencies among U.S. students is critical for future productivity—particularly among students at-risk of not achieving minimal competence in areas of computation, communication and reading. They see little evidence, however, that the U.S. performance on international achievement tests reveals a threat to the country’s international economic competitiveness.

17. Which of the following “connections” between test performance and productivity is likely to be the basis for Bishop’s perspective?
   (a) High performance on achievement tests are associated with low level of productivity
   (b) Countries with low levels of productivity tend to have the highest achievement test scores
   (c) Low productivity in countries causes low academic achievement in math and science
   (d) Countries with high performance on achievement tests are likely to have high economic productivity

18. Based on the passage, Levin and Kelley appear to agree with Bishop concerning which of the following?
   (a) The rank order position of the U.S. compared to other countries in math and science achievement
   (b) The importance of the math and science achievement test results in predicting the future of the U.S.
   (c) Factors that are associated with worker productivity
19. Bishop is likely to use which of the following types of information to support his perspective?
(a) Studies of earnings have failed to find a strong link between test scores and earnings
(b) The proportion of jobs requiring the application of technical mathematical or scientific skills has increased in industrial nations during the past six years
(c) Studies have found only a modest connection between test scores and productivity ratings by supervisors
(a) Criticisms of the contents of international achievement tests

20. With which of the following statements would Levin and Kelly most likely disagree?
(a) International achievement tests in math and science do not measure skills that are related to productivity
(b) Basic competencies of at-risk students in the areas of mathematics and literacy are important predictors of worker productivity
(c) International comparisons based on achievement tests reveal that the economic competitiveness of the U.S. is at-risk
(d) Collaboration, cooperation, and a commitment to excellence in work are important predictors of worker productivity

21. The achievement data used by Bishop as the foundation of his argument is from what type of assessment?
(a) Math and science tests given to middle school students in the United States only
(b) Math and Science tests given to a sample of high school students in a number of countries
(c) Math and Science tests given to high school students in all countries except for the United States
(d) Advanced placements tests in Calculus and Biology

The five major air pollutants are carbon monoxide (CO), hydrocarbons, the nitrogen oxides (NO and NO₂), the sulfur oxides (SO₂ and SO₃), and particulates -- airborne solid particles and liquid droplets. Pollution based on automobile use has been tracked in cities over time with the most significant components being shown on the following graph. This graph shows the relationship between concentration of pollutants in parts per million (ppm) and time during the production of photochemical smog.

22. Which of the components of photochemical smog is not considered a "major air pollutant"?
   a. NO
   b. Hydrocarbons
   c. O₃
   d. NO₂
23. What is the relationship between time of day and the concentrations of nitrogen oxides?
   a. These are lowest after 6 AM and before noon.
   b. These are highest after 6AM and before noon.
   c. These are highest during evening rush hour traffic.
   d. These are lowest during evening rush hour traffic.

24. According to the graph and accompanying information, what could account for a reduction in ozone (O₃) levels after noon?
   a. The increase in other pollutants.
   b. The action of the sun to break down ozone.
   c. People are driving less.
   d. Change in atmospheric pressure.

25. What evidence is available from the graph that NO is involved in the production of NO₂?
   a. Levels of NO and NO₂ increase at the same rate.
   b. Levels of NO₂ and O₃ both increases.
   c. The level of NO decreases as the level of NO₂ increases.
   d. Initial levels of both NO and NO₂ are very low at midnight.

26. What is the level of hydrocarbons at 3 p.m.?
   a. 0 ppm
   b. .05 ppm
   c. .1 ppm
   d. .15 ppm
   e. .2 ppm
The phenomenon of dreaming has long fascinated philosophers and scientists. The ancients believed that dreams were messages from the gods or portents of one’s future. Nineteenth and twentieth century scientists have sought rational explanations—the first such effort to receive wide acceptance was Sigmund Freud’s psychoanalytic theory. Freud called dreams “the royal road to the unconscious,” by which he meant that dreams lead the way to a realm of mental functioning where our fantasies, emotional conflicts, repressed memories, and infantile impulses find expression. Through condensation, displacement, and symbol formation, troubling and fantastic thoughts evade the vigilant censor that keeps us largely unaware of them in our waking moments.

Recently, however, cognitive psychologists have challenged Freud’s ideas. They point out that cats in laboratory experiments have been repeatedly shown to dream. So, in fact, have all other animals except one: the anteater, which has a tiny brain. In addition, newborn infants spend half the day dreaming. These organisms do not have the unconscious conflicts of the type Freud described, but during sleep they show obvious signs of dreaming, such as Rapid Eye Movement sleep (periods of sleep when eyes dart around). Other research has provided evidence that suggest that the cause of dreaming is physiological rather than emotional.

Others have proposed different alternatives. Information processing theorists suggest that the brain functions in the same way as an enormous computer, and that Rapid Eye Movement sleep is a way of “dumping” unwanted data that could otherwise overload the system. Like a computer, the brain is “wired” to be capable of taking on huge amounts of information, but has a finite capacity for storing information. Rapid Eye Movement sleep may be a way of the brain removing unusable data in order to free itself to attend new tasks during waking hours.

27. Who described dreams as “the royal road to the unconscious”?
   a) Cognitive psychologists
   b) Physiologists
   c) Sigmund Freud
   d) REM psychologists
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28. According to the passage, laboratory experiments have shown:
   f) Anteaters dream more than cats
   g) Cats do dream
   h) The brain downloads information at night
   i) Cats and anteaters have unconscious conflicts like people

29. Which group believed that dreams were signs or premonitions about a person’s future?
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   b) Cognitive psychologists
   c) Ancients
   d) 19th and 20th century scientists

30. The passage primarily concerns:
   a) Sigmund Freud’s psychoanalytic theories
   b) The effect of dreams on the personality
   c) The attempts of psychologists to explain dreaming
   d) The role of REM sleep in dreaming
   e) The similarities of computers to the brain
31. “Condensation, displacement, and symbol formation” are similar in that they are:
   a) An attempt by Freud to make his theories sound more scientific than they in fact were
   b) Terms that Freud used to explain the process by which feelings find expression in dreams
   c) Universally accepted explanations for the fantastic images that occur during dreams
   d) Repressed material that is found in the unconscious

32. The two new theories outlined in the passage contrast with Freud’s belief that:
   a) Dreams must be primarily understood as an attempt to come to terms with unconscious material
   b) We dream in order to find out about ourselves
   c) Dreams originate in a specific area of the brain
   d) Researchers have discovered the place in the brain where repressed memories are stored
   e) The conscious mind represses unpleasant thoughts

33. The author would most likely argue that the reason that the anteater does not dream is that:
   a) It lacks the type of unconscious conflict Freud describes
   b) Its brain is not complex enough to support the mechanisms that cause dreams
   c) Anteaters’ Rapid Eye Movement sleep differs from that of humans or rats
   d) The wiring of the anteaters’ brain is too complex for the information experienced

34. Evidence that acetylcholine, a chemical neurotransmitter in the brain, is linked to dreaming supports which of the following conclusions about dreaming?
   a) Psychoanalytic
   b) Physiological
   c) Information processing
   d) The ancients’

35. The author’s attitude toward Sigmund Freud’s theories could best be described as:
   a) admiration
   b) envious
   c) indifferent
   d) skeptical
Many individuals past the age of 45 develop osteoporosis, which makes the bones less dense and is characterized by a net loss of calcium in the bones. Osteoporosis is more common in women than in men. Several hypotheses have been proposed to explain the onset of osteoporosis.

Dietary Hypothesis:

Calcium from food is absorbed into the bloodstream by the small intestine. Vitamin D is necessary for this process. Most Americans ingest too little calcium and vitamin D in their diet. In a study of individuals 18-25 years old, it was shown that the majority had significantly low levels calcium in their blood. When these individuals received daily supplements of 1,500 milligrams calcium and 400 units of vitamin D, their blood calcium levels increased to normal levels. If insufficient levels of calcium and vitamin D are supplied by the diet, dietary supplements should be taken to avoid osteoporosis.

Estrogen Hypothesis:

Estrogens, hormones produced primarily in the ovaries in women and, to a much lesser degree, in the adrenal glands in both sexes, and androgens, produced in the testes in men, are required for the deposition of calcium into bone. While androgen levels in men remain relatively constant throughout life, estrogen levels in women slowly decline after the onset of menopause (the time when a woman’s ability to reproduce ends), which usually occurs between the ages of 45 and 55. As a result, the bones of postmenopausal women lose calcium.

Scientists compared the bone density of 4 groups of postmenopausal women. Each group took a dietary supplement. The results are shown in the table.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>SUPPLEMENTS</th>
<th>CHANGE IN BONE DENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Estrogen</td>
<td>+2.3%</td>
</tr>
<tr>
<td>B</td>
<td>500 mg calcium</td>
<td>-1%</td>
</tr>
<tr>
<td>C</td>
<td>Estrogen and 500 mg calcium</td>
<td>+2.3%</td>
</tr>
<tr>
<td>D</td>
<td>Sugar</td>
<td>-1%</td>
</tr>
</tbody>
</table>

Exercise Hypothesis:

Lack of exercise results in calcium loss from bones, whereas regular weight-bearing exercise can increase bone density. One study showed that 8 weeks of weight training added calcium and hardened bones in both postmenopausal women and men over the age of 45. Since body weight is supported by water, 8 weeks of swimming had no effect on bone density. Both groups followed the same high-calcium diet. Vitamin D intake was not measured.

36. To accept the evidence presented in the dietary hypothesis, one must assume that low blood levels of calcium are indicative of:

a) Low bone levels of calcium  
b) Low bone levels of estrogen  
c) High intestinal levels of vitamin D  
d) High blood levels of vitamin D

37. One advantage of the estrogen hypothesis is that, of the three hypotheses, it best explains why osteoporosis is more common in which of the following groups?

a) Men over the age of 45 rather than women over the age of 45  
b) Men over the age of 45 rather than men under the age of 45  
c) Women over the age of 45 rather than in men over the age of 45  
d) Women under the age of 45 rather than in women over the age of 45
38. According to the estrogen hypothesis, premenopausal women who have had their ovaries surgically removed should exhibit:

   a) Increased calcium levels in their bones
   b) Increased estrogen levels in their blood
   c) Gradual loss of calcium from their bones
   d) Gradual reduction in vitamin D levels in their blood

39. Which of the following is a criticism that supporters of the dietary hypothesis would make of the experimental results cited in the exercise hypothesis?

   a) Too much calcium was added to the diets of the test subjects in both groups
   b) Blood vitamin D levels in the two groups were not monitored
   c) Estrogen supplements should have been given to each group of individuals
   d) Osteoporosis is more common in premenopausal women than in postmenopausal women

40. Assume that increased blood calcium levels result in increased bone density. How would supporters of the estrogen hypothesis explain the experimental results presented in the dietary hypothesis?

   a) The test subjects probably had below-normal blood calcium levels
   b) The test subjects did not perform any weight-bearing exercise
   c) The test subjects probably had normal estrogen and androgen levels.
   d) The test subjects were given too low a dose of vitamin D

41. How would supporters of the dietary hypothesis explain the results for Group B in the experiment cited in the estrogen hypothesis?

   a) This group should not have taken Vitamin D supplements
   b) Insufficient calcium was added to the diet to increase bone density
   c) Estrogen supplements should have been taken to increase bone density
   d) Too much estrogen was added to the diet of this group to affect bone density

42. The experiments cited in the estrogen hypothesis and the exercise hypothesis are similar in that each:

   a) Test subject was given an estrogen supplement
   b) Test subject was given a calcium supplement
   c) Test subject was given a vitamin D supplement
   d) Woman tested was postmenopausal

43. What can be concluded from the dietary, and estrogen supplement study?

   a) Calcium improves the effects of estrogen on bone density
   b) Estrogen is not needed to increase bone density
   c) 500mg of calcium does not improve the effects of estrogen on bone density
   d) Sugar or calcium are more effective than estrogen for improving bone density
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3. Based on the passage, Levin and Kelley appear to agree with Bishop concerning which of the following?
   a. The rank order position of the U.S. compared to other countries in math and science achievement
   b. The importance of the math and science achievement test results in predicting the future of the U.S.
   c. Factors that are associated with worker productivity

4. With which of the following statements would Levin and Kelly most likely disagree?
   a. International achievement tests in math and science do not measure skills that are related to productivity
   b. Basic competencies of at-risk students in the areas of mathematics and literacy are important predictors of worker productivity
   c. International comparisons based on achievement tests reveal that the economic competitiveness of the U.S.
      is at-risk
   d. Collaboration, cooperation, and a commitment to excellence in work are important predictors of worker productivity
The phenomenon of dreaming has long fascinated philosophers and scientists. The ancients believed that dreams were messages from the gods or portents of one’s future. Nineteenth and twentieth century scientists have sought rational explanations—the first such effort to receive wide acceptance was Sigmund Freud’s psychoanalytic theory. Freud called dreams “the royal road to the unconscious,” by which he meant that dreams lead the way to a realm of mental functioning where our fantasies, emotional conflicts, repressed memories, and infantile impulses find expression. Through condensation, displacement, and symbol formation, troubling and fantastic thoughts evade the vigilant censor that keeps us largely unaware of them in our waking moments.

Recently, however, cognitive psychologists have challenged Freud’s ideas. They point out that cats in laboratory experiments have been repeatedly shown to dream. So, in fact, have all other animals except one: the anteater, which has a tiny brain. In addition, newborn infants spend half the day dreaming. These organisms do not have the unconscious conflicts of the type Freud described, but during sleep they show obvious signs of dreaming, such as Rapid Eye Movement sleep (periods of sleep when eyes dart around). Other research has provided evidence that suggest that the cause of dreaming is physiological rather than emotional.

Others have proposed different alternatives. Information processing theorists suggest that the brain functions in the same way as an enormous computer, and that Rapid Eye Movement sleep is a way of “dumping” unwanted data that could otherwise overload the system. Like a computer, the brain is “wired” to be capable of taking on huge amounts of information, but has a finite capacity for storing information. Rapid Eye Movement sleep may be a way of the brain removing unusable data in order to free itself to attend new tasks during waking hours.

5. “Condensation, displacement, and symbol formation” are similar in that they are:
   a. An attempt by Freud to make his theories sound more scientific than they in fact were
   b. Terms that Freud used to explain the process by which feelings find expression in dreams
   c. Universally accepted explanations for the fantastic images that occur during dreams
   d. Repressed material that is found in the unconscious

6. The two new theories outlined in the passage contrast with Freud’s belief that:
   f) Dreams must be primarily understood as an attempt to come to terms with unconscious material
   g) We dream in order to find out about ourselves
   h) Dreams originate in a specific area of the brain
   i) Researchers have discovered the place in the brain where repressed memories are stored
   j) The conscious mind represses unpleasant thoughts
The United States is often ranked near the bottom of international comparisons of mathematics and science achievement. Experts differ in the significance they attach to comparisons of achievement outcomes across countries. Bishop (1992) uses international test data to argue that the low mathematics and science performance of U.S. 17- and 18-year olds relative to students in other countries is a major problem for the nation’s future productivity. Basing his results on both the growing importance of the technical elements in these fields for the changing economy and the connection between test performance and productivity, Bishop sees a threat to U.S. competitiveness. Levin and Kelley (1994) view the situation differently. They assert the achievement tests behind such comparisons do not reflect the kinds of skills that are likely to increase productivity. They argue that teamwork and work habits are more influential than academic skills on worker productivity. Levin and Kelley believe that basic competencies among U.S. students is critical for future productivity—particularly among students at-risk of not achieving minimal competence in areas of computation, communication and reading. They see little evidence, however, that the U.S. performance on international achievement tests reveals a threat to the country’s international economic competitiveness.

1. Based on the passage, Levin and Kelley appear to agree with Bishop concerning which of the following?
   a. The rank order position of the U.S. compared to other countries in math and science achievement
   b. The importance of the math and science achievement test results in predicting the future of the U.S.
   c. Factors that are associated with worker productivity

2. Bishop is likely to use which of the following types of information to support his perspective?
   a. Studies of earnings have failed to find a strong link between test scores and earnings
   b. The proportion of jobs requiring the application of technical mathematical or scientific skills has increased in industrial nations during the past six years
   c. Studies have found only a modest connection between test scores and productivity ratings by supervisors
   d. Criticisms of the contents of international achievement tests

3. With which of the following statements would Levin and Kelly most likely disagree?
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4. The author would most likely argue that the reason that the anteater does not dream is that:
   a. It lacks the type of unconscious conflict Freud describes
   b. Its brain is not complex enough to support the mechanisms that cause dreams
   c. Anteaters’ Rapid Eye Movement sleep differs from that of humans or rats
   d. The wiring of the anteaters’ brain is too complex for the information experienced

5. Evidence that acetylcholine, a chemical neurotransmitter in the brain, is linked to dreaming supports which of the following conclusions about dreaming?
   a. Psychoanalytic
   b. Physiological
   c. Information processing
   d. The ancients’

6. The author’s attitude toward Sigmund Freud’s theories could best be described as:
   a. Admiration
   b. Envious
   c. Indifferent
   d. Skeptical
Seeds are tested for their ability to produce substances that kill microorganisms. Each seed is placed on a culture of the microorganism. Seeds are classified on a scale of 0 (no effect) to 5 (strong effect), according to the amount of microorganism-free space that develops around the seed.

Experiment 1
Seeds of two members of the Lily family are tested against four different microorganisms:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Lily Family</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Garlic</td>
<td>Daylily</td>
<td></td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>4</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Escherichia</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Bread Mold</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>3</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Experiment 2
The same experiment is repeated using seeds of two members of the Composite family:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Composite Family</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dandelion</td>
<td>Thistle</td>
<td></td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Escherichia</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Bread Mold</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Experiment 3
The experiment is then done with two members of the Legume family:

<table>
<thead>
<tr>
<th>Microorganism</th>
<th>Legume Family</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Soybean</td>
<td>Alfalfa</td>
<td></td>
</tr>
<tr>
<td>Staphylococcus</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Escherichia</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bread Mold</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Penicillium mold</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
7. Which of the microorganisms is most susceptible to attacks by the chemicals produced by seeds?
   a. Staphylococcus
   b. Escherichia
   c. Bread mold
   d. Penicillium mold

8. Of the following, which kind of seed is more effective against molds than against bacteria?
   e. Alfalfa
   f. Daylily
   g. Thistle
   h. Garlic

9. To find an antibiotic that will protect oranges against *Penicillium* mold, a scientist would concentrate on:
   e. Seeds of the thistle and its close relatives
   f. A variety of members of the Composite family
   g. Members of the Legume family
   h. Seeds of the daylily and its relatives

10. What hint might a scientist trying to find an antibiotic to control Staphylococcus infections get from these experiments?
    e. Looking for seeds that produce such an antibiotic would be a wasted of effort
    f. It would be inadvisable to concentrate on seeds of the Legume family
    g. It would be wise to concentrate on Penicillium mold and its close relatives
    h. The scientist should not waste time trying the bread mold and its close relatives.