

2. This passage is from Freeman Dyson, *Disturbing the Universe*, copyright © 1979 by Freeman J. Dyson.

There are some striking examples in the laws of nuclear physics of numerical accidents that seem to conspire to make the universe habitable. The strength of the attractive nuclear force is just sufficient to overcome the electrical repulsion between the positive charges in the nuclei of ordinary atoms such as oxygen or iron. But the nuclear forces are not quite strong enough to bind together two protons (hydrogen nuclei) into a bound system which would be called a diproton if it existed. If the nuclear forces had been slightly stronger than they are, the diproton would exist and almost all the hydrogen in the universe would have been combined into diprotons and heavier nuclei. Hydrogen would be a rare element, and stars like the sun, which live for a long time by the slow burning of hydrogen in their cores, could not exist. On the other hand, if the nuclear forces had been substantially weaker than they are, hydrogen could not burn at all and there would be no heavy elements.

According to the text, if the nuclear forces in atoms had been slightly stronger than they are,

- (A) there would be many more stars like the sun than there are.
- (B) the universe would be made up of over 99% hydrogen.
- (C) most of the hydrogen in the universe would have burned up.
- (D) stars like the sun would not exist.

3. This passage is from Lewis Thomas, *The Medusa and the Snail*, copyright © 1974.

It is customary to place the date for the beginnings of modern medicine somewhere in the mid-1930s, with the entry of sulfonamides and penicillin into the pharmacopoeia, and it is usual to ascribe to these events the force of a revolution in medical practice. This is what things seemed like at the time. Medicine was upheaved, revolutionized indeed. Therapy had been discovered for great numbers of patients whose illnesses had previously been untreatable. Cures were now available. It seemed a totally new world. Doctors could now

cure disease, and this was astonishing, most of all to the doctors themselves.

Why, according to the text, were doctors astonished around the mid-1930s?

- (A) They were amazed that drugs were able to cure diseases.
- (B) Cures were becoming available for some illnesses, whereas before these doctors had little capacity to cure illnesses.
- (C) The practice of medicine was being revolutionized by a bold young breed of doctors.
- (D) They were surprised that people still had so much respect for doctors and medicine.

4. This passage is from Irving Kristol, *Reflections of a Neoconservative*, copyright © 1983 by Irving Kristol.

Throughout history, artists and writers have been candidly contemptuous of commercial activity between consenting adults, regarding it as an activity that tends to coarsen and trivialize the human spirit. And since bourgeois society was above all else a commercial society—the first in all of recorded history in which the commercial ethos was sovereign over all others—their exasperation was bound to be all the more acute. Later on, the term “philistinism” would emerge to encapsulate this sentiment.

According to the text, the term “philistinism” arose because

- (A) artists and writers became aware that they would increasingly have to participate in commercial activities.
- (B) artists and writers became increasingly frustrated and annoyed as society became more commercial and bourgeois.
- (C) a new word had to be found to refer to the new commercial ethos that was emerging in the eighteenth century.
- (D) artists and writers needed a word to conveniently describe their changing role in bourgeois society.

5. This passage is from Milton Friend, “Why Bother About Wildlife Disease?” from *U.S. Geological Survey Circular 1401*, 2014.

The general importance of zoonoses for humanity has waxed and waned over time in concert with changing conditions including changes in the number of human cases and (or) exposures associated with enzootic areas, such as chronic disease presence and activity levels, for specific zoonoses. The occurrence of major epizootics or epidemics involving the expansion of established geographic range for specific diseases and (or) the appearance of “new” zoonoses within a geographic area is also of great concern.

According to the text,

- (A) the effects of zoonoses on human beings have remained relatively consistent through human history.
- (B) zoonoses have had little effect on human activities.
- (C) zoonoses have often been the decisive factor in the extinction of civilizations.
- (D) the effects of zoonoses on human beings have varied considerably through human history.

6. This passage is from Milton Friend, “Why Bother About Wildlife Disease?” from *U.S. Geological Survey Circular 1401*, 2014.

Rabies is a well-established zoonosis and, except for anthrax, perhaps the next earliest zoonosis to confront humans. The first recorded description of canine rabies dates back to about 500 B.C. Rabies is an important zoonosis in much of the world, because death is the outcome once clinical signs appear. Human deaths from rabies are rare in the United States, but the disease is diagnosed annually in wildlife and other animals where it continues to cause periodic epizootics.

According to the text, rabies

- (A) is maintained in nature by animals.
- (B) affects only domesticated animals.
- (C) is no longer a threat to human life.
- (D) cannot be transmitted from an animal to a human.

7. The following passage is from Alexis de Tocqueville, *Democracy in America*, translated from French into English by Henry Reeve and

originally published in 1835. Alexis de Tocqueville was a French writer and visitor to the United States.

A majority taken collectively is only an individual, whose opinions, and frequently whose interests, are opposed to those of another individual, who is styled a minority. If it be admitted that a man possessing absolute power may misuse that power by wronging his adversaries, why should not a majority be liable to the same reproach?

According to the text,

- (A) it is possible for a majority to establish an unjust law.
- (B) what is decided by a majority in a society is always just.
- (C) what is just cannot be decided by human beings.
- (D) what is just can be decided only by the members of that society for that society.

8. The following passage is from Alexis de Tocqueville, *Democracy in America*, translated from French into English by Henry Reeve and originally published in 1835. Alexis de Tocqueville was a French writer and visitor to the United States.

I am therefore of the opinion that social power superior to all others must always be placed somewhere; but I think that liberty is endangered when this power finds no obstacle which can retard its course and give it time to moderate its own vehemence.

According to the text,

- (A) once superior power is placed into the hands of a single group, nothing will be able to limit its power.
- (B) to preserve freedom, it is necessary for there to be some opposition to the dominant power group in a society.
- (C) individual liberty is not possible when a society is dominated by a single principle.
- (D) individual liberty is possible only when society is dominated by a powerful minority.

9. This passage is from Peter Matthiessen, *Indian Country*, copyright © 1984 by Peter Matthiessen.

By eliminating an Indian nation termination quiets Indian claims to tribal lands that were never ceded to the U.S. government by treaty, which happens to describe almost all the “federal” land in the Far West; instead, the people must accept whatever monetary settlement has been bestowed upon them by the Court of Claims, which was set up not to administer justice but to expedite adjudication of land titles and head off any future claims that Indians might make on lands already coveted by the white economy.

According to the text, the Court of Claims

- (A) adjudicates cases fairly.
 - (B) almost always favors Indian claims to land over white claims to land.
 - (C) has little real effect on Indian affairs.
 - (D) is biased toward white people in its judgments.
10. This passage is from Henry Van Dyke, *The Americanism of Washington*. It was originally published in 1906.

I see Benjamin Franklin, in the Congress of 1776, already past his seventieth year, prosperous, famous, by far the most celebrated man in America, accepting without demur the difficult and dangerous mission to France, and whispering to his friend, Dr. Rush, “I am old and good for nothing, but as the store-keepers say of their remnants of cloth, ‘I am but a fag-end, and you may have me for what you please.’”

According to the text, which of the following is not true about Benjamin Franklin?

- (A) He was wise.
- (B) He believed deeply in natural rights and liberty.
- (C) He never went to Europe.
- (D) He was widely admired in his country.

11. This passage is from Henry Van Dyke, *The Americanism of Washington*. It was originally published in 1906.

He made no extravagant claims for his own motives, and some of his ways were not distinctly ideal. He was full of prudential proverbs and claimed to be a follower of the theory of enlightened self-interest. But there was not a faculty of his wise old head which he did not put at the service of his country, nor was there a pulse of his slow and steady heart which did not beat loyal to the cause of freedom.

According to the text, Benjamin Franklin said that he was

- (A) motivated by what would benefit him.
 - (B) motivated to action by the highest ideals.
 - (C) chivalrous.
 - (D) the most useful person that his country could send on a mission to France.
12. This passage is from Suparna Choudhury, "Culturing the Adolescent Brain: What Can Neuroscience Learn from Anthropology?" in *Social Cognitive and Affective Neuroscience*, 2010.

All of these factors were thought to make Samoan adolescence relatively tranquil and enjoyable and led to Mead's assertion of the primacy of nurture over nature.

According to the text, from her observation that adolescence in Samoa is different from adolescence in America, Margaret Mead argued that

- (A) Samoan culture is different from American culture.
 - (B) culture has a larger part in shaping human behavior than does genetics.
 - (C) girls are treated better in Samoa than they are in America.
 - (D) people go through the same basic life experiences in all societies but do so at different times in their lives.
13. This passage is from Suparna Choudhury, "Culturing the Adolescent Brain: What Can Neuroscience Learn from Anthropology?" in *Social Cognitive and Affective Neuroscience*, 2010.

Schlegel and Barry's cross-cultural study of adolescents in tribal and traditional societies using data collected from over 175 societies around the world demonstrated that adolescence as a distinctive, socially marked stage of life is ubiquitous. These researchers put forward a biosocial theory, arguing that the social stage of adolescence is a response to the development of the reproductive capacity.

According to the text, Schlegel and Barry's cross-cultural study of adolescents in tribal and traditional societies showed that

- (A) the phenomenon of adolescence is found everywhere.
- (B) adolescence is a time of great conflict in every society.
- (C) antisocial behavior always increases during adolescence.
- (D) adolescent boys become aggressive in every society.

14. This passage is from Gilbert Highet, *The Art of Teaching*, copyright © 1950 by Gilbert Highet.

In that, perhaps, they are the ancestors of the modern journalists who have the knack of turning out a bright and interesting article on any new subject, without using special or expert information. The sophists dazzled everyone without convincing anyone of anything positive. They argued unsystematically and unfairly, but painted over the gaps in their reasoning with glossy rhetoric. They had few constructive ideas, and won most applause by taking traditional notions and showing they were based on convention rather than logic. They demonstrated that almost anything could be proved by a fast talker—sometimes they made a powerful speech on one side of a question in the morning and an equally powerful speech on the opposite side in the afternoon.

According to the text, what is not true about the sophists?

- (A) They used superficial elements of the art of persuasion in their arguments.
- (B) They were fast talkers.
- (C) Some of them were very effective at proving their points.
- (D) They were always scrupulously fair in arguments.

15. This passage is from Milton Friend, “Why Bother About Wildlife Disease?” from *U.S. Geological Survey Circular 1401*, 2014.

However, in some instances the culling of urban waterfowl collections infected by duck plague has been vigorously opposed by various segments of society. That opposition highlights one of the difficulties associated with wildlife disease management within urban environments; companion animal status conferred upon these waterfowl by segments of the public may interfere with needed disease control actions and facilitate disease establishment and spread when eradication was possible.

According to the text, a difficulty faced by authorities in charge of wildlife management in urban areas is that

- (A) people in urban areas often have little interest in wildlife.
- (B) many people in urban areas take action to destroy nonindigenous wildlife.
- (C) quite a few people can become quite emotionally attached to animals and seek to protect them despite the need for disease control measures.
- (D) the interests of fishermen, hunters, and wildlife conservationists seldom coincide.

16. This passage is from Milton Friend, “Why Bother About Wildlife Disease?” from *U.S. Geological Survey Circular 1401*, 2014.

Another disease dynamic of increased importance within urban environments is the transfer of pathogens between wildlife and companion animals (dogs and cats). A recent study of urban areas in California has disclosed that domestic cats, wild bobcats and mountain lions that live in the same area share the same diseases. The passage of those pathogens from wildlife to domestic cats provides a vehicle for bringing those diseases into the home, thereby bridging an “infection gap” between people and wildlife. Rabies, plague, and tularemia are among the diseases of wildlife that cats and dogs have brought into the home. There is also potential for companion animals to transmit their pathogens to free-ranging wildlife.

According to the text, pet dogs and cats in urban areas

- (A) are immune to the diseases of wildlife in their area.
- (B) are rapidly beginning to share the characteristics of wildlife in their area.
- (C) frequently bring disease-causing agents from wildlife into homes but never bring disease-causing agents to wildlife.
- (D) sometimes bring diseases into homes and can also bring their disease-causing agents to wildlife.

17. This selection is taken from *The Trained Memory*, Vol. 4 of *Applications of Psychology to the Problems of Personal and Business Efficiency* by Warren Hilton (1920).

If you find it difficult to remember a fact or a name, do not waste your energies in “willing” it to return. Try to recall some other fact or name associated with the first in time or place or otherwise, and lo! When you least expect it, it will pop into your thought.

According to the author, when you apply the principle of association to recall information that you are struggling to remember, the result will be

- (A) instantaneous recall.
- (B) willful recall.
- (C) delayed recall.
- (D) unassociated recall.

18. This passage is from Joseph Conrad, *Lord Jim*, originally published in 1917.

He was an inch, perhaps two, under six feet, powerfully built, and he advanced straight at you with a slight stoop of the shoulders, head forward, and a fixed from-under stare which made you think of a charging bull. His voice was deep, loud, and his manner displayed a kind of dogged self-assertion which had nothing aggressive in it. It seemed a necessity, and it was directed apparently as much at himself as at anybody else. He was spotlessly neat, appareled in immaculate

white from shoes to hat, and in the various Eastern ports where he got his living as a ship-chandler's water-clerk he was very popular.

According to the text, Jim is

- (A) effeminate and extremely neat in appearance.
- (B) lonely and aggressive.
- (C) powerfully built and popular.
- (D) academically gifted, especially in abstract subjects.

19. This passage is from W. E. B. Du Bois, *The Souls of Black Folk*, originally published in 1903.

In a wee wooden schoolhouse, something put it into the boys' and girls' heads to buy gorgeous visiting-cards—ten cents a package—and exchange. The exchange was merry, till one girl, a tall newcomer, refused my card,—refused it peremptorily, with a glance. Then it dawned upon me with a certain suddenness that I was different from the others; or like, mayhap, in heart and life and longing, but shut out from their world by a vast veil. I had thereafter no desire to tear down that veil, to creep through; I held all beyond it in common contempt, and lived above it in a region of blue sky and great wandering shadows. That sky was bluest when I could beat my mates at examination-time, or beat them at a foot-race, or even beat their stringy heads.

According to the text, what is true about the lesson the narrator learns from his experience with the visiting-cards?

- (A) As a black man, he is fundamentally different from white people.
- (B) White people accept all blacks except him.
- (C) He is fundamentally the same as white people but separated from them by their attitudes toward blacks.
- (D) White boys but not white girls accept him.

20. This passage is from Simon Singh, *Fermat's Enigma*, copyright © 1997 by Simon Singh.