

Reading Test 2

65 Minutes, 52 Questions

Turn to Section 1 of your answer sheet to answer the questions in this section.

Directions

Each passage or pair of passages below is followed by a number of questions. After reading each passage or pair, choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

Questions 1-10 are based on the following passage.

This passage is adapted from Daniel Deronda, a novel by Mary Ann Evans published in 1876. Evans famously used a pen name, George Eliot, as male novelists were generally taken more seriously in the 19th century.

His attention was arrested by a young lady who, standing at an angle not far from him, was the last to whom his eyes traveled. Was she beautiful or not beautiful? What was the secret of form or expression that gave her a dynamic quality? She who raised these questions in Daniel Deronda's mind was occupied in gambling. Yes, she had been bending and speaking English to a middle-aged lady seated at play before her. In an instant, however, the middle-aged lady summarily returned to her play, and the other stood upright, showing the full height of a graceful figure. She had a face that might possibly be looked at without admiration, but could hardly be passed with indifference.

The inward debate which she raised in Deronda gave to his eyes a growing expression of scrutiny. At one moment they followed the movements of the figure, of the arms and hands, as this alluring sylph bent forward again to deposit a coin with an air of firm choice; and the next they returned to the face, which was directed steadily toward the game. The sylph was a winner. As her slender fingers, delicately gloved in pale-gray, were adjusting the coins that the lady pushed toward her, she looked round her with a survey too markedly cold and neutral not to have in it a little of that nature which we call artifice concealing an inward exultation.

But in the course of that survey, her eyes met Deronda's and, instead of averting them as she would have desired to do, she was unpleasantly conscious that they became arrested. And for how long she could not tell. The darting sense that he was measuring her and looking down on her as an inferior, that he was of different quality from the human dross around her, that he felt himself in a region outside and above her, and was unfairly examining her as a specimen of a lower order, roused a tingling resentment which stretched the moment in her mind.

It did not bring the blood to her cheeks, but it sent it away from her lips. She controlled herself by the help of an inward defiance, and without other sign of emotion than this lip-paleness, turned back to her play. But Deronda's gaze seemed to have acted as a hex. The last coin she anted was gone. No matter; she had been winning ever since she took to roulette and had a considerable reserve. She had begun to believe in her luck, as had others around her. She had visions of being followed by a *cortège* that would worship her as a goddess of luck and watch her play as a directing soothsayer. Such things had been known of male gamblers. Why should not a woman have a like supremacy? Her friend and chaperon—the very one who had not wished her to play at first—was beginning to approve. He now only administered the prudent advice to stop at the right moment and carry money back to England—advice to which Gwendolen had replied that she cared for the excitement of play, not the financial returns.

On that supposition, the present moment ought to have heightened her desire to gamble. Yet, when her next stake was swept away, she felt the orbits of her eyes getting hot, and the certainty she had (without looking) of that man still watching became torturous, an even greater reason, she decided, that she should not flinch. And so she went on playing as if she were indifferent to loss or gain. Her friend, not shortly after, touched her elbow and proposed that they quit the table. She stubbornly refused.

1

Based on the passage, which of the following best describes Daniel Deronda's relationship with Gwendolen?

- A) He had admired her for a long time.
- B) He did not know her, but immediately fell in love with her.
- C) He knew her, but could not remember her name.
- ☒ D) He did not know her, but was intrigued by her.

#1 Daniel admires from a far and is curious abt her — asks many rhetorical questions

2

As used in line 15, "raised" most nearly means

- ☒ A) inspired.
- B) lifted.
- C) parented.
- D) leveled.

↓
similar meaning to "cultivated" or "started"

3

It can reasonably be inferred from the passage that Gwendolen

- A) enjoyed winning money.
- ☒ B) was careful not to express excitement after winning.
- C) gladly heeded the advice of her chaperon.
- D) admired her chaperon and friend.

"concealing an inward exultation"
hiding her happiness after woman pushed the coins to her

4

Which choice provides the best evidence for the answer to the previous question?

- A) Line 22 ("The sylph ... winner")
- ☒ B) Lines 22-28 ("As her ... exultation")
- C) Lines 41-42 ("It did not ... lips")
- D) Lines 54-57 ("Her friend ... approve")

only lines that refer to her winning

5

According to the passage, Daniel Deronda evoked which of the following feelings in Gwendolen?

- A) Regret
- B) Joy
- ☒ C) Indignation
- D) Envy

#4 "without any sign of emotion"
↳ returned to game without acknowledging his presence

6

As used in line 48, “reserve” most nearly means

- A) patience.
- B) restraint.
- ☒ C) excess.
- D) waiting.

↓
inference to the
money she had
been winning

7

Based on the passage, it can be reasonably inferred that the society in which the scene is set is

- A) chaotic.
- ☒ B) male-dominated.
- C) lawless.
- D) agrarian.

TP4 “why should
not a woman
have a like
supremacy?”

almost wasn't allowed to play
because she was a woman

8

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 7-9 (“Yes, ... before her”)
- B) Lines 45-46 (“But Deronda’s ... hex”)
- ☒ C) Lines 53-54 (“Why should ... supremacy”)
- D) Lines 57-61 (“He now ... returns”)

9

The rhetorical effect of the last sentence of the fourth paragraph (lines 57-61) is to

- A) transition back to the present time.
- ☒ B) support an assertion made in the previous sentence.
- C) offer necessary background information.
- D) introduce a secondary theme.

same
theme
of strong
woman
defiance

speaking about how her friend didn't
want her to play — the following
sentence shows how he approved but
still wants her to stop

10

Which of the following best describes the point of view from which the passage was written?

- A) Daniel Deronda
- B) Gwendolen
- C) Gwendolen’s chaperon
- ☒ D) A third-party narrator

↓ mentions both
characters names

Questions 11-21 are based on the following passage and supplementary material.

This passage discusses the annual federal budget.

Classified job ads typically include a list of "must have" skills necessary to perform a job. A hypothetical ad for the job of President of the United States would surely include "strong business knowledge" as a must-have skill because the federal government operates like a business in many ways.

Business leaders around the world pay careful attention to the balance between expenses or costs (money spent) and revenue or income (money received). Financially successful businesses have more revenue than expenses, and this condition is often achieved through adherence to a carefully mapped financial plan known as a budget.

The federal government operates on similar principles, but on a staggering scale relative to the average small business. Each year, the President submits a budget to Congress that includes expenses and estimated income. Congress disseminates the proposal among various subcommittees, and the members of these subcommittees work to adjust the proposed budget according to the needs of their constituents. After a great deal of hard work and compromise, a budget for the year is approved by Congress. Major annual expenses include Social Security, Medicare, and Medicaid payments, and defense spending.

There are many variables that create obstacles to emerging with a surplus, or leftover revenue. Often, the expected amount of revenue simply does not meet the actual amount. Sometimes emergencies arise; military conflicts, natural disasters, and economic troubles are events that may dictate a deviation in the plan. In the forty years between 1974 and 2014, a period of time that spanned seven different presidential administrations, the budget ran a surplus only four years, from 1998 to 2001. Budgets during those years were the work of President Bill Clinton, a Democrat, and a Republican-controlled Congress.

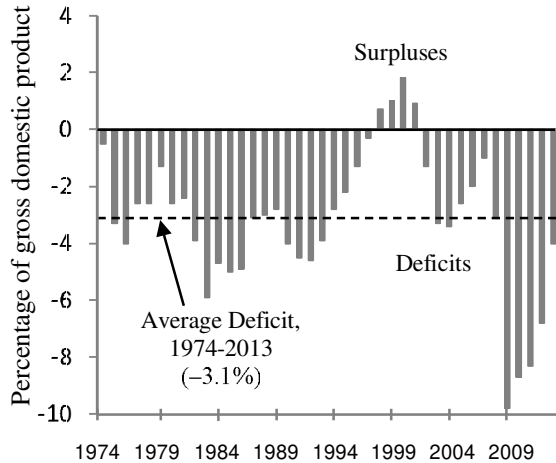
Deficits are sometimes more common. When reporting such shortfalls, the Congressional Budget Office presents the deficit as a percentage of the Gross Domestic Product, or GDP. The GDP is the total dollar amount of all goods and services produced in a single year within the nation's borders. The GDP usually numbers in the trillions. When a deficit exists, the government must borrow money to cover expenses. Continuous borrowing adds to the national debt.

In the last quarter of the 20th century, the deficit levels were highest when President Ronald Reagan held office. Because Republicans often run on a platform that calls for the downsizing of federal government spending, it seems strange that Reagan presided over a period of large deficits. However, the deficits that the Reagan administration incurred were partly caused by tax reductions. Reagan lowered taxes significantly on the wealthiest earners in 1981, reducing revenue. At the same time, he increased defense spending. While he was personally disappointed with the amount of debt his administration accumulated, most historians would agree that his escalation of defense spending yielded an immensely positive result: the end of the Cold War in 1989.

The most significant deficits since the beginning of the new century occurred between 2009 and 2011, when President Barack Obama initiated government bailout programs to help businesses and banks recover from the 2008 housing market crash. These programs forced the United States to borrow vast sums of money, increasing the government's debt considerably.

In navigating the difficult balance between protecting the country's interests, responding to crises, reining in spending, and generating sufficient revenues, the President of the United States should append another must-have skill: effective multitasker.

Federal Deficits or Surpluses



11

In the passage, the author attempts to help the reader understand how the federal government functions by

- A) comparing it to a program like Medicare.
- B) contrasting it with a global corporation.
- ☒ C) likening it to a small business.
- D) explaining the details of how Congress and its subcommittees interact.

R1 "fed. govt. operates like a business in many ways"

12

As used in line 11, "condition" most nearly means

- A) requirement.
- B) predicament.
- ☒ C) state.
- D) provision.

↓ refers to the "financially successful" state of the business

13

The passage suggests that a deficit can be created by which of the following?

- A) Underperforming programs like Social Security.
- ☒ B) Too little revenue or unexpected crises.
- C) Too much income and not enough spending.
- D) High tax rates and reduced defense spending.

#4 - many variables can cause the expenses to be different "emergencies arise:"

14

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 24-26 ("Major annual ... spending")
- B) Lines 27-28 ("There are ... revenue")
- ☒ C) Lines 29-33 ("Often ... the plan")
- D) Lines 56-58 ("However ... tax reductions")

15

Which of the following questions CANNOT be answered based on the information in the passage?

- R3 A) Which branch of government approves federal budgets? **Congress**
- #4 B) Did the federal government run deficits during the presidency of George H.W. Bush, 1989-1993? **Yes**
- ☒ C) From who or what does the United States government borrow money?
- line 70 D) What market crashed in 2008 right before President Obama took office? **housing**

16

Which of the following statements is supported by the graph that accompanies the passage?

- A) The federal deficit in 1984 was less than the average deficit of -3.1% of GDP.
- B) The average surplus is roughly 2% of GDP.
- C) The federal government is currently running a surplus.
- ☒ D) As a percentage of GDP, the federal deficit in 1995 was less than the federal deficit in 1994.

after 1994 the deficit decreases according to graph

17

The passage most strongly supports which of the following statements about the President of the United States?

- A) Most presidents begin their career journey by reading classified ads.
- ☒ B) The success or failure of a president should not be determined by financial considerations alone.
- C) President Obama spent far too much money bailing out businesses and banks between 2009 and 2011.
- D) All presidents have been effective multitaskers since 1974.

↑
P b - talks about Reagan's presidency despite the massive debt, it had positive results

18

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 1-2 ("Classified ... job")
- B) Lines 27-28 ("There are ... revenue")
- ☒ C) Lines 61-65 ("While he ... 1989")
- D) Lines 66-71 ("The most ... crash")

19

In order to better align the language of the passage with the graph, the word "sometimes" in line 40 should be changed to which of the following?

- A) always
- ☒ B) far
- C) surprisingly
- D) unfortunately

↓ deficits are the majority of the graph
word should be synonymous with "often"

20

As used in line 48, "cover" most nearly means

- A) hide.
- ☒ B) pay.
- C) shield.
- D) reduce.

↓
"cover expenses"
borrowing money will help pay back the expenses

21

Based on the passage, the primary purpose of lines 56-60 ("However ... spending") is to

- A) argue that it was unfair for Reagan to lower taxes on the wealthiest Americans.
- ☒ B) explain how Reagan managed to run deficits despite his desire to reduce government spending.
- C) suggest that Reagan did not possess strong business knowledge.
- D) explain why Reagan increased defense spending during the Cold War.

the 2 sentences talk about why there were large deficits by explaining loss of revenue

CONTINUE

Questions 22-32 are based on the following passages.

The following passages debate the merits of space travel.

Passage 1

Line Mankind has always demonstrated a thirst for
knowledge about the universe. Early in the
twentieth century, this desire led to serious dreams
of space travel, which ultimately became reality by
5 the middle of same century. While mankind's
horizons have stretched to very distant parts of the
universe, the incentive to explore space has shifted
from an intellectual desire to explore to a more
practical desire to collect information that may
10 prove useful, if not necessary, to humanity.

For example, outer space exploration is certain
to enhance our understanding of Earth's atmosphere,
which may in turn help us manage pressing issues
like ozone depletion. Mars' atmosphere, with its
15 inherent similarities to Earth's upper stratosphere,
has already allowed scientists to study climate
change processes. Furthermore, studies of the
Martian landscape have offered clues about how
surface conditions and atmosphere interact.

20 There are also more fantastic ideas about what
space travel might bring: a new, useful substance
that can cure diseases or provide limitless energy?
Space travel might also lead to contact with an
advanced alien species that can teach us all we need
25 to know to preserve the Earth and its natural
resources for millions, if not billions, of years.
While these suppositions are incredible, some of the
other benefits of space exploration are right in front
of us already.

30 Space exploration obviously involves solving
problems that are unique. However, when the most
brilliant minds try to solve the varied issues
involved with space travel, they sometimes create
technologies that prove highly useful in everyday
35 life. For example, an aeronautical engineering team
back in the 1950s was charged with designing an
electric screw driver with two necessary features:
the screwdriver had to work without a power cord
and it had to protect against the unintentional

40 overtightening of screws. The successfully
designed tool, with a rechargeable battery and an
adjustable maximum-torque setting, was not only
used by astronauts making repairs in space, but a
less expensive, mass-produced version has become
45 a staple in the toolbox of most homeowners today.

Passage 2

While it is romantic to believe that humankind
has a destiny that extends beyond the limits of
Earth's atmosphere, the simple fact is that we have
evolved as earthbound creatures. We are physically
50 ill suited to travel through space over extended
periods of time. Space travel is such an exotic
pursuit that we often forget about the risks involved.
Astronauts do not return to Earth unscathed.

The lack of gravity in space is costly to
55 travelers in terms of bone mass. When humans
exercise on Earth, subjecting their bodies to jolting
impacts, their bodies respond by building bone mass
to compensate for the expectation of future impacts.
In space, weightlessness minimizes such impacts to
60 the point where they fail to trigger a bone-building
response. This lack of response results in decreased
bone mass in astronauts.

Zero gravity also allows fluids to rise in the
body. In space, the tendency of fluids to
65 accumulate in the chest and head puts the skull and
eyes under unusual pressure; astronauts have often
arrived back on Earth with puffy faces and, more
seriously, worse vision than they had when they
left. Testing conducted shortly after landing has
70 revealed compression of the eyeballs, spotting on
the retinas, and increased farsightedness.

The dream of manned explorations to Mars
and other planets must be tempered in the face of
these sobering consequences. These effects are
75 based on short-term observations and do not even
take into account the long-term impact of space
travel. Extended journeys could be even more
detrimental to astronauts.

22

Passage 1 suggests that which of the following motivated scientists who were seriously interested in space travel during the early part of the twentieth century?

- A) The hope of discovering useful substances
- ☒ B) The desire to simply learn more about the universe
- C) The chance to save humanity
- D) The perks of government funding and steady employment

P1 First 2 sentences
"thirst for knowledge about the universe"

23

Which choice provides the best evidence for the answer to the previous question?

- ☒ A) Lines 5-10 ("While ... humanity")
- B) Lines 11-14 ("For example ... depletion")
- C) Lines 20-22 ("There are ... energy")
- D) Lines 40-45 ("The successfully ... today")

"collect information"
correlates with choice B

24

With regard to the benefits that space exploration has brought, brings, or may one day bring, the second, third, and fourth paragraphs of Passage 1 (lines 11-45) can be best characterized, respectively, as:

- A) fanciful, potential, and practical.
- ☒ B) potential, fanciful, and practical.
- C) practical, fanciful, and potential.
- D) practical, potential, and fanciful.

P2 study Mars to learn more abt climate change
P3 Fantastic, creative ideas
P4 solving actual problems

25

Which of the following words or phrases is the most acceptable alternative to the word "unique" in line 31?

- A) rarely seen
- B) isolated
- ☒ C) singular
- D) not uncommon

uncommon
↳ special

26

The "travelers" referred to in line 55 would most likely be found in which of the following places?

- A) On city buses
- B) In health and fitness centers
- ☒ C) In manned spacecraft
- D) In research laboratories

In reference to space travel
and therefore spacecrafts

27

Based on the passages, with which of the following statements would both authors most likely agree?

- A) The scientists who first made space travel a reality forgot to consider the physical wellbeing of astronauts.

→ addressed in passage 2

- ☒ B) Humankind has always been fascinated and intrigued by space.

- C) Brief trips to space are entirely safe for humans who are physically fit.
- D) Manned spacecraft can collect more and better data than unmanned spacecraft.

→ both imply the opposite
mentioning mankind's purpose
in space exploration

CONTINUE

28

In contrast with the author of Passage 1, the author of Passage 2 focuses more on

- A) the technical requirements of space travel.
- B) the likelihood of unmanned space travel to Mars.
- ☒ C) the negative physical effects of manned space travel.
- D) the current and future benefits of space travel.

P1 focuses on possibilities of space travel (+)
 P2 focuses on effects of manned space travel (-) - bone mass - fluids etc.

29

As used in line 74, "sobering" most nearly means

- ☒ A) serious.
- B) healthful.
- C) urgent.
- D) vigilant.

↓
 whole passage talks about negative effects of space travel
 "consequences"
 ↑
 should have negative connotation

30

According to Passage 2, lack of gravity may negatively impact which of the following in a human?

- A) Extended travel through space
- B) Short-term functioning
- C) Calcium reserves
- ☒ D) Bone mass levels

P2 in passage 2
 weightlessness →
 decreased bone mass
 in astronauts

31

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 49-51 ("We are ... time")
- ☒ B) Lines 54-55 ("The lack ... mass")
- C) Lines 63-64 ("Zero gravity ... body")
- D) Lines 74-77 ("These effects ... travel")

directly connects
 gravity to bone mass

32

Which of the following best describes the tone of the passages?

- ☒ A) Passage 1 is positive, while Passage 2 is cautionary.
- B) Passage 1 is persuasive, while Passage 2 is informative.
- C) Passage 1 is inspirational, while Passage 2 is provocative.
- D) Passage 1 is argumentative, while Passage 2 is threatening.

Passage 1 focuses on possibilities
 ↓
 pos. impact of space research

Passage 2 - neg impact of space travel

Questions 33-42 are based on the following passage.

This passage is an excerpt from a novel on democracy in America published in 1835.

Line
5 Some countries are so large and varied that the different populations that inhabit them have dramatically different interests and views. Although all citizens of such countries are the subjects of the same government, the perpetual state of opposition on issues—issues that affect fundamental rights and quality of life—sometimes boils over into what is known as civil war. In such cases, the different factions of people may more properly be considered
10 distinct nations than different parties under the same government.

When the citizens of a country entertain different opinions on less fundamental issues, even though they may affect citizens unevenly, the
15 groupings that arise may correctly be styled parties. Parties, which differ in their characteristics and propensities, are necessary components of democratic governments.

At certain periods, a nation may be oppressed
20 by such insupportable evils that all parties agree to a total overhaul of the nation's political constitution. At other times, the mischief lies still deeper, and the continued existence of the society itself is endangered. Such are the times of great revolutions
25 and of deep divisions. But between these epochs of misery and of upheaval, there are periods—some very long—during which human society seems to rest and mankind seems to make a pause. This pause is, indeed, only figurative, for time does not
30 stop its course for nations any more than for men. Both advance continuously toward goals with which they are unacquainted. And we only imagine them to be stationary when their progress escapes our observation, as men who are going at a foot-pace
35 seem to be standing still to those who view them from a distance.

But however this may be, there are certain epochs at which the changes that take place in the social and political constitution of nations are so
40 slow and so insensible that men imagine their present condition to be a final state. During such

times of calm, the human mind can engage in the lively debate and the give-and-take of civil life within a diverse society. These are the times of
45 parties and of intrigue.

The great, enduring political parties are those that cling to principles more than to their consequences. They adhere to the general cases, not to the unique or special. They rely on ideas, not
50 on men. These parties are usually distinguished by nobler character, more generous passions, and more genuine convictions. In them, private interest, which always plays some role in political passions, is more studiously veiled under the pretext of the
55 public good.

The minor, fleeting parties are, on the other hand, generally deficient in political faith. As they are not sustained or dignified by a lofty purpose, they ostensibly display the egotism of their
60 character in their actions. They glow with a factitious zeal. Their language is vehement, but their conduct is irresolute. The means they employ are as wretched as the ends at which they aim. While society may be convulsed by great parties, by
65 minor ones it can only be agitated. It is torn by the former, degraded by the latter.

When the great War of Independence was terminated, the foundations of the new government were laid down. The nation was divided between
70 two opinions—two opinions which are as old as the world and which are perpetually to meet under all the forms and all the names. The one worked to limit, the other to extend indefinitely, the power of the people. The conflict of these two opinions
75 never assumed that degree of violence in America which it has frequently displayed elsewhere. Both parties of the Americans, in fact, agreed upon the most essential points, and neither of them had to destroy the Constitution or overthrow the structure
80 of government in order to ensure its own triumphs.

33

In the context of the passage as a whole, the primary function of the first paragraph (lines 1-11) is to help the reader begin to understand political parties by

- A) arguing that party differences can lead to civil war, if not properly checked by the national government.
- ☒ B) contrasting them with factions created by deeper, more fundamental, divisions that can exist within a single country.
- C) likening them to populations with mildly different interests and agendas.
- D) explaining the origins of political parties within large and varied countries.

last sentence
factions are more separate + extreme than political parties

34

As it is used in line 12, “entertain” most nearly means

- A) satisfy.
- B) humor.
- ☒ C) hold.
- D) conjure.

entertain diff opinions
↓ “consider”

35

Based on the passage, it is reasonable to conclude that parties are most likely to exist within a country during times of

- A) political turmoil.
- ☒ B) civil rest.
- C) financial prosperity.
- D) misery and upheaval.

P4
“times of calm”
there can be debate and political parties

36

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 19-21 (“At certain ... constitution”)
- B) Lines 25-28 (“But between ... pause”)
- C) Lines 32-36 (“And we ... distance”)
- ☒ D) Lines 41-45 (“During such ... intrigue”)

matches with prev. answer choice
↓ times of peace can focus on debate and political parties

37

According to the passage, which of the following would most likely adhere to a general principle even though doing so under certain circumstances would lead to an undesirable result?

- ☒ A) A great, enduring party
- B) A minor, fleeting party
- C) A democratic government
- D) A nation during a great upheaval

P5 detail question - 1st sentence

38

The primary rhetorical effect of the first sentence of the final paragraph (lines 67-69) is to

- ☒ A) transition the passage from a general discussion to an actual example.
- B) offer a counterexample to the principles discussed in the preceding paragraphs.
- C) conclude the passage with a final hypothetical account.
- D) support an assertion made at the end of the preceding paragraph.

first sentence mentions a specific event rather than speaking of a broad statement

CONTINUE

39

As used in line 75, “assumed” most nearly means

- A) presumed.
- ☒ B) achieved.
- C) trusted.
- D) appropriated.

"took on"
never
that degree of
violence

40

Based on the passage, during the time that followed America's declaration of independence, the new nation's two parties

- ☒ A) were not deeply divided.
- B) held remarkably similar opinions.
- C) left no room for a third party.
- D) fought to empower the people.

last paragraph
"Both parties ... agreed upon
the most essential parts"
↳ only had slightly differing
views + coexisted peacefully

41

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 67-69 ("When the ... down")
- B) Lines 69-72 ("The nation ... names")
- C) Lines 72-74 ("The one ... people")
- ☒ D) Lines 76-80 ("Both parties ... triumphs")

42

The primary purpose of the passage is to

- A) explain how the two-party system originated in America.
- B) detail the rise of political parties throughout the world too broad
- C) detail the rise of the party system throughout history.
- ☒ D) briefly explain certain aspects of political parties and various types of parties.

addresses what types
of parties exists

P5 what makes a great party
P6 bad parties

Questions 43-52 are based on the following passage and supplementary material.

This passage reports on the challenges environmental scientists face in addressing pollution of the Great Lakes.

- The Great Lakes belong on any short list of the most spectacular natural wonders. With all due reverence to places like the Grand Canyon, Yellowstone National Park, the Grand Tetons, and the Redwood Forest, the Great Lakes, beyond their beauty, hold almost unfathomable scientific significance. This chain of five freshwater lakes (Superior, Huron, Michigan, Ontario, and Erie) was formed during the Ice Age, when enormous glacial sheets moving across the surface of North America carved basins that were eventually filled with meltwater. The Great Lakes contain over 20 percent of the world's surface freshwater and 95 percent of the surface freshwater found in the United States. The ecosystem within the Great Lakes region, which includes forests, streams, coastal marshes, and wetlands, comprises over 3,500 species of plants and animals, including 46 native to the region alone.
- Recognizing the ecological, economic, and cultural significance of these magnificent bodies of water, scientists from the Environmental Protection Agency (EPA) monitor the Great Lakes closely to ensure that the complex ecosystem remains balanced. They pay close attention to the levels of various pollutants, which threaten ecological stability. These pollutants enter the waters in myriad ways. One way is deposition, which occurs when airborne pollutants find their way into the water. Deposition happens through several routes: particles simply fall from the air into the water, gaseous pollutants are absorbed by the water, or particles from the air are trapped in rain or snow that lands in the water.
- Environmental scientists have named the chemicals that pollute the Great Lakes and other bodies of water through deposition *persistent bioaccumulative toxins*, or PBTs. PBTs do not

- typically break down easily, so if they deposit in an area with warm water, they may actually return to the air through evaporation until they deposit somewhere else, sometimes thousands of miles away. Because PBTs can “jump” from one body of water to another, this cycle is known as the *Grasshopper Effect*. Eventually, some mobile PBTs will deposit in a body of water that is too cold for further evaporation to occur, and the PBTs will remain there indefinitely. Given that the Great Lakes are located in the north, where average temperatures are low, PBTs tend to concentrate in the Great Lakes.

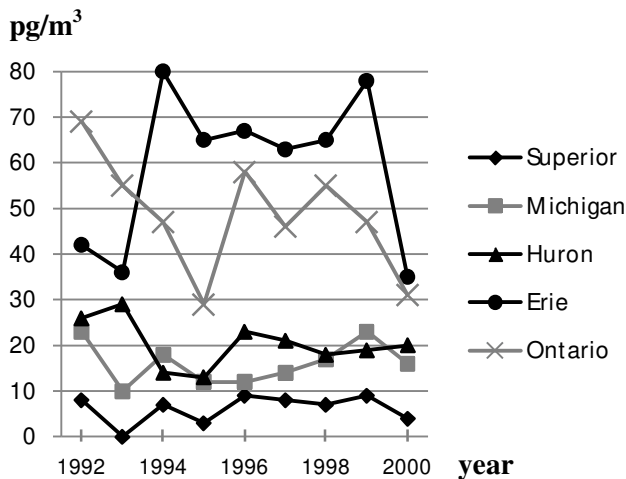
Not surprisingly, the high concentration of PBTs in the Great Lakes has affected fish there. Many species contain levels of PBT that are thousands, or even millions, of times higher than those found in the water. The PBTs can cause reproductive issues in the fish. Furthermore, fish contaminated with high PBT levels are unsafe for wildlife and humans to consume. Potential human health problems include neurological and immune system dysfunction, as well as developmental issues in children.

- The EPA maintains five master monitoring stations, one on each lake, to take PBT readings. These stations use air vacuum pumps or filtered precipitation samplers to determine how much of several pollutants are in the local air and could thereby be deposited in the lake. Measurements are calculated in picograms (one-trillionth of a gram) per cubic meter (pg/m^3) of air at the lake.

Polycyclic Aromatic Hydrocarbons (PAHs) are a PBT of interest to EPA scientists. PAHs are a group of compounds that are produced when fossil fuels are burned incompletely. *Benzopyrene* is a PAH which affects human DNA and is a known carcinogen. Although the United States has gotten serious about reducing fossil fuel consumption, some countries continue to aggressively burn fossil fuels (incompletely). This is problematic for the Great Lakes, especially Huron and Michigan.

Again, because the Grasshopper Effect can result in pollutants traveling long distances over many years, the day when PBT readings are negligible seems far off. The EPA will continue to monitor PBT levels in the Great Lakes while hoping that the efforts of environmentalists everywhere will raise awareness of the dangers of airborne contaminants. Ultimately, the water quality of one of America's natural treasures is in the hands of 90 people all over the world.

**Benzopyrene Levels of Air
in Great Lakes Regions**



43

The passage suggests that the “short list” referenced in line 1 would include all of the following EXCEPT:

- A) the Great Lakes.
- B) Mount Kilimanjaro.
- ☒ C) the Empire State Building.
- D) Yellowstone National Park.

mentions all except
empire state in first
couple of lines — detail

44

The last sentence of the first paragraph (lines 15-19) was most likely included to support which of the following assertions?

- A) The Great Lakes contain over 20 percent of the world's surface freshwater.
- ☒ B) The Great Lakes hold almost unfathomable scientific significance.
- C) The Great Lakes belong on any short list of the most spectacular natural wonders.
- D) The Great Lakes contain 95 percent of the surface freshwater found in the United States.

the vast ecosystem illustrates
how it is important to science
↓ connected in following TP

45

As used in line 23, “monitor” most nearly means

- ☒ A) study.
- B) count.
- C) sample.
- D) compare.

“ — the
Great Lakes
closely”

later states
“pay attention to...”
indicating study

46

According to the passage, pollutants can enter lake water:

- A) through melting ice only.
- B) three ways only.
- C) three ways primarily.
- ☒ D) an indefinite number of ways.

P 2 “in a myriad ways”
↓ numerous ways

CONTINUE

47

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 7-12 ("This chain ... meltwater")
- ☒ B) Lines 27-28 ("These pollutants ... ways")
- C) Lines 30-34 ("Deposition ... water")
- D) Lines 35-38 ("Environmental ... PBTs")

R 2 mentions pollutants
best matches prev.
answer choice

48

As used in line 50, "concentrate" most nearly means

- A) fixate.
- ☒ B) accumulate.
- C) contemplate.
- D) assemble.

"high concentration"
in following
sentence indicates
a build up or
accumulation

49

Based on the graphic, which of the following statements is accurate about the benzopyrene levels measured in the Great Lakes regions from 1992 to 2000?

- A) In 1993, the air near Erie had the highest benzopyrene level. 1994
- ☒ B) In 1998, the amount of benzopyrene in the air near Huron and Michigan was about the same. → rose for Huron
- C) The benzopyrene level in the air near all five lakes dropped from 1999 to 2000. superior
- D) The air near Michigan had the lowest average benzopyrene level from 1992 to 2000.

the triangle + grey box overlap
in 1998

STOP

If you finish before time is called, you may check your work in this section only.
Do not return to any other section in the test.

50

Based on the passage, it is reasonable to conclude that the "potential human health problems" referred to in lines 59-60 would mostly likely be caused by

- A) fishing in Lake Huron.
- B) swimming in Lake Michigan
- ☒ C) eating fish from Lake Ontario.
- D) living near Lake Erie.

right before the
passage
speaks about
contaminated
fish
"unsafe for
humans to
consume"

51

Which of the following offers the best explanation for why the author included the word "incompletely" in parenthesis in line 79?

- A) To highlight how much more pollution there would be, if other countries burned fossil fuels completely
- ☒ B) To remind the reader that PAHs are created when fossil fuels are burned incompletely
- C) To suggest that the data collected by scientists is incomplete at best
- D) To argue that fossil fuel consumption does not have to be eliminated completely in order to make a positive difference

incompletely refers to how fossil fuels
are burned which creates the
pollutants — provides
explanation

52

To better align the text with the graphic, the phrase "especially Huron and Michigan" in line 80 should be changed to

- A) except for Huron and Michigan.
- B) especially Superior and Ontario.
- C) except for Huron and Ontario.
- ☒ D) especially Erie and Ontario.

↓ find the 2 lakes
with highest contamination
levels