# **Large-Type Edition**

The University of the State of New York
REGENTS HIGH SCHOOL EXAMINATION

# REGENTS EXAMINATION IN ENGLISH LANGUAGE ARTS

**Tuesday**, January 21, 2025 — 9:15 a.m. to 12:15 p.m., only

The possession or use of any communications device is strictly prohibited when taking this examination. If you have or use any communications device, no matter how briefly, your examination will be invalidated and no score will be calculated for you.

A separate answer sheet has been provided for you. Follow the instructions for completing the student information on your answer sheet. You must also fill in the heading on each page of your essay booklet that has a space for it, and write your name at the top of each sheet of scrap paper.

The examination has three parts. For Part 1, you are to read the texts and answer all 24 multiple-choice questions. For Part 2, you are to read the texts and write one source-based argument. For Part 3, you are to read the text and write a text-analysis response. The source-based argument and text-analysis response should be written in pen. Keep in mind that the language and perspectives in a text may reflect the historical and/or cultural context of the time or place in which it was written.

When you have completed the examination, you must sign the statement printed at the bottom of the front of the answer sheet, indicating that you had no unlawful knowledge of the questions or answers prior to the examination and that you have neither given nor received assistance in answering any of the questions during the examination. Your answer sheet cannot be accepted if you fail to sign this declaration.

DO NOT START THIS EXAMINATION UNTIL YOU ARE TOLD TO DO SO.

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# Part 1

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**Directions** (1–24): Closely read each of the three passages below. After each passage, there are several multiple-choice questions. Select the best suggested answer to each question and record your answer on the separate answer sheet provided for you. You may use the margins to take notes as you read.

# Reading Comprehension Passage A The Great Silence

In this work of fiction, the narrator is a parrot who reveals its view of human attempts to communicate with intelligent species in outer space.

The humans use Arecibo<sup>1</sup> to look for extraterrestrial intelligence. Their desire to make a connection is so strong that they've created an ear capable of hearing across the universe.

But I and my fellow parrots are right here. Why aren't they interested in listening to our voices?

We're a nonhuman species capable of communicating with them. Aren't we exactly what humans are looking for?

The universe is so vast that intelligent life must surely have arisen many times. The universe is also so old that even one technological species would have had time to expand and fill the galaxy. Yet there is no sign of life anywhere except on Earth. Humans call this the Fermi Paradox.

One proposed solution to the Fermi Paradox is that intelligent species actively try to conceal their presence, to avoid being targeted by hostile invaders.

 $<sup>^{1}\</sup>mathrm{Arecibo}$  — a former space observatory located in Arecibo, Puerto Rico

Speaking as a member of a species that has been driven nearly to extinction by humans, I can attest that this is a wise strategy.

It makes sense to remain quiet and avoid attracting attention.

The Fermi Paradox is sometimes known as the Great Silence. The universe ought to be a cacophony<sup>2</sup> of voices, but instead it is disconcertingly quiet.

Some humans theorize that intelligent species go extinct before they can expand into outer space. If they're correct, then the hush of the night sky is the silence of a graveyard.

Hundreds of years ago, my kind was so plentiful that the Rio Abajo Forest [Puerto Rico] resounded with our voices. Now we're almost gone. Soon this rain forest may be as silent as the rest of the universe.

There was an African gray parrot named Alex. He was famous for his cognitive abilities. Famous among humans, that is.

A human researcher named Irene Pepperberg spent thirty years studying Alex. She found that not only did Alex know the words for shapes and colors, he actually understood the concepts of shape and color.

Many scientists were skeptical that a bird could grasp abstract concepts. Humans like to think they're unique. But eventually Pepperberg convinced them that Alex wasn't just repeating words, that he understood what he was saying.

Out of all my cousins, Alex was the one who came closest to being taken seriously as a communication partner by humans.

Alex died suddenly, when he was still relatively young. The evening before he died, Alex said to Pepperberg, "You be good. I love you."

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<sup>&</sup>lt;sup>2</sup>cacophony — a jarring mixture of noises

If humans are looking for a connection with a nonhuman intelligence, what more can they ask for than that?

Every parrot has a unique call that it uses to identify itself; biologists refer to this as the parrot's "contact call."

In 1974, astronomers used Arecibo to broadcast a message into outer space intended to demonstrate human intelligence. That was humanity's contact call.

In the wild, parrots address each other by name. One bird imitates another's contact call to get the other bird's attention.

If humans ever detect the Arecibo message being sent back to Earth, they will know someone is trying to get their attention.

Parrots are vocal learners: we can learn to make new sounds after we've heard them. It's an ability that few animals possess. A dog may understand dozens of commands, but it will never do anything but bark.

Humans are vocal learners, too. We have that in common. So humans and parrots share a special relationship with sound. We don't simply cry out. We pronounce. We enunciate.

Perhaps that's why humans built Arecibo the way they did. A receiver doesn't have to be a transmitter, but Arecibo is both. It's an ear for listening, and a mouth for speaking.

Humans have lived alongside parrots for thousands of years, and only recently have they considered the possibility that we might be intelligent.

I suppose I can't blame them. We parrots used to think humans weren't very bright. It's hard to make sense of behavior that's so different from your own.

But parrots are more similar to humans than any extraterrestrial species will be, and humans can observe us up close; they can look us in the eye. How do they expect to recognize an alien intelligence if all they can do is eavesdrop from a hundred light-years away?

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It's no coincidence that "aspiration" means both hope and the act of breathing.

When we speak, we use breath in our lungs to give our thoughts a physical form. The sounds we make are simultaneously our intentions and our life force.

I speak, therefore I am. Vocal learners, like parrots and humans, are perhaps the only ones who fully comprehend the truth of this.

There's a pleasure that comes with shaping sounds with your mouth. It's so primal and visceral<sup>3</sup> that, throughout their history, humans have considered the activity a pathway to the divine.

Pythagorean mystics<sup>4</sup> believed that vowels represented the music of the spheres, and chanted to draw power from them.

Pentecostal Christians believe that when they speak in tongues, they're speaking the language used by angels in heaven.

Brahman Hindus believe that by reciting mantras, they are strengthening the building blocks of reality.

Only a species of vocal learners would ascribe<sup>5</sup> such importance to sound in their mythologies. We parrots can appreciate that.

According to Hindu mythology, the universe was created with a sound: "om." It is a syllable that contains within it everything that ever was and everything that will be.

When the Arecibo telescope is pointed at the space between stars, it hears a faint hum.

Astronomers call that the cosmic microwave background. It's the residual<sup>6</sup> radiation of the Big Bang, the explosion that created the universe fourteen billion years ago.

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<sup>&</sup>lt;sup>3</sup>visceral — instinctive

<sup>&</sup>lt;sup>4</sup>Pythagorean mystics — ancient Greek believers

<sup>&</sup>lt;sup>5</sup>ascribe — credit

<sup>&</sup>lt;sup>6</sup>residual — remaining

But you can also think of it as a barely audible reverberation<sup>7</sup> of that original "om." That syllable was so resonant that the night sky will keep vibrating for as long as the universe exists.

When Arecibo is not listening to anything else, it hears the voice of creation.

We Puerto Rican parrots have our own myths. They're simpler than human mythology, but I think humans would take pleasure from them.

Alas, our myths are being lost as my species dies out. I doubt the humans will have deciphered our language before we're gone.

So the extinction of my species doesn't just mean the loss of a group of birds. It's also the disappearance of our language, our rituals, our traditions. It's the silencing of our voice.

Human activity has brought my kind to the brink of extinction, but I don't blame them for it. They didn't do it maliciously. They just weren't paying attention.

And humans create such beautiful myths; what imaginations they have. Perhaps that's why their aspirations are so immense. Look at Arecibo. Any species who can build such a thing must have greatness within them.

My species probably won't be here for much longer; it's likely that we'll die before our time and join the Great Silence. But before we go, we are sending a message to humanity. We just hope the telescope at Arecibo will enable them to hear it.

The message is this:

You be good. I love you.

—Ted Chiang adapted from "The Great Silence" *Exhalation*, 2019 Alfred A. Knopf

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<sup>&</sup>lt;sup>7</sup>reverberation — echo

- 1 The Fermi Paradox (line 10) explains why
  - (1) the age of the universe cannot be determined
  - (2) the Arecibo experiment has not succeeded
  - (3) other galaxies are expanding into space
  - (4) some planets could support intelligent life
- 2 The figurative language in line 19 suggests that intelligent extraterrestrials
  - (1) prefer to interact with other species in space
  - (2) have no reason to converse with other species
  - (3) miss the opportunity to connect with humans
  - (4) relate to humans without need of language
- 3 Alex's death (lines 33 and 34) is expressed using which literary device?
  - (1) an anecdote

(3) an allegory

(2) a metaphor

(4) a simile

- 4 Lines 39 through 44 suggest that extraterrestrials may
  - (1) maintain contact only with nonhuman species
  - (2) prove to be more intelligent than humans
  - (3) prefer nonverbal modes of communication
  - (4) mimic communications coming from Earth
- 5 In line 64, the word "primal" most nearly means
  - (1) unique

(3) deceptive

(2) natural

- (4) unknowable
- 6 Lines 67 through 76 serve to show the historical
  - (1) similarities among ancient and modern creation beliefs
  - (2) connection between vocalization and spiritual expression
  - (3) shared ways people celebrate important events
  - (4) role of vocal performances in preserving cultural traditions
- 7 As used in line 81, "resonant" most nearly means
  - (1) rich

(3) startling

(2) muffled

(4) harsh

- 8 According to the narrator, "the voice of creation" (line 83) is the result of
  - (1) "the music of the spheres" (line 67)
  - (2) "the language used by angels" (lines 69 and 70)
  - (3) "reciting mantras" (line 71)
  - (4) "the Big Bang" (line 79)

- 9 Which statement best represents a central idea of the text?
  - (1) "The universe is also so old that even one technological species would have had time to expand and fill the galaxy" (lines 7 through 9)
  - (2) "Hundreds of years ago, my kind was so plentiful that the Rio Abajo Forest [Puerto Rico] resounded with our voices" (lines 20 and 21)
  - (3) "But parrots are more similar to humans than any extraterrestrial species will be" (line 56)
  - (4) "Look at Arecibo. Any species who can build such a thing must have greatness within them" (lines 93 and 94)

GO RIGHT ON TO THE NEXT PAGE  $\Longrightarrow$ 

# Reading Comprehension Passage B Sea Drift

They would sit, two or three of them as a rule, on the cast-iron seat they called a form, that stood at the end of the road to the sea where it petered out in a dirt track through salt marsh, disappeared in sand.

- Old men now: dark clothes and rough workboots worn from habit, faces scarred by wind and sun from days on the boats.

  Stranded somehow in this place as if, like seaweed, they had washed up on shore at high tide.

  Survivors from a world once theirs.
- Somewhere in nearby stone cottages, with modern extensions at the back and sides to accommodate indoor plumbing, were daughters or daughters-in-law, keeping house, cooking meals, expecting the men home, at appointed times.

  This was the daily routine now.
- Out of doors they were free, to rejoice in weather and tides, smell sea air that was the smell of life: salt, seaweed, sour mud, dead fish, churned-up sand; to feel the whip of wind on their skin.

  Gulls circling and swooping in the wide skies, diving, as they once did above the shrimp boats as heavy nets were cast into the sea.
- 20 The slow pace of nature's change gave them some kind of peace.

—Eileen Berry "Sea Drift"

from Bye Bye Blackbird: Worlds Past and Worlds Away, 2010

Plain View Press

- 10 The term "petered out" in line 3 most nearly means
  - (1) carried on

- (3) dwindled away
- (2) branched off
- (4) dipped slightly
- 11 The figurative language in lines 7 and 8 conveys the men's
  - (1) lack of purpose
  - (2) feeling of obligation
  - (3) sense of control
  - (4) loss of companionship
- 12 The men are most likely called "survivors" (line 9) because they have
  - (1) dominated new competition
  - (2) endured past adversity
  - (3) settled in new locations
  - (4) found safer employment

- 13 The repetition of the word "once" in lines 9 and 18 supports a central idea about
  - (1) forgiveness

(3) aging

(2) regret

- (4) confusion
- 14 Which phrase supports a central idea?
  - (1) "the cast-iron seat / they called a form" (lines 1 and 2)
  - (2) "faces / scarred by wind and sun" (lines 5 and 6)
  - (3) "Somewhere in nearby stone cottages" (line 10)
  - (4) "Gulls circling and swooping" (line 18)

# **Reading Comprehension Passage C**

### **Beautiful Brains**

...The first full series of scans of the developing adolescent brain—a National Institutes of Health (NIH) project that studied over a hundred young people as they grew up during the 1990s—showed that our brains undergo a massive reorganization between our 12th and 25th years. The brain doesn't actually grow very much during this period. It has already reached 90 percent of its full size by the time a person is six, and a thickening skull accounts for most head growth afterward. But as we move through adolescence, the brain undergoes extensive remodeling, resembling a network and wiring upgrade.

For starters, the brain's axons—the long nerve fibers that neurons use to send signals to other neurons—become gradually more insulated with a fatty substance called myelin (the brain's white matter), eventually boosting the axons' transmission speed up to a hundred times. Meanwhile, dendrites, the branchlike extensions that neurons use to receive signals from nearby axons, grow twiggier, and the most heavily used synapses—the little chemical junctures across which axons and dendrites pass notes—grow richer and stronger. At the same time, synapses that see little use begin to wither. This synaptic pruning, as it is called, causes the brain's cortex—the outer layer of gray matter where we do much of our conscious and complicated thinking—to become thinner but more efficient. Taken together, these changes make the entire brain a much faster and more sophisticated organ.

This process of maturation, once thought to be largely finished by elementary school, continues throughout adolescence. Imaging work done since the 1990s shows that these physical changes move in a slow wave from the brain's rear to its front, from areas close to the brain stem that look after older and more behaviorally basic functions, such as vision, movement, and fundamental processing, to the evolutionarily newer and more complicated thinking areas up front. The corpus callosum, which connects the brain's left and right

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hemispheres and carries traffic essential to many advanced brain functions, steadily thickens. Stronger links also develop between the hippocampus, a sort of memory directory, and frontal areas that set goals and weigh different agendas; as a result, we get better at integrating memory and experience into our decisions. At the same time, the frontal areas develop greater speed and richer connections, allowing us to generate and weigh far more variables and agendas than before.

When this development proceeds normally, we get better at balancing impulse, desire, goals, self-interest, rules, ethics, and even altruism, generating behavior that is more complex and, sometimes at least, more sensible. But at times, and especially at first, the brain does this work clumsily. It's hard to get all those new cogs to mesh.

Beatriz Luna, a University of Pittsburgh professor of psychiatry who uses neuroimaging to study the teen brain, used a simple test that illustrates this learning curve. Luna scanned the brains of children, teens, and twentysomethings while they performed an antisaccade task, a sort of eyes-only video game where you have to stop yourself from looking at a suddenly appearing light. You view a screen on which the red crosshairs at the center occasionally disappear just as a light flickers elsewhere on the screen. Your instructions are to not look at the light and instead to look in the opposite direction. A sensor detects any eye movement. It's a tough assignment, since flickering lights naturally draw our attention. To succeed, you must override both a normal impulse to attend to new information and curiosity about something forbidden. Brain geeks call this response inhibition.

Ten-year-olds stink at it, failing about 45 percent of the time. Teens do much better. In fact, by age 15 they can score as well as adults if they're motivated, resisting temptation about 70 to 80 percent of the time. What Luna found most interesting, however, was not those scores. It was the brain scans she took while people took the test. Compared with adults, teens tended to make less use of brain regions that monitor performance, spot errors, plan, and stay focused—areas the adults seemed to bring online automatically.

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<sup>&</sup>lt;sup>1</sup>altruism — concern for others

This let the adults use a variety of brain resources and better resist temptation, while the teens used those areas less often and more readily gave in to the impulse to look at the flickering light—just as they're more likely to look away from the road to read a text message.

If offered an extra reward, however, teens showed they could push those executive regions to work harder, improving their scores. And by age 20, their brains respond to this task much as the adults do. Luna suspects the improvement comes as richer networks and faster connections make the executive region more effective.

These studies help explain why teens behave with such vexing inconsistency: beguiling<sup>2</sup> at breakfast, disgusting at dinner; masterful on Monday, sleepwalking on Saturday. Along with lacking experience generally, they're still learning to use their brain's new networks. Stress, fatigue, or challenges can cause a misfire. Abigail Baird, a Vassar psychologist who studies teens, calls this neural gawkiness—an equivalent to the physical awkwardness teens sometimes display while mastering their growing bodies.

The slow and uneven developmental arc revealed by these imaging studies offers an alluringly pithy<sup>3</sup> explanation for why teens may do stupid things like drive at 113 miles an hour, aggrieve their ancientry, and get people (or get gotten) with child: They act that way because their brains aren't done! You can see it right there in the scans! ...

Meanwhile, in times of doubt, take inspiration in one last distinction of the teen brain—a final key to both its clumsiness and its remarkable adaptability. This is the prolonged plasticity of those late-developing frontal areas as they slowly mature. As noted earlier, these areas are the last to lay down the fatty myelin insulation—the brain's white matter—that speeds transmission. And at first glance this seems like bad news: If we need these areas for the complex task of entering the world, why aren't they running at full speed when the challenges are most daunting?

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<sup>&</sup>lt;sup>2</sup>beguiling — charming

<sup>&</sup>lt;sup>3</sup>pithy — concise

The answer is that speed comes at the price of flexibility. While a myelin coating greatly accelerates an axon's bandwidth, it also inhibits the growth of new branches from the axon. According to Douglas Fields, an NIH neuroscientist who has spent years studying myelin, "This makes the period when a brain area lays down myelin a sort of crucial period of learning—the wiring is getting upgraded, but once that's done it's harder to change."

The window in which experience can best rewire those connections is highly specific to each brain area. Thus the brain's language centers acquire their insulation most heavily in the first 13 years, when a child is learning language. The completed insulation consolidates those gains—but makes further gains, such as second languages, far harder to come by.

So it is with the forebrain's myelination during the late teens and early 20s. This delayed completion—a withholding of readiness—heightens flexibility just as we confront and enter the world that we will face as adults.

This long, slow, back-to-front developmental wave, completed only in the mid-20s, appears to be a uniquely human adaptation. It may be one of our most consequential. It can seem a bit crazy that we humans don't wise up a bit earlier in life. But if we smartened up sooner, we'd end up dumber.

—David Dobbs excerpted from "Beautiful Brains" National Geographic, October 2011

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- 15 The metaphor in lines 6 and 7 ("But as we ... wiring upgrade") serves to
  - (1) provide a scientific hypothesis
  - (2) compare prior and current knowledge
  - (3) establish an ironic tone
  - (4) link simple and complex ideas
- 16 The goal of "synaptic pruning" (lines 14 and 15) is to alter the brain cortex's
  - (1) pigment

(3) productivity

(2) protection

- (4) position
- 17 The primary purpose of lines 19 and 20 is to
  - (1) note a misconception
  - (2) predict a problem
  - (3) express an opinion
  - (4) introduce an argument

- 18 The description of the brain's development in lines 19 through 30 implies that as the brain matures,
  - (1) memory is adversely affected
  - (2) processing speed is compromised
  - (3) decision-making is greatly enhanced
  - (4) physical coordination is impacted
- 19 Lines 31 through 34 ("When this development ... does this work clumsily") imply that the process of normal maturation is
  - (1) unchangeable and instant
  - (2) immeasurable and mysterious
  - (3) uniform and predictable
  - (4) intricate and inconsistent
- 20 Lines 51 through 53 contribute to the effectiveness of the text by
  - (1) showing a contradiction
  - (2) presenting a familiar example
  - (3) introducing an inaccurate belief
  - (4) discussing an irrelevancy

- 21 As used in lines 54 and 55, the term "executive regions" most likely refers to areas of the brain that
  - (1) store information
- (3) trigger instincts
- (2) control responses
- (4) retrieve memories
- 22 As used in the text, the word "plasticity" (line 70) refers to the brain's
  - (1) reluctance to accept directions
  - (2) ability to make distinctions
  - (3) tendency to misdirect information
  - (4) capacity to undergo modification

- 23 Lines 88 through 90 provide information that is
  - (1) contrary to expectations
  - (2) debated by psychologists
  - (3) unclear to neurologists
  - (4) unproven by experiments
- 24 Which statement best identifies the main effect of the myelination process?
  - (1) "a thickening skull accounts for most head growth" (lines 5 and 6)
  - (2) "synapses that see little use begin to wither" (line 14)
  - (3) "A sensor detects any eye movement" (lines 41 and 42)
  - (4) "speed comes at the price of flexibility" (line 75)

# Part 2

# Argument

**Directions:** Closely read each of the *four* texts provided on pages 22 through 34 and write a source-based argument on the topic below. You may use the margins to take notes as you read and scrap paper to plan your response. Write your argument beginning on page 1 of your essay booklet.

**Topic:** Should people adopt a vegan diet?

**Your Task:** Carefully read each of the *four* texts provided. Then, using evidence from at least *three* of the texts, write a well-developed argument regarding whether or not people should adopt a vegan diet. Clearly establish your claim, distinguish your claim from alternate or opposing claims, and use specific, relevant, and sufficient evidence from at least *three* of the texts to develop your argument. Do *not* simply summarize each text.

#### **Guidelines:**

#### Be sure to:

- Establish your claim regarding whether or not people should adopt a vegan diet
- Distinguish your claim from alternate or opposing claims
- Use specific, relevant, and sufficient evidence from at least *three* of the texts to develop your argument
- Identify each source that you reference by text number and line number(s) or graphic (for example: Text 1, line 4 or Text 2, graphic)
- Organize your ideas in a cohesive and coherent manner
- Maintain a formal style of writing
- Follow the conventions of standard written English

#### **Texts:**

- Text 1 Pros and Cons of a Vegan Diet
- Text 2 Are There Health Benefits to Going Vegan?
- Text 3 Vegan Diets Are Adding to Malnutrition in Wealthy Countries
- Text 4 Veganism and the Environment

#### Text 1

### **Pros and Cons of a Vegan Diet**

A vegan diet is a vegetarian eating style, but it's completely devoid of animal products, including eggs, honey, and dairy products. Some vegans choose the diet for health reasons, but others prefer it for ethical reasons, such as avoiding animal cruelty and consuming more sustainable foods.<sup>1</sup>

While there are documented health benefits of a vegan diet, some find the lifestyle challenging to maintain. Consider each of the pros and cons of a vegan diet before you decide if it is the right program for you.

#### Pros...

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#### **Health Benefits**

Since a vegan diet is plant-based, it's easier to load up on healthy whole grains, legumes, fruits, and vegetables that many people on regular diets lack. Studies comparing different types of diets have found that vegan eating ranks highest for nutritional quality. A vegan diet is generally high in fiber, vitamin C, magnesium, iron, and folate and lower in calories and saturated fats.

The nutritional quality of a vegan diet leads to more significant health benefits. Eating a diet rich in plant-based foods has been associated with a decreased risk of many chronic diseases. A large cohort study evaluated vegetarian and vegan diets. Researchers found that both groups experienced a reduced risk of cardiovascular diseases, cardiometabolic risk

<sup>&</sup>lt;sup>1</sup>sustainable foods — healthy foods that use responsible means of production that protect the environment for future crops

factors,<sup>2</sup> some cancers, and total mortality. Those who were vegan enjoyed those benefits along with a reduced risk of obesity, hypertension,<sup>3</sup> type-2 diabetes, and cardiovascular mortality. ...

#### **Better for the Environment**

Some people choose a vegan diet because they feel it is better for the planet. There is increased concern in the environmental community about the impact of livestock and livestock farming practices on the earth.

By comparison, the farming of vegan-friendly plants requires fewer resources (land and water) than the production of typical western foods such as meat, poultry, and dairy. And cows produce more greenhouse gasses (methane) than plants do, which leads some to believe that eating vegan helps to reduce the risk of global warming. ...

## **No Animal Impact**

Because no animals are harmed or killed to produce vegan-friendly foods, many choose this diet because of concerns about animal cruelty.

One study showed that the most popular reason for choosing a vegan diet is to support the more humane treatment of animals. These vegans may also avoid clothing or other products that are made from animals, poultry, fish, or bees. ...

#### Cons...

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#### **Limited Food Choices...**

To get a greater sense of the scope of the restriction, remember that not only are animal

<sup>&</sup>lt;sup>2</sup>cardiometabolic risk factors — health factors such as obesity, diabetes, or high blood pressure that could increase a person's chances of having a cardiovascular event such as a heart attack or stroke

<sup>&</sup>lt;sup>3</sup>hypertension — high blood pressure

products eliminated, but any food or product that contains an animal by-product is eliminated. Many traditional home recipes, groceries, and restaurant foods contain at least one animal by-product. ...

#### **Possible Nutritional Deficiencies**

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A vegan diet can be healthy, but there are a few potential nutritional deficiencies that need to be addressed. Researchers have found that vegan diets are generally lacking in calcium, required for bone formation, muscle contraction, and other essential functions. Vegans can increase their intake by eating calcium-rich foods such as green leafy vegetables, pulses,<sup>4</sup> sesame seeds, some dried fruits, and calcium-fortified foods such as plant milks, yogurt, or cereal with calcium added. ...

Protein can be another issue, but it's one that is easily solved. Proteins are made up of building blocks called amino acids that your body needs to maintain organs and muscles and important functions. Essential amino acids are those that your body does not make so you need to get them from the foods you eat.

While animal proteins contain all of the essential amino acids, plant proteins are usually missing one or more of those amino acids. So, it's crucial to eat a variety of protein sources to ensure you get all those amino acids you need. ...

<sup>&</sup>lt;sup>4</sup>pulses — peas and beans

# **Requires Diligence**

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Those who follow a vegan diet will need to become accustomed to carefully reading nutrition labels and ingredient lists, especially if they choose to consume processed foods. Foods that you might assume to be free from animal by-products may contain gelatin, whey, casein,<sup>5</sup> honey, or other foods that are non-compliant on a vegan diet.

You'll also need to carefully read nutrition labels to stay healthy on a vegan diet. It is important to choose foods that contain important vitamins and minerals to avoid nutritional deficiencies. ...

—Shereen Lehman, MS excerpted from "Pros and Cons of a Vegan Diet" www.verywellfit.com reviewed by Marisa Moore, RDN, MBA on November 30, 2020

<sup>&</sup>lt;sup>5</sup>casein — protein in milk

#### Text 2

# **Are There Health Benefits to Going Vegan?**

...One common motivation for shunning steak and stilton<sup>1</sup> and going vegan is the promised health benefits. The vegan diet is generally considered to be higher in fibre and lower in cholesterol, protein, calcium and salt than an omnivorous diet — but there are still misconceptions and concerns around cutting meat, fish, eggs and dairy completely from our diets.

One common concern is whether a vegan diet provides enough vitamin B12. B12 helps prevent nerve damage, and is found in meat, fish, eggs and dairy, but not in fruit or vegetables. It's recommended that adults consume 1.5 micrograms of the vitamin per day.

"A B12 deficiency can lead to neurological symptoms such as numbness, and it's irreversible if the deficiency is present for too long," says Janet Cade, of the Nutritional Epidemiology<sup>2</sup> Group, School of Food Science and Nutrition.

A recent study involving 48,000 people over 18 years compared the health of meateaters, pescatarians — who eat fish and dairy but not meat — and vegetarians, including some vegans. They found that people who eat vegan and vegetarian diets have a lower risk of heart disease, but a higher risk of stroke, possibly partly due to a lack of B12. ...

Haemorrhagic stroke is caused by a bleeding in the brain. While low cholesterol is protective for heart disease and ischemic stroke,<sup>3</sup> there's some evidence showing that low cholesterol levels (associated with the vegan and vegetarian diet) may be linked to a small risk of haemorrhagic stroke. ...

But it's easy to get the "minuscule" amount of B12 we need from nutritional yeast or

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<sup>&</sup>lt;sup>1</sup>stilton — English cheese

 $<sup>^{2}</sup>$  epidemiology — branch of medicine that deals with the possible control of diseases

 $<sup>^{3} \</sup>mathrm{ischemic}$  stroke — a stroke that is induced by a blockage of a blood vessel to the brain

fortified food, such as plant-based milks, says Marco Springmann, senior researcher of environmental sustainability and public health at the University of Oxford.

In countries where food isn't fortified with B12, he recommends vitamin supplements. However, the Academy of Nutrition and Dietetics states that nutritional yeast isn't an adequate source of B12, and vegans must take supplements or eat fortified food. ...

For those who worry that the vegan diet doesn't offer enough variety, one study in 2018 found no evidence that a more varied diet promotes a healthier diet or weight. In fact, they found that those who ate a more diverse diet tended to eat more processed foods and sugary drinks. ...

But this doesn't have to be the case. In a recent study looking at the effects of a diet high in plants, but not strictly vegan, researchers used indexes that ranked people according to how much of their diet consisted of plant-based foods, compared to animal foods. Even those who ate the most plant-based foods also ate some dairy, fish and meat.

Those who had the most plant-based diets, and lower intakes of animal products, scored better on health markers. There was up to a 32% lower risk among those with the highest intake of plant-based foods for cardiovascular disease, after adjusting for age, sex, race, education and health behaviours such as smoking, alcohol intake and exercise.

"We found a striking relationship between adherence<sup>4</sup> to dietary patterns and risk of important clinical outcomes," says study author Casey Rebholz, an assistant professor at the Johns Hopkins Bloomberg School of Public Health in Baltimore.

She found that people who ate more fruit and vegetables generally ate less red and processed meat, dairy and fish. However, the research doesn't confirm if the relationship between eating more plant-based foods and a lower risk of heart disease drops off at a certain point. In other words, it didn't prove whether a strictly vegan diet is any more beneficial than a diet made up mostly of fruit and vegetables, but with some animal products. ...

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<sup>&</sup>lt;sup>4</sup>adherence — commitment

Researchers are concerned that a lot of research comparing the vegan diet and health outcomes (also known as observational research) is unreliable, since vegans tend to be healthier.

"Typically, vegans smoke less, drink less alcohol and exercise more," says Faidon Magkos, associate professor at the University of Copenhagen's department of nutrition, exercise and sports, who last year published a review into research examining the health effects of the vegan diet.

These lifestyle factors, which can also contribute to a lower risk of heart disease and mortality, can suggest that the vegan diet alone is healthier than it may actually be. These studies serve as a starting point, says Faidon, and because most data on veganism is observation, there are still uncertainties around the vegan diet, particularly when it comes to long-term effects. ...

The vegan diet is much like any other. It can help to lower your risk of disease, or increase it — depending on the foods you eat.

"If you compare a plant-based diet with an unhealthy diet that includes meat, the plant-based diet is certainly better," Faidon says.

"But if you follow a relatively prudent omnivorous diet, such as the Mediterranean diet, which is high in fruit, vegetables, legumes and low in meat, there's evidence to suggest this type of omnivorous diet is at least as healthy as a vegan diet," he says. ...

—Jessica Brown excerpted from "Are There Health Benefits to Going Vegan?" www.bbc.com, January 23, 2020

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#### Text 3

# **Vegan Diets Are Adding to Malnutrition in Wealthy Countries**

Hidden hunger affects over two billion people, globally. The cause is a chronic lack of essential micronutrients in the diet, such as vitamins and minerals. The effects of these nutritional deficiencies may not be seen immediately, but the consequences can be severe. They include lower resistance to disease, mental impairment and even death.

While many of the cases of hidden hunger are found in developing countries, this phenomenon is also a growing public health concern in developed countries. For example, iodine deficiency is the most common cause of preventable mental impairment and the UK ranks seventh among the ten most iodine-deficient nations. And data from the US shows that more than one in four children lacks calcium, magnesium or vitamin A, and more than one in two children are deficient in vitamin D and E.

There are several causes of hidden hunger in developed countries. The consumption of cheap, energy dense, nutritionally poor and heavily processed foods, particularly by poorer members of society, is a major factor. Even when fresh produce is consumed, there appear to be fewer micronutrients available than was once the case. This is due to issues such as soil health, caused by poor agricultural management and climate change.

# Growing trend of veganism

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The rapidly growing trend of veganism is likely to become another major contributor to hidden hunger in the developed world. According to the Vegan Society, the number of people switching to a vegan diet in the UK has risen more than fourfold in the last decade. A study commissioned by the Vegetarian Resource Group revealed that nearly 5% of the US population are vegetarian and about half of these are vegan.

Eating a plant-based diet may lower the risk of chronic disease and is good for the environment, but poorly planned vegan diets that do not replace the critical nutrients found in meat, can lead to serious micronutrient deficiencies.

Bone health is a concern for long-term vegans. Vegans are consistently reported to have lower intakes of calcium and vitamin D, with resultant lower blood levels of vitamin D and lower bone mineral density reported worldwide. Fracture rates are also a third higher among vegans compared with the general population.

Omega 3 and iodine levels are also lower compared with meat eaters, as are vitamin B12 levels. Vitamin B12 is most often obtained from animal foods, and higher rates of deficiency have been found in vegans compared with other vegetarians and meat eaters. The symptoms can be serious and include extreme tiredness and weakness, poor digestion and developmental delays in young children. Untreated, vitamin B12 deficiency can cause irreversible nerve damage.

While getting less than the optimal amount of B12 is quite common in pregnant women and in less-developed countries, the reported frequencies of deficiencies among vegetarians and vegans in developed countries vary greatly in severity between age groups. Even low levels of vitamin B12, but not enough to be classed as deficient, may be bad for your health and increase your risk of heart disease.

#### **Potential solutions**

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Vegans can prevent micronutrient deficiency by consuming fortified foods (food with added vitamins and minerals) and taking supplements. But supplement use is often resisted by those on a plant-based diet and they have been reported to interfere with the absorption of other important nutrients.

Also, plant-derived vegan supplements tend to have low biological activity in humans. For example, studies show that vegan-friendly vitamin D2 supplements are less effective in raising blood vitamin D levels than the more widely used vitamin D3 supplements. Other supplements, such as vitamin B12, may be largely inactive in the body. ...

—Chris Elliott, Chen Situ, and Claire McEvoy excerpted from "Vegan Diets Are Adding to Malnutrition in Wealthy Countries" <a href="https://theconversation.com">https://theconversation.com</a>, December 13, 2018

#### Text 4

# **Veganism and the Environment**

...As the world's appetite for meat increases, countries across the globe are bulldozing huge swaths of land to make more room for animals as well as crops to feed them. From tropical rain forests in Brazil to ancient pine forests in China, entire ecosystems are being destroyed to fuel humans' addiction to meat. According to scientists at the Smithsonian Institution, seven football fields' worth of land is bulldozed every minute to create more room for farmed animals and the crops that feed them. Of all the agricultural land in the U.S., 80 percent is used to raise animals for food and grow grain to feed them—that's almost half the total land mass of the lower 48 states. In the "finishing" phase alone, in which pigs grow from 100 pounds to 240 pounds, each hog consumes more than 500 pounds of grain, corn, and soybeans; this means that across the U.S., pigs eat tens of millions of tons of feed every year.

Chickens, pigs, cattle, and other animals raised for food are the primary consumers of water in the U.S.: a single pig consumes 21 gallons of drinking water per day, while a cow on a dairy farm drinks as much as 50 gallons daily. It takes more than 2,400 gallons of water to produce 1 pound of cow flesh, whereas it takes about 180 gallons of water to make 1 pound of whole wheat flour.

# **Polluting the Air**

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Carbon dioxide, methane, and nitrous oxide together cause the vast majority of global warming. Producing a little more than 2 pounds of beef causes more greenhouse-gas emissions than driving a car for three hours and uses up more energy than leaving your house lights on for the same period of time. According to the United Nations, a global shift toward a vegan diet is one of the steps necessary to combat the worst effects of climate change. ...

The Environmental Protection Agency (EPA) reports that roughly 80 percent of ammonia emissions in the U.S. come from animal waste. A California study found that a single dairy cow "emits 19.3 pounds of volatile<sup>1</sup> organic compounds per year, making dairies the largest source of the smog-making gas, surpassing trucks and passenger cars."

# **Polluting the Water**

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Each day, factory farms produce billions of pounds of manure, which ends up in lakes, rivers, and drinking water.

The one trillion pounds of waste produced by factory-farmed animals each year are usually used to fertilize crops, and they subsequently end up running off into waterways—along with the drugs and bacteria that they contain. Many tons of waste end up in giant pits in the ground or on crops, polluting the air and groundwater. According to the EPA, agriculture runoff is the number one source of pollution in our waterways. ...

# **Cruelty to Animals**

In addition to polluting the environment, factory farming strives to produce the most meat, milk, and eggs as quickly and cheaply as possible and in the smallest amount of space possible, resulting in abusive conditions for animals. Cows, calves, pigs, chickens, turkeys, ducks, geese, rabbits, and other animals are kept in small cages or stalls, where they are often unable to turn around. They are deprived of exercise so that all their energy goes toward producing flesh, eggs, or milk for human consumption. They are fed drugs that fatten them more quickly, and they are genetically manipulated to grow faster or produce much more milk or eggs than they would naturally. ...

<sup>&</sup>lt;sup>1</sup>volatile — unstable

#### What You Can Do

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Switching to a vegan diet reduces your "ecological footprint," allowing you to tread lightly on the planet and be compassionate to its inhabitants. With so many great vegan options, eating green has never been more delicious. Whether you go vegetarian for the environment, for your health, or for animals, you have the power to change the world, simply by changing what's on your plate.

—excerpted from "Veganism and the Environment" <u>www.peta.org</u>, 2021

# Part 3

# **Text-Analysis Response**

**Your Task:** Closely read the text provided on pages 36 through 38 and write a well-developed, text-based response of two to three paragraphs. In your response, identify a central idea in the text and analyze how the author's use of **one** writing strategy (literary element or literary technique or rhetorical device) develops this central idea. Use strong and thorough evidence from the text to support your analysis. Do **not** simply summarize the text. You may use the margins to take notes as you read and scrap paper to plan your response. Write your response in the spaces provided on pages 7 through 9 of your essay booklet.

### **Guidelines:**

#### Be sure to:

- Identify a central idea in the text
- Analyze how the author's use of **one** writing strategy (literary element or literary technique or rhetorical device) develops this central idea. Examples include: characterization, conflict, denotation/connotation, metaphor, simile, irony, language use, point-of-view, setting, structure, symbolism, theme, tone, etc.
- Use strong and thorough evidence from the text to support your analysis
- Organize your ideas in a cohesive and coherent manner
- Maintain a formal style of writing
- Follow the conventions of standard written English

#### **Text**

#### **Journey**

You begin your journey on so high an elevation that your destination is already in sight—a city which you have visited many times and which, moreover, is indicated on a traveller's map which you have carefully folded up to take along with you. You are a lover of maps, and you have already committed this map to memory, but you bring it with you just the same.

The highway down from the mountains is broad and handsome, constructed after many years of ingenious blasting and levelling and paving. Engineers from all over the country aided in the construction of this famous highway. Its cost is so excessive that many rumors have circulated about it—you take no interest in such things, sensing that you will never learn the true cost anyway, and that this will make no difference to your journey.

After several hours on this excellent highway, where the sun shines ceaselessly and where there is a moderate amount of traffic, cars like your own at a safe distance from you, as if to assure you that there are other people in the world, you become sleepy from the monotony and wonder if perhaps there is another, less perfect road parallel to this. You discover on the map a smaller road, not exactly parallel to the highway, and not as direct, but one which leads to the same city.

You turn onto this road, which winds among foothills and forests and goes through several small villages. You sense by the attitude of the villagers that traffic on this road is infrequent but nothing to draw special attention. At some curves the road shrinks, but you are fortunate enough to meet no oncoming traffic.

The road leads deep into a forest, always descending in small cramped turns. Your turning from left to right and from right to left, in a slow hypnotic passage, makes it impossible for you to look out at the forest. You discover that for some time you have not been able to see the city you are headed for, though you know it is still somewhere ahead of you.

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<sup>&</sup>lt;sup>1</sup>monotony — boredom

By mid-afternoon you are tired of this road, though it has served you well, and you come upon a smaller, unpaved road, which evidently leads to your city, though in a convoluted way. After only a moment's pause you turn on this road, and immediately your automobile registers the change—the chassis bounces, something begins to vibrate, something begins to rattle. This noise is disturbing but after a while you forget about it, in your interest in the beautiful countryside. Here, the trees are enormous. There are no villages or houses. For a while the dirt road runs alongside a small river, dangerously close to the river's steep bank, and you begin to feel apprehension. It is necessary for you to drive very slowly. At times your speedometer registers less than five miles an hour. You will not get to the city before dark.

The road narrows until it is hardly more than a lane. Grass has begun to grow in its center. As the river twists and turns, so does the road twist and turn, curving around hills that consist of brute, enormous boulders, bare of all trees and plants, covered only in patches by a dull, brown lichen that is unfamiliar to you. Along one stretch rocks of varying sizes have fallen down onto the road, so that you are forced to drive around them with great caution.

Navigating these blind turns, you tap your horn to give warning in case someone should be approaching. But it is all unnecessary, since you come upon no other travellers.

Late in the afternoon, your foot numb from its constant pressure on the accelerator, your body jolted by the constant bumps and vibrations of the car, you decide to make the rest of your journey on foot, since you must be close to your destination by now.

A faint path leads through a tumble of rocks and bushes and trees, and you follow it enthusiastically. You descend a hill, slipping a little, so that a small rockslide is released; but you are able to keep your balance. At the back of your head is the precise location of your parked car, and behind that the curving dirt road, and behind that the other road, and then the magnificent highway itself: you understand that it would be no difficult feat to make your

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<sup>&</sup>lt;sup>2</sup>convoluted — complicated

<sup>&</sup>lt;sup>3</sup>chassis — frame

<sup>&</sup>lt;sup>4</sup>apprehension — uneasiness

way back to any of these roads, should you decide that going by foot is unwise. But the path, though overgrown, is through a lovely forest, and then through a meadow in which yellow flowers are blooming, and you feel no inclination to turn back.

By evening you are still in the wilderness, and you wonder if perhaps you have made a mistake. You are exhausted, your body aches, your eyes are seared by the need to stare so intently at everything around you. Now that the sun has nearly set it is getting cold; evenings here in the mountains are always chilly.

You find yourself standing at the edge of a forest, staring ahead, into the dark. Is that a field ahead of you, or a forest of small trees? Your path has long since given way to wild grass. Clouds obscure the moon, which should give you some light by which to make your way, and you wonder if you dare continue without this light.

Suddenly you remember the map you left back in the car, but you remember it as a blank sheet of paper.

You resist telling yourself that you are lost. In fact, though you are exhausted and it is almost night, you are not lost. You have begun to shiver but it is only with cold, not with fear. You are really satisfied with yourself. You are not lost. Though you can remember your map only as a blank sheet of paper, which can tell you nothing, you are not really lost.

If you had the day to begin again, on that highway which was so wide and clear, you would not have varied your journey in any way: you are not lost.

—Joyce Carol Oates [Fernandes, Pseud.] "Journey" *The Transatlantic Review*, Spring 1973

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