

Large-Type Edition

The University of the State of New York

REGENTS HIGH SCHOOL EXAMINATION

REGENTS EXAMINATION

IN

ENGLISH LANGUAGE ARTS

v202

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.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

Part 1

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

Reverdy

I never see asters without remembering her—never the haze of their pink and lavender blossoming as summer dies, but her name is in my heart: Reverdy, Reverdy.

I never say her name—not to anyone. When people ask about her, as they do occasionally even now, I say “she” and “her.” “She is still gone.” “We do not hear from her.”

5 “Yes, she was very beautiful,” I say. But not her name. . . .

I have longed all these years to tell her how it was the night she left. You may scarcely believe it, but it is worse to have a good thing that is not true believed about you, than a bad. To be thanked for an act you meant as harmful—every year those words sharpen until at last they cut like knives.

10 You mustn’t think she was like me. She wasn’t in the least. Not inside nor out. She had dark hair like a cloud. Yes, really. It wasn’t curly but it didn’t hang straight. It billowed out. And her face—oh, you mustn’t think it was anything like mine. She had hazel eyes and a pointed chin. And you’ve seen lots of people, haven’t you, with very live, animated faces and dead eyes? It was just the other way with Reverdy. Her face was always quiet, but her eyes

15 were so alive they glowed. Oh, she was the most beautiful, most alive, and most loving girl in the world, and she was my sister.

I cannot bear for people to say we were alike—she was really good, and I was just a show-off. . . .

20 One evening in October, when it was almost dark, I was coming home from the library,
coasting across lots in the hot dry Santa Ana that had been blowing all day. Cool weather
had already come, and then three days of this hot wind. Dust everywhere. Under your
eyelids, between your fingers, in your mouth. When we went to school in the morning the
first thing we'd do would be to write our names in the dust on our desks. I had on a skirt
full of pleats that evening, and I pulled the pleats out wide so the skirt made a sort of sail
and the wind almost pushed me along. I watched the tumble weeds blowing, and listened
25 to the wind in the clump of eucalyptus by the barn, and felt miserable and gritty. Then
I saw Reverdy walking up and down the driveway by the house and I felt suddenly glad.
Reverdy loved the wind, even Santa Ana's, and she was always out walking or running when
the wind blew, if she didn't have any work to do. She liked to carry a scarf in her hand and
30 hold it up in the wind so she could feel it tug and snap. When I saw Reverdy I forgot how
dusty and hot the wind was and remembered only how alive it was and how Reverdy loved
it. I ran toward her but she didn't wave or say a word, and when she reached the end of the
driveway she turned her back on me and started walking toward the barn.

35 Before I had a chance to say a word to her, Mother came to the door and called to me
to come in and not talk to Reverdy. As soon as I heard her voice before I could see her face,
I knew there was some trouble—some trouble with Reverdy—and I knew what kind of
trouble, too. I went in the house and shut the door. The sound of Reverdy's footsteps on the
pepper leaves in the driveway outside stopped and Mother put her head out of the window
and said, "You're to keep walking, Reverdy, and not stop. Understand? I want to hear
40 footsteps and I want them to be brisk." Then she closed the window, though it was hard to
do against the wind.

I stood with my face to the window and looked out into the dusty, windy dark where I
could just see Reverdy in her white dress walking up and down, never stopping, her head
bent, not paying any attention to the wind she loved. It made me feel sick to see her walking
45 up and down there in the dusty dark like a homeless dog, while we were snug inside.

But Mother came over to the window and took the curtain out of my hand and put it back over the glass. Then she put her arm around my shoulders and pressed me close to her and said, “Mother’s own dear girl who has never given her a moment’s trouble.”

50 That wasn’t true. Mother had plenty of fault to find with me usually ... but it was sweet to have her speak lovingly to me, to be cherished and appreciated. Maybe you can’t understand that, maybe your family was always loving, maybe you were always dear little daughter, or maybe, a big golden wonder-boy. But not me and not my mother. So try to understand how it was with me, then, and how happy it made me to have Mother put her arms about me. Yes, I thought, I’m Mother’s comfort. And I forgot I couldn’t make a boy look at me if I wanted to and blamed Reverdy for not being able to steer clear of them the way I did. She just hasn’t any consideration for any of us, I decided. Oh, I batted on Reverdy’s downfall all right. ...

60 [Our ten-year-old brother] Chummie came back from feeding his rabbits and sat with me in the dark room. Then I got the idea of a way to show Mother how much I was her comfort and mainstay, her darling younger daughter, dutiful and harmonious as hell. Mother wanted me and Chummie to be musical—she’d given up with Reverdy—but Chummie and I had taken lessons for years. Usually we kicked and howled at having to play, so, I thought, if we play now it will show Mother how thoughtful and reliable we are. It will cheer her up while she’s out there in the wind talking to that bad Reverdy. Yes, she will think, I have one fine, dependable daughter, anyway. ...

70 I was asleep when Reverdy did come in. She sat down on the side of my bed, and it was just her sitting there that finally awakened me. Then, when I was awake she picked up my hand and began to press my finger-tips one by one, and spoke in the sweetest, kindest voice. You’d never have thought to hear her that she had just spent four or five hours the way she did.

She said, “I’ll never forget your playing for me, Sister. Never. Never. It was kind and beautiful of you. Just when I thought I was all alone I heard you telling me not to be sad.”

75 Then she leaned over and kissed me and said, “Good night, now. I’ve put some asters in water for you. They’re a little wilted but I think they’ll be all right by morning. Go to sleep, now. I’ll never forget, Clare.”

80 “Oh, Clare, what a thing to say.”

But I couldn’t do it and next morning she was gone. And there on the table by my bed were the asters she had left for me, grown fresh over night.

—Jessamyn West
excerpted and adapted from “Reverdy”
The New Mexico Quarterly Review, Spring 1943

1 In the context of the passage as a whole, lines 3 through 5 suggest that Clare

- (1) feels humiliated by her sister’s actions
- (2) is pained by the memory of her sister
- (3) feels resentful about her sister’s choices
- (4) is secretive about the life of her sister

2 The figurative language in lines 14 and 15 helps to establish

- (1) Reverdy’s mischievousness
- (2) Reverdy’s appreciation of attention
- (3) Clare’s admiration for Reverdy
- (4) Clare’s aggressiveness toward Reverdy

- 3 The description of each sister's reaction to the wind (lines 19 through 33) serves to
- (1) demonstrate a contrast between the sisters
 - (2) foreshadow a conflict between the sisters
 - (3) emphasize the sisters' appreciation of nature
 - (4) illustrate the sisters' competitive relationship
- 4 Clare's reaction to Reverdy's punishment (lines 44 and 45) reveals that Clare is
- (1) ashamed of Reverdy's attitude
 - (2) concerned about Reverdy's reputation
 - (3) envious of Reverdy's strength
 - (4) distressed by Reverdy's situation
- 5 Clare's reflections in lines 49 through 54 convey her
- (1) rejection of tenderness
 - (2) acceptance of her mistake
 - (3) justification for her behavior
 - (4) reluctance to change
-
- 6 As used in line 56, the phrase "battered on" most nearly means
- (1) questioned
 - (2) benefited from
 - (3) learned from
 - (4) imagined
- 7 Which statement best explains Clare's motivation for playing music (lines 62 through 65)?
- (1) Clare wants to be her family's mediator.
 - (2) Clare wants to distract her brother.
 - (3) Clare wants to console her sister.
 - (4) Clare wants to be her mother's favorite.
- 8 In the context of the passage as a whole, the author suggests that the family interactions have been influenced by
- (1) Reverdy's love for her mother
 - (2) Mother's reliance upon Clare
 - (3) Reverdy's behavior toward Clare
 - (4) Mother's attitude toward Reverdy

9 The occasional use of second person point of view contributes to the reader's

- (1) optimism
- (2) sympathy
- (3) curiosity
- (4) suspicion

10 Which quotation best reflects a central idea of the text?

- (1) “You may scarcely believe it, but it is worse to have a good thing that is not true believed about you, than a bad.” (lines 6 through 8)
- (2) “I watched the tumble weeds blowing, and listened to the wind in the clump of eucalyptus by the barn, and felt miserable and gritty.” (lines 25 and 26)
- (3) “And I forgot I couldn’t make a boy look at me if I wanted to and blamed Reverdy for not being able to steer clear of them the way I did.” (lines 54 through 56)
- (4) “Usually we kicked and howled at having to play, so, I thought, if we play now it will show Mother how thoughtful and reliable we are.” (lines 62 and 63)

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Reading Comprehension Passage B

The Gift

To pull the metal splinter from my palm
my father recited a story in a low voice.

I watched his lovely face and not the blade.

5 Before the story ended, he'd removed
the iron sliwer I thought I'd die from.

I can't remember the tale,
but hear his voice still, a well
of dark water, a prayer.

10 And I recall his hands,
two measures of tenderness
he laid against my face,
the flames of discipline
he raised above my head.

15 Had you entered that afternoon
you would have thought you saw a man
planting something in a boy's palm,
a silver tear, a tiny flame.

Had you followed that boy
20 you would have arrived here,
where I bend over my wife's right hand.

Look how I shave her thumbnail down
so carefully she feels no pain.

Watch as I lift the splinter out.

25 I was seven when my father
took my hand like this,

and I did not hold that shard
between my fingers and think,

Metal that will bury me,
christen it Little Assassin,

30 Ore Going Deep for My Heart.

And I did not lift up my wound and cry,

Death visited here!

I did what a child does

when he's given something to keep.

35 I kissed my father.

—Li-Young Lee
“The Gift”
from *Rose*, 1986
BOA Editions, Ltd.

11 The figurative language in lines 6 through 11 reflects the father's

- (1) hesitation about inflicting pain
- (2) pride about removing the splinter
- (3) need to earn his son's respect
- (4) ability to calm his son

12 Lines 21 through 23 reveal that the narrator

- (1) is worried that he might harm his wife
- (2) is reassured by his wife's confidence
- (3) has mastered his father's technique
- (4) has forgotten his childhood trauma

13 In line 26, "shard" most nearly means

- (1) wooden chip
- (2) shiny object
- (3) jagged piece
- (4) small tool

14 Lines 33 through 35 convey a sense of

- (1) longing
- (2) gratitude
- (3) uncertainty
- (4) accomplishment

Reading Comprehension Passage C

This Is Your Brain on Silence

- ...Dislike of noise has produced some of history’s most eager advocates of silence, as [Hillel] Schwartz explains in his book *Making Noise: From Babel to the Big Bang and Beyond*. In 1859, the British nurse and social reformer Florence Nightingale wrote, “Unnecessary noise is the most cruel absence of care that can be inflicted on sick or well.”
- 5 Every careless clatter or banal bit of banter,¹ Nightingale argued, can be a source of alarm, distress, and loss of sleep for recovering patients. She even quoted a lecture that identified “sudden noises” as a cause of death among sick children.

- 10 Surprisingly, recent research supports some of Nightingale’s zealous claims. In the mid 20th century, epidemiologists² discovered correlations between high blood pressure and chronic noise sources like highways and airports. Later research seemed to link noise to increased rates of sleep loss, heart disease, and tinnitus.³ (It’s this line of research that hatched the 1960s-era notion of “noise pollution,” a name that implicitly refashions transitory⁴ noises as toxic and long-lasting.)

- 15 Studies of human physiology help explain how an invisible phenomenon can have such a pronounced physical effect. Sound waves vibrate the bones of the ear, which transmit movement to the snail-shaped cochlea. The cochlea converts physical vibrations into electrical signals that the brain receives. The body reacts immediately and powerfully to these signals, even in the middle of deep sleep. Neurophysiological⁵ research suggests that

¹banal bit of banter — everyday conversation

²epidemiologists — scientists who study the incidence and control of disease

³tinnitus — buzzing or ringing in the ear

⁴transitory — brief, temporary

⁵neurophysiological — pertaining to the study of the functioning of the nervous system

20 noises first activate the amygdalae, clusters of neurons located in the temporal lobes of the
brain, associated with memory formation and emotion. The activation prompts an
immediate release of stress hormones like cortisol. People who live in consistently loud
environments often experience chronically elevated levels of stress hormones.

25 Just as the whooshing of a hundred individual cars accumulates into an irritating wall of
background noise, the physical effects of noise add up. In 2011, the World Health
Organization tried to quantify its health burden in Europe. It concluded that the 340
million residents of western Europe—roughly the same population as that of the United
States—annually lost a million years of healthy life because of noise. It even argued that
3,000 heart disease deaths were, at their root, the result of excessive noise. . . .

30 Silence first began to appear in scientific research as a control or baseline, against which
scientists compare the effects of noise or music. Researchers have mainly studied it by
accident, as physician Luciano Bernardi did in a 2006 study of the physiological effects of
music. “We didn’t think about the effect of silence,” he says. “That was not meant to be
studied specifically.”

35 He was in for a quiet surprise. Bernardi observed physiological metrics for two dozen
test subjects while they listened to six musical tracks. He found that the impacts of music
could be read directly in the bloodstream, via changes in blood pressure, carbon dioxide,
and circulation in the brain. (Bernardi and his son are both amateur musicians, and they
wanted to explore a shared interest.) “During almost all sorts of music, there was a
physiological change compatible with a condition of arousal,” he explains.

40 This effect made sense, given that active listening requires alertness and attention. But
the more striking finding appeared between musical tracks. Bernardi and his colleagues
discovered that randomly inserted stretches of silence also had a drastic effect, but in the
opposite direction. In fact, two-minute silent pauses proved far more relaxing than either
“relaxing” music or a longer silence played before the experiment started.

45 The blank pauses that Bernardi considered irrelevant, in other words, became the most interesting object of study. Silence seemed to be heightened by contrasts, maybe because it gave test subjects a release from careful attention. “Perhaps the arousal is something that concentrates the mind in one direction, so that when there is nothing more arousing, then you have deeper relaxation,” he says.

50 In 2006, Bernardi’s paper on the physiological effects of silence was the most-downloaded research in the journal *Heart*. One of his key findings—that silence is heightened by contrasts—is reinforced by neurological research. In 2010, Michael Wehr, who studies sensory processing in the brain at the University of Oregon, observed the brains of mice during short bursts of sound. The onset of a sound prompts a specialized network of neurons in the auditory cortex to light up. But when sounds continue in a relatively constant manner, the neurons largely stop reacting. “What the neurons really do is signal whenever there’s a change,” Wehr says.

60 The sudden onset of silence is a type of change too, and this fact led Wehr to a surprise. Before his 2010 study, scientists knew that the brain reacts to the start of silences. (This ability helps us react to dangers, for example, or distinguish words in a sentence.) But Wehr’s research extended those findings by showing that, remarkably, the auditory cortex has a separate network of neurons that fire when silence begins. “When a sound suddenly stops, that’s an event just as surely as when a sound starts.”

65 Even though we usually think of silences as a lack of input, our brains are structured to recognize them, whenever they represent a sharp break from sounds. So the question is what happens after that moment—when silence continues, and the auditory cortex settles into a state of relative inactivity.

70 One of the researchers who’s examined this question is a Duke University regenerative biologist, Imke Kirste. Like Bernardi, Kirste wasn’t trying to study silence at all. In 2013, she was examining the effects of sounds in the brains of adult mice. Her experiment exposed four groups of mice to various auditory stimuli: music, baby mouse calls, white

noise, and silence. She expected that baby mouse calls, as a form of communication, might prompt the development of new brain cells. Like Bernardi, she thought of silence as a control that wouldn't produce an effect.

75 As it turned out, even though all the sounds had short-term neurological effects, not one of them had a lasting impact. Yet to her great surprise, Kirste found that two hours of silence per day prompted cell development in the hippocampus, the brain region related to the formation of memory, involving the senses. This was deeply puzzling: The total absence of input was having a more pronounced effect than any sort of input tested.

80 Here's how Kirste made sense of the results. She knew that “environmental enrichment,” like the introduction of toys or fellow mice, encouraged the development of neurons because they challenged the brains of mice. Perhaps the total absence of sound may have been so artificial, she reasoned—so alarming, even—that it prompted a higher level of sensitivity or alertness in the mice. Neurogenesis⁶ could be an adaptive response to uncanny quiet. . . .

85 While it's clear that external silence can have tangible benefits, scientists are discovering that under the hoods of our skulls “there isn't really such a thing as silence,” says Robert Zatorre, an expert on the neurology of sound. “In the absence of sound, the brain often tends to produce internal representations of sound.”

90 Imagine, for example, you're listening to Simon and Garfunkel's “The Sound of Silence,” when the radio abruptly cuts out. Neurologists have found that if you know the song well, your brain's auditory cortex remains active, as if the music is still playing. “What you're ‘hearing’ is not being generated by the outside world,” says David Kraemer, who's conducted these types of experiments in his Dartmouth College laboratory. “You're retrieving a memory.” Sounds aren't always responsible for sensations—sometimes our subjective sensations are responsible for the illusion of sound.

⁶neurogenesis — development of neurons

This is a reminder of the brain’s imaginative power: On the blank sensory slate of silence, the mind can conduct its own symphonies. But it’s also a reminder that even in the absence of a sensory input like sound, the brain remains active and dynamic. . . .

—Daniel A. Gross
excerpted and adapted from “This Is Your Brain on Silence”
<http://nautil.us>, July 7, 2016

- 15 The first paragraph introduces a central idea by citing
- (1) medical research
 - (2) scientific trends
 - (3) conflicting opinions
 - (4) relevant background
- 16 Lines 8 through 13 support the idea that noise
- (1) can be controlled
 - (2) promotes clear thinking
 - (3) impacts human health
 - (4) can be soothing
-
- 17 The details in lines 14 through 22 indicate that
- (1) sleep prevents the perception of sound
 - (2) noise can cause stress during sleep
 - (3) sleep relies on the presence of cortisol
 - (4) memory formation can accelerate during sleep
- 18 The conclusion drawn by the World Health Organization (lines 24 through 28) highlights the
- (1) need for more study
 - (2) need for further funding
 - (3) seriousness of the problem
 - (4) importance of global cooperation

- 19 Initial findings about the effects of silence (lines 29 through 33) were
- (1) ignored
 - (2) unintended
 - (3) revised
 - (4) repeated
- 20 As used in the text, “striking” (line 41) most nearly means
- (1) impressive
 - (2) disappointing
 - (3) confusing
 - (4) predictable
- 21 Bernardi’s discovery (lines 41 through 44) contributes to a central idea by emphasizing the
- (1) distinction between sound and noise
 - (2) calming effect of music
 - (3) loss of attentiveness after silence
 - (4) importance of silence between sounds
- 22 The statement in lines 45 and 46 conveys a sense of
- (1) uncertainty
 - (2) irony
 - (3) bias
 - (4) conflict
-
- 23 The figurative language in lines 97 through 99 reinforces the idea that
- (1) the presence of sound interferes with thinking
 - (2) silence can provide an opportunity for creativity
 - (3) the volume of sound increases appreciation of music
 - (4) silence can limit the recollection of memories
- 24 The author’s primary purpose in the text is to
- (1) explain
 - (2) criticize
 - (3) promote
 - (4) entertain

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Part 2

Argument

Directions: Closely read each of the *four* texts provided on pages 22 through 32 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 protective headgear be mandatory in soccer?

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 protective headgear should be mandatory in soccer. 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 protective headgear should be mandatory in soccer
- 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 – U.S. Soccer’s Ali Krieger Wears a Concussion Headband. But Do They Work?

Text 2 – Evidence Mounts for Headgear in Soccer

Text 3 – Should High School Soccer Players Wear Helmets?

Text 4 – Protect My Head? Soccer Pros Shrug and Carry On

Text 1

U.S. Soccer’s Ali Krieger Wears a Concussion Headband. But Do They Work?

Cleats and shin guards have long been the only two items needed to suit up for a soccer game. But some members of the soccer community think a third piece of gear needs to be added to the list: concussion-prevention headbands.

U.S. defender Ali Krieger is among them. After suffering a concussion during a National Women’s Soccer League game in April [2015], Krieger decided to wear a black headband, which is made by Unequal and costs \$39.95, during U.S. World Cup games.

That decision has put a spotlight on concussion-prevention headbands, a relatively new technology in the fight against concussions in sports. And while there’s little scientific research showing these headbands can prevent concussions (manufacturers are careful to say the headbands only reduce risk), increased awareness about concussions — and their consequences — has made them a more visible option.

George Connolly, head women’s soccer coach at Holy Family High School in Broomfield [Colorado], has been requiring his players to wear the headbands during both practice and games for the past six years. The headbands, which are made by Full 90, cost between \$45 and \$50. As far as Connolly knows, he’s the only girls’ high school soccer coach in Colorado who requires his players to wear them. (Manitou Springs used to require its players to wear the headbands, but that rule was discontinued a few years ago, he said.)

And what’s the player reaction to the headbands? “They don’t like them. Every year, one or two of them try to talk me out of it,” he said. It takes practice to get good at heading the ball¹ with the headband, he said. But Connolly has persisted. “I just feel the added protection they give, especially to young players, is worth the minor discomfort.”

¹heading the ball — the act of hitting the ball in a particular direction with one’s head

Connolly has nothing more than anecdotal evidence² that the headbands make a difference, but he said when his players do get concussions, they seem to be less severe.

25 What the data does show is that girls who play high school soccer are at a significant risk for concussions. A 2012 study in the American Journal of Sports Medicine found that women’s soccer had the second highest rate of concussions among high school athletes, behind only football. That same study also found that girls had a higher concussion rate than boys.

30 Dawn Comstock, one of the co-authors of the study and a professor at the Colorado School of Public Health at the University of Colorado, said she doesn’t think concussion headbands will alter this statistic. ...

 Laboratory studies have shown the headbands do dissipate³ some force, but since there’s no hard number for how much force it takes to sustain⁴ a concussion, it’s hard to know whether the headbands are effective, she said.

35 But Miguel Rueda, the associate director for health and performance for the University of Colorado athletic department, rejected the idea that there’s no downside to wearing the headbands.

40 “Once you put a protective band on someone’s head, they start to play the game differently,” he said. Athletes may become more aggressive knowing that they have an extra layer of protection, so the headband could actually increase injury, he said. (Comstock notes there’s no scientific evidence to support this theory. Connolly calls it “poppycock.”⁵)

 Some CU [Colorado University] soccer players have worn the headbands in the past, and the athletes who wear them tend to have a prior concussion history. Rueda has discussed

²anecdotal evidence — evidence in the form of personal stories

³dissipate — absorb and scatter

⁴sustain — receive

⁵poppycock — silliness

45 wearing the headbands with some athletes on a case-by-case basis, he said, but too many variables are involved to say whether the headbands actually work. Nor does he see them becoming a mandatory part of the sport anytime soon. ...

—Jessica Iannetta
excerpted and adapted from “U.S. Soccer’s Ali Krieger Wears a
Concussion Headband. But Do They Work?”
www.denverpost.com, June 23, 2016

Text 2

Evidence Mounts for Headgear in Soccer

A competitive 16-year-old soccer player, Lauren Skeen was leaping for a head ball when her head cracked into the head of an opposing player. It was her second such collision, and this time she fell into a grand mal seizure.¹

Such head injuries are all too common in the world's most popular sport, particularly for girls. Girls playing soccer suffer 9 concussions per 10,000 games or practices—the same incidence as boys playing American football in US high schools, researchers at Northwestern University in Chicago have found. And since many concussions go unrecognized, the actual incidence could be much higher; as many as half of all players report symptoms.

The US Soccer Federation and Major League Soccer have responded to the problem, primarily with initiatives to reduce the amount of heading done by children under age 14, and to remove players with concussions from games. . . .

To Lauren Skeen's father, Jeff Skeen, the current recommendations fall far short of what's necessary to protect soccer players. After Lauren's second concussion in 2001, Jeff (a former employee of Troxel, maker of equestrian helmets) put together a broad padded headband he thought would protect his daughter during soccer. . . .

In fact, studies so far support the use of headgear to prevent concussions. Some confusion stems from the unique way that players' heads are used in soccer. Intentional heading itself rarely causes concussions because the ball absorbs most of the energy from the collision.

Only about 8% of concussions in men and 18.3% in women result from contact with the ball, and most of these appear to be from unintentional contact, such as when a ball from one field hits a player on another field from behind.

¹grand mal seizure — a seizure marked by abrupt loss of consciousness with muscle contractions and spasms

25 In one experiment, FIFA [Fédération Internationale de Football Association] researchers
shot balls from a mechanical launcher at a subject holding accelerometers in his mouth, and
found that headgear made little difference to the movements of his head. Nevertheless, some
researchers have worried that repetitive subconcussive blows² might cause cumulative
trauma.³ An average player heads the ball 6-12 times per game and performs at least 2000
headers during a 20-year career in addition to repetitive heading drills at training. . . .

30 If intentional heading does cause damage, headgear doesn't seem likely to protect against
it. Researchers have suggested that headgear causes a change in the radius of the head, which
increases both the ball's moment arm⁴ and the head's moment of inertia. That could explain
why one study showed that volunteers who headed a soccer ball 15 times in 15 minutes
suffered small but significant short-term memory losses if they wore headgear, but not if
their heads were bare.

35 While he believes that heading is likely to cause cumulative damage, Skeen says he didn't
design his headgear to protect against head-to-ball contact because that would change the
way the game is played. "We're trying to make the headgear ignore the head-to-ball impact,
because if you reduce the impact you would slow the rebound speed or direction of the ball,"
he says.

40 Instead, Skeen designed Full90 gear to protect against collisions between the head and
other hard surfaces, such as another head, an elbow, a goal post, or the ground. As many as
80% of soccer concussions result from player-to-player collisions, such as "heading duels" of
the type that proved so harmful to Lauren Skeen.

It's common sense that putting something between a head and another hard surface—
such as another head, an elbow, a goal post, or the ground—will protect the head. FIFA

²subconcussive blows — head impacts that do not result in a clinical concussion

³cumulative trauma — damage gathered over time

⁴moment arm — the length between a joint axis and the force acting on that joint

45 required players to wear shin guards in 1990 based on little more than such intuitive reasoning.

And a handful of laboratory and observational studies support the idea. In one study, FIFA researchers outfitted crash test dummy heads with various types of soccer headgear. Earlier studies had shown that soccer players' heads sometimes collide at speeds up to 50 2.5 m/s [meters per second]. So the researchers dropped one dummy head against another at approximately that speed. They found that the headgear reduced peak linear acceleration⁵ by about a third.

On the basis of this and on angular acceleration, they calculated that the best of the headgear significantly reduced the risk for concussion from head-to-head contact. At 3 m/s, the risk was 10% without headgear and 5% with headgear. At 4 m/s, it was 56% without and 7% with. . . .

For his part, Skeen plans to keep pushing his headgear. It's not about making money, he says. He has lost money on every unit sold for the past 15 years and will gladly get out of the business if Nike or Adidas takes his place. "I just think that the number of head injuries needs to be reduced or the sport will die."

—Laird Harrison
excerpted and adapted from "Evidence Mounts for
Headgear in Soccer"
www.medscape.com, May 9, 2017

⁵linear acceleration — the rate of change of velocity without a change in direction

Text 3

Should High School Soccer Players Wear Helmets?

A high school soccer player leaps into the air, smacks the ball with his head and directs it to a teammate.

Amid today’s growing awareness surrounding head injuries in sports, would wearing a helmet or other protective headgear protect the teen and prevent a possible concussion?

5 Absolutely not, said two of Alabama’s top doctors who specialize in sports injuries — Dr. James Robinson, the Medical Director for DCH Sports Medicine in Tuscaloosa and the head team physician for the University of Alabama, and Dr. Larry Lemak, founder of Lemak Sports Medicine in Birmingham.

10 “Headgear may protect athletes from trauma — lacerations, fractures — but there is no good scientific evidence that they reduce the rate of concussion,” Robinson said. ...

Robinson and Lemak prescribe proper training, not headgear, as the best concussion prevention for soccer players.

Simply put, science isn’t on the side of helmets. ...

15 For boys soccer, concussions accounted for 23 percent of all game injuries and 10 percent of all practice injuries, according to the study.¹ For girls soccer, the study found concussions accounted for 36 percent of game injuries and 31 percent of practice injuries.

In total, the study found concussions accounted for 34.5 percent of all girls soccer injuries and 20 percent of all boys soccer injuries. ...

Knowing that, why isn’t headgear useful? Isn’t some protection better than none at all?

20 The doctors outlined several reasons helmets or other headgear provide little, if any, protection.

¹The study — 2014-15 National High School Injury Surveillance Study led by R. Dawn Comstock at the Colorado School of Public Health

First, wearing headgear makes the head heavier. Most soccer concussions occur because of “acceleration-deceleration injury or rotational change like a boxer may get,” Robinson said. In layman’s terms, that’s whiplash.

25 A helmet won’t prevent whiplash.

Secondly — and perhaps most importantly for girls, whose neck muscles are often weaker than boys — a helmet or other headgear makes the head heavier. Imagine a bobblehead, Robinson said, which increases the risk of whiplash. Since girls already face a heightened concussion risk, headgear could be especially dangerous for them.

30 Lastly, wearing headgear often gives teens a false sense of security. When helmets were mandated in hockey, Robinson said, head injuries increased “because they felt invincible.”

“Sometimes the kids wearing headgear are more reckless,” said Chad Harrelson, boys soccer coach at St. Paul’s in Mobile [Alabama], who has two players wearing protective caps this season, “because they think they have that added layer of protection.” ...

35 Coaches and doctors agree on three main ways to prevent soccer concussions:

- 1) Teach proper rules
- 2) Promote proper technique
- 3) Strengthen neck muscles

40 Players who understand soccer’s rules and accepted norms are less likely to play aggressively or put themselves in harm’s way. Minimizing aggressive play also promotes sportsmanship and ethical play, Robinson said. ...

Finally, it’s important to work on spatial awareness, or having players know where other players are positioned. This minimizes contact and can prevent head-to-head collisions or other dangerous situations. ...

—Josh Bean

excerpted and adapted from “Should High School Soccer Players Wear Helmets?”
<http://highschoolsports.al.com>, April 29, 2016

Text 4

Protect My Head? Soccer Pros Shrug and Carry On

Today, during a World Cup game between Morocco and Iran, Moroccan winger¹ Nordin Amrabat suffered a wicked head injury when he collided with an opponent. After he went down, a team trainer tried to revive him by slapping his face—a move decried² by athletes and followers online.

5 But despite the frequency of those kinds of injuries in soccer, you won't see many international pros wearing gear that might prevent a concussion—reinforced headbands. Recent tests show that some brands can reduce the impact of a concussive blow by more than 70 percent. Unlike sweatbands, these headbands are made with hardened polyurethane foam, like that found inside military helmets, while still allowing players to see the action
10 around them.

Still, soccer pros are loath³ to slip them on. The combination of peer pressure (“Does it make me look weak?”) and institutional inertia (some soccer officials don't think they help) means that soccer is sort of backwards when it comes to preventing head injuries.

15 “It's not normal to wear them,” says Steve Rowson, an assistant professor of biomedical engineering at Virginia Tech who just completed tests of 22 commercially available models. “The players that do either have a history of head injury or were just hit.” Head injuries in soccer usually result from a collision between two players, often when one or both is trying to head the ball. To mitigate⁴ the risk, padded headbands have been on the market for nearly

¹winger — attacking midfielder

²decried — criticized

³loath — reluctant

⁴mitigate — lessen

20 two decades, and FIFA, the sport’s international governing organization, allowed them for
play in 2004. But Rowson and colleagues wanted to find out whether the headbands really
work or are just expensive bits of padding. They cost about \$15 to \$90, which for most players
is less than a pair of primo soccer shoes.

25 Rowson connected sensors to the soccer headbands and slipped them on a pair of crash
test dummies at Virginia Tech’s helmet lab, which has tested football helmets for pro and
collegiate teams. His team slammed the two dummy heads together, with and without
headgear, and the embedded sensors measured linear and rotational acceleration at three
different speeds and two locations on the heads. Those values were used to calculate a score
representing how much the headband reduced a player’s risk of concussion for a given
impact, according to Rowson.

30 While direct head-to-head hits generated a force of 150 g’s (150 times the accelerative
force of gravity), compared to an average of 100 g’s during football hits, the headbands could
reduce that acceleration. The three best headband models received a five-star rating in a
system devised by Rowson’s team at Virginia Tech; five stars translates to a reduction in
concussion risk of at least 70 percent for the impacts tested.

35 Superstars like England’s Wayne Rooney and USA’s Ali Krieger have worn headbands
after injuries but took them off after a while. A few goalkeepers, like former Czech Republic
captain Petr Čech, wear them religiously.⁵ But the push for protection isn’t trickling down
from highly paid and idolized professionals, but rather from soccer parents who don’t want
their kids facing a lifetime of concussion-related health problems. ...

40 In 2014, a group of parents sued USA Soccer to force the sport’s governing body to
prevent heading the ball because of the risk of head injury. That lawsuit was dismissed in
2015, but officials did agree to ban heading for both boys and girls under 12 years old.

In May [2018], parents of two Pennsylvania players sued the US Soccer Federation and

⁵ religiously — regularly

45 USA Youth Soccer claiming officials were negligent and failed to require headbands despite scientific evidence that they work. “We would like to protect these girls,” says Joe Murphy, a Pittsburgh attorney who filed the class action. . . .

50 As those lawsuits progress, new science will hopefully inform best practices.⁶ Tim McGuine, professor of sports medicine at the University of Wisconsin School of Medicine, is wrapping up a two-year clinical trial of 3,000 male and female high school soccer players in Wisconsin, Minnesota, and Ohio. He distributed headbands to half the group, while the others play without them. He is still processing the data, but said an initial analysis shows that the headbands do make a difference for some groups of athletes, and there’s no indication that using them increases the risk of head injury. . . .

55 It’s likely that more than one World Cup player will get a head injury during the month-long tournament that just kicked off. Some will shake it off and return to play (just like Morocco’s Amrabat, who rejoined his teammates), while others will get a serious concussion that could lead to health issues down the road. But by the time the US hosts the 2026 World Cup, perhaps we’ll be seeing more soccer players deciding that headbands are worth wearing before they get hit.

—Eric Niler
excerpted and adapted from “Protect My Head?
Soccer Pros Shrug and Carry On”
www.wired.com, June 15, 2018

⁶best practices — procedures that are accepted as being most effective

Part 3

Text-Analysis Response

Your Task: Closely read the text provided on pages 34 through 37 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

Playing Doc’s Games-II

5 ... It was the third day of a solid west swell. Winter is the prime season for surfing Ocean Beach—it’s when the biggest waves and the cleanest conditions (little or no wind, orderly sandbars¹) coincide—but this joyful conjunction usually falls apart in early February, so each good day now was gravy. Conditions this afternoon were superb: six-foot waves, not a breath of wind. Unfortunately, the prolonged season had brought out unprecedented crowds, and half the surfers in Northern California seemed to be on hand. Ocean Beach didn’t normally suffer from the overpopulation that spoils most California surf spots. There were only a few dozen local surfers, and visitors were rare. My theory was that surfers from nearby towns and cities didn’t *want* to know about Ocean Beach, because, while it sometimes got great waves, it was just as often ferociously intimidating. But crowds of sixty or more had become common in the last couple of weeks. It was as if a whole layer of the regional surf population had decided that, with the major winter swells probably over and conditions still improbably clean, Ocean Beach could be safely raided. I understood this selective bravado,² because I felt it, too, along with an immense relief at having survived another winter—this was my third—of surfing Ocean Beach. Still, I resented the horde whose spidery silhouettes I could barely see, gliding and thrashing in the glare beyond the shore break, as I prepared to paddle out. ...

15 Beyond the inside [sand] bar, in the deepwater trough that separated it from the outside bar, scores of people came suddenly into view. They were scattered for two hundred yards in each direction: sitting in clumps far outside, scrambling for waves, scratching to get

¹ sandbars — offshore accumulations of sand formed by tides or currents

² bravado — courage

back out. Two or three were actually on their feet, riding waves. All had passed the snarling mastiff³ of the inside bar—the price of admission to this green-gold world of glassy low-tide peaks. The channels through the outside bar looked wide and easy to read. I angled north, toward a field of open water. Slightly farther north, a surfer I didn't recognize, riding a needle-nosed pale-blue board, caught a good-sized wave. He fought to keep his balance as the wave, which was about twice his height, jacked⁴ and began to pitch. He didn't fall, but he lost speed in the struggle to keep his feet, and his first turn, now deep in the wave's shadow, was weak. If the wave hadn't hit a patch of deep water, and paused for a beat, he would have been buried by the first section. He managed to steer around it, though, and then pull into the next section and set a high line across a long green wall. By the time he passed me, he was in full command, perhaps one turn from the end of an excellent ride. But his face, I saw in the moment he shot past, was twisted with anguish, and with something that looked like rage.

35 Riding a serious wave is for an accomplished surfer what playing, say, Chopin's
Polonaise in F-Sharp Minor might be for an accomplished pianist. Intense technical
concentration is essential, but many less selfless emotions also crowd around. Even in
unchallenging waves, the faces of surfers as they ride become terrible masks of fear,
frustration, anger. The most revealing moment is the pullout, the end of a ride, which
usually provokes a mixed grimace of relief, distress, elation, and dissatisfaction.
40 The assumption, common among non-surfers, that riding waves is a slaphappy, lighthearted
business—fun in the sun—is for the most part mistaken. The face of the stranger on the
pale-blue board had reminded me, in fact, of nothing so much as the weeping, contorted
faces of the pillow-beaters⁵ on the beach.

³mastiff — a large breed of dog

⁴jacked — steeply rose

⁵pillow-beaters — people engaged in therapeutic venting of aggression

45 I slipped between the big, shifting peaks of the outside bar and arrived at the takeoff area, known as the lineup. I half knew a few of the people I could see there, but the crowd seemed amorphous, unfocussed—there were no conversations in progress. Everyone seemed intent on the waves, on himself. I caught my breath, chose a lineup marker—a school bus parked in the Sloat lot—and went to work. It was important, especially in a strange crowd, to make a good showing on one’s first waves, for they established one’s place in the pecking order.⁶ Blowing a takeoff or failing to catch a catchable wave usually sent one to the end of the queue⁷ for waves; this was an improvised but fierce arrangement, and in an aggressive crowd where waves were scarce one could easily be stuck there for the duration. I moved to a spot about fifteen yards inside a group of four or five surfers—a risky position, vulnerable to a big set, or series of waves, breaking farther out, but I was fit after a winter of paddling, and had the advantage of knowing the bars off this part of Ocean Beach. And, as it happened, the next wave to come through held up nicely, shrugging off the efforts of two guys farther out to catch it, and handing me a swift, swooping, sure-footed first ride.

60 Paddling back out, I burned to tell somebody about the wave—about the great *crack* the lip had made as it split the surface behind me, about the mottled⁸ amber upper hollows of the inside wall. But there was no one to tell. A surf crowd is a delicate social unit. Everyone out there is starring in his own movie, and permission is required before you inflict your exploits on anyone else. Vocal instant replays and noisy exultation are not unknown, but they’re subject to a strict code of collective ego control. Young kids sometimes misunderstand this part of the surfing social contract, and brag and browbeat each other in the water, but they generally cool it when older surfers are in earshot. The usual crowd at Ocean Beach was older than most—in fact, I couldn’t remember ever

⁶pecking order — social ranking

⁷queue — line

⁸mottled — marbled

70 seeing a teen-ager out on a big day—and the unwritten limits on garrulity⁹ among strangers there were correspondingly firm. Those who exceeded them were shunned. Those who consistently exceeded them were hated, for they failed to respect the powerfully self-enclosed quality of what other surfers, especially the less garrulous, were doing out there—the emotions that many of them were surfing through.

Two black grebes¹⁰ popped out of the foam beside me, their spindly necks like feathered periscopes, their big, surprised eyes staring. I murmured, “Did you see my wave?” ...

—William Finnegan

excerpted and adapted from “Playing Doc’s Games-II”
The New Yorker, August 31, 1992

⁹ garrulity — talkativeness

¹⁰ grebes — diving birds
