

EXIT LEVEL ENGLISH LANGUAGE ARTS MATHEMATICS SCIENCE SOCIAL STUDIES

Fall 2005

READING AND WRITTEN COMPOSITION

DIRECTIONS

Read the two selections and the viewing and representing piece. Then answer the questions that follow.

Amir

by Paul Fleischman

- In India we have many vast cities, just as in America. There, too, you are one among millions. But there at least you know your neighbors. Here, one cannot say that. The object in America is to avoid contact, to treat all as foes unless they're known to be friends. Here you have a million crabs living in a million crevices.
- When I saw the garden for the first time, so green among the dark brick buildings, I thought back to my parents' Persian rug. It showed climbing vines, rivers and waterfalls, grapes, flower beds, singing birds, everything a desert dweller might dream of. Those rugs were indeed portable gardens. In the summers in Delhi, so very hot, my sisters and I would lie upon it and try to press ourselves into its world. The garden's green was as soothing to the eye as the deep blue of that rug. I'm aware of color. I manage a fabric store. But the garden's greatest benefit, I feel, was not relief to the eyes, but to make the eyes see our neighbors.
- I grew eggplants, onions, carrots, and cauliflower. When the eggplants appeared in August they were pale purple, a strange and eerie shade. When my wife would bring our little son, he was forever wanting to pick them. There was nothing else in the garden with that color. Very many people came over to ask about them and talk to me. I recognized a few from the neighborhood. Not one had spoken to me before—and now how friendly they turned out to be. The eggplants gave them an excuse for breaking the rules and starting a conversation. How happy they seemed to have found this excuse, to let their natural friendliness out.
- Those conversations tied us together. In the middle of summer someone dumped a load of tires on the garden at night, as if it were still filled with trash. A man's four rows of young corn were crushed. In an hour, we had all the tires by the curb. We were used to helping each other by then. A few weeks later, early in the evening a woman screamed, down the block from the garden. A man with a knife had taken her purse. Three men from the garden ran after him.

My notes about what I am reading

My notes about what I am reading

I was surprised that I was one of them. Even more surprising, we caught him. Royce held the man to a wall with his pitchfork until the police arrived. I asked the others. Not one of us had ever chased a criminal before. And most likely we wouldn't have except near the garden. There, you felt part of a community.

5 I came to the United States in 1980. Cleveland is a city of immigrants. The Poles are especially well known here. I'd always heard that the Polish men were tough steelworkers and that the women cooked lots of cabbage. But I'd never known one—until the garden. She was an old woman whose space bordered mine. She had a seven-block walk to the garden, the same route I took. We spoke quite often. We both planted carrots. When her hundreds of seedlings came up in a row, I was very surprised that she did not thin them—pulling out all but one healthy-looking plant each few inches, to give them room to grow. I asked her. She looked down at them and said she knew she ought to do it, but that this task reminded her too closely of her concentration camp, where the prisoners were inspected each morning and divided into two lines—the healthy to live and the others to die. Her father, an orchestra violinist, had spoken out against the Germans, which had caused her family's arrest. When I heard her words, I realized how useless was all that I'd heard about Poles, how much richness it hid, like the worthless shell around an almond. I still do not know, or care, whether she cooks cabbage.

6 The garden found this out with Royce. He was young and black. He looked rather dangerous. People watched him and seemed to be relieved when he left the garden. Then he began spending more time there. We found out that he had a stutter. Then that he had two sisters, that he liked the cats that roamed the garden, and that he worked very well with his hands. Soon all the mothers were trying to feed him. How very strange it was to watch people who would have crossed the street if they'd seen him coming a few weeks before, now giving him vegetables, more than he could eat. In return, he watered for people who were sick and fixed fences and made other repairs. He might weed your garden or use the bricks from the building that was torn down up the block to make you a brick path between your rows. He always pretended he hadn't done it. It was always a surprise. One felt honored to be chosen. He was trusted and liked—and famous, after his exploit with the pitchfork. He was not a black teenage boy. He was Royce.

My notes about what I am reading

In September he and a Mexican man collected many bricks from up the street and built a big barbecue. I was in the garden on Saturday when the Mexican family drove up in a truck with a dead pig in the back. They built a fire, put a heavy metal spit through the pig, and began to roast it. A bit later their friends began arriving. One brought a guitar, another played violin. They filled a folding table with food. Perhaps it was one of their birthdays, or perhaps no reason was needed for the party. It was beautiful weather, sunny but not hot. Fall was just beginning and the garden was changing from green to brown. Those of us who had come to work felt the party's spirit enter us. The smell of the roasting pig drifted out and called to everyone, gardeners or not. Soon the entire garden was filled.

It was a harvest festival, like those in India, though no one had planned it to be. People brought food and drinks and drums. I went home to get my wife and son. Watermelons from the garden were sliced open. The gardeners proudly showed off what they'd grown. We traded harvests, as we often did. And we gave food away, as we often did also—even I, a businessman, trained to give away nothing, to always make a profit. The garden provided many excuses for breaking that particular rule.

I was from. I wondered if they knew as little about Indians as I had known about Poles. One old woman, Italian I believe, said she'd admired my eggplants for weeks and told me how happy she was to meet me. She praised them and told me how to cook them and asked all about my family. But something bothered me. Then I remembered. A year before she'd claimed that she'd received the wrong change in my store. I was called out to the register. She'd gotten quite angry and called me—despite her own accent—a dirty foreigner. Now that we were so friendly with each other I dared to remind her of this. Her eyes became huge. She apologized to me over and over again. She kept saying, "Back then, I didn't know it was you . . ."

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by Lois Raimondo

1

Late at night I sit in my apartment in Washington, D.C., watching U.S. leaders talk on television about the war on terrorism. Afghanistan moves in and out of these conversations, as it does with the headlines. One day there's a lethal flare-up in a mountain stronghold. Later the situation is "controlled," and newsroom pundits move on to other hot spots like Iran, Kashmir, or Somalia. Then my phone rings. The call is from Afghanistan.

2

It's my former translator, Ahmad Zia Masud, now a negotiator for Afghanistan's hastily formed Ministry of Defense. He calls me often by satellite phone from mountaintops, villages, and caves where he is meeting with resisters to reform—Taliban fighters, independent warlords—who, after decades of war, are reluctant or unwilling to lay down their guns. Sometimes Masud and other negotiators are threatened and forced to retreat. Soldiers then move in, and the hills resound once more with war.

3

"This is a very dangerous time for my country," Masud tells me. "Every day I see disaster. The young boys, they know only war, nothing else. What will happen to them? I believe food will come, factories will come, but now the people are suffering. Even if peace comes, so much has died."

4

From last October into December, Masud and I worked together day and night in the parched hills and plains of northern Afghanistan, where I was on assignment as a photojournalist for *The Washington Post*. Masud was in his eighth year of forced exile from his home in Taliban-controlled Kabul, working mostly for Northern Alliance leadership. When hundreds of foreign journalists began descending into Khodja Bahauddin, site of the Northern Alliance's government headquarters, the foreign ministry assembled an army of translators. Masud, with halting English but well connected, wound up with me.

He is a devout Muslim and father of three; I an unveiled, single Western woman. Neither of us imagined how our minds and lives would mingle—and be forever changed.

From the start we covered frontline stories, which required a steady diet of Russian military maps, bareback rides on mountain-bred horses across frigid rivers, a phone book filled with satellite numbers for field commanders, and a stomach for black tea. Some days mortar fire thundered constantly. Other days were still. The United States had announced that it would launch air strikes on Taliban positions, but the Northern Alliance frontline commanders we were meeting with weren't being told when. So they held their men in check, awaiting the U.S. campaign that would allow them to take the offensive against weakened Taliban territory. This lull created space to report beyond the front lines, to provide social and historical background for the conflict. Camera in hand, I set out to document the "collateral" consequences of the war. From

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dawn to dark Masud and I bounced around in a Russian jeep to find Afghan people and their stories. Along the way, sharing hundreds of miles, our own stories unfolded.

Educated at Kabul University, Masud was still a consummate student at age 32. He carried a small, lined notebook in his chest pocket, which he filled each working day with new English words. (Once when we were under fire he yelled, "Make yourself small!" "You mean scrunch down?" I shouted back. "Scrunch" made its way into his book.) He has immense curiosity. Yet Masud had chosen to avoid all contact with Western cultures abroad and instead became a religious-political activist, nurturing strict devotion to Islam among his people. My own curiosity had led me to spend more than a decade living in remote corners of China, India, and Tibet—none so ravaged as Afghanistan.

Day after day Masud interpreted his war-torn world for me. I photographed young students, hungry for knowledge, whose schools had been commandeered by Taliban troops and turned into garbage-strewn military barracks. We met families, three generations deep, displaced to barebones refugee camps. We found fragmented lives—scattered to hospitals, cemeteries, and prisons.

Such suffering failed to dim Masud's sense of hope. That hope was rooted in a deep devotion to God, which I learned through his long, joyful renditions of Koranic stories. Our trips by jeep or horseback were punctuated each day by sunset prayer, even when shells were flying. Despite the constant threat of

danger and death, Masud and other Afghans I met strove for normalcy in their lives. Imposing the rhythms of religion, they transformed one more day of war into one more night of peace. We'd break Ramadan fast at sunset with still-warm bread made with prayerful hands in an outdoor clay oven-soldiers, civilians, and one foreigner seated on the ground, a complex human circle bound by simple bread. The teachings of Islam seemed to temper potential violence in a poor and desperate people. Yet taken to fundamentalist extremes, that same faith was also motivating Taliban fighters just over the next hill, who wanted to kill, certainly me, but also their Muslim brothers. Masud was more of a brother than most. He, like most Taliban, is ethnically Pashtun, one of the few working with the Northern Alliance.



One day we visited Lalaguzar, a sprawling refugee camp near Khodja. Weeks earlier I had watched a boy there toss a tiny ball made of plastic wrapped

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with twine. The sand-colored ball was constantly disappearing or unwinding. Later, in a far-off town, I bought a soccer ball. Masud and I returned to Lalaguzar and wandered through miles of indistinguishable tents, looking for the boy. Giggling children, all hungry for play, crowded around. As I offered a kicking lesson, some women peeked at us from behind a tent. Masud kicked the ball, and one of the women kicked it back. "Oh, no," said Masud, only half-joking. "Maybe her husband will kill me. I played soccer with his wife."

That afternoon we returned to Khodja and sat with tea on the concrete stoop outside my room. Masud poured the tea, then abruptly confessed that he felt conflicted in my presence. "It is a sin to be with you, talking friendly in this way," he said. "I must pray very hard every night after leaving you."

I wasn't ready for this. We had been working together, almost every day, for weeks. "You are saying I am a sin?"

"Yes. A man must not speak friendly with a woman who is not his wife. I love my wife very much. We have rules. You are not Muslim. But this is not the main thing. It is dangerous. You should be covered." I instinctively tightened my scarf around my head. "The people of Afghanistan do not want you here."

"I see." I stayed calm but was inwardly stunned because, until then, I had thought we understood each other and communicated in ways that were, at times, extraordinary. Now I was a sin. He went on. "Nobody wants foreigners here. I hate America. In too many ways, I hate America."

His words sank into silence. We had already discussed what we both viewed as the rampant materialism of U.S. culture. Masud believed that American peacetime society, rife with crime, was the inevitable consequence of spiritual bankruptcy. He feared that Americans in Afghanistan—soldiers, journalists, businessmen, even peacekeepers—would carry with them these same cultural values. I could see, and agree with, some of what he said. Now my Afghan translator, who was becoming my friend, seemed to equate me with an enemy. I was a sin from a nation he loathed.

Tears welling up, I surrendered. "Okay, I understand." Then I looked up and saw tears coursing down his face. "Masud, why are you crying?" "I cry because I have hurt you," he said. "Speaking with you is a small sin; this is a big sin. The heart is a holy place, and we must always take care to never hurt one another. I am sorry. Now I must leave." He rose to his feet, planning to resign as my translator. We were both off balance, but I wanted him to stay. "Wait. Please. You will be part of Afghanistan's new government. Contact with the West is now inevitable. You will have to deal with foreigners, if for no other reason than to protect what you feel is precious about Islam and Afghan culture. You can be both bridge and gatekeeper for your people."

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The optimist and the fundamentalist were tangled in a web. In the end Masud chose to stay. He was beginning to trust me, and that troubled him. Because I was not Muslim, he had assumed I would never understand his world. Yet my work had taken us together into the raw lives of strangers, giving us common ground where we could challenge each other's thinking. He entered new words in his notebook that night—"flexibility" and "cultural relativity," ideas we discussed at length. We then retired to our separate quarters for exhausted sleep.

A month later, the time had come for me to leave. It was snowing. Masud had come to say good-bye. "How do I say good-bye to you?" I said. He struggled to reply. "You have been my closest friend. You have taught me 'flexible' and 'complicated.' I am a different man because of you." He paused. "I can no longer hate America, because you are there." He gave me gifts for my nephews, three small vests of leather and fur. Then he put his hand over his heart, and we parted.

Masud worked his way south over snowy mountains to Kabul, where he was reunited with his family, briefly, before being called upon to help secure remote hostile regions of the country. When he phones me now, he tells me of the "total devastation of buildings, land, and people's minds." He worries that aid from the U.S. and other foreign powers will degrade his culture. He cringes when new Afghan leaders who have lived most of their lives abroad talk of a "new Afghanistan" and "globalization." I've never heard him sound

"These people do not know my country. What must we call this? 'Cultural relativity'? Remember our time with that word?" he laughs quietly. "We are a very religious people. Our ideas are very different. I am afraid for Afghanistan. These are the things you must write about. Otherwise, your words will have no soul." I ask if I can also tell our story. "If it can help the world know there is beauty and peace in Islam, then you must tell it," he said.

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so tired, or so sad.

It's a Small World. Come Meet Your Neighbors.



Texas is home to people from all over the world, yet many of us don't even know who lives next door. Join Bridgebuilders and meet people from every part of the globe. Every Thursday night Bridgebuilders hosts a dinner at the Killeen Community Center. We spotlight a country, and everyone

prepares and brings a dish from that country's native cuisine. Over good

food and laughter, we get beyond the surface and learn a lot about the people around us—and ourselves.



Join us this Thursday at 7 p.m. Spotlighted Country: Syria

You'll be glad you came!

Photograph courtesy of © Don Hammond/CORBIS.

Use "Amir" (pp. 4-6) to answer questions 1-12.

- 1 Which words from paragraph 1 help the reader understand the meaning of the word *vast*?
 - A in India
 - **B** you know your neighbors
 - C as in America
 - **D** among millions
- 2 Read the following dictionary entry.

register \'re-jə-stər\ n 1. a device that automatically enters a sales amount or number 2. a formal or official recording of items, names, or actions 3. an adjustable grill-like device through which heated or cooled air is released into a room 4. the range of an instrument or voice

Which definition best matches the meaning of the word *register* as it is used in paragraph 9?

- F Definition 1
- G Definition 2
- H Definition 3
- **J** Definition 4

- **3** The narrator of this story is originally from
 - A the United States
 - B Poland
 - C Mexico
 - **D** India

- 4 What is paragraph 6 mostly about?
 - **F** A young man in the community purposefully frightens his neighbors.
 - **G** The people in the community change their mind about one of their neighbors.
 - **H** The women in the community attempt to take care of one of their neighbors.
 - **J** A young man in the community becomes famous after a daring rescue.
- **5** In the first paragraph of the story, the narrator uses a metaphor to
 - A establish that U.S. cities are more hospitable than Indian cities
 - **B** describe what he misses most about his native country
 - C illustrate patterns of population growth in U.S. cities
 - **D** contrast life in a U.S. city with life in an Indian city
- **6** This story highlights the conflict between
 - **F** Americans and people from other countries
 - **G** people's prejudices and their experiences with one another
 - H people who care for the garden and those who harm it
 - J teenagers and older people in a neighborhood

- 7 In paragraph 5, the narrator reveals that he is
 - A willing to change his mind about others
 - **B** distrustful of people from other countries
 - C envious of the toughness of Poles
 - **D** well informed about how to grow plants

- **8** Which of these is the most important product of the garden?
 - **F** A sense of community among the neighbors
 - **G** The neighbors' acceptance of Royce
 - H The bounty of fruits and vegetables grown in it
 - J Its visual beauty amid the buildings

- 9 Paragraph 2 represents a
 - **A** flashback to the narrator's youth
 - B change in the story's point of view
 - C comparison of different cultures
 - **D** foreshadowing of events in the story

- **10** What does paragraph 6 reveal about Royce's character?
 - **F** He is threatening and aggressive.
 - **G** He is friendly and outgoing.
 - H He is kind and modest.
 - **J** He is withdrawn and lonely.

- 11 Which of these can the reader conclude about the narrator?
 - **A** He wishes that he could move out of the city and have his own garden.
 - **B** He is more generous with the proceeds of the garden than with those of his business.
 - **C** He would like to hire Royce to work at the fabric store that he manages.
 - **D** He is still angry with the woman who complained in his store about receiving the wrong change.

- 12 Which of these best supports the prediction that the narrator is no longer likely to believe generalizations about others?
 - **F** We traded harvests, as we often did.
 - G I still do not know, or care, whether she cooks cabbage.
 - **H** She had a seven-block walk to the garden, the same route I took.
 - **J** She'd gotten quite angry and called me . . . a dirty foreigner.

Use "Long Road Home" (pp. 7-10) to answer questions 13-22.

- 13 In paragraph 16, the words rife with mean
 - A full of
 - B ready for
 - C influenced by
 - D defined by

- 14 In the selection, the author describes her job as a
 - F member of the U.S. military
 - **G** photojournalist for a newspaper
 - H translator for foreign journalists
 - J religious-political activist

- 15 Masud strongly opposes
 - A Afghanistan's new government
 - B the beliefs of Islam
 - C the Northern Alliance leadership
 - D the cultural values of Americans

- 16 Which of these is the best summary of the selection?
 - F The author, an American photojournalist, spent several months traveling the front lines of the war in Afghanistan. She and her Muslim translator developed a deep friendship, in spite of their cultural differences. The two challenged each other's thinking and changed each other's lives.
 - G A photojournalist recalls her experience in Afghanistan. She describes her experiences among the Afghan people, whose lives were disrupted by war. She explains the difficulties of trying to establish friendships with people who consider Americans the enemy.
 - H An American photojournalist and an Afghan interpreter traveled across Afghanistan, interviewing people about ways the war had affected their lives. The Muslim faith of the Afghans came alive for the photojournalist as she heard Koranic stories and witnessed daily prayer and other practices. The interpreter's anti-American stance caused tension between the two.
 - J An American photojournalist spent time in war-torn Afghanistan. She observed firsthand the ravages of war and recorded the information in words and photographs. The photojournalist discovered that it was possible for an American to understand the Afghan conflict.

- 17 In paragraph 17, the mood changes from
 - **A** confusion to clarity
 - **B** tension to peacefulness
 - C sorrow to hopefulness
 - D anger to happiness

- 18 This selection's point of view helps the reader understand
 - **F** the reasons for fighting among the Afghan people
 - **G** the difficulties of bridging two very different cultures
 - **H** the daily rituals practiced by Muslims in Afghanistan
 - J family life in a refugee camp

- 19 In paragraph 16, the term "spiritual bankruptcy" refers to
 - A a lack of moral or religious values
 - **B** separation of church and state
 - C differences among religious traditions
 - **D** religious persecution

- **20** Which of these most likely contributed to the author's willingness to understand Masud's point of view?
 - F Her skills as a writer
 - ${f G}$ Her support of the Northern Alliance
 - H Her curiosity about other cultures
 - J Her hope of changing Masud's mind

- 21 Which of these summarizes an essential problem that Masud faced in his friendship with the author?
 - A "This is a very dangerous time for my country...."
 - **B** I was a sin from a nation he loathed.
 - C I could see, and agree with, some of what he said.
 - **D** "I am a different man because of you."

- **22** In paragraph 9, the image of the "complex human circle" serves to
 - **F** illustrate the desire for peace among the various groups in Afghanistan
 - **G** present a picture of unity in the midst of stark differences among people
 - **H** emphasize the frustrations of trying to achieve peace among people
 - **J** foreshadow the failure of different groups in Afghanistan to achieve peace

Use "Amir" and "Long Road Home" (pp. 4–10) to answer questions 23–25.

- 23 How is the garden in "Amir" similar to the war in "Long Road Home"?
 - A Both are sources of misunderstandings.
 - **B** Both bring people of different cultures together.
 - C Both are causes of economic change.
 - **D** Both reflect religious and cultural values.

- 24 Amir and Masud are alike in that both
 - **F** allow their minds to be changed
 - G are from the same country
 - H were educated in the United States
 - ${f J}$ want to preserve their cultures

- **25** The authors of both selections are trying to show
 - A different ways that people disagree
 - B how misunderstandings cause problems
 - C differences among religious faiths
 - **D** the value of insight and understanding

Use the visual representation on page 11 to answer questions 26–28.

- **26** Bridgebuilders created this flyer in order to
 - **F** encourage people to help feed hungry families in their community
 - **G** keep children off the streets and out of trouble at night
 - H teach people about the location of countries around the world
 - **J** persuade the local community to learn about its origins and diversity

- **27** Which of the following best describes the symbolism used in the photograph?
 - **A** The globe represents the heavy burden that everyone must share.
 - **B** The clouds in the background represent a storm that threatens the community.
 - C The hands imply that all people must share and support Earth as their home.
 - **D** The globe suggests that the United States is the most important country on Earth.

- **28** Which of the following is a persuasive technique used in the flyer?
 - **F** The spotlighted country is one that readers should be familiar with.
 - G Readers are told they will learn about themselves as well as about others.
 - **H** The photograph shows viewers the benefits of joining Bridgebuilders.
 - **J** Readers are given clear instructions about what to bring and when to arrive.

DIRECTIONS

Answer the following questions in the space provided on the answer document.				
In "Amir," what does the garden symbolize? Support your answer with evidence from the selection.				
How would you describe the relationship between Masud and the author of "Long Road Home"? Support your answer with evidence from the selection.				
How is the concept of accepting others important in both "Amir" and "Long Road Home"? Support your answer with evidence from both selections.				

WRITTEN COMPOSITION

Write an essay about whether it is important to seek friendships with people who are different from you.

The information in the box below will help you remember what you should think about when you write your composition.

REMEMBER—YOU SHOULD

- □ write about the assigned topic
- □ make your writing thoughtful and interesting
- ☐ make sure that each sentence you write contributes to your composition as a whole
- ☐ make sure that your ideas are clear and easy for the reader to follow
- □ write about your ideas in depth so that the reader is able to develop a good understanding of what you are saying
- □ proofread your writing to correct errors in spelling, capitalization, punctuation, grammar, and sentence structure

USE THIS PREWRITING PAGE TO PLAN YOUR COMPOSITION.

MAKE SURE THAT YOU WRITE YOUR COMPOSITION ON THE TWO LINED PAGES IN THE ANSWER DOCUMENT.

USE THIS PREWRITING PAGE TO PLAN YOUR COMPOSITION.

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MAKE SURE THAT YOU WRITE YOUR COMPOSITION ON THE TWO LINED PAGES IN THE ANSWER DOCUMENT.

Revising and Editing Sample

DIRECTIONS

Read the introduction and the passage that follows. Then read each question and fill in the correct answer on page 2 of your answer document.

Lydia has written this report for her U.S. history class. As part of a peer conference, you have been asked to read the report and think about what suggestions you would make. When you finish reading the report, answer the questions that follow.

The American Red Cross

- (1) The American Red Cross is an organization that aids people all around the world. (2) It started as a result of the efforts of a dedicated woman. (3) That woman was named Clara Barton. (4) It was during the Civil War that Barton began the work that lead to the establishment of the American Red Cross.

 (5) She assisted on the battlefield by nursing injured soldiers and helping
- transport supplies. (6) Eventually the Government of the United States selected her to serve as superintendent of nurses for the army.
- **S-1** What is the most effective way to combine sentences 2 and 3?
 - A It started as a result of the efforts of a dedicated woman, that woman was named Clara Barton.
 - **B** It started as a result of the efforts of a woman who was dedicated and named Clara Barton.
 - C It started as a result of the efforts of a dedicated woman named Clara Barton.
 - **D** It started as a result of the efforts of a dedicated woman she was named Clara Barton.

- **S-2** What change, if any, should be made in sentence 4?
 - F Change was to is
 - G Insert a comma after Civil War
 - **H** Change *lead* to *led*
 - J Make no change
- **S-3** What change, if any, should be made in sentence 6?
 - A Change *Government* to **government**
 - B Change *selected* to *sellected*
 - C Change *her* to herself
 - D Make no change



REVISING AND EDITING

DO NOT GO ON TO THE REVISING AND EDITING SECTION.

WHEN YOU FINISH THE READING AND WRITTEN

COMPOSITION SECTION, RAISE YOUR HAND AND WAIT

FOR A TEST ADMINISTRATOR TO ASSIST YOU.

DIRECTIONS

Read the following passages and mark your answers on page 2 of your answer document. Remember that you are NOT permitted to use dictionaries or other reference materials on this section of the test.

Sandi's teacher asked her to write a paper related to setting a goal. Sandi decided to write a personal narrative about a goal she had achieved. She wants you to review her paper and think about the corrections and improvements she should make. When you finish reading, answer the questions that follow.

Car Shopping

- (1) I had always dreamed of having my own car by the time I was 18, so I launched a vigorous campaign as soon as I turned 17. (2) I began presenting evidence to prove that owning my own automobile is a good idea.
- (3) "Wouldn't it be great, Mom," I suggested, "if I could run errands for you while you're at work? (4) Even better, you'd never have to drive me to my after-school job again!"
- (5) Another day I added "Have you noticed that I'm always home on time when I borrow your car? (6) Have you noticed that I keep it filled?"
- (7) Then there was my favorite argument. (8) "Don't you like for me to set goals and achieve them?" I asked quite frequent.
- (9) It took almost a year of presenting logical arguments, demonstrating responsibility, and earning money to make my dream a reality. (10) Shortly before my 18th birthday, setting out to buy my first car. (11) I asked Uncle Ray and Aunt Ellen to accompany me because they are my familys shrewdest consumers. (12) Since I had a limited budget, everyone agreed that I should shop for a used car. (13) "It should be something inexpensive with low mileage," Uncle Ray insisted.

- (14) We went straight to a used-car lot near my dad's office, where we were greeted by a cheerful salesman. (15) My aunt and uncle headed for a small blue sedan with 50,000 miles on the odometer. (16) I went toward a sporty red convertible with 120,000 miles.
 - (17) "It gets great gas mileage!" Uncle Ray said as he pointed to the sedan.
 - (18) "It's RED!" I exclaimed as I danced around the sports car.
 - (19) "The sedan, my aunt noted, "is reasonably priced."
 - (20) "But this one is a convertible!" I pleaded.
 - (21) "The sedan has good tires," the salesman stressed.
 - (22) "This one has a CD player!" I shouted.
 - (23) "Let's call your mother," my overwhelmed relatives finally suggested.
- (24) "From my personel experience," Mom wisely said, "I can tell you that the red car will look great in the repair shop. (25) And considering how many miles are on the engine, it will probably be there most of the time. (26) I think you'd better go with the sedan."
- (27) Little Blue, I must admit, has been an exceptionally good car. (28) With regular oil changes, it keeps humming along. (29) And my aunt and uncle's van has stayed in pretty good shape, too. (30) Whenever I pass a sporty red convertible being pulled by a tow truck, I just smile!

- **32** What change should be made in sentence 2?
 - F Change evidence to evidense
 - G Change prove to proof
 - H Change my to her
 - \mathbf{J} Change is to was

- **33** What change, if any, should be made in sentence 5?
 - A Insert a comma after added
 - B Change that to it
 - C Change borrow to borrowed
 - D Make no change

- **34** The meaning of sentence 6 can be clarified by changing *it* to
 - F them
 - G my after-school job
 - H yours
 - J the gas tank

- **35** What change, if any, should be made in sentence 8?
 - A Change *them* to it
 - B Change quite to quiet
 - C Change *frequent* to **frequently**
 - D Make no change

- **36** What revision, if any, is needed in sentence 10?
 - **F** It was shortly before my 18th birthday, I set out to buy my first car.
 - **G** Shortly before my 18th birthday. I set out to buy my first car.
 - **H** Shortly before my 18th birthday, I set out to buy my first car.
 - **J** No revision is needed.

- **37** What change, if any, should be made in sentence 11?
 - A Change accompany to acompany
 - B Change familys to family's
 - C Change *shrewdest* to **most shrewdest**
 - D Make no change

- **38** What change, if any, should be made in sentence 19?
 - F Insert quotation marks after the first comma
 - G Change *noted* to **notes**
 - H Change *reasonably* to **reasonable**
 - J Make no change

- **39** What change, if any, should be made in sentence 24?
 - A Change personal to personal
 - B Change the second comma to a period
 - C Change that to it
 - **D** Make no change

- **40** What transition could be added to the beginning of sentence 26?
 - **F** Fortunately,
 - **G** With that in mind,
 - **H** In contrast,
 - **J** On the other hand,

- 41 What is the most effective way to improve the organization of the last paragraph (sentences 27–30)?
 - A Delete sentence 28
 - **B** Switch sentences 28 and 29
 - C Delete sentence 29
 - **D** Move sentence 30 to the beginning of the paragraph

Clayton's teacher asked him to write a paper about an interesting event. Clayton decided to describe an unusual festival he had read about in the newspaper. He wants you to read his paper and suggest corrections and improvements he should make. When you finish reading, answer the questions that follow.

The Annual Bug Bowl

- (1) The annual Bug Bowl, which is put on each spring at Purdue university in West Lafayette, Indiana, started in 1990 as a class project. (2) More than 10,000 visitors each year are brought to the college by this unusual festival now.(3) Many festivals feature the same kinds of activities. (4) Usually there are races, exhibits, and tasty treats. (5) However, this festival is a little different.
- (6) At first glance Bug Bowl events may seem rather ordinary, but a more close look reveals some surprises. (7) For example, the races aren't relay or sack races; they are cockroach races. (8) Held at Purdue's Roach Hill Downs, these races are quite popular with visitors, who are invited to select their favorite roach and cheer for it to win. (9) Thousands stand and observe as the big brown insects scurry across the ground.
- (10) In an adjacent area another unique competitive takes place—cricket spitting. (11) Women, men, girls, and boys compete to see how far they can propel a cricket. (12) This unusual sport is even listed in the *Guinness Book of World Records*. (13) As of the year 2000, the world record stood at just over 32 feet. (14) National news agencies are always on hand. (15) To take pictures and interview the people who participate in this strange event.
- (16) Of course, a festival wouldn't never be complete without a huge offering of delicious snacks. (17) The Bug Bowl is no exception. (18) On the night before the celebration begin, designated chefs participate in an insect cook-off.

- (19) Local proffessionals judge the "delicious" dishes. (20) In addition to these gourmet items, the following concoctions have been offered at Bug Bowls in years past: Chinese stir-fry with mealworms, chocolate crickets on a stick, and a snack mix made with cereal and wax-moth larvae.
 - (21) Before visitors leave this festival, many visit the insect petting zoo.
- (22) Scientists believe some insects have been on Earth since prehistoric times.
- (23) Children line up for the opportunity to hold strange bugs of all kinds.
- (24) Most people agree that Purdue's Bug Bowl is definitely a one-of-a-kind experience!

- **42** What change should be made in sentence 1?
 - F Delete the comma after **Bowl**
 - G Change university to University
 - H Delete the comma after West Lafayette
 - J Change started to starts

- 43 What is the most effective way to revise sentence 2?
 - **A** This unusual festival now brings more than 10,000 visitors to the college each year.
 - **B** Bringing more than 10,000 visitors to the college each year. This is an unusual festival now.
 - C This is an unusual festival, it now brings more than 10,000 visitors to the college each year.
 - **D** No revision is needed.

- 44 What change should be made in sentence 6?
 - F Delete the comma after ordinary
 - G Change more close to closer
 - H Change reveals to reveal
 - J Change surprises to suprises

- **45** What change should be made in sentence 10?
 - A Change *adjacent* to ajacent
 - B Change unique to uniquely
 - C Change competitive to competition
 - **D** Change *takes* to **took**

- **46** What change, if any, should be made in sentence 11?
 - F Change *compete* to *competes*
 - G Change *they* to you
 - H Change a cricket to it
 - J Make no change

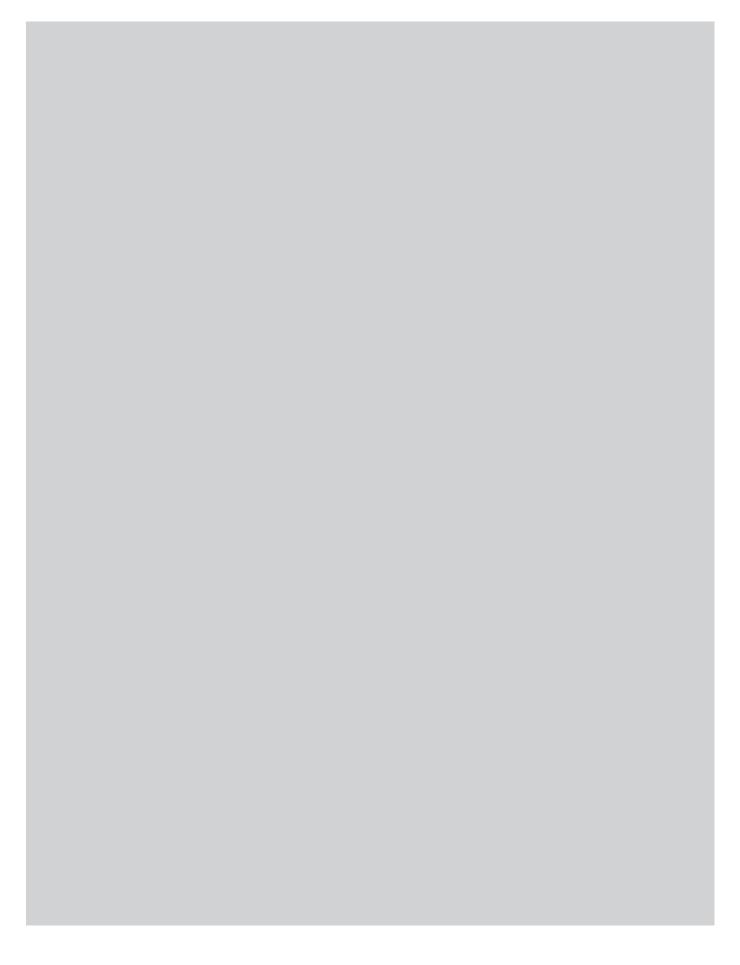
- 47 How should sentences 14 and 15 be rewritten?
 - A National news agencies are always on hand to take pictures. And interview the people who participate in this strange event.
 - **B** National news agencies are always on hand to take pictures they interview the people who participate in this strange event.
 - C National news agencies are always on hand if they take pictures and interview the people who participate in this strange event.
 - **D** National news agencies are always on hand to take pictures and interview the people who participate in this strange event.

- 48 What change should be made in sentence 16?
 - F Delete the comma after Of course
 - G Delete never
 - H Insert it after without
 - J Change *offering* to *offerring*

- **49** What change, if any, should be made in sentence 18?
 - A Change *celebration* to *celebrates*
 - B Change *begin* to begins
 - C Change *chefs* to chiefs
 - **D** Make no change

- **50** What change, if any, should be made in sentence 19?
 - F Change *proffessionals* to professionals
 - G Change judge to judging
 - H Change dishes to dish's
 - J Make no change

- 51 What is the most effective way to improve the organization of the last paragraph (sentences 21–24)?
 - A Delete sentence 21
 - **B** Switch sentences 21 and 22
 - C Delete sentence 22
 - **D** Move sentence 24 to the beginning of the paragraph



MATHEMATICS

Mathematics Chart

LENGTH

Metric

Customary

1 kilometer = 1000 meters 1 mile = 1760 yards

1 meter = 100 centimeters 1 mile = 5280 feet

1 centimeter = 10 millimeters 1 yard = 3 feet

1 foot = 12 inches

CAPACITY AND VOLUME

Metric

Customary

1 liter = 1000 milliliters 1 gallon = 4 quarts

1 gallon = 128 ounces

1 quart = 2 pints

1 pint = 2 cups

1 cup = 8 ounces

MASS AND WEIGHT

Metric

Customary

1 kilogram = 1000 grams 1 ton = 2000 pounds

1 gram = 1000 milligrams 1 pound = 16 ounces

TIME

1 year = 365 days

1 year = 12 months

1 year = 52 weeks

1 week = 7 days

1 day = 24 hours

1 hour = 60 minutes

1 minute = 60 seconds

Metric and customary rulers can be found on the separate Mathematics Chart.

Mathematics Chart

Perimeter	rectangle	P = 2l + 2w or $P = 2(l + w)$
Circumference	circle	$C = 2\pi r$ or $C = \pi d$
Area	rectangle	A = lw or $A = bh$
	triangle	$A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$
	trapezoid	$A = \frac{1}{2} (b_1 + b_2)h$ or $A = \frac{(b_1 + b_2)h}{2}$
	circle	$A = \pi r^2$
Surface Area	cube cylinder (lateral) cylinder (total) cone (lateral) cone (total) sphere	$S = 2\pi r h + 2\pi r^2$ or $S = 2\pi r (h + r)$ $S = \pi r l$
Volume	prism or cylinder	$V = Bh^*$
	pyramid or cone	$V = \frac{1}{3} Bh^*$
	sphere	$V = \frac{4}{3} \pi r^3$
*B represents the area of the	e Base of a solid figure.	00
Pi	π	$\pi \approx 3.14$ or $\pi \approx \frac{22}{7}$
Pythagorean Theorem		$a^2 + b^2 = c^2$
Distance Formula		$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
Slope of a Line		$m = \frac{y_2 - y_1}{x_2 - x_1}$
Midpoint Formula		$M = \left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$
Quadratic Formula		$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Slope-Intercept Form o	f an Equation	y = mx + b
Point-Slope Form of an	Equation	$y - y_1 = m(x - x_1)$
Standard Form of an E	quation	Ax + By = C
Simple Interest Formu	ıla	I = prt

DIRECTIONS

Read each question. Then fill in the correct answer on your answer document. If a correct answer is <u>not here</u>, mark the letter for "Not here."

SAMPLE A

Find the slope of the line 2y = 8x - 3.

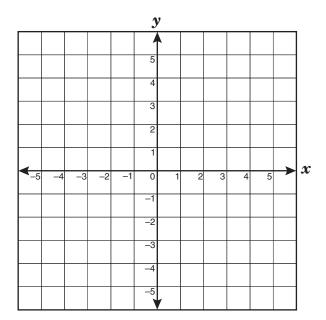
- **A** $-\frac{3}{2}$
- **B** 4
- **C** 8
- **D** Not here

SAMPLE B

Janice uses a rectangular box to store her art supplies. The dimensions of the rectangular box are 22.5 inches by 14 inches by 11.5 inches. What is the volume of this box in cubic inches?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

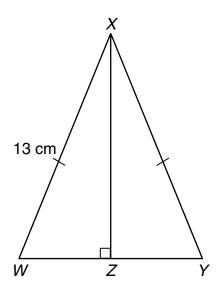
1 If a line contains the points (1, -1) and (3, 3), which of the following points also lies on this line?



- **A** (4, 2)
- **B** (2, 4)
- C (2, 1)
- **D** (1, 2)

- 2 Identify the situation that best represents the amount f(n) in the function f(n) = 75 + 80n.
 - **F** Alton paid \$75 each for *n* gifts and spent \$80 on himself.
 - **G** Bonita spent \$75 on registration fees and \$80 each for *n* credit hours last semester.
 - **H** Carlton deposited \$75 per month for *n* months and an extra \$80 in the summer.
 - **J** Dylan worked for 75 hours at *n* dollars per hour and earned \$80 in tips.

3 $\triangle WXY$ is isosceles.



 $\overline{\underline{WY}}$ is 10 centimeters long. Find the length of \overline{XZ} .

- **A** 5 cm
- **B** 10 cm
- C 12 cm
- **D** 13 cm

4 Which expression best represents $(3a^2b^3c)(-3ab)(-2a^3bc^3)$?

$${f F}$$
 18 $a^{\,6}b^{\,5}c^{\,4}$

$$G -18a^6b^3c^3$$

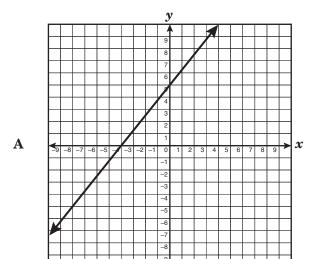
H
$$18a^{6}b^{9}c^{4}$$

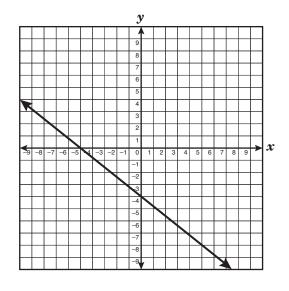
J
$$-8a^{6}b^{5}c^{4}$$

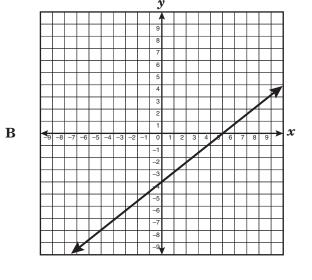
5 Which graph best represents the line that has intercepts at (5, 0) and (0, -4)?

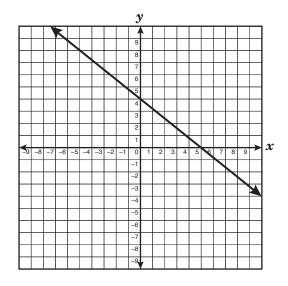
 \mathbf{C}

 \mathbf{D}

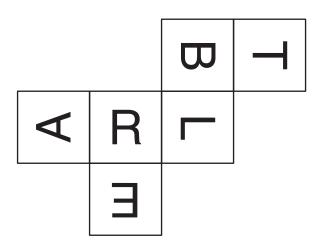




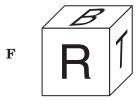


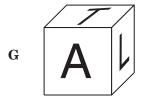


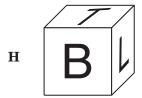
6 The net below can be folded to form a cube.

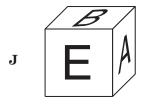


Which cube could be formed from this net?









7 Which quadratic function has a vertex below the origin and opens upward?

A
$$y = -x^2 + 3$$

$$\mathbf{B} \quad y = -x^2 - 1$$

$$\mathbf{C}$$
 $y = x^2 + 5$

D
$$y = x^2 - 2$$

8 Mr. Ortega photographed the students in the math club. He arranged the students into 4 parallel rows. Each row had 3 more people than the previous row. If the first 2 rows had a total of 9 people, how many people total were in the group?

- 9 Mrs. Travis wants to have a clown deliver balloons to her secretary's office. Clowns R Fun charges \$1.25 per balloon and \$6 for delivery. Singing Balloons charges \$1.95 per balloon and \$2 for delivery. What is the minimum number of balloons Mrs. Travis needs to purchase in order for Clowns R Fun to have a lower price than Singing Balloons?
 - **A** 5
 - **B** 6
 - **C** 11
 - **D** 12

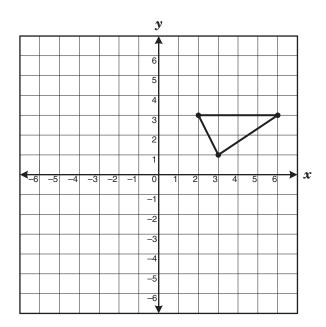
10 The table below shows h, the approximate height of an Ameri-Willow tree after t years.

Age of Ameri-Willow (years)	Height of Ameri-Willow (feet)
1	8
3	25
6	49
7	57
9	70

Which equation best fits these data?

- **F** h = 8.2 + 3.75t
- **G** h = 1.12 + 7.82t
- **H** $h = 7.5 + 0.65t^2$
- **J** h = -1.24 + 9.75t

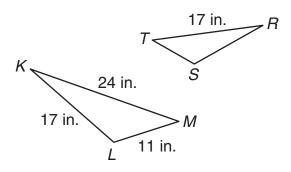
11 Look at the triangle graphed on the coordinate grid below.



Which coordinates are the vertices of a triangle congruent to this figure?

- **A** (3,-1), (2,-3), (6,-3)
- **B** (-3, 3), (1, 1), (-2, 1)
- \mathbf{C} (-4, -1), (0, -1), (-4, -3)
- **D** (3, 1), (2, 3), (-3, 6)

12 Look at the figures below.

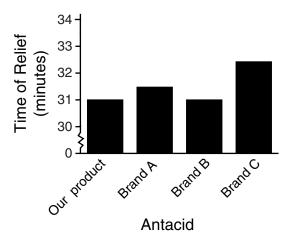


If $\Delta KLM \sim \Delta RST$, which is closest to the length of \overline{ST} ?

- **F** 15.52 inches
- **G** 9.81 inches
- **H** 7.79 inches
- **J** 12.04 inches

13 A pharmaceutical company claimed that its product relieves acid indigestion more quickly than any other antacid. The company used the graph below to support its claim.

Effectiveness of Antacids

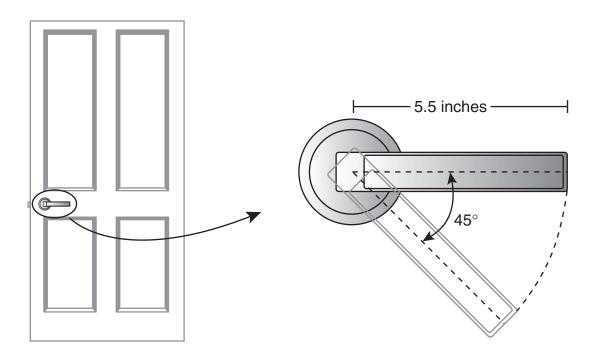


According to the graph, which statement best describes the company's product?

- **A** Its product works faster than some brands but much slower than others.
- **B** Its product works many times faster than the other brands.
- C Its product works in about the same time as the other brands.
- **D** Its product works somewhat slower than the other brands shown.

- 14 The payroll clerk at an appliance store calculates each salesclerk's weekly salary using the function f(x) = 75 + 0.10x, where x is each salesclerk's total weekly sales. The best interpretation of this situation is that each salesclerk is paid
 - F \$75 plus a 10% commission on the total weekly sales of all the salesclerks
 - G \$75 plus a 10% commission on his or her weekly sales
 - $m {f H}$ \$75 plus a 10% commission on the total weekly profit for the store
 - J the same amount regardless of his or her total weekly sales

15 Look at the diagram below.



When the door handle is pushed down to open the door, it makes a 45° angle with its former position. What is the approximate arc length of the path traveled by the outside end of the door handle when the handle is pushed down?

- **A** 34.56 in.
- **B** 11.88 in.
- **C** 4.32 in.
- **D** 2.16 in.

An isosceles triangle has legs that are each x inches long and a base that is y inches long. The perimeter of this triangle is 38 inches. The base is 8 inches shorter than the length of a leg. Which system of linear equations can be used to find the length of each of the 3 sides?

$$\mathbf{F} \quad 2x + y = 38$$
$$y = x - 8$$

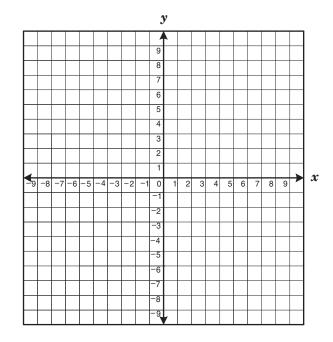
$$\mathbf{G} \quad 2x + 2y = 38$$
$$y = x - 8$$

$$\mathbf{H} \quad 2x + y = 38$$
$$x = y - 8$$

$$\mathbf{J} \quad 2x + 2y = 38$$
$$x = y - 8$$

- 17 Some students want to order shirts with their school logo. One company charges \$9.65 per shirt plus a setup fee of \$43. Another company charges \$8.40 per shirt plus a \$58 fee. For what number of shirts would the cost be the same?
 - **A** 6
 - **B** 12
 - **C** 81
 - **D** 159

18 How does the graph of y = 3x + 2 compare to the graph of y = 4x + 2?



- **F** The slope of y = 3x + 2 is less steep.
- **G** The slope of y = 3x + 2 is steeper.
- **H** The graph of y = 3x + 2 has a greater *y*-intercept.
- **J** The graph of y = 3x + 2 has a smaller *y*-intercept.

- The runners on a cross-country team need to buy bottles of water for their next meet. Each runner will buy at least four bottles, and the coach will buy six extra bottles. Which inequality best describes the total number of bottles, b, the runners and coach will buy in terms of n, the number of runners on the team?
 - **A** b < 4n + 6
 - **B** $b \ge 6n + 4$
 - C $b \ge 4n + 6$
 - **D** b < 6n + 4

20 What is the *y*-intercept of the linear function described by the data below?

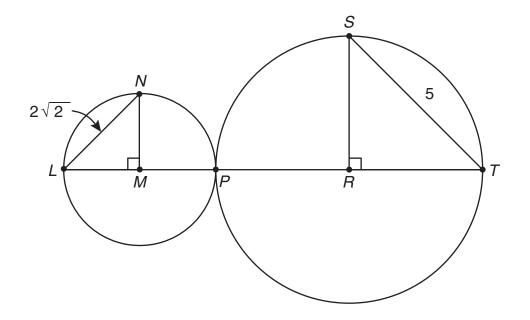
x	y
-6	5.8
-3	3.4
2	-0.6
4	-2.2
7	-4.6

- \mathbf{F} (0, 1)
- **G** (1.25, 0)
- **H** (0,-1)
- **J** (0, -1.25)

21 The years 707, 1001, and 2332 are examples of palindrome numbers. The year 2002 also represents a palindrome number. What is the nearest year before 2002 that also represents a palindrome number?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.

22 In the figure below, circle M and circle R intersect at point P.



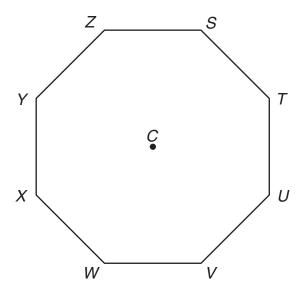
Which is closest to the length of \overline{LT} ?

- **F** 14 units
- G 11 units
- H 18 units
- **J** 16 units

- **23** Which of the following does not describe the graph of the parent function of a quadratic equation?
 - **A** The graph has its vertex at the origin.
 - **B** The graph is a parabola that opens upward.
 - **C** The graph has the *x*-axis as its line of symmetry.
 - **D** The graph has a minimum value at (0, 0).

- **24** What is the solution set for the equation $4x^2 + 11x 10 = -7$?
 - $\mathbf{F} = \{-3, 0.25\}$
 - $G = \{-3.47, 0.72\}$
 - **H** $\{3, -0.25\}$
 - $J = \{-3.85, 1.1\}$

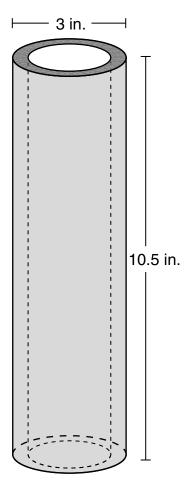
25 The regular octagon below shows selected positions on a combination lock.



The dial of the lock is turned 90° clockwise and then 45° counterclockwise. Which pair of points can describe the starting and ending points of a marker on the dial of this lock?

- $\mathbf{A} \quad T \text{ to } U$
- \mathbf{B} S to V
- \mathbf{C} W to V
- $\mathbf{D} \quad Z \text{ to } W$

26 A cylindrical piece of pipe insulation is shown below



If the insulation is 0.5 inch thick, what is the approximate volume of insulation used?

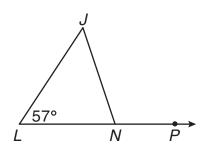
- **F** 231 in. ³
- **G** 74 in. ³
- **H** 41 in. ³
- **J** 33 in. ³

27 Kirk repairs computers. He charges an hourly rate plus a base fee for his services. The table below shows the relationship between h, the number of hours of labor, and c, the total cost for Kirk's services.

Hours, h	Total Cost, c
1	\$57
2	\$69
4	\$93
6	\$117

If Kirk decides to keep his base fee the same but increase his hourly rate by \$2, what will be the total cost for 8 hours of work?

- **A** \$112
- **B** \$141
- C \$143
- **D** \$157
- 28 Look at the diagram below.



Which of the following relationships must be true?

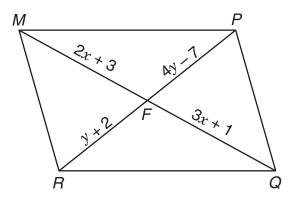
$$\mathbf{F}$$
 $m \angle JNP + m \angle JNL + 57^{\circ} = 180^{\circ}$

G
$$m \angle NJL + 57^{\circ} = m \angle JNP$$

H
$$m \angle JNP = 57^{\circ}$$

J
$$m \angle JNL + 57^{\circ} = m \angle JNP$$

29 Parallelogram MPQR is shown below.



What are the lengths of diagonals MQ and RP?

A
$$MQ = 10$$
 and $RP = 14$

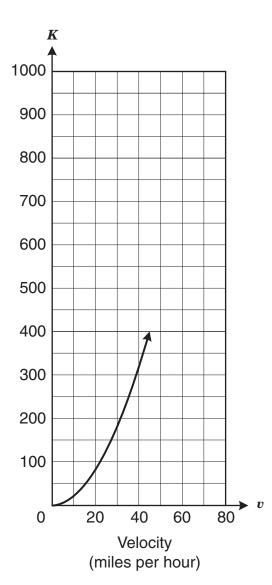
$$\mathbf{B} \quad MQ = 7 \text{ and } RP = 5$$

C
$$MQ = 14$$
 and $RP = 10$

 $\mathbf{D} \quad MQ = 2 \text{ and } RP = 3$

- **30** Which of the following describes a solid with 1 base and no vertices?
 - F Cone
 - G Sphere
 - H Cylinder
 - J Hemisphere

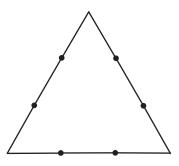
31 The graph shows the relationship between a 1-ton car's kinetic energy, K, and its velocity, v.



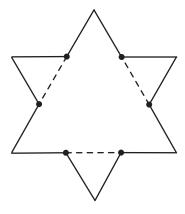
If the kinetic energy of the car is proportional to the square of its velocity, then its kinetic energy when traveling at 60 miles per hour is about —

- A 320 kilojoules
- **B** 480 kilojoules
- C 720 kilojoules
- **D** 1280 kilojoules

32 A student begins drawing a fractal by dividing each side of an equilateral triangle into 3 segments.



The student then replaces the middle segments with 2 equal segments to form the sides of smaller equilateral triangles.



If the student repeats this process on the 12 sides of the second figure, how many sides will the next figure have?

- **F** 24
- **G** 36
- **H** 48
- **J** 60

An appliance store put one kind of refrigerator and one kind of freezer on sale. The total sales of these two appliances were \$8000. The refrigerator was on sale for \$750, and the freezer was on sale for \$325. If *f* represents the number of freezers sold, which expression can be used to determine the number of refrigerators sold during this sale?

A
$$\frac{8000 - 325f}{750}$$

B
$$\frac{8000 - 750f}{325}$$

C
$$8000 - 750f$$

D
$$8000 - 325 f$$

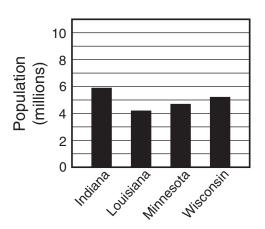
34 Only 4 members of the student council attended a meeting, and they greeted one another with handshakes. Each member shook the hand of each of the other members only once, for a total of 6 handshakes. If all 8 student council members had been present and each member had shaken the hand of each of the other members only once, what would have been the total number of handshakes?

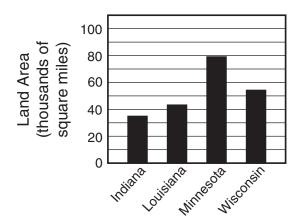
35 The volume of a sphere can be found by using the function $V = \frac{4}{3}\pi r^3$, where V represents the volume and r represents the radius. What is the dependent quantity in this function?

$$\mathbf{A}$$
 π

$$\mathbf{B}$$

D
$$\frac{4}{3}$$





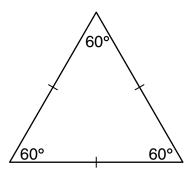
Based on the information given in the bar graphs, which of these four states is the least densely populated?

- F Indiana
- G Louisiana
- H Minnesota
- J Wisconsin

- 37 An insurance company reimbursed members of the Alonzo family 80% of their medical expenses after the family paid the first \$1000 of those expenses. If the family members received \$160 from the insurance company, what were their total medical expenses?
 - **A** \$960
 - **B** \$1200
 - **C** \$1128
 - **D** \$1410

- 38 Brandon wants to reduce a figure that is 9 inches tall and 16 inches wide so that it will fit on a 9-inch-by-12-inch piece of paper. If he reduces the figure proportionally, what is the maximum size the reduced figure could measure?
 - **F** 12 inches by $21\frac{1}{3}$ inches
 - **G** 9 inches by 12 inches
 - **H** $5\frac{1}{16}$ inches by 9 inches
 - **J** $6\frac{3}{4}$ inches by 12 inches

39 The area of this regular polygon is 72 square inches.



- Find the approximate length of one side of this polygon.
- **A** 12.9 in.
- **B** 15.8 in.
- C 22.3 in.
- **D** 24.0 in.

40 The table shows Cain's 7 quiz scores for the first 9-week period. Each score is based on a 50-point scale.

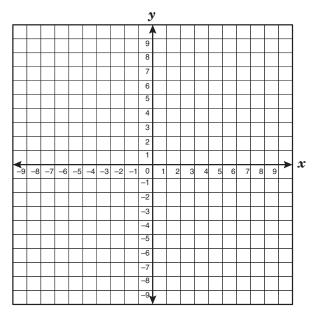
Cain's Quiz Scores

Quiz Number	Score
1	38
2	45
3	42
4	48
5	35
6	41
7	45

Which of the following gives the highest value for Cain's quiz scores for the first 9-week period?

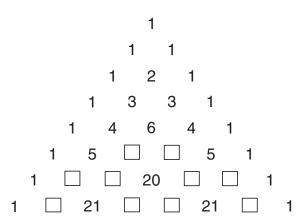
- F Mode
- **G** Mean
- H Range
- \mathbf{J} Median

Victor purchased motor oil for \$2 a bottle and car wax for \$4 a bottle. The inequality 2x + 4y < 16 can be used to determine the number of bottles of motor oil, x, and the number of bottles of car wax, y, Victor purchased for less than \$16, not including tax. Which of the following ordered pairs best represents a reasonable combination of bottles of motor oil and car wax that Victor could have purchased?



- **A** (4, 2)
- **B** (2, 3)
- C (5, 2)
- **D** (3, 2)

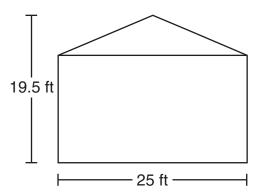
42 The figure below shows a partial view of Pascal's triangle.



If each square represents a missing number in Pascal's triangle, which of the following could not be a missing number used to complete the partial view of Pascal's triangle shown above?

- **F** 24
- **G** 15
- **H** 35
- **J** 10

43 The figure below shows a triangle on top of a rectangle.



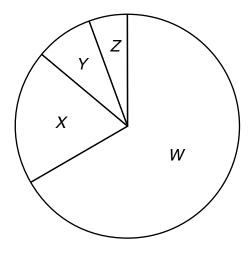
If the area of the triangle is 83 square feet, which of the following best represents the area of the rectangle?

- \mathbf{A} 405 ft²
- **B** 239 ft²
- $C = 322 \text{ ft}^2$
- **D** 166 ft²

- 44 The formula for the volume of a cylinder with a height of 5 units can be represented as $y = 5\pi x^2$, where x represents the radius. If the cylinder's height is tripled, what is the effect on the graph of y as a function of x?
 - **F** The graph is translated up.
 - **G** The graph remains the same.
 - **H** The graph becomes narrower.
 - **J** The graph becomes wider.

45 An orange-drink label reads "20% real fruit juice." The other ingredients are water, sugar, and flavoring.

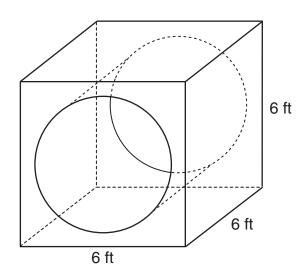
Orange-Drink Ingredients



Which section of the circle graph best represents the amount of real fruit juice in the orange drink?

- \mathbf{A} W
- $\mathbf{B} \quad X$
- \mathbf{C} Y
- \mathbf{D} Z

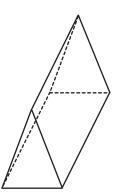
46 A cube-shaped piece of playground equipment has a cylindrical portion removed, as shown in the diagram. The diameter of the opening is 5 feet.



What is the approximate volume of the remaining portion of the cube?

- **F** 255 ft³
- \mathbf{G} 122 ft³
- **H** 98 ft³
- **J** 28 ft³

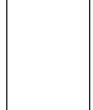
Which set of figures can be used to construct a representation of the surface area of the solid shown below?



A











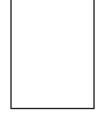
R











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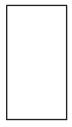
D



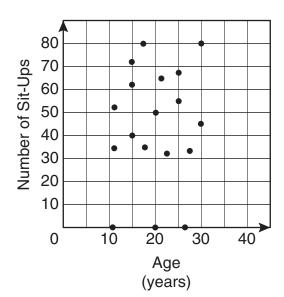








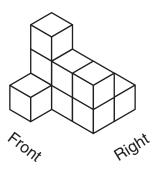
48 In a recent survey conducted at a mall, 18 people between the ages of 10 and 35 were asked how many sit-ups they do for exercise on a weekly basis. The data are shown in the scatterplot below.



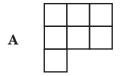
According to the data, what is the relationship between a person's age and the number of sit-ups done on a weekly basis?

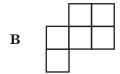
- **F** The younger a person is, the more sit-ups the person does weekly.
- **G** The older a person is, the more sit-ups the person does weekly.
- **H** There is a constant correlation between the age of a person and the number of sit-ups done weekly.
- **J** There is no correlation between a person's age and the number of sit-ups done weekly.

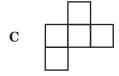
49 The 3-dimensional figure shown below represents a structure that Corina built with 9 cubes.

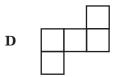


Which of the following best represents the top view of Corina's 9-cube structure?

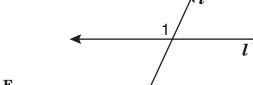




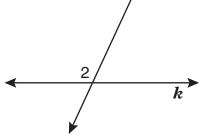




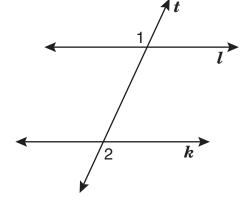
Mitch drew lines l, k, and t. Lines l and k were parallel to each other. Mitch measured 2 alternate interior angles. He labeled the angles 1 and 2. Which of the following shows angles 1 and 2 correctly labeled?



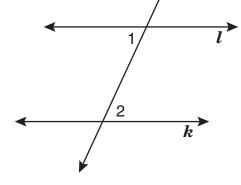
 \mathbf{F}



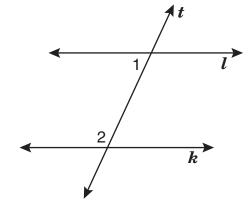
 \mathbf{H}



G



 \mathbf{J}



51 On a certain math problem, Cynthia mistakenly divided a number by 4 and then subtracted 24 and got 12 for her answer. After reading the problem again, she realized that she should have subtracted 24 before dividing by 4. What was the correct answer?

$$A - 48$$

$$B - 28$$

F
$$6x - 2y = -8$$
 and $3x + y = -4$

G
$$3x - y = -1$$
 and $9x - 3y = -6$

H
$$12x - 4y = -4$$
 and $x - 3y = -9$

J
$$9x - 3y = -6$$
 and $5x + 15y = 15$

53 The table below shows the relationship between I, the current in milliamperes (mA) through a filament, and t, the filament's temperature in degrees Celsius.

Temperature, t	Current, <i>I</i> (mA)
80	320
90	360
100	400
110	440

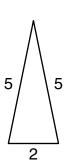
Which equation best represents the relationship between the quantities in the table?

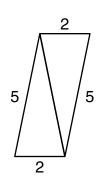
- $\mathbf{A} \quad I = \frac{1}{4}t$
- $\mathbf{B} \quad I = \frac{1}{40}t$
- **C** I = 40t
- $\mathbf{D} \quad I = 4t$

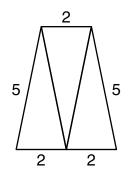
- 54 Mrs. Jones has a piece of carpet that is 12 feet long and 2 feet wide. She wants to cut off a section that is 3 feet long and 1 foot wide. She wants to cut up the remaining piece of carpet into 22 pieces that are 1 foot square. Why is this scenario impossible?
 - **F** A piece 3 feet long by 1 foot wide cannot be cut from the carpet.
 - **G** Some pieces of carpet would be left over.
 - **H** There is not enough carpet to cut all the pieces.
 - **J** The carpet cannot be cut into 1-square-foot pieces.

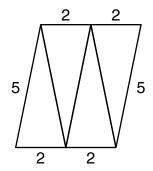
- 55 The radius of a spherical beach ball is 24 centimeters. If another spherical beach ball has a radius 3 centimeters longer, about how much greater is its surface area, to the nearest square centimeter?
 - **A** 37 cm²
 - **B** 113 cm²
 - C 1,923 cm²
 - **D** 24,542 cm²

56 Below are congruent isosceles triangles arranged in a sequence to obtain a geometric pattern.



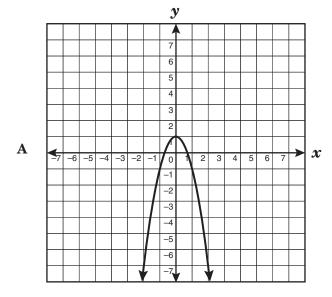


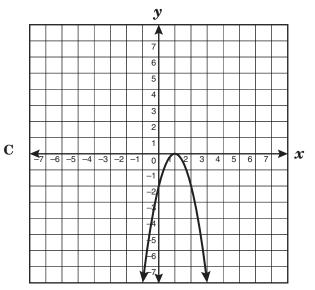


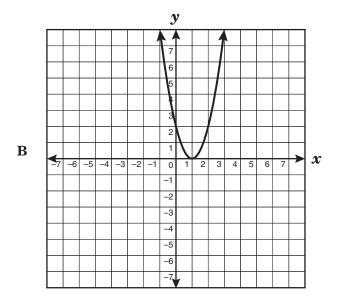


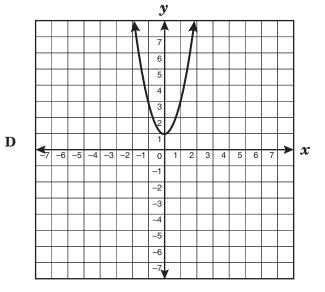
Which expression can be used to find the perimeter of a composite figure made up of t triangles arranged in this pattern?

- \mathbf{F} 12t
- **G** 2t + 10
- **H** 5t + 2
- **J** 12t 5

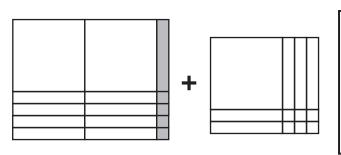


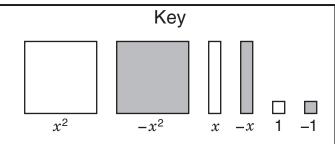






58 Look at the two polynomials modeled below using algebra tiles.





Which expression describes the sum of the two polynomials in terms of *x*?

F
$$3x^2 + 12x - 10$$

G
$$3x^4 + 12x^2 - 2$$

H
$$3x^2 + 12x + 2$$

J
$$2x^4 + 35x^2 - 24$$

59 Find the midpoint of the line segment with endpoints (4, -6.25) and (-15, 12.25).

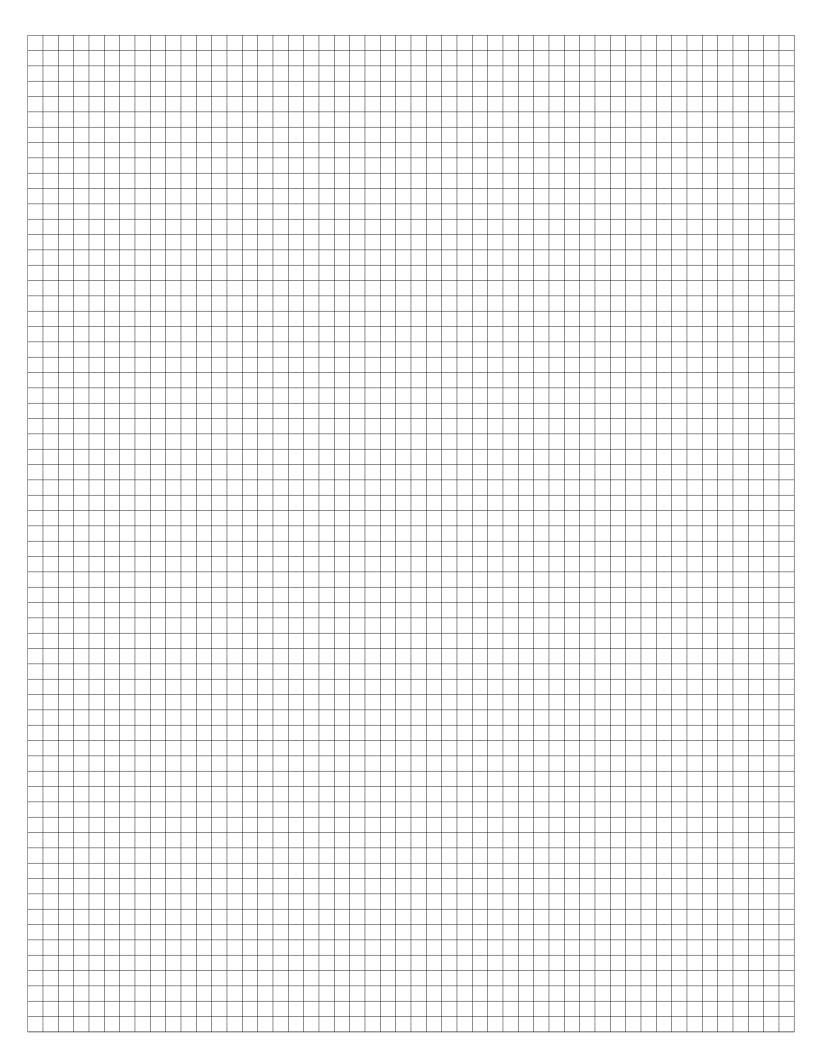
A
$$(-5.5, 3)$$

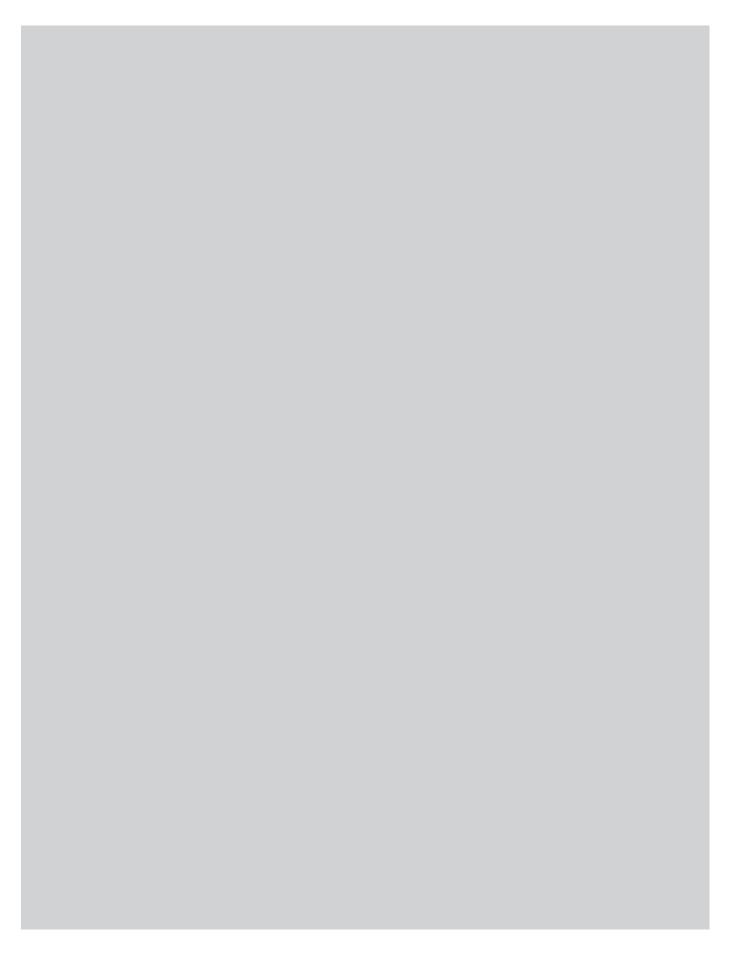
$$\mathbf{B}$$
 (-9.5, 9.25)

$$\mathbf{C}$$
 (-11, 6)

$$\mathbf{D}$$
 (-19, 18.5)

60 The math club at Hawthorne High School surveyed 180 students and found that 36 of them have a March birthday. Based on this information, which is the best prediction of the number of students at Hawthorne High School who have a March birthday if there are 867 students enrolled?





SCIENCE

FORMULA CHART

$Density = \frac{mass}{volume}$	$D = \frac{m}{v}$
$\begin{pmatrix} \text{heat gained} \\ \text{or lost} \end{pmatrix} = \begin{pmatrix} \text{mass in} \\ \text{grams} \end{pmatrix} \begin{pmatrix} \text{change in} \\ \text{temperature} \end{pmatrix} \begin{pmatrix} \text{specific} \\ \text{heat} \end{pmatrix}$	$Q = (m)(\Delta T)(C_p)$
$Speed = \frac{distance\ traveled}{time}$	$v = \frac{d}{t}$
$Acceleration = \frac{\text{final velocity} - \text{initial velocity}}{\text{change in time}}$	$a = \frac{v_{\rm f} - v_{\rm i}}{\Delta t}$
$Momentum = mass \times velocity$	p = mv
Force = $mass \times acceleration$	F = ma
$Work = force \times distance$	W = Fd
$Power = \frac{work}{time}$	$P = \frac{W}{t}$
$\% \text{ efficiency} = \frac{\text{work output}}{\text{work input}} \times 100$	$\% = \frac{W_{\rm O}}{W_{\rm I}} \times 100$
Kinetic energy = $\frac{1}{2}$ (mass × velocity ²)	$KE = \frac{mv^2}{2}$
Gravitational potential energy = mass \times acceleration due to gravity \times height	PE = mgh
Energy = mass \times (speed of light) ²	$E = mc^2$
Velocity of a wave = frequency \times wavelength	$v = f\lambda$
$Current = \frac{voltage}{resistance}$	$I = \frac{V}{R}$
Electrical power = voltage \times current	P = VI
Electrical energy = power \times time	E = Pt

Co	Constants/Conversions										
g = accel	eration due to gravity =	9.8 m/s ²									
$c = \mathrm{speed}$ of light = 3×10^8 m/s											
speed of so	speed of sound = 343 m/s at sea level and 20° C										
$1 \text{ cm}^3 = 1 \text{ mL}$											
1 wave cycle/second = 1 hertz (Hz)											
1 calorie (cal) = 4.18 joules											
1000 calories (cal) = 1 Calorie (Cal) = 1 kilocalorie (kcal)											
	newton (N) = kgm/s^2										
	joule (J) = Nm										
	watt (W) = $J/s = Nm/s$										
volt (V)	ampere (A)	ohm (Ω)									

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	18 VIIIA	² He	4.0026 Helium	₽ 9	20.179 Neon	18	<u>¥</u>	39.948 Argon	36	궃	83.80 Krynto	54	×	131.29 Xenon	98	듄	(222) Radon				71	<u> </u>	174.967 Lutetium	103	<u>ځ</u>	(262) Lawrencium
		ļ	VIIA	6 L	18.998 Fluorine	17	ರ	35.453 Chlorine	32	ğ	79.904 Browine	53	н	126.904	85	Αţ	(210) Astatine				70	Υb	173.04 Ytterbium	102	2	(259) Nobelium
		Ç	ol VIA	_∞ O	15.999 Oxygen	16	တ	32.066 Sulfur	34	Se	78.96	52	Te	127.60 Tellurium	84	Ъо	(209) Polonium				69	π	168.934 Thulium	101	Md	(258) Mendelevium
			d VA	∠ Z	14.007 Nitrogen	15	<u></u>	30.974 Phosphorus	33	As	74.922 Arsenic	51	Sp	121.763 Antimony	83	<u>ia</u>	208.980 Bismuth				89	ш	167.26 Erbium	100	Ę	(257) Fermium
	o well		14 IVA	ဖပ	12.011 Carbon	14	S	28.086 Silicon	32	පි	72.61 Germanium	50	Sn	118.71 Tin	82	Pb	207.2 Lead	e those of	isotope.		29	운	164.930 Holmium	66	Es	(252) Einsteinium
-14	- Si		T3 IIIA	D	10.81 Boron	13	₹	26.982 Aluminum	31	Са	69.72	49	占	114.82	81	F	204.383 Thallium	Mass numbers in parentheses are those of	the most stable or most common isotope.		99	ò	162.50 Dysprosium	86	ざ	(251) Californium
	_						ç	IIB	30	Zu	65.39	48	ප	112.41 Cadmium	80	Нg	200.59 Mercury	nbers in par	stable or mo		65	T	158.925 Terbium	26	鮝	(247) Berkelium
Atomic number	Symbol Symbol Atomic mass						Ţ	B	59	ე ე	63.546	47	Ag	107.868 Silver	79	Αn	196.967 Gold	Mass nun	the most		64	Вg	157.25 Gadolinium	96	E S	(247) Curium
Ato	Υ						5	2	28	Z	58.69 Nickel	46	Pd	106.42	78	풉	195.08 Platinum	110	(569)		63	Ш	151.97 Europium	95	Am	(243) Americium
							d	М	27	ပိ	58.933	45	Rh	102.906 Bhodium	77	Ļ	192.22 Iridium	109	(266)		62	Sm	150.36 Samarium		Pu	(244) Plutonium
Elements							o	0	56	Pe	55.847	44	æ	101.07 Buthenium	9/	SO	190.23 Osmium	108	(265)		61	Pm	(145) Promethium	93	g V	237.048 Neptunium
							^	VIIB	25	M	54.938 Mangapaga	5	ည	(98) Technetium	75	Re	186.207 Rhenium	107 D.L.	(262)		09	PZ	144.24 eodymium	92	>	238.029 Uranium
Periodic Table of the							ď	VIB	24	ပ်	51.996 Chromium		№	95.94 (98)	74	>	183.84 Tungsten	106	50 (263)		59	ሗ	140.908 Praseodymium N	91	Ра	231.036 Protactinium
Table							Ľ	NB VB	23	>	50.942 Vanadium	41	g	92.906 Niobium	Т	Та	180.948 Tantalum	105	(262)		58	ပီ	140.12 Cerium		ᆮ	232.038 Thorium
odic							4	IVB	22	F	47.88 Titanium	40	Zr	91.224 Zirconium	72	Ξ	178.49 Hafnium	104	71 (261)		/ /	_	_	_	_	_
Peri							٣	e III	21	သွ	44.956 Scandium	39	>	88.906 Yttrium	22	La	138.906 Lanthanum	88	227.028			Lanthanide Series			Actinide Series	
		Ó	Z IIA	₄ Be	9.012 Beryllium	12	Mg	24.305 Magnesium	20	S	40.08	38	ഗ്	87.62 Strontium	56	Ва	137.33 Barium	88	526.025			anthanic			Actinic	
	Group 1 IA	- エ	1.008 Hydrogen	ღ 🗀	6.941 Lithium	+	Na	22.990 Sodium	19	¥	39.098	37	윤	85.468 Bubidium	55	S	132.905 Cesium	87	(223)			_				
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DIRECTIONS

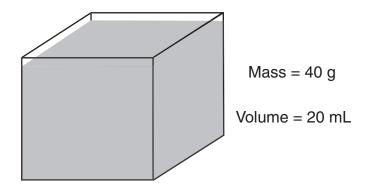
Read each question and choose the best answer. Then fill in the correct answer on your answer document.

SAMPLE A

When a 10% hydrochloric acid solution is heated in an open test tube, the test tube should always be pointed —

- A so bubbles are visible
- ${f B}$ at a 180° angle from the flame
- C toward a ventilated area
- **D** away from nearby people

SAMPLE B



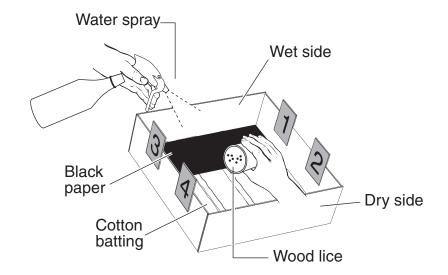
The picture shows a cube that contains 20~mL of a solution. The solution has a mass of 40~grams. What is the density in g/mL of this solution? Record and bubble in your answer on the answer document.

Organism X

Animalia
Vertebrata
Aves
Poecile carolinensis

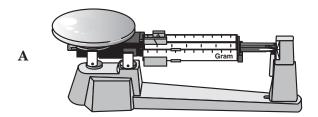
Organism 1	Organism 2	Organism 3	Organism 4
Animalia	Animalia	Animalia	Animalia
Vertebrata	Vertebrata	Vertebrata	Vertebrata
Reptilia	Amphibia	Aves	Aves
Anolis carolinensis	Bufo americanus	Poecile gambeli	Grus americana

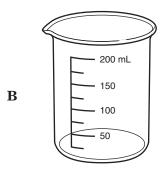
- 1 The chart shows the classification of four organisms found in Texas. Which organism is most closely related to Organism X?
 - A Anolis carolinensis
 - **B** Bufo americanus
 - C Poecile gambeli
 - **D** Grus americana

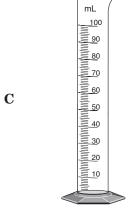


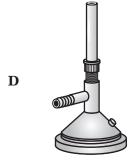
- ${\bf 2}$ The diagram shows a classroom setup for an experiment. This experiment was probably designed to determine wood lice
 - F social behaviors
 - G activity patterns
 - H speed
 - J habitat preferences

3 Which piece of equipment would be used to precisely measure the volume of an acid?

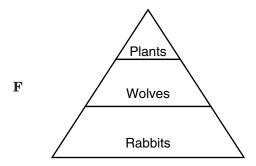


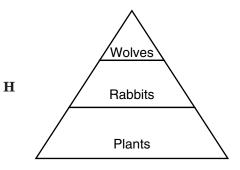


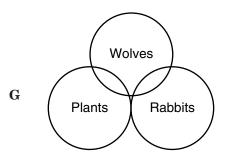


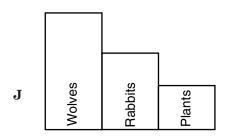


4 In a typical forest community, plants are producers, rabbits are primary consumers, and wolves are secondary consumers. Which diagram correctly represents these relationships?







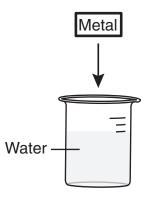


- **5** Which of these is the most appropriate unit of measure for reporting the density of a solid?
 - A g/cm³
 - B g/cm
 - **C** g/L²
 - \mathbf{D} g/mm²

- **6** The benefits of spines on a cactus are similar to the benefits of the
 - F scales on a butterfly wing
 - G talons on a hawk
 - **H** whiskers on a cat
 - J shell on a tortoise

	Examining Owl Pellets
	Ommuning Own peners
\cup	
	1. Obtain owl pellet and place in a dissecting tray
	2. Carefully break open the owl pellet with forceps and dissecting needle
	3. Remove fur and feathers from the bones
	4. Group the recovered bones into mammal and bird skeletons

- 7 When performing this activity, students must remember to
 - A label the equipment used
 - ${f B}$ keep hands away from face and mouth
 - ${f C}$ sterilize the dissecting needle before use
 - ${f D}$ disinfect the fur and feathers removed from the pellet

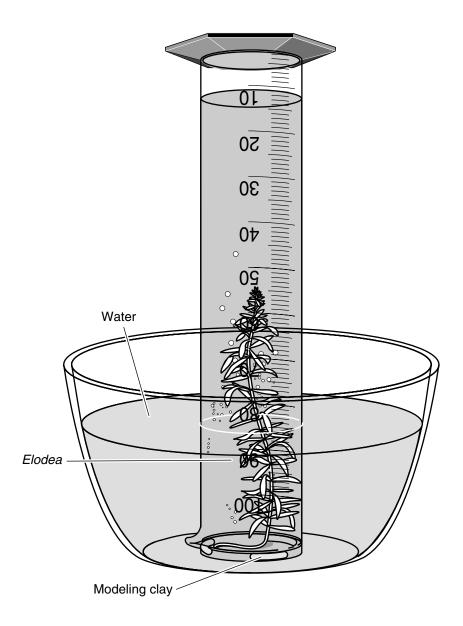


	Temperature (°C)	Mass (g)
Metal Block	120	100
Water	20	400

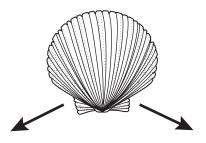
- 8 The temperature of the water increases by 8° C when the metal block is added. Which could cause the temperature of the water to increase by 10° C after the metal block is added?
 - F Using 500 g of water
 - G Using a larger beaker
 - H Adding more 20°C water
 - J Adding heat to the metal block

- **9** The small intestine is to nutrient absorption as the blood is to nutrient
 - A assimilation
 - **B** distribution
 - C regulation
 - **D** elimination

- 10 Heavy metals such as mercury, cadmium, and nickel are often found in landfills and occasionally leach into rivers, lakes, and other bodies of water. Such heavy metals are toxic to wildlife and to humans. Which of the following sources of environmental contamination is most often associated with these heavy metals?
 - F Batteries
 - G Plastics
 - H Automobile exhaust
 - J Tobacco smoke



- 11 The picture shows the results of a demonstration using the simple water plant *Elodea*. When the setup was placed in strong light, a space gradually appeared above the water in the graduated cylinder containing the plant. The gas in the space above the water was mostly
 - A oxygen
 - B carbon dioxide
 - C hydrogen
 - **D** nitrogen

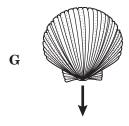


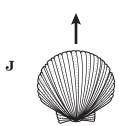
The picture above shows the directions in which water leaves this scallop's shell. Which picture below shows the direction the scallop will move?



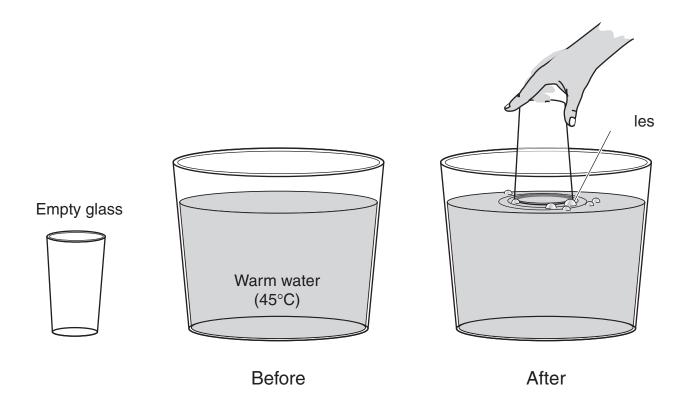








- 13 A guitar player is seated next to a piano. The piano player strikes an E key on the piano. The guitarist reports that this causes the E string on his guitar to vibrate. What is the name of this phenomenon?
 - A Polarization
 - **B** Resonance
 - C Reflection
 - **D** Diffraction



- 14 A glass is held upside down so that its open end is closed by the water's surface. Soon air bubbles begin to escape from the glass. The best explanation for this observation is that
 - ${f F}$ water condenses on the glass and escapes as a gas
 - G air in the glass increases the water temperature and causes bubbling
 - H pressurized water vapor rises rapidly and evaporates
 - **J** air trapped in the glass is warmed and expands in volume

Ancient Greeks and Science

The ancient Greeks developed a set of assumptions, based on observations, to explain how the universe works. These observations led the Greeks to believe that the universe was composed of four elements: earth, water, fire, and air. The "theory of natural place" was based on their observations of these four elements. The theory stated that anything not in its natural place would move toward its natural place as soon as an opportunity arose. The theory of natural place was the foundation for the modern understanding of the elements. The following chart describes some observations and assumptions made by the ancient Greeks.



Object	Observation	Assumption
Rock	Found in or on the ground; if not on the ground, rocks move toward it at first opportunity	Rocks are made of earth and seek the ground, their natural place.
Water	Flows over land	Water has its natural place on the ground.
Fire	Flames flicker upward; the greater the fire, the higher the flames	Fire's natural place is in the heavens, above the atmosphere.
Air	Blows across the land; if trapped in water, escapes at first opportunity	Air's natural place is in the space above the ground.
Burning wood	Gives off smoke, heat, and ash	Tree limbs are made of fire, earth, and air.
Smoke	Found in fires; if not confined, rises or moves across the land	Smoke is made of fire and air.
Feather	Floats to the ground	Feathers are made of air and earth.

- **15** Which of these fails to support the idea that water's natural place is on the ground?
 - A Hailstones
 - B Rain
 - C Waterfalls
 - D Clouds

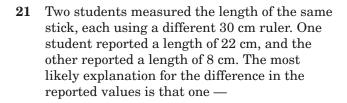
- 16 The Greek scholar Aristotle studied plants. He believed that plants obtain everything they need from the soil. Current understanding does not support this belief. Which of the following would least likely be absorbed from the soil?
 - F Minerals
 - G H_2O
 - H Nitrates
 - \mathbf{J} CO_2

- 17 A leaf from an apple tree falls to the ground more slowly than an apple falls. As an explanation of this observation, the ancient Greeks' theory of natural place has been replaced by a more recent theory involving gravitational force and
 - A atomic weight
 - B inertial mass
 - C air resistance
 - **D** kinetic energy

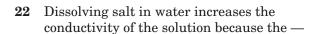
- 18 Because ancient Greeks lived close to water, they may have enjoyed a more constant climate than if they had lived inland. Water warms up and cools down more slowly than land. This is because of water's
 - F boiling point
 - G specific heat
 - H melting point
 - J specific gravity

- 19 Today, the observation that an air bubble in water rises to the surface is explained by the principle of
 - A viscosity
 - B buoyancy
 - C interference
 - **D** polarity

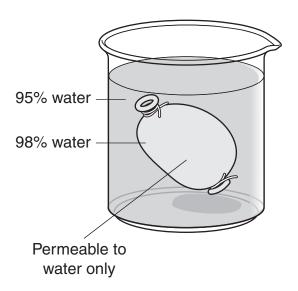
When 50 mL of isopropyl alcohol (39.5 g) is added to 50 mL of water (50 g), the mixture will have a volume of 98 mL. What is the mass in grams of this mixture? Record and bubble in your answer to the nearest tenth on the answer document.



- **A** student improperly read the ruler
- **B** ruler was metal and the other ruler was plastic
- C student viewed the ruler from a different angle
- **D** ruler was constructed with nonstandard cm marks



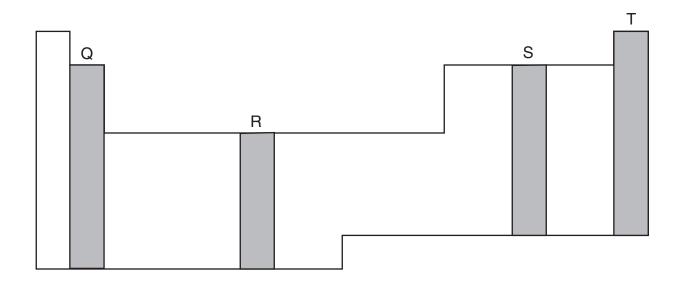
- **F** salt gives the solution a net negative charge
- G salt ions bond with the available water molecules
- H solution has an increase in kinetic energy
- J concentration of ions in the solution increases



- 23 The picture shows a cell model and the solutions associated with it. In this situation the cell model will
 - A gain mass
 - B shrink
 - C increase in solute content
 - **D** start to vibrate

- **24** Which of these conditions is caused by bacteria?
 - F AIDS
 - G Seasonal allergies
 - H Dental cavities
 - J Colds

- 25 Brown sugar consists of crystals of white sugar coated with molasses. If brown sugar hardens, it can be softened by heating. The most likely reason brown sugar softens when heated is that heat
 - A increases the moisture of sugar
 - B decreases the volume of molasses
 - C increases the density of sugar
 - D decreases the viscosity of molasses



- 26 Elements found in which shaded area of this periodic table undergo the fewest chemical reactions?
 - \mathbf{F} Q
 - G R
 - H S
 - **J** T

- **27** An increase in greenhouse gases is considered harmful because it
 - A allows more heat to be trapped in the lower atmosphere
 - B depletes carbon dioxide in the atmosphere
 - C releases energy trapped inside Earth
 - **D** destroys light energy that plants need for photosynthesis

- 28 "Thymine—guanine—thymine—cytosine" describes
 - F nucleotides within an RNA strand
 - G a sequence of bases within a DNA section
 - **H** points of DNA separation during protein synthesis
 - J tRNA codons for specific amino acids

29 The following hypothesis refers to iron in the topsoil found on an island formed from limestone.

Hypothesis: Much of the iron found in the topsoil of the island was carried from Africa by huge dust clouds.

Which study would most likely be used to investigate this hypothesis?

- A Tracking dust clouds with satellite photos
- **B** Determining the effects of iron on limestone
- C Calculating erosion rates in African limestone mines
- **D** Analyzing the content of comet dust clouds

- **30** Liquid 1 and Liquid 2 react to produce a solid and a gas. Which of the following expressions correctly shows how to determine the mass of the gas?
 - \mathbf{F} (mass of Liquid 1 + mass of Liquid 2) (mass of solid)
 - G (mass of Liquid 1 + mass of Liquid 2) + (mass of solid)
 - **H** (mass of Liquid $1 \times$ mass of Liquid 2) \div (mass of solid)
 - **J** (mass of Liquid 1 mass of Liquid 2) \div (mass of solid)

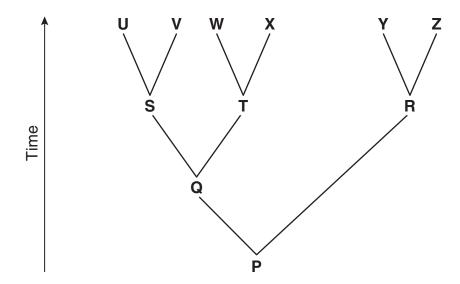
3'CGGUAU 5'

- 31 This is a short section of mRNA. Which DNA code probably produced this section of mRNA?
 - A 3'GCCTUT 5'
 - B 5'GCCAUT 3'
 - C 3'ATTGCC 5'
 - **D** 5'GCCATA 3'

- **32** Two competing species can thrive in the same community if they have
 - **F** the same habitat
 - G different niches
 - H similar diets
 - J different life spans

- **33** Which of the following is the most specific group used to classify organisms?
 - A Kingdom
 - B Class
 - C Genus
 - **D** Order

Grouping of Selected Species from a Single Phylum



- 34 The diagram shows relationships of selected species over time. According to this information, which of these species is expected to have the greatest phenotypic difference from the ancestral species?
 - F Species Q
 - G Species R
 - H Species T
 - J Species U
- 35 Enzymes allow viruses to insert their genetic material into the host cell's DNA. The virus benefits from this action by
 - A acquiring the traits of the host cell
 - **B** causing the host cell to produce viruses
 - C introducing random deadly mutations into the host cell
 - **D** turning the host cell into a virus

- 36 The structure of pure water makes it a good
 - F solvent
 - G catalyst
 - H conductor
 - J nutrient
- 37 The bonding characteristics of oxygen are most similar to the bonding characteristics of
 - A hydrogen
 - B silicon
 - C helium
 - **D** sulfur

38 Aluminum metal and oxygen gas combine to produce aluminum oxide (Al_2O_3) . Which of these is the balanced equation for this reaction?

$$\mathbf{F} \quad \mathrm{Al} + \mathrm{O}_2 \, \rightarrow \, \mathrm{Al}_2\mathrm{O}_3$$

$$G$$
 2Al + 2O₂ \rightarrow 2Al₂O₃

$$\mathbf{H} \ \ 2\mathrm{Al} + 3\mathrm{O}_2 \, \rightarrow \, 5\mathrm{Al}_2\mathrm{O}_3$$

$$J$$
 4Al + 3O₂ \rightarrow 2Al₂O₃

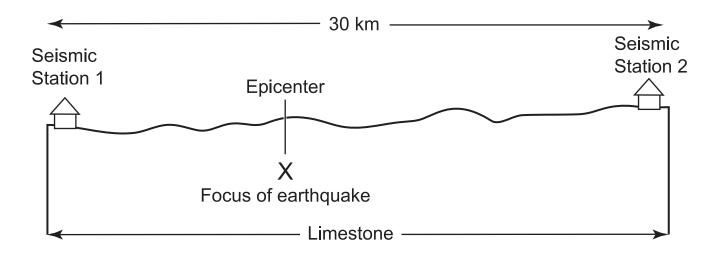
- **39** A researcher determined the percentage of electrical energy transformed into different forms of energy by a toaster. The best way to communicate these results is to display the data using a
 - A histogram
 - B circle graph
 - C line graph
 - D box-whisker graph

Electron Configuration

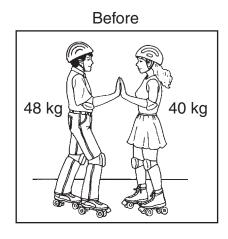
Energy level	1	2	3
Electrons	2	8	8

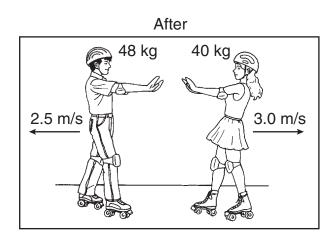
- **40** According to the periodic table and the information above, which element has this electron configuration?
 - F Sodium
 - G Neon
 - H Magnesium
 - J Argon

- 41 Working muscle cells that are deprived of oxygen produce
 - A alcohol
 - B lactic acid
 - C citric acid
 - **D** acetone



- 42 A surface wave generated by an earthquake was recorded at Seismic Station 1. Forty seconds later the same wave was recorded at Seismic Station 2. What accounts for the time difference?
 - **F** The origin of the wave is closer to Seismic Station 1.
 - **G** The speed of the wave decreases with distance.
 - **H** The wavelength is longer at Seismic Station 2.
 - **J** The wave frequency increases when the wave passes through soil.

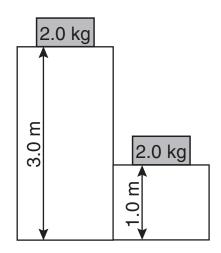




- 43 Starting from rest at the center of a skating rink, two skaters push off from each other over a time period of 1.2 s. What is the force of the push by the smaller skater?
 - **A** 16 N
 - **B** 32 N
 - C 88 N
 - **D** 100 N

Experimental Control Water and 5% root hormone Soil Sunflower seed Tomato seed Bean seed Water and 10% root hormone Soil Soil Sunflower seed Tomato seed Bean seed Water and 15% root hormone Soil Sunflower seed Tomato seed Bean seed

- 44 A valid study would include a control group containing
 - F bean seed, tomato seed, sunflower seed, and water
 - G water and 2% root hormone
 - H water only
 - J bean seed, tomato seed, sunflower seed, water, and 1% root hormone
- 45 A sugar cube in a test tube is heated over a Bunsen burner. The sugar cube turns black and has less mass than before it was heated. These changes occur because the sugar has
 - A melted
 - B boiled
 - C reacted chemically
 - **D** become hydrated

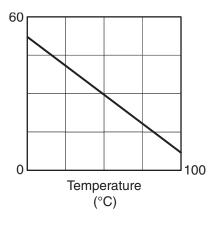


- 46 What is the approximate difference in gravitational potential energy of the two shaded boxes?
 - **F** 19 J
 - **G** 39 J
 - **H** 59 J
 - **J** 79 J

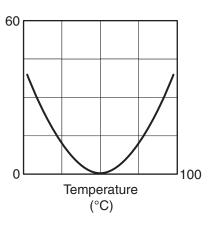
Group	Temperature (°C)	Solubility (g/100 mL)
Α	0	28
В	10	31
С	20	34
D	30	37
Е	40	40
F	60	45
G	80	51
Н	90	54
I	100	56

47 Nine groups of students dissolved as much potassium chloride as possible in water. Each group used 100 mL of water heated to a different temperature. Which graph shows the relationship between solubility and temperature for potassium chloride?

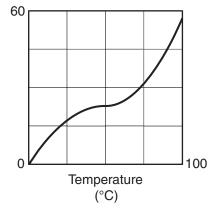
A



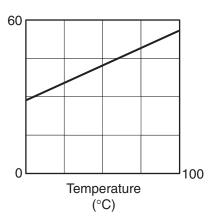
 \mathbf{C}



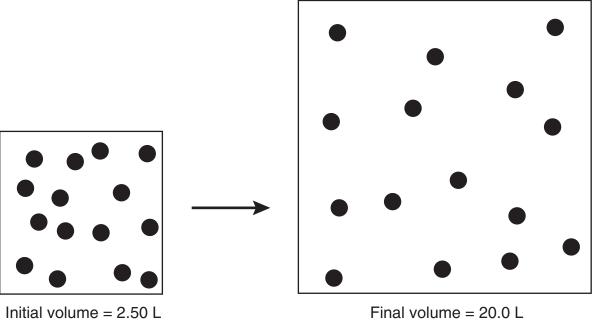
В



D



- 48 A change within a single base pair in DNA is least likely to be observable if the change affects
 - **F** the production of a stop codon
 - G an unexpressed recessive trait
 - H actions of a codominant allele
 - **J** the expression of a sex-linked trait



Initial volume = 2.50 L Mass = 1 g

- Final volume = 20.0 L Mass = 1 g
- 49 The diagram represents helium gas expanding to fill a larger container. What is the ratio of the helium gas's density at the final volume to its density at the initial volume?
 - **A** 1:1
 - **B** 4:1
 - **C** 1:8
 - **D** 1:50



- 50 This picture indicates that the chemical represented is
 - F pressurized
 - G corrosive
 - **H** flammable
 - \mathbf{J} toxic

- 51 A cyclist moves at a constant speed of 5 m/s. If the cyclist does not accelerate during the next 20 seconds, he will travel
 - **A** 0 m
 - **B** 4 m
 - **C** 50 m
 - **D** 100 m

Organism	Observed Characteristics
Q	Eukaryotic, photosynthetic, nonvascular, gametophytes larger than sporophytes
R	Eukaryotic, heterotrophic, nonvascular, reproduces with spores
S	Eukaryotic, photosynthetic, vascular, sporophytes larger than gametophytes
Т	Eukaryotic, photosynthetic, vascular, reproduces with seeds

- **52** According to this information, three of these organisms should be placed in the same kingdom. Which organism should be placed in a different kingdom?
 - F Q
 - G R
 - H S
 - **J** T

- **53** A tick feeding on the blood of a dog is an example of
 - A commensalism
 - B parasitism
 - C neutralism
 - **D** mutualism

Migraine Headaches!

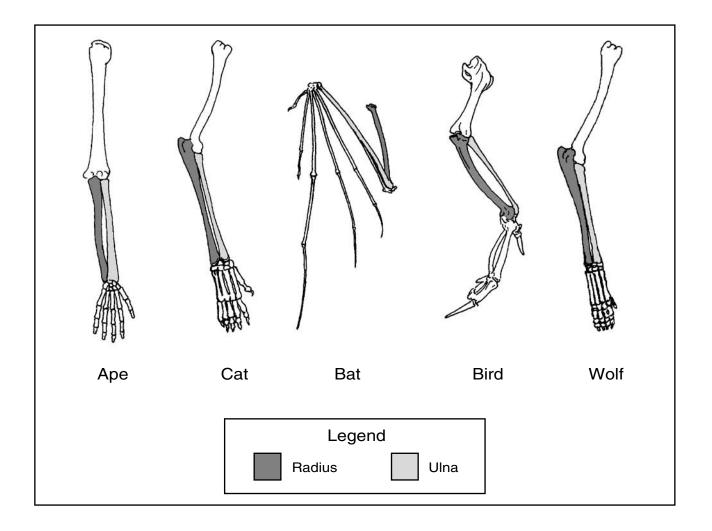
When the pain of a migraine starts ... When the pain of a migraine builds ... When the pain is full-blown ...



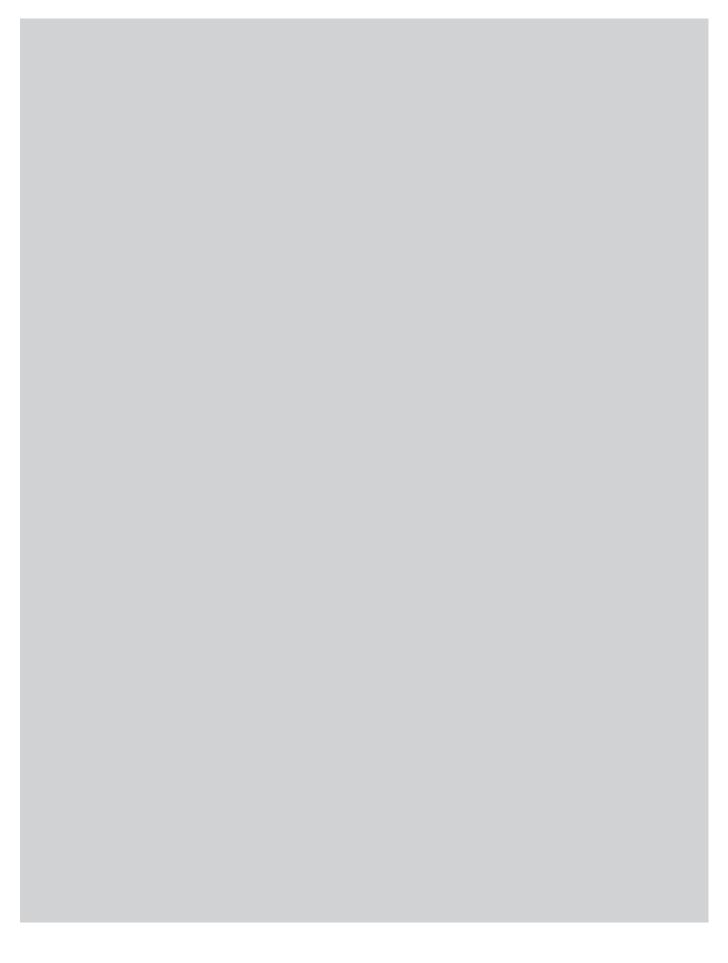
AvexTec is a prescription medicine that only your doctor can decide is right for you. AvexTec is not designed to prevent the onset of migraine headaches. Rather, it can relieve migraines once they start. Those diagnosed with uncontrolled high blood pressure and certain types of heart disease should not take AvexTec. Some people without recognized heart disease may have serious heart-related complications. If you believe that you have risk factors for heart disease, such as high blood pressure, high cholesterol, smoking, or a family history of heart disease, or if you are pregnant, nursing, or taking other medications, talk to your doctor.

Call for a valuable coupon toward your first purchase!

- **54** Which conclusion about AvexTec is supported by information in this advertisement?
 - **F** AvexTec is available over the counter at local pharmacies and grocery stores.
 - G People who take AvexTec every day will seldom experience pain from migraines.
 - H Research indicates that AvexTec prevents migraine headaches.
 - **J** AvexTec can be prescribed to reduce pain from migraines.



- 55 According to these anatomical structures, which two animals are probably most closely related?
 - A Ape and bat
 - B Bat and bird
 - C Bird and cat
 - **D** Cat and wolf



SOCIAL STUDIES

DIRECTIONS

Read each question and choose the best answer. Then fill in the correct answer on your answer document.

SAMPLE A

Who served as president of the United States during the Civil War?

- A Thomas Jefferson
- **B** Andrew Jackson
- C James K. Polk
- **D** Abraham Lincoln

- 1 In a democracy, freedom of speech and freedom of the press allow citizens to
 - A express opinions on important issues
 - **B** disobey controversial laws without consequences
 - C change government policies through the use of violence
 - **D** knowingly publish falsehoods for the purpose of ruining someone's reputation

- 2 During World War I and World War II, American women —
 - F served in Congress in large numbers
 - G boycotted industries with government contracts
 - **H** replaced many men in the civilian workforce
 - **J** served in combat positions overseas

Use the photograph and your knowledge of social studies to answer the following question.



Source: CORBIS

- ${\bf 3}$ $\,$ This photograph shows child workers in a textile mill. In the late 19th and early 20th centuries, many U.S. employers
 - A required vocational training programs for children
 - **B** hired children as a source of cheap labor
 - C sought government regulation of child labor
 - D provided safe working conditions for child laborers

Use the excerpt and your knowledge of social studies to answer the following question.

Nothing is particularly hard if you divide it into small jobs.

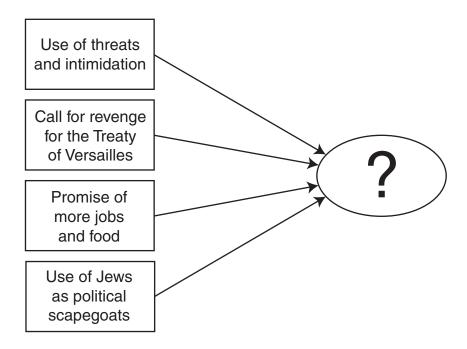
- 4 The statement above, which describes the innovative manufacturing process of the assembly line, was made by
 - **F** Orville Wright
 - G Henry Bessemer
 - **H** Henry Ford
 - J Charles Lindbergh

Use the chart and your knowledge of social studies to answer the following question.

Colonial Grievance	Constitutional Remedy
• Taxation without representation	• A popularly elected Congress makes tax laws.
The quartering of British troops in private homes	• The Third Amendment forbids the quartering of troops in private homes in peacetime.
Being transported to Britain to be tried for offenses committed in the colonies	?

- 5 Which of the following constitutional remedies best completes the chart above?
 - A The First Amendment guarantees freedom of speech.
 - B The Eighth Amendment prohibits excessive bail.
 - C The Second Amendment grants the right to bear arms.
 - **D** The Sixth Amendment provides for a fair and speedy trial.

Use the diagram and your knowledge of social studies to answer the following question.



- **6** Which of the following best completes the diagram above?
 - **F** The Nazis rise to power in Germany.
 - G The United States declares a policy of neutrality.
 - H The military seizes power in Japan.
 - J The Soviet Union annexes Poland.

Use the table and your knowledge of social studies to answer the following question.

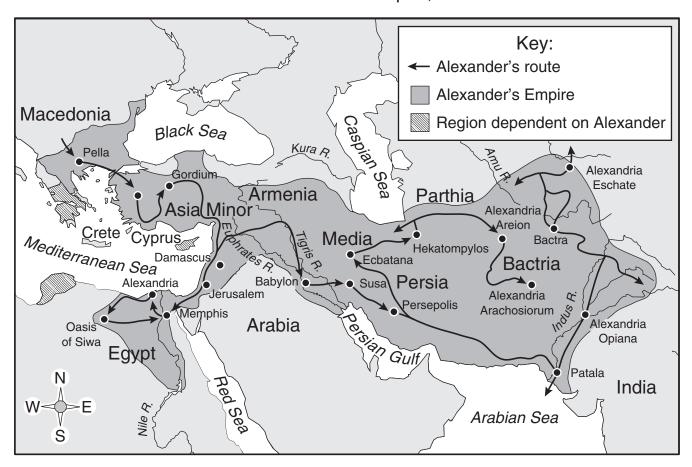
Estimated Indicators of Health in Selected Countries, 2000–2005

Country	Life Exp	ectancy	Infant Mortality Rate	
Country	Male	Female	(per 1,000 live births)	
Australia	76.4	82.0	6	
Bolivia	61.8	66.0	56	
China	68.9	73.3	37	
Egypt	66.7	71.0	41	
Turkmenistan	63.9	70.4	49	

Source: United Nations

- **7** According to the information in the table, which of the following countries probably has the lowest standard of living?
 - **A** Egypt
 - **B** Turkmenistan
 - C Bolivia
 - **D** Australia

Alexander the Great's Empire, c. 323 B.C.



- f 8 Based on the information on the map, it can be concluded that by around 323 B.C. the empire of Alexander the Great
 - F extended north of the Black Sea
 - G encompassed the entire continent of Asia
 - H extended from the eastern Mediterranean to India
 - J included all the territory surrounding the Red Sea

Use the information in the box and your knowledge of social studies to answer the following question.

- Freedom of speech
- Due process of law
- Right to a trial by jury
- **9** The items listed above are all found in the
 - A Articles of Confederation
 - B Bill of Rights
 - C Magna Carta
 - D Declaration of Independence

- 10 The effectiveness of nonviolent protest for the Civil Rights movement was demonstrated by which of the following?
 - **F** The Montgomery bus boycott
 - G The internment of Japanese Americans
 - H The Truman Doctrine
 - J The Good Neighbor policy

- 11 As a result of technological innovations in the late 1800s and early 1900s, industrialized nations
 - A lowered protective tariffs
 - **B** eliminated periods of economic depression
 - C raised their standard of living
 - **D** increased immigration restrictions

Use the information in the box and your knowledge of social studies to answer the following question.

Statement 1: We have a responsibility to honor their independence.

They fought side by side with us against the Spanish.

Statement 2: They cared for our wounded and did not mistreat the Spanish prisoners.

Statement 3: With their help we were able to surround Manila and capture the Spanish garrison.

Statement 4: In the interest of civilization, we must take their land.

These savage heathens are ill equipped to rule their own country.

- **12** Bias is illustrated in which of the above statements?
 - F Statement 1
 - G Statement 2
 - H Statement 3
 - J Statement 4

Use the excerpt and your knowledge of social studies to answer the following question.

We have learned that we cannot live alone, at peace; that our own well-being is dependent on the well-being of other nations far away. We have learned that we must live as men, not as ostriches, nor as dogs in the manger.

We have learned to be citizens of the world, members of the human community.

- Franklin D. Roosevelt, Fourth Inaugural Address, January 1945
- 13 In the speech excerpted above, President Roosevelt argued that the United States needed to abandon its foreign policy of
 - A containment
 - B imperialism
 - C internationalism
 - **D** isolationism

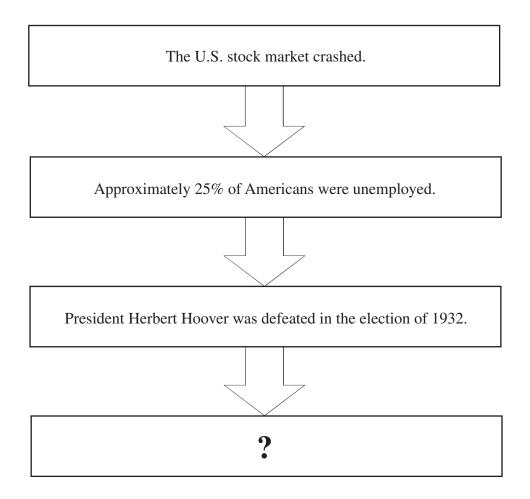
Use the cartoon and your knowledge of social studies to answer the following question.



Source: Westerville Public Library

- 14 The point of view expressed in the cartoon is that
 - F the methods used by the Anti-Saloon League contributed to liquor consumption
 - G aggressive measures were necessary to address the evils of liquor
 - H poverty and crime were not the direct result of liquor consumption
 - J disease and waste were caused by the actions of the Anti-Saloon League

Use the diagram and your knowledge of social studies to answer the following question.



- 15 Which of the following best completes the sequence of events in the diagram?
 - A The U.S. economy was stimulated when the United States withdrew from World War II.
 - B Progressive Era reforms brought greater government regulation of the economy.
 - C The United States reinforced its laissez-faire economic policy.
 - **D** Congress responded to the economic crisis by passing New Deal legislation.

- 16 Which of the following occurred as a result of the ratification of the 14th Amendment to the U.S. Constitution?
 - **F** Women were granted the right to vote.
 - **G** Citizenship was extended to former slaves.
 - **H** The authority of the federal judiciary was expanded.
 - **J** The rights of immigrants were protected.

- 17 During the Progressive Era, reformers succeeded in making the political process more democratic by enacting legislation that
 - A made education mandatory in every state
 - **B** provided for the direct election of senators
 - C allowed 18-year-olds to vote
 - D provided funds for settlement houses

Use the table and your knowledge of social studies to answer the following question.

Percentage of African Americans Who Completed Four Years of High School or More

Year	Percentage
1965	27.2
1970	33.7
1975	42.5
1980	51.2
1985	59.8
1990	66.2
1995	73.8
2000	78.9

Source: U.S. Census Bureau

- 18 The trend represented in the table above most likely resulted from
 - **F** the efforts of the Civil Rights movement
 - G government support of private schools
 - H the strengthening of Jim Crow laws
 - J segregation in public schools

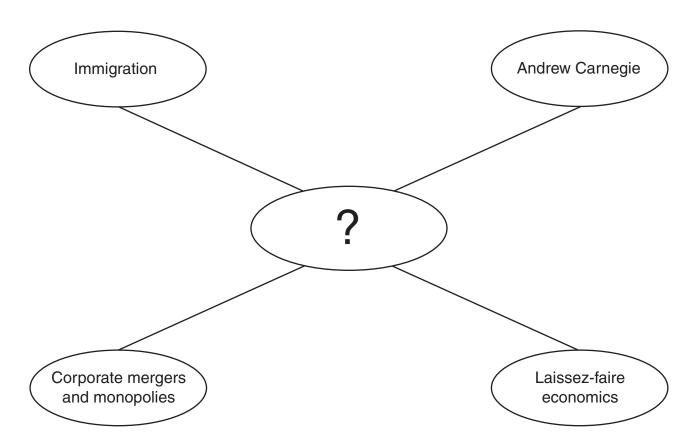
Use the excerpt and your knowledge of social studies to answer the following question.

The consumer boycott is the only open door in the dark corridor of nothingness down which farm workers have had to walk for many years. It is a gate of hope through which they expect to find the sunlight of a better life for themselves and their families.

— César Chávez

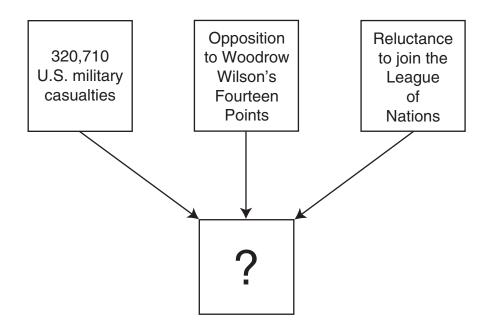
- **19** According to the excerpt, what did César Chávez advocate to open the door to a better life?
 - A Sit-ins
 - B Refusal to purchase certain goods
 - C Petitions
 - **D** Voter registration drives

Use the diagram and your knowledge of social studies to answer the following question.



- 20 Which of the following best completes the diagram above?
 - F Industrialism
 - G Imperialism
 - H Prohibition
 - J Reconstruction

Use the diagram and your knowledge of social studies to answer the following question.



- 21 Which of the following best completes the diagram above?
 - A A return to isolationism
 - **B** Raids on extremist groups
 - C Restrictions on immigration
 - D The impact of demobilization

- **22** The 1968 Tet offensive in South Vietnam resulted in
 - F the capture of Ho Chi Minh by U.S. troops
 - G the final defeat of North Vietnamese forces
 - **H** a loss of public confidence in the U.S. government
 - J Cambodian attacks on U.S. military bases

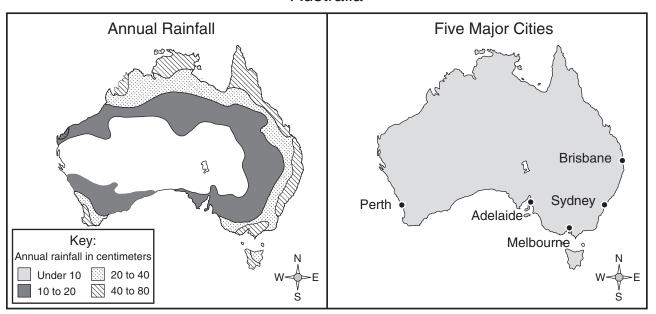
Use the information in the box and your knowledge of social studies to answer the following question.

- Varying elevation
- Tropical climate
- Swampy land
- Rock slides
- Yellow fever
- 23 The best title for the box above is
 - A Obstacles to Building the Transcontinental Railroad
 - **B** Challenges During the Construction of the Panama Canal
 - C Difficulties Faced by Pioneers Settling the Great Plains
 - Problems Encountered by Immigrants Entering at Ellis Island

- 24 Which of the following was instrumental in halting the German advance across the Soviet Union during World War II?
 - **F** The superior organization of the Soviet forces
 - G Russian access to the Atlantic Ocean
 - H The effects of the harsh Russian winter
 - **J** The use of atomic weapons by the Soviets

Use the maps and your knowledge of social studies to answer the following question.

Australia



Source: Geoscience Australia

- **25** Based on the maps above, it can be concluded that
 - A the interior regions of Australia have the highest rainfall totals and the most major cities
 - B the annual rainfall amounts have no impact on the location of the major cities
 - C most of Australia's five largest cities are located in areas with high rainfall totals
 - D low annual rainfall has prevented the growth of large cities along the coastline

- 26 Clarence Darrow and William Jennings Bryan were the lead attorneys in the famous 1925 case that dealt with
 - **F** the prosecution of suspected anarchists
 - G an investigation of the U.S. stock market
 - **H** the teaching of the theory of evolution in public schools
 - J violations of antitrust laws by U.S. businesses

- 27 Which of the following is the most valid statement regarding the long-term effects of the Great Depression?
 - **A** The government placed fewer restrictions on large corporations.
 - **B** The economic role of the federal government was expanded.
 - C The government reduced its dependence on foreign trade.
 - **D** The American people had less confidence in the nation's presidential leadership.

Use the table and your knowledge of social studies to answer the following question.

Population, Land Area, and Density for the 10 Largest U.S. Cities: 1990

Rank	U.S. City	Population	Land Area (square miles)	Density (average population per square mile)
1	New York, NY	7,323,000	309	23,700
2	Los Angeles, CA	3,485,000	469	7,400
3	Chicago, IL	2,784,000	227	12,300
4	Houston, TX	1,631,000	540	3,000
5	Philadelphia, PA	1,586,000	135	11,700
6	San Diego, CA	1,111,000	324	3,400
7	Detroit, MI	1,028,000	139	7,400
8	Dallas, TX	1,007,000	342	2,900
9	Phoenix, AZ	983,000	420	2,300
10	San Antonio, TX	936,000	333	2,800

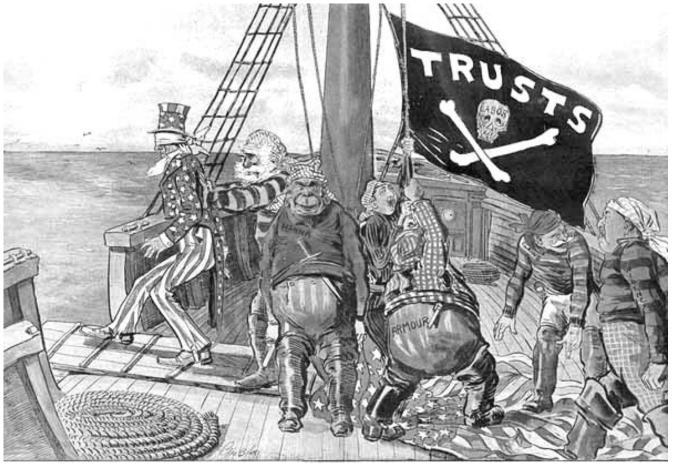
Source: U.S. Census Bureau

- 28 Which of the following statements is most accurate, based on the table above?
 - **F** The cities with the greatest land area have the lowest population.
 - **G** Population density is greater in cities located in the North.
 - H The cities with the greatest population have the greatest population density.
 - **J** The cities with the greatest land area have the greatest population.

- **29** Which of the following is guaranteed in the Bill of Rights?
 - A The right to vote
 - B The right to own property
 - C The right to work
 - **D** The right to a public trial

- **30** Which of the following geographic features contributed most to U.S. isolationism?
 - F Wide rivers
 - G Large deserts
 - **H** High mountains
 - J Vast oceans

Use the cartoon and your knowledge of social studies to answer the following question.

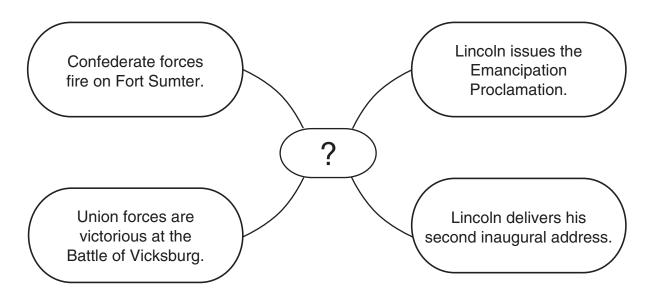


ONE SEES HIS FINISH UNLESS GOOD GOVERNMENT RETAKES THE SHIP.

Source: Public domain

- 31 The cartoon above expresses the opinion that
 - A monopolistic practices by big business are a threat to the United States
 - **B** the U.S. government should pass stricter immigration laws
 - C high protective tariffs are preventing U.S. trade with foreign countries
 - D the U.S. government must relax regulations on big business

Use the diagram and your knowledge of social studies to answer the following question.



- **32** Which of the following date ranges best completes the diagram?
 - **F** 1776–1781
 - **G** 1846–1848
 - **H** 1812–1814
 - **J** 1861–1865

- **33** The delegates to the Constitutional Convention of 1787 met to correct the defects of the
 - A Bill of Rights
 - **B** Northwest Ordinance
 - C Articles of Confederation
 - **D** Declaration of Independence

Use the excerpt and your knowledge of social studies to answer the following question.

Excerpt from the First *Lusitania* Note to Germany

In view of recent acts of the German authorities in violation of American rights on the high seas which culminated in the torpedoing and sinking of the British steamship *Lusitania* on May 7, 1915, by which over 100 American citizens lost their lives, it is clearly wise and desirable that the government of the United States and the Imperial German government should come to a clear and full understanding as to the grave situation which has resulted.

- President Woodrow Wilson, May 13, 1915
- **34** What effect did the event described in the excerpt above have on the United States?
 - **F** It caused the United States to join Germany in the Triple Alliance.
 - **G** It resulted in the creation of the United Nations.
 - **H** It led to U.S. rejection of the Treaty of Versailles.
 - **J** It influenced U.S. public opinion against Germany.

Use the information in the box and your knowledge of social studies to answer the following question.

- Creation of NATO
- McCarthyism
- Launch of Sputnik I
- Cuban Missile Crisis
- **35** All the events listed above are associated with which period in U.S. history?
 - A World War II
 - **B** The Great Depression
 - C The Cold War
 - **D** The Progressive Era

Use the table and your knowledge of social studies to answer the following question.

Percentage Change in Population for Texas and the United States

	Population, 2000	Percentage Change in Population, 1990–2000	Population, 2001 Estimate	Percentage Change in Population, April 1, 2000– July 1, 2001
Texas	20,851,820	22.8%	21,325,018	2.3%
United States	281,421,906	13.1%	284,796,887	1.2%

Source: U.S. Census Bureau

- **36** It can be concluded from the table above that
 - F the population of Texas is growing at a faster rate than that of the United States as a whole
 - G Texas and the United States each experienced the same rate of population growth
 - H the percentage change in population for Texas was greater than that of any other state
 - ${f J}$ the poor job market in Texas resulted in a decline in population

Use the excerpt and your knowledge of social studies to answer the following question.

Excerpt from the Declaration of Independence

When, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another . . .

- **37** Who is credited with writing most of the document excerpted above?
 - A Samuel Adams
 - B Thomas Paine
 - C Thomas Jefferson
 - **D** George Washington

- **38** What was the significance of the ratification of the 15th Amendment to the U.S. Constitution?
 - **F** It granted the right to vote to African American men.
 - **G** It granted citizenship to Native Americans.
 - **H** It outlawed discrimination in public places.
 - **J** It provided for the admission of new states to the Union.

Use the excerpt and your knowledge of social studies to answer the following question.

Excerpt from a Fireside Chat

We are now in the midst of a war, not for conquest, not for vengeance, but for a world in which this nation, and all that this nation represents, will be safe for our children. We expect to eliminate the danger from Japan, but it would serve us ill if we accomplished that and found that the rest of the world was dominated by Hitler and Mussolini.

— Franklin D. Roosevelt

- **39** What event is Roosevelt referring to in the excerpt above?
 - A World War I
 - B World War II
 - C The Cold War
 - **D** The Korean War

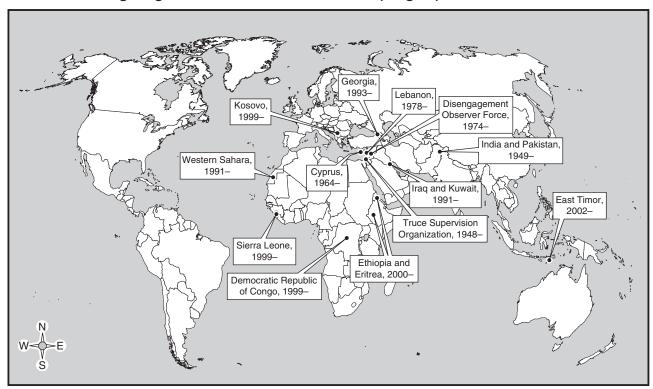
Use the information in the box and your knowledge of social studies to answer the following question.

Great Depression Scenario

- 1. An investor goes to a broker to buy stock but doesn't have enough money.
- 2. The broker allows the investor to buy stock on credit.
- 3. The broker borrows money from a bank to buy the investor's stock.
- 4. The stock market crashes.
- 5. The broker wants his money from the investor.
- 6. The bank wants its money from the broker.
- 40 During the Great Depression, what usually happened when a majority of investors and brokers couldn't pay back their loans?
 - **F** The banks failed.
 - **G** The investors went to jail.
 - **H** The brokers lost their licenses.
 - **J** The government paid off all the loans.

- 41 The federal government gave land grants to railroads in order to
 - **A** prevent the growth of labor unions in U.S. industries
 - **B** promote government ownership of factories
 - $\begin{array}{ll} \textbf{C} & \text{support the economic development of the} \\ & \text{West} \end{array}$
 - **D** prevent European investors from controlling U.S. industry

Ongoing United Nations Peacekeeping Operations, 2003



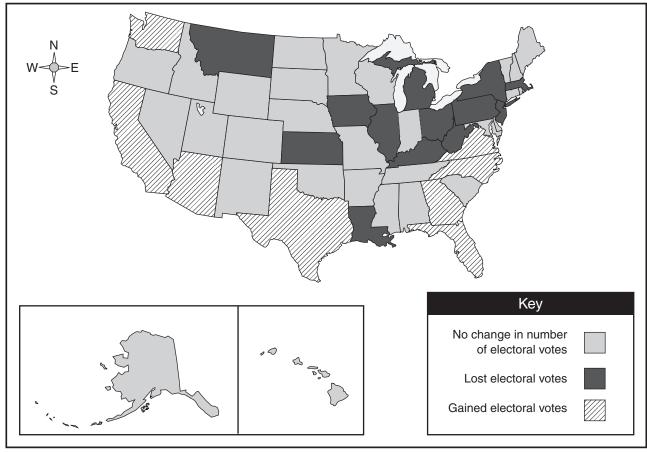
Source: United Nations Department of Public Information

- 42 According to the map, in which of the following regions does the United Nations have peacekeeping operations?
 - F South America
 - G Northern Europe
 - H Central America
 - J The Middle East
- **43** Which of the following historical periods is most associated with efforts by the U.S. government to promote the political equality of African Americans?
 - A Gilded Age
 - **B** Civil Rights movement
 - C Great Depression
 - **D** Progressive movement

Use the information in the box and your knowledge of social studies to answer the following question.

- Life
- Liberty
- Pursuit of happiness
- 44 The items listed in the box above are most closely associated with
 - **F** citizenship requirements
 - G inalienable rights
 - H limited government
 - ${f J}$ checks and balances

Changing Distribution of U.S. Electoral Votes, 1981–2000



Source: Federal Election Commission

- Which of the following statements about the change in distribution of U.S. electoral votes from 1981 to 2000 is the most accurate?
 - A Most states bordering the Great Lakes lost electoral votes.
 - **B** States along the Pacific Ocean lost more electoral votes than any other region.
 - C There was no change in the number of electoral votes in most Gulf Coast states.
 - **D** States bordering Mexico lost electoral votes.
- **46** Which of the following is an economic situation in which individuals produce crops for their personal needs rather than for sale?
 - **F** Corporate agriculture
 - **G** Cooperative farming
 - H Market-oriented agriculture
 - J Subsistence farming

Use the poster and your knowledge of social studies to answer the following question.



Source: CORBIS

- 47 The purpose of World War II posters such as the one above was to encourage women to
 - A sell bonds for the war effort
 - B support government rationing
 - C play an active role in the war effort
 - **D** pursue opportunities in higher education

Use the table and your knowledge of social studies to answer the following question.

Median Age (2002) and Life Expectancy (2003 estimated) of Selected Countries

Country	Total Median Age	Male Median Age	Female Median Age	Total Life Expectancy at Birth	Male Life Expectancy at Birth	Female Life Expectancy at Birth
Afghanistan	18.9	19.1	18.7	46.97	47.67	46.23
China	31.5	31.2	31.7	72.22	70.33	74.28
Ethiopia	17.3	17.4	17.3	41.24	40.39	42.11
France	38.3	36.8	39.8	79.28	75.63	83.11
Liberia	18.1	17.7	18.4	48.15	47.03	49.3
Mexico	23.8	22.9	24.6	72.3	69.26	75.49
United States	35.8	34.5	37.1	77.14	74.37	80.05
Zimbabwe	18.9	18.9	18.9	39.01	40.09	37.89

Source: CIA World Factbook

- 48 Based on the table above, it can be concluded that
 - F men have a longer life expectancy than women
 - G countries with lower median ages also have shorter life expectancies
 - H deaths from childbirth result in a lower median age for women than for men
 - **J** a longer life expectancy is a result of proximity to the equator

Use the cartoon and your knowledge of social studies to answer the following question.

Three Men In A Tub



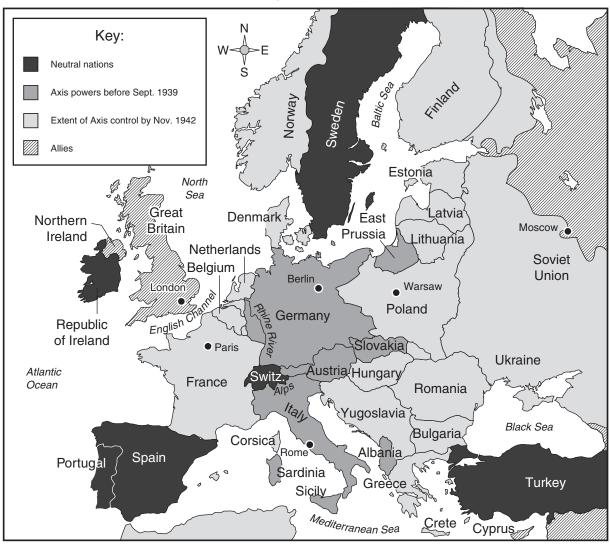
Source: CORBIS

- **49** The view expressed in the cartoon above is that
 - A both political parties cooperated to establish an effective foreign policy
 - B the public supported foreign-policy decisions made by the two political parties
 - C U.S. foreign-policy decisions made the world safer
 - **D** neither political party wanted to take responsibility for U.S. foreign-policy decisions

Use the information in the box and your knowledge of social studies to answer the following question.

- Higher wages
- Safer working conditions
- Collective bargaining
- **50** The items in the box above are most closely associated with the
 - F expansion of U.S. railroads
 - G development of labor unions
 - H deregulation of big business
 - J rise of organized crime

Use the map and your knowledge of social studies to answer the following question.



Europe During World War II, 1942

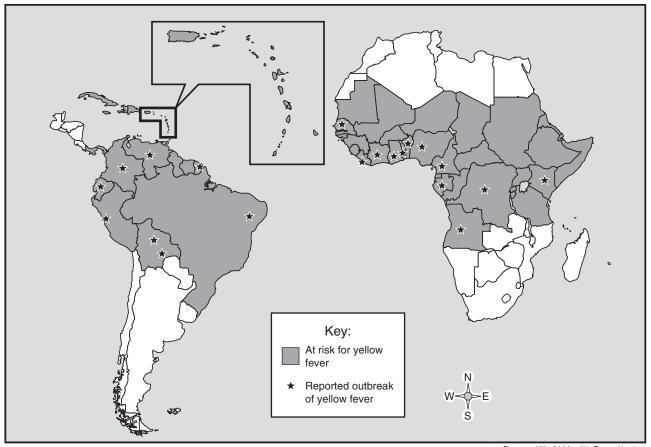
- **51** Which of these geographic features most likely played a significant role in preventing the Axis powers from taking control of Great Britain during World War II?
 - A The Alps
 - B The Rhine River
 - C The English Channel
 - D The Mediterranean Sea

Use the information in the box and your knowledge of social studies to answer the following question.

- To find better jobs with higher wages
- To escape prejudice and discrimination
- To search for better housing
- To gain more political rights
- 52 The items in the box describe the reasons for the
 - **F** mass migration of African Americans to northern cities in the early 1900s
 - G limits placed on European immigration in the 1930s
 - **H** government's abandonment of laissezfaire economic policy in the 1920s
 - J development of political parties in the 1790s

- 53 One of the main reasons that air pollution increased in the 1950s was the
 - A shift from the use of natural gas to electricity to heat homes
 - **B** new government legislation to regulate defense industries
 - C population shift as people moved from cities to rural areas
 - **D** growing use of automobiles resulting from the development of suburbs

Countries at Risk for Yellow Fever, 1985–2002[†]



Source: World Health Organization

†Data as of November 2002

- 54 It can be concluded from the map that
 - F the threat of yellow fever has been eliminated in the Western Hemisphere
 - G South America has had more outbreaks of yellow fever than Africa has had
 - H outbreaks of yellow fever have been a problem in South America and Africa
 - J the Caribbean Islands have not been at risk for yellow fever

Use the headline and your knowledge of social studies to answer the following question.



- **55** The event referred to in the headline above led directly to the
 - A collapse of the U.S. stock market
 - **B** formation of the North Atlantic Treaty Organization
 - C entry of the United States into World War II
 - **D** beginning of the Cold War