

Webster County Schools

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9th – 12th Grade

Packet 5

English

Name: _____ Class: _____

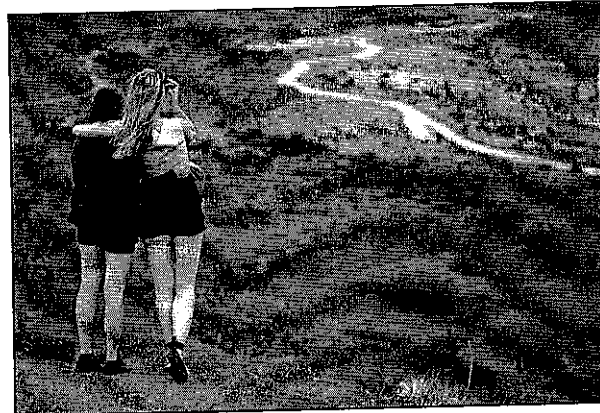
Help-Giving

By Set to Go
2019

How do we help the friends who depend on us for guidance and advice? This informational text explores the responsibility of helping others as a necessary life skill. As you read, take notes on what it means to help friends and why this responsibility is significant.

- [1] As a teen or young adult, you're likely to confide¹ in a good friend to talk about your troubles. When you and your friends turn to each other to talk about problems, you depend on each other for advice and guidance.

One positive aspect of our growth and independence is making the important decision to help our friends and commit to looking out for each other. However, this also gives us the responsibility to learn what it means to help friends. It also means we need to learn how to recognize when it is time to address a problem, or share with a parent or trusted adult a difficult situation that our friends might be going through.



"two women standing on mountain while looking on road" by Irina Gorskaia is licensed under CC0

As human beings, we are dependent on connections with others for our happiness, as well as our emotional and physical health. Our connection with others undergoes an important change as we enter our late teenage years. Our attention and time spent with people often shifts toward spending more time with friends and less time with family. We will, more often than not, still be deeply attached to our family, but our friends — and then ultimately romantic relationships — will continue to play bigger roles in most of our lives.

This is also a crucial stage in the development of help-giving as a life skill. Older teenagers are entering a time in life when many issues begin to emerge. Personal problems can become more complicated or serious. Teenagers often find themselves in circumstances where they need the help of those closest to them: their peers.

1. **Confide (verb):** to tell someone about a secret or private matter while trusting them not to repeat it to others

Identify signs

- [5] The first step toward helping others is to identify that they need help. It's common to have periods of difficulty throughout our lives. Difficulties are often no more than brief challenges that are part of growing up. However, sometimes common issues can intensify² and lead to more serious problems that require more help. It's important to learn how to identify when to help a friend who is struggling. Perhaps they don't feel like hanging out as much or, when they do, their mind seems elsewhere. There are other cues that you can also pick up on, signs that friends are not acting like their normal selves, for instance. It may seem like they are always anxious. Maybe they are taking more risks than usual, seem irritable or have developed a negative outlook on life. It's important to pay attention to friends and to be prepared to act when you've picked up on signs that all may not be well.

Listening to others

The next step toward helping others is to listen. Being mindful of how well you listen to others will be an important consideration throughout your life. As young people, when we begin to communicate more with others, we learn when and when not to speak. We also begin to develop the skills that help us pick up on signs that someone is or isn't doing well emotionally. Actively listening and paying attention to others when communicating (verbally and non-verbally) helps us learn more about others and our environment. As an individual learns these skills, they may be better equipped to understand when a peer is or isn't doing well.

Listening is dynamic; it is an active process that requires us to simultaneously listen and critically consider what others might be saying to us. It also means that the listener tries to understand what the other person is feeling or experiencing and attempts to see things from the speaker's perspective. In a world full of distractions, it can be easy to get sidetracked and lose focus on the person or people in front of us. Listening and paying attention to others when they speak is a sign of respect and a skill that will lead to deeper and better relationships. You'll also probably learn a lot more about your friends and your environment by actively listening to others.

Most of the time we think of "communication" as two people saying words back and forth to one another. But lots of meaning comes from the unspoken, such as facial expressions, gestures, and body postures. These are called nonverbal cues. Sometimes it helps to display positive nonverbal cues when listening to others and help-giving. This means focusing on the person in front of us. It can be demonstrated, for example, by shifting our bodies so that we are facing the person we are listening to, looking them straight in the eye, and putting down our phones! The person who is talking can feel as if they are being respected, listened to, and have your support simply by picking up on the non-verbal cues you are displaying.

Taking responsibility and taking action

You don't need to be a trained mental health professional to recognize and do something for a friend who is struggling. However, there may be times when you've listened to a friend, and given them advice, only for them to tell you they're okay, or they tell you they're "dealing with it." Sometimes, even when a friend tells you "everything's okay," there's something — your intuition, your gut instinct — that tells you everything isn't okay. This often means it's time to get professional help.

2. **Intense** (*adjective*): to become highly concentrated

[10] Some key signs that tell us it is time to get professional help include:

- Problems are severe or intense, last a long time, or keep getting worse
- Difficulties seem to be repeating themselves, interfering with normal (day to day) functioning
- The usual ways of dealing with things are not working

It is always good to encourage a friend to get help. If they are not ready to follow your advice, the best thing to do is to share your concerns with someone you trust, like a member of their family, or another friend. If you're unsure where to turn, another good resource would be a counselor, teacher or coach at school — they are usually familiar with the problems that teens face.

You might feel bad about going behind a friend's back to talk about their private struggles, and you might worry that you'll ruin a friendship by "ratting them out." Try to remember that if your heart tells you that your friend needs help, this is not the time to keep secrets. It is always sensible to go with your gut and get advice when you can't ignore your concerns. You shouldn't have to feel bad about showing concern for a friend. In a strong friendship, your friend will be grateful for your help once they feel better.

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Text-Dependent Questions

Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: What is the central idea of the text?
 - A. Going behind a friend's back can end a friendship because a peer might feel betrayed.
 - B. Teens are not advised to give their peers guidance or advice because they are not trained professionals.
 - C. Help-giving is an important life skill for teens to develop as they turn to their peers for guidance and advice.
 - D. Noticing non-verbal cues is the most important way for teens to recognize that their peers are seeking help.

2. PART B: Which detail from the text best supports the answer to Part A?
 - A. "As human beings, we are dependent on connections with others for our happiness, as well as our emotional and physical health." (Paragraph 3)
 - B. "As young people, when we begin to communicate more with others, we learn when and when not to speak." (Paragraph 6)
 - C. "You don't need to be a trained mental health professional to recognize and do something for a friend who is struggling." (Paragraph 9)
 - D. "You might feel bad about going behind a friend's back to talk about their private struggles, and you might worry that you'll ruin a friendship by 'ratting them out.'" (Paragraph 12)

3. What does the phrase "dealing with it" mean as it is used in Paragraph 9?
 - A. participating in an activity
 - B. taking action to solve the problem
 - C. giving ownership to someone else
 - D. distributing an item equally or fairly

4. What is the author's purpose in paragraph 12?
 - A. to reassure readers to trust their instincts when deciding to help a friend
 - B. to argue the importance of telling an adult when a friend has a problem
 - C. to provide readers with steps for helping a friend in need
 - D. to persuade readers to respect the privacy of peers

Name: _____ Class: _____

When You Are Old

By William Butler Yeats
1892

William Butler Yeats (1865-1939) was an Irish poet and a prominent figure in the Irish Literary Revival, as well as an important figure in 20th century literature. It is speculated that this poem, "When You Are Old," was written for the Irish revolutionary Maud Gonne. Yeats was deeply in love with Maud, although she never felt the same way about him. As you read, identify examples of imagery in the poem.

[1] When you are old and grey and full of sleep,
And nodding by the fire, take down this book,
And slowly read, and dream of the soft look
Your eyes had once, and of their shadows deep;

[5] How many loved your moments of glad grace,
And loved your beauty with love false or true,
But one man loved the pilgrim¹ soul in you,
And loved the sorrows of your changing face;

[10] And bending down beside the glowing bars,
Murmur, a little sadly, how Love fled
And paced upon the mountains overhead
And hid his face amid a crowd of stars.



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"When You Are Old" by William Butler Yeats (1892) is in the public domain.

1. specifically referring to a wanderer in this context

Text-Dependent Questions

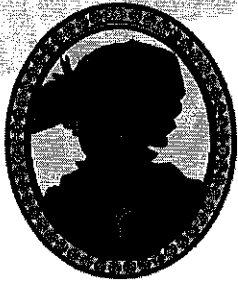
Directions: For the following questions, choose the best answer or respond in complete sentences.

1. PART A: Which of the following expresses a main theme of the poem?
 - A. People should reflect on their life's accomplishments when they are older.
 - B. People will come to regret rejecting those who loved them truly and deeply.
 - C. People should value their youth because they will wish that they had done more when they are old.
 - D. People can come to regret the choices they made in their youth.

2. PART B: Which TWO quotes best support the answer to Part A?
 - A. "When you are old and grey and full of sleep, / And nodding by the fire, take down this book" (Lines 1-2)
 - B. "And slowly read, and dream of the soft look / Your eyes had once, and of their shadows deep" (Lines 3-4)
 - C. "How many loved your moments of glad grace, / And loved your beauty with love false or true" (Lines 5-6)
 - D. "But one man loved the pilgrim soul in you, / And loved the sorrows of your changing face" (Lines 7-8)
 - E. "And bending down beside the glowing bars, / Murmur, a little sadly, how Love fled" (Lines 9-10)
 - F. "And paced upon the mountains overhead / And hid his face amid a crowd of stars" (Lines 11-12)

3. What is the significance of Yeats' characterization of the subject as a "pilgrim soul" in Line 7?
 - A. It shows that they are different from others that the speaker loved.
 - B. It shows that the subject is unable to love the speaker back.
 - C. It shows that the speaker loves the subject for who they truly are.
 - D. It shows that the speaker loves the subject despite their tendency to stray.

4. How does the last stanza shape the overall meaning of the poem? Support your answer by citing evidence from the text.



Poe: The Oval Portrait



Edgar Allan Poe's 1842 short story "The Oval Portrait" presents a story within a story. The narrator has been hurt. He and his servant find shelter in an abandoned mansion for the night. The narrator is resting in one of the bedrooms which is filled with paintings. One of the paintings is the portrait of a beautiful young woman who seems almost to be alive. After studying the portrait for a good while, the narrator reads about it in a book he has found about the paintings:

"She was a maiden of rarest beauty, and not more lovely than full of glee. And evil was the hour when she saw, and loved, and wedded the painter. He, passionate, studious, austere, and having already a bride in his Art; she a maiden of rarest beauty, and not more lovely than full of glee; all light and smiles, and frolicsome as the young fawn; loving and cherishing all things; hating only the Art which was her rival. It was thus a terrible thing for this lady to hear the painter speak of his desire to portray even his young bride. But she was humble and obedient, and sat meekly for many weeks in the dark, high turret-chamber where the light dripped upon the pale canvas only from overhead. But he, the painter, took glory in his work, which went on from hour to hour, and from day to day. And he was a passionate, and wild, and moody man, who became lost in reveries; so that he would not see that the light which fell so ghastly in that lone turret withered the health and the spirits of his bride, who pined visibly to all but him. Yet she smiled on and still on, uncomplainingly, because she saw that the painter (who had high renown) took a fervid and burning pleasure in his task, and wrought day and night to depict her who so loved him, yet who grew daily more dispirited and weak. But at length, as the labor drew nearer to its conclusion, there were admitted none into the turret; for the painter had grown wild with the ardor of his work, and turned his eyes from canvas merely, even to regard the countenance of his wife. And he would not see that the tints which he spread upon the canvas were drawn from the cheeks of her who sat beside him. And when many weeks had passed, and but little remained to do, save one brush upon the mouth and one tint upon the eye. And then the brush was given, and then the tint was placed; and, for one moment, the painter stood entranced before the work which he had wrought; but in the next, while he yet gazed, he grew tremulous and very pallid, and aghast, and crying with a loud voice, 'This is indeed Life itself!' turned suddenly to regard his beloved:—She was dead!"

What Do You Think?

1. Why do you think the painter did not notice his wife's declining health?

2. What do you think "the tints which he spread upon the canvas were drawn from the cheeks of her who sat beside him" means?

3. What do you think the word *entranced* means based on the context "the painter stood *entranced* before the work"?



History

NAFTA

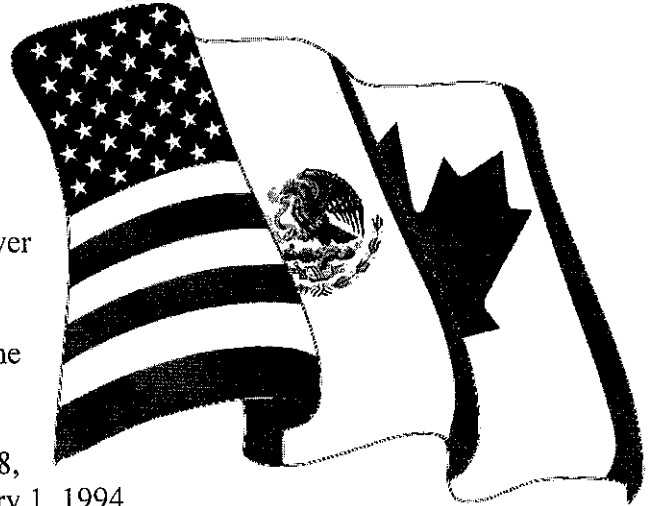
The North American Free Trade Agreement (NAFTA) is a trade group in North America created by the governments of the United States, Canada, and Mexico.

Following negotiations dating back to 1991 between the three nations, the leaders met in San Antonio, Texas in 1992, to sign NAFTA. U.S. President George H.W. Bush, Canadian Prime Minister Brian Mulroney and Mexico's President Carlos Salinas, each responsible for spearheading and promoting the agreement signed it.

NAFTA required the U.S. Mexico and Canada to adhere to strict environmental practices and regulations. Under NAFTA, all barriers to agricultural trade between the United States and Mexico were eliminated. In addition, many tariffs were eliminated immediately, with others being phased out over periods of 5 to 15 years.

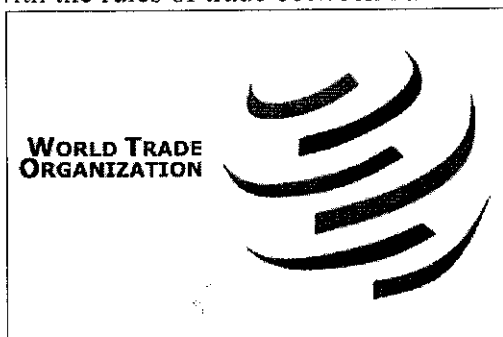
NAFTA is the largest trading group in the world and one of the most powerful, wide-reaching treaties in the world.

The agreement was signed into law in the U.S. on December 8, 1993, by President Bill Clinton and went into effect on January 1, 1994.



World Trade Organization

The World Trade Organization (WTO) is an international organization designed to supervise international trade. The WTO came into being in January 1995. It is the only global international organization dealing with the rules of trade between nations.



The World Trade Organization deals with the rules of trade between nations at a near-global level. It is responsible for negotiating and implementing new trade agreements, and is in charge of policing member countries' adherence to all the WTO agreements, signed by the majority of the world's trading nations and ratified in their parliaments. Most of the issues that the WTO focuses on derive from previous trade negotiations.

The WTO has 153 members, which represents more than 95% of total world trade. The WTO is governed by a Ministerial Conference, which meets every two years; a General Council, which implements the conference's policy decisions and is responsible for day-to-day administration; and a director-general, who is appointed by the Ministerial Conference. The WTO's headquarters is in Geneva, Switzerland.

The United Nations

The United Nations (UN) is an international organization whose goal to facilitate cooperation in international law, international security, economic development, social progress, human rights and achieving world peace. The UN was founded in 1945 after World War II to replace the League of Nations, to stop wars between countries and to provide a platform for dialogue.



The UN's functions include:

1. Sending peacekeepers to regions where armed conflict has recently ceased or paused to enforce the terms of peace agreements and to discourage combatants from resuming hostilities.
2. Upholding and implementing the principles enshrined in the Universal Declaration of Human Rights.
3. Supporting countries in transition to democracy and giving assistance in providing free and fair elections.
4. Fighting against diseases around the world such as AIDS, tuberculosis, and malaria, especially in poor countries

There are currently 192 member states, including nearly every recognized independent state in the world. From its headquarters on international territory in New York City, the UN and its specialized agencies decide on issues in regular meetings held throughout the year. The organization is divided into administrative bodies, primarily:

- * The General Assembly (the main deliberative assembly);
- * The Security Council (decides certain resolutions for peace and security);
- * The Economic and Social Council (assists in promoting international economic and social cooperation and development);
- * The Secretariat (provides studies, information and facilities needed by the UN);
- * The International Court of Justice (the primary judicial organ).

The UN's most visible public figure is the Secretary-General, currently Ban Ki-moon of South Korea, who attained the post in 2007.

The organization is financed from contributions from its member states, and has six official languages: Arabic, Chinese, English, French, Russian and Spanish.

International Monetary Fund

The International Monetary Fund (IMF) is an international organization that oversees the global financial system by following economic policies of its member countries, in particular exchange rates and payments.

The work of the IMF is of 4 main types.

1. Surveillance involves the monitoring of economic and financial developments, and the provision of policy advice, aimed especially at crisis-prevention.
2. The IMF also lends money to countries to support policies aimed at correcting problems; loans to low-income countries are also aimed at poverty reduction.
3. The IMF provides countries with technical assistance and training in its areas of expertise.
4. The IMF also plays an important role in the fight against money-laundering and terrorism

Supporting all of these activities is IMF work in economic research and statistics.

The IMF was formed in 1945 to stabilize international exchange rates and facilitate development. It also offers financial and technical assistance to its members, making it an international lender of last resort. It currently has 188 members with a headquarters located in Washington, D.C.

The European Union

The European Union (EU) is an economic and political union of 27 member states, located primarily in Europe. It was established by a treaty in November 1993. With almost 500 million citizens, the EU combined generates an estimated 30% share of the gross world product.

The EU has passed a variety of laws & objectives:

1. The EU has a standardized system of laws which apply in all member states, guaranteeing the freedom of movement of people, goods, services and capital. It maintains common trade, agriculture, and fishing policies.
2. Sixteen member states have adopted a common currency, the euro.
3. It has developed a role in foreign policy, representing its members in the World Trade Organization, at G8 summits, and at the United Nations.
4. Twenty-one EU countries are members of NATO.
5. The EU has developed a role in justice and home affairs, including the abolition of passport controls between many member states.



Important institutions and bodies of the EU include the European Commission, the European Parliament, the Council of the European Union, the European Council, the European Court of Justice and the European Central Bank. EU citizens elect the Parliament every five years. The EU traces its origins to the European Coal and Steel Community formed among six countries in 1951 and the Treaty of Rome in 1957. Since then the union has grown in size through the accession of new countries, and new policy areas have been added to the remit of the EU's institutions.

Name _____

International Organizations

Directions: For each of the following scenarios, determine which international organization would be best suited to deal with the issue.

	1. A country in Eastern Europe has suffered a severe downturn in its economy.
	2. An African nation has recently freed itself of a dictator and needs training and assistance in setting up its economy.
	3. A devastating malaria outbreak has hit a small country in South America.
	4. An Asian nation has set up very high tariffs & taxes on all its exports and imports.
	5. An American company is planning on moving to Mexico to lower its costs.
	6. A European nation's currency is losing its value.
	7. A civil war is just ending and settling down in a South Asian nation.
	8. An African dictator is funneling loan money to terrorist groups.
	9. Several countries in southern Africa would like to form a free trade group.
	10. There is a suspected genocide taking place in eastern Russia.

Name:

Date:

Chapter 10: The Civil Rights Movement, 1960-1971

Vocabulary

Directions: Match each of the terms in the left column to the correct definition in the right column. Write the letter of your answer in the space provided.

- | | |
|--|--|
| _____ 1. College Board | A. a program during World War II that allowed naval personnel to enroll in college, which would lead to their qualifying to become commissioned officers |
| _____ 2. Freedom Schools | B. a parade or march in protest of a perceived wrongdoing |
| _____ 3. tear gas | C. members of the all-white regular Mississippi Democratic Party |
| _____ 4. mistrial | D. an organization composed of representatives from various civil rights groups, such as the NAACP, SCLC, SNCC, and CORE, that conducted Freedom Schools and voter registration drives in Mississippi in the 1960s |
| _____ 5. Navy V-12 Program | E. a thirteen-member board appointed by the governor that supervises the state's colleges and universities |
| _____ 6. Congress of Racial Equality | F. a protest in which people refuse to buy certain items until specific conditions are met |
| _____ 7. Freedom Democratic Party | G. a trial that has no legal effect because of some error in the proceedings or because of a hung jury |
| _____ 8. federal marshal | H. a protest where people enter a public facility and refuse to leave until their demands are heard |
| _____ 9. hung jury | I. a group of blacks who challenged the all-white regular Mississippi Democratic Party's delegation at the 1964 national Democratic Convention in Atlantic City, New Jersey, claiming that it was loyal to the national party organization |
| _____ 10. loyalists | J. schools organized by COFO to encourage blacks to exercise their rights as American citizens, by informing them about the voter registration procedure and teaching them how to answer questions designed to make it difficult to register |
| _____ 11. demonstration | K. a group that is unable to agree on a verdict |
| _____ 12. white flight | L. a civil rights organization founded in 1957 by Dr. Martin Luther King Jr. and others to coordinate protest activities across the South |
| _____ 13. SCLC | M. a civil rights organization founded in 1942 to promote a nonviolent approach to combating racial prejudice; it held the nation's first sit-in in Chicago |
| _____ 14. firebomb | N. murder of a prominent person, usually for political reasons |
| _____ 15. regulars | O. the departure of whites from neighborhoods or schools increasingly or predominantly populated by minorities |
| _____ 16. sit-in | P. a substance that blinds the eyes with tears and is used for dispelling mobs |
| _____ 17. assassination | Q. a law enforcement officer of a federal judicial district who carries out court orders |
| _____ 18. boycott | R. members of the Freedom Democratic Party, which claimed to be loyal to the national party organization |
| _____ 19. Council of Federated Organizations | S. to launch an attack with a bomb that could start a fire |

Name: _____

Date: _____

Chapter 10: The Civil Rights Movement, 1960-1971

Sequencing Events

Directions: To complete this Civil Rights Timeline, use the information in your textbook to determine the year in which the following events took place. Write that date on the line in the first column at the left. Then place the events in the correct order by writing the numbers 1-10 on the lines in the second column.

Date	Order	Event
_____	_____	The Student Nonviolent Coordinating Committee (SNCC) was founded.
_____	_____	Edgar Ray Killen was convicted in the June 1964 Philadelphia murders of three civil rights workers.
_____	_____	Congress passed the Voting Rights Act.
_____	_____	A sniper murdered Medgar Evers.
_____	_____	Robert Clark became the first black in the state legislature since 1894.
_____	_____	Mississippi's schools began to be integrated.
_____	_____	Byron De La Beckwith was tried and convicted for the murder of Medgar Evers.
_____	_____	James Meredith gained admission to the University of Mississippi.
_____	_____	Klansmen firebombed Vernon Dahmer's Hattiesburg home, killing him.
_____	_____	Governor Paul B. Johnson Jr.'s inaugural address set a tone of positive leadership. Byron De La Beckwith was first tried for the murder of Medgar Evers. Freedom Democratic Party was established in Mississippi. The Civil Rights Act ended segregated public facilities.

Narration/Description Handout

English III students should know that their ability to tell a story and describe a situation, person, place, thing, or event influences their writing of other rhetorical modes (for example, students may need to incorporate narration and/or description in an exemplification essay – without sacrificing the intended rhetorical mode of each essay). Students will write a diagnostic paragraph/essay using either narration or description. Students will also write a full-length essay of each mode as practice for process writing.

Narration: Narration is used to tell a story. We encounter narration in short stories and novels (and even in poetry), personal letters or emails, and biographies and autobiographies – all written forms of expression. But we also encounter narration when we talk to our family members, classmates, and friends. The effectiveness of your narration is often determined by the amount and type of details that you include in your story and the way you tell the story (i.e. the organizational pattern). When you tell a story, how do you keep people listening instead of tuning you out? Those same techniques can be used in your writing. Using a mixture of sentence styles can also add interest to your narrative.

Consider the strong and weak points of the following paragraph from “My Mother Never Worked” by Bonnie Smith-Yackel:

In the winter she sewed night after night, endlessly, begging cast-off clothing from relatives, ripping apart coats, dresses, blouses, and trousers to remake them to fit her four daughters and son. Every morning and every evening she milked cows, fed pigs and calves, cared for chickens, picked eggs, cooked meals, washed dishes, scrubbed floors, and tended and loved her children. In the spring she planted a garden once more, dragging pails of water to nourish and sustain the vegetables for the family. In 1936 she lost a baby in her sixth month. (98)

Description: Description often uses one or more of the five senses to “tell readers about the physical characteristics of a person, place, or thing” (135). Descriptive writing describes. How many of you have described someone or something this week? Probably all of you. You may emphasize either objective or subjective description in your writing (objective description is more factual, like a lab report in chemistry that describes the color, smell, and consistency of a mixture; subjective description relies more on your personal response to a person, place, or thing, like a piece of writing that captures the writer’s feelings of watching the bombing of the Twin Towers). Although you can emphasize one type of description over another, you will often have to use both. Specific details that are carefully selected will help you create the image you want the reader to see; already you can see that including **specific details** will be important in your writing (please avoid vagueness – avoid ambiguous or imprecise words like “nice” or “good”).

After reading the following paragraphs from “The Valley of Windmills” by Mary Lim (student writer), decide what you like and dislike about her writing:

The road to Taungaleik twists out of the coastal flatlands into those heaps of slag, shale, and limestone that are the Tenneserim Mountains in the southern part of Burma. The air grows rarer and cooler, and stones become grayer, the highway a little more precarious at its edges, until, ahead, standing in ghostly sentinel across the lip of a pass, is a line of squat forms. They straddle the road and stand at intervals up hillsides on either side. Are they boulders? Are they fortifications? Are they broken wooden crosses on graves in an abandoned cemetery?

These dark figures are windmills standing in the misty atmosphere. They are immensely old and distinctly evil, some merely turrets, some with remnants of arms hanging derelict from their snouts, and most of them covered with dark green moss....(145)

Work Cited: Kirsznner, Laurie G. and Stephen R. Mandell, eds. *Patterns for College Writing: A Rhetorical Reader and Guide*. 9th ed. Boston: Bedford/St. Martin's, 2004.

Writing Process Worksheet

Name:

Diagnostic Paragraph/Essay Assignment

1. Think of a time you wanted to do something – take a trip with friends, work a summer job, participate in something, major in a particular subject – that was in conflict with what your parents wanted you to do. What was the conflict? What did you finally decide to do? How did you feel about your decision? Were you able to talk about the decision with your parents?
2. There's an old saying that "familiarity breeds contempt." We've all had the experience of becoming numb to sights or experiences that once struck us with wonderment; but sometimes, with luck, something happens to renew our appreciation. Think of an example from your own experience. What are some ways we can retain or recover our appreciation of the remarkable things we have come to take for granted?
3. Think about one of your favorite aunts or uncles. What makes that person someone special for you? Is it that the person has a special affection for you? Is it because the person has special character traits that you'd like to emulate or think are in some way strange but appealing? Or is it that the person shares some family traits with your parents? Explain.

Prewriting - Ideas Stage

Freewrite or brainstorm for at least ten minutes to explore interests and develop ideas. (PEN to paper without stopping or worrying about grammar, spelling, mechanics, etc.)

Prewriting - Arrangement Stage

Construct a cluster or an outline that shows the arrangement of your paper (should demonstrate that your paper is organized).

Form a topic sentence that will control your paragraph or a thesis statement that will control your paper. Use separate paper if you need more space (if you use separate paper, turn in with this form).

Create a well-developed, well-supported, organized, and unified paragraph or essay of 200-750 words discussing any one of the following topics. Make sure you have a strong, arguable topic sentence or thesis that focuses your paper. Use MLA format and remember to vary your sentence structure and incorporate transitions.

Topic Sentence or Thesis (use four-step method or ABC):

Subject and Verb Agreement Exercise

Choose the correct form of the verb that agrees with the subject.

1. Annie and her brothers (is, are) at school.
2. Either my mother or my father (is, are) coming to the meeting.
3. The dog or the cats (is, are) outside.
4. Either my shoes or your coat (is, are) always on the floor.
5. George and Tamara (doesn't, don't) want to see that movie.
6. Benito (doesn't, don't) know the answer.
7. One of my sisters (is, are) going on a trip to France.
8. The man with all the birds (live, lives) on my street.
9. The movie, including all the previews, (take, takes) about two hours to watch.
10. The players, as well as the captain, (want, wants) to win.
11. Either answer (is, are) acceptable.
12. Every one of those books (is, are) fiction.
13. Nobody (know, knows) the trouble I've seen.
14. (Is, Are) the news on at five or six?
15. Mathematics (is, are) John's favorite subject, while Civics (is, are) Andrea's favorite subject.
16. Eight dollars (is, are) the price of a movie these days.
17. (Is, Are) the tweezers in this drawer?
18. Your pants (is, are) at the cleaner's.
19. There (was, were) fifteen candies in that bag. Now there (is, are) only one left!
20. The committee (debates, debate) these questions carefully.
21. The committee members (leads, lead) very different lives in private.
22. The Prime Minister, together with his wife, (greet, greets) the press cordially.
23. All of the CDs, even the scratched one, (is, are) in this case.

Answers:

1. Annie and her brothers **are** at school.
2. Either my mother or my father **is** coming to the meeting.
3. The dog or the cats **are** outside.
4. Either my shoes or your coat **is** always on the floor.
5. George and Tamara **don't** want to see that movie.
6. Benito **doesn't** know the answer.
7. One of my sisters **is** going on a trip to France.
8. The man with all the birds **lives** on my street.
9. The movie, including all the previews, **takes** about two hours to watch.
10. The players, as well as the captain, **want** to win.
11. Either answer **is** acceptable.
12. Every one of those books **is** fiction.
13. Nobody **knows** the trouble I've seen.

14. **Is** the news on at five or six?
15. Mathematics **is** John's favorite subject, while Civics **is** Andrea's favorite subject.
16. Eight dollars **is** the price of a movie these days.
17. **Are** the tweezers in this drawer?
18. Your pants **are** at the cleaner's.
19. There **were** fifteen candies in that bag. Now there **is** only one left!
20. The committee **debates** these questions carefully.
21. The committee members **lead** very different lives in private.
22. The Prime Minister, together with his wife, **greet**s the press cordially.
23. All of the CDs, even the scratched one, **are** in this case.

SUBJECT-VERB AGREEMENT

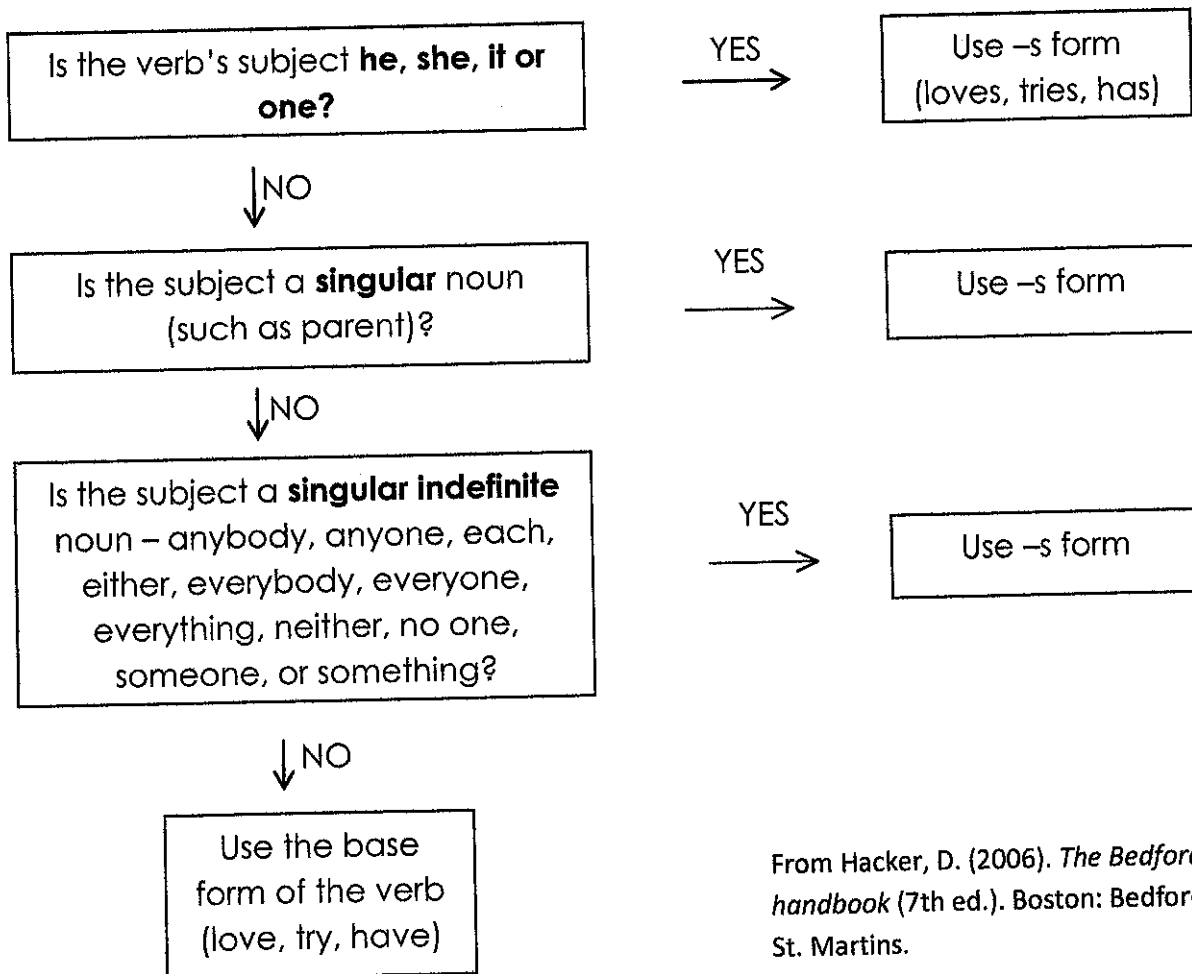
Most native English speakers know the standard verb-subject combinations by ear. Examples of these combinations are *he talks*, not *he talk* and *she has*, not *she have*.

However, if you don't trust your ear or you find simple sentence formations confusing, just follow these simple rules and you will be ready to write flawless sentences in no time!

- In the present tense, verbs agree with their subjects in NUMBER (singular/plural) and in PERSON (first, second, or third). The present tense ending **-s (or -es)** is used on a verb if the subject is **THIRD PERSON SINGULAR**. Otherwise, the verb takes **NO ENDING**.

	SINGULAR		PLURAL	
First Person	I	love	We	love
Second Person	You	love	you	love
Third Person	He/she/it	loves	They	love

- If the concept still confuses you, try answering the following questions to understand when to use the **-s (or -es)** form of a present tense verb.



From Hacker, D. (2006). *The Bedford handbook* (7th ed.). Boston: Bedford/ St. Martins.

- After learning the basic fundamentals of subject-verb agreement, read and understand these special rules and after some practice, forming correct sentences will be easy!

1. Make the verb agree with its subject, not with the word in between

High levels of pollution **cause** damage to the respiratory tract

The subject is **levels**, NOT pollution

2. With subjects joined with or, nor, either...or, or neither... nor, make the verb agree with the part of the subject **NEARER** to the verb

A driver's license or credit card **is** required

See, the term "driver's license" was not used in making the verb agree the sentence. Instead it was the term "credit card"

Neither the lab assistant nor the students **were** able to download the information

3. Treat most indefinite pronouns as SINGULAR

Anybody	Each	Everyone	Nobody	Somebody
Anyone	Either	Everything	No one	Someone
Anything	Everybody	Neither	Nothing	Something

Everybody who signed up for the snowboarding trip **was** taking lessons

Everyone on the team **supports** the coach

4. However, a few indefinite nouns such as ALL, ANY, NONE and SOME may be singular or plural **DEPENDING** on the noun or pronoun they refer to.

Some of our luggage **was** lost

None of his advice **makes** sense

5. Make the verb agree with its subject even when the subject follows the verb

There **are** surprisingly few children in our neighbourhood

There **were** a social worker and a crew of twenty volunteers at the scene of the accident

6. Words such as athletics, economics, measles and news are usually SINGULAR, despite their plural form

Statistics **is** among the most difficult courses in our program

7. Titles of works, company names, words mentioned as words, and gerund phrases are SINGULAR

Lost Cities **describes** the discoveries of many ancient civilizations

Delmonico Brothers **specializes** in organic produce and additive-free meats.

8. Treat collective nouns (e.g. team, audience, crowd, class, family) as SINGULAR unless the meaning is clearly plural

1. SINGULAR

Collective nouns nearly always emphasize a group as a UNIT

The class **respects** the teacher

The board of trustees **meets** in Denver twice a year

2. PLURAL

Occasionally, a collective noun is treated as plural to draw attention to the INDIVIDUAL members of the group

The class **are** debating amongst themselves

If that is the case, it is better to change it to:

The class members **are** debating amongst themselves

Now try answering these exercises to measure how much you learned!

EXERCISE 1

Underline the subject (or compound subject) and then identify the verb that agrees with it.

Everyone in the telecom focus group (has/have) experienced problems with cell phones

1. Your friendship over the years and your support (has/have) meant a great deal to us.
2. Hamilton Family Center, a shelter for teenage runaways in San Francisco, (offers/offer) a wide variety of services.
3. The main source of income for Trinidad (is/are) oil and pitch.
4. The chances of your being promoted (is/are) excellent.
5. There (was/were) a Pokémon card stuck to the refrigerator.
6. Neither the professor nor his assistants (was/were) able to solve the mystery of the eerie glow in the laboratory.
7. Many hours at the driving range (has/have) led us to design golf balls with GPS locators in them.
8. Discovered in the soil of our city garden (was/were) a button dating from the Civil War dating from the turn of the century.
9. Every year, during the midsummer festival, the smoke of village bonfires (fills/fill) the sky.
10. The story performers (was/were) surrounded by children and adults eager to see magical tales.

EXERCISE 2

Edit the following sentences to eliminate problems with subject-verb agreement and write the edited sentence. If a sentence is correct, write "correct."

Jack's first days in the infantry was gruelling
Jack's first days in the infantry **were** gruelling

1. One of the main reasons for elephant poaching are the profits received from selling the ivory tusks.
2. Not until my interview with Dr. Chang were other possibilities opened to me.
3. Batik cloth from Bali, blue and white ceramics from Cambodia, and a bocce ball from Turin has made Hannah's room the talk of the dorm.
4. The board of directors, ignoring the wishes of the neighbourhood, has voted to allow further development.
5. Measles is a contagious childhood disease.
6. The presence of certain bacteria in our bodies are one of the factors that determines our overall health.
7. Leah is the only one of the many applicants who has the ability to step into this job.
8. Neither the explorer nor his companions was ever seen again.

ANSWER KEY- Exercise 1

1. Your friendship over the years and your support (has/have) meant a great deal to us.
2. Hamilton Family Center, a shelter for teenage runaways in San Francisco, (offers/offer) a wide variety of services.
3. The main source of income for Trinidad (is/are) oil and pitch.
4. The chances of your being promoted (is/are) excellent.
5. There (was/were) a Pokémon card stuck to the refrigerator.
6. Neither the professor nor his assistants (was/were) able to solve the mystery of the eerie glow in the laboratory.
7. Many hours at the driving range (has/have) led us to design golf balls with GPS locators in them.
8. Discovered in the soil of our city garden (was/were) a button dating from the Civil War dating from the turn of the century.
9. Every year, during the midsummer festival, the smoke of village bonfires (fills/fill) the sky.
10. The story performers (was/were) surrounded by children and adults eager to see magical tales.

ANSWER KEY- Exercise 2

1. One of the main reasons for elephant poaching is the profits received from selling the ivory tusks.
2. CORRECT
3. Batik cloth from Bali, blue and white ceramics from Cambodia, and a bocce ball from Turin have made Hannah's rooms the talk of the dorm.
4. CORRECT
5. CORRECT
6. The presence of certain bacteria in our bodies is one of the factors that determine our overall health.
7. CORRECT
8. Neither the explorer nor his companions were ever seen again.

Information and exercises from: Hacker, D. (2006). *The Bedford handbook* (7th ed.). Boston: Bedford/ St. Martins.

Using Adverbs Correctly

From enlichlc.com

What are adverbs?

Adverbs are words that tell us more about the verbs or adjectives that they modify. For example, if she drives, then how does she drive? What does she drive?

- She drives **slowly**.
- She drives **quickly**.
- She drives **safely**.
- She drives **once a week**.
- She drives a **really** unusual car.

In what positions can we use adverbs correctly?

There are three positions where adverbs can be placed in a sentence: the front, mid and final positions.

- **Suddenly**, the rain started to fall. (front position)
- The rain **suddenly** started to fall. (mid position)
- The rain started to fall **suddenly**. (final position)

Types of adverbs:

1. -ly adverbs of manner:

- **Carefully**, the patient entered the doctor's office. (front position)
- The patient **carefully** entered the doctor's office. (mid position)
- The patient entered the doctor's office **carefully**. (final position)

2. -ly adverbs of frequency:

- The rubbish is collected **weekly**. I check my emails **daily**. (final position)

3. Non -ly adverbial phrases of frequency:

- **Once a week** we go to the cinema. (front position)
- We go to the cinema **twice a month**. (final position)

4. Connecting adverbs:

- **However**, this is one of the cheapest properties in the area. (front position)

- This is one of the cheapest properties in the area, **however**. (final position)

5. Focusing adverbs:

- This film is **so** boring. We have **just** finished decorating the house. (mid position)

6. Adverbs of frequency:

- They **always** arrive to dinner parties on time. We **sometimes** go camping in the summer holidays. (mid position)

It can be seen that in order to use adverbs correctly we must simply understand the different types of adverbs (see 1-6 above), and then make sure that they are placed in one of their acceptable positions within the sentence. The most effective way to ensure that we use adverbs correctly is to practise, and refer to guidelines for usage such as those presented in this this guide.

Excerpt from "Luck"
Mark Twain

Mark Twain was an American humorist and writer. In the following excerpt, the narrator, a guest at a banquet, introduces the story of a military man's rise to fame. In a footnote to the story, Twain insisted that the story was true.

1 I was at a banquet in London to honor an illustrious military hero. For reasons which will soon be obvious, I will withhold his real name and call him Lieutenant General Lord Arthur Scoresby, V.C., K.C.B., etc. etc. What a fascination there is in a renowned name! There sat the man, in actual flesh, whom I had heard of thousands of times since the day thirty years earlier, when his name had shot suddenly to the zenith from a Crimean battlefield,¹ to remain forever celebrated. It was both food and drink to me to look, and look, and look at that man, scanning, searching, and noting the quietness, the reserve, and the noble gravity of his countenance. He seemed unconscious of the deep, sincere worship flowing toward him from those in attendance.

2 The Reverend sitting to my left at the banquet was an old acquaintance of mine. Although he was a clergyman now, he had spent the first half of his life in the camp and field and as an instructor in the military school at Woolwich. In the midst of the proceedings, a veiled and singular light glimmered in his eyes, and he leaned down and muttered confidentially to me. He pointed to Scoresby, the hero of the banquet, and said, "Privately—he's an absolute fool." This assessment of the honoree was a great surprise to me. If the Reverend had been talking about Napoleon, Socrates, or Solomon, I could not have been more astonished. I was aware of two things: the Reverend was a man of strict veracity, and his judgment about men was good. For this reason, I knew beyond doubt that the world was mistaken about this hero. I meant to find out, at some convenient moment, how the Reverend, all solitary and alone, had discovered this secret.

3 Some days later came the explanation of this strange remark, and the account that follows is what the Reverend told me:

4 "Consider what I did—I who so loved repose and inaction. I told myself that I was responsible to the country for this man serving in the military during wartime, and I must go along with him to protect the country against him as much as I possibly could. For this reason, I took the poor little capital that I had saved, left with a sigh, and joined in his regiment.² Away we went to the battlefield.

5 "And on the battlefield...oh dear, it was awful. Blunders? Why, he never did anything but blunder. But, you see, everybody misinterpreted his performance each time; consequently, they took his idiotic blunders for inspirations of genius! His blunders were enough to make a man in his right mind cry, in fact, they did make me cry, rage, and rave, but always privately. The thing that always kept me in a sweat of apprehension was the fact that every fresh blunder he made seemed to increase the luster of his reputation! I kept saying to myself that he would get so uplifted, that when discovery did finally come, it would be like the sun falling out of the sky.

6 "He moved up in rank over the dead bodies of his superiors, until at last, in a hot battle, our colonel went down, and my heart jumped into my mouth, for Scoresby was next in rank! This battle was awfully hot, our allies were steadily giving way all over the field. Our regiment occupied a position that was vital; a blunder now would be destruction for all of us. At this critical moment, what does this immortal fool Scoresby do but command the regiment to leave and charge over a neighboring hill, where there wasn't even a suggestion of an enemy! There you got! I said to myself. This is the end at last!

7 "Away we went over the shoulder of the hill before our ridiculously insane movement could be stopped. And what did we find? An entire, unsuspecting Russian army! What happened? Were we eaten up? That is necessarily what would have happened in ninety-nine cases out of a hundred. But no, those Russians argued that no single regiment would ever come browsing around there at such a time. They decided that we must be just the front of the entire English army, and that their sly Russian battle plans were known. They bolted, and away they went, pell-mell, over the hill and down into the battlefield, in wild confusion, with us in pursuit of them. What ensued was the most tremendous rout you ever saw. What had begun as an ally loss turned into a sweeping and splendid victory!

battlefield in the presence of all of the armies!

8 "And what exactly was Scoresby's blunder that time? Merely mistaking his right hand for his left—that was all. He had received an order to fall back and support our right flank; instead, he had led us forward over the hill and to the left. But the name he won that day as a marvelous military genius filled the world with his glory, and that glory will never fade while the history books last.

9 "Scoresby is just as good and kind as a man can be, but he doesn't know enough to come in when it rains. The man has been pursued, day by day and year by year, by a most phenomenal and astonishing luckiness. He has been a shining soldier in all our wars for half a generation; he has lifted his military life with blunders, and yet has never committed one that didn't make him a knight or a baronet³ or a lord or something. Look at his uniform; why, he is just covered in domestic and foreign medals! Well, sir, every one of those decorations is a record of some shouting stupidity or other. Taken together, they are proof that the very best thing in all of this world that can happen to a man is to be born lucky."

Twain, Mark. "Luck." *Merry Tales*. Charles L. Webster, 1892. United States. In the Public Domain. Adapted by Educational Leadership Solutions, Inc.

¹Crimean battlefield-reference to the Crimean War, a conflict in which Russia lost to the alliance of the United Kingdom, France, Sardinia, and the Ottoman Empire

²regiment-military unit of ground forces, made up of two or more battle groups

³baronet-member of the British hereditary order of honor, ranking below the barons and made up of commoners

End of Passage

This question refers to Excerpt from Luck

1. How does the author advance the plot through the use of the Reverend's character?

- A. The author presents the Reverend as an eager participant in military planning, which validates his patriotic heritage.
- B. The author presents the Reverend as a close observer of the Russian military, which suggests his alliance with the enemy.
- C. The author presents the Reverend as an admirer of Scoresby's manners, which causes suspicion about the Reverend's conclusion.
- D. The author presents the Reverend as an eyewitness to multiple examples of Scoresby's good fortune, which adds reliability to his account.

This question refers to Excerpt from Luck

2. How does the author use the structure of paragraphs 3-4 to develop the plot?

- A. by using conflict within wartime to depict the resolution
- B. by using the order of events to build sympathy toward Scoresby
- C. by using flashback to begin the Reverend's account within the narrative
- D. by using foreshadowing to convey the Reverend's life as a poor clergyman

This question refers to Excerpt from Luck

3. Read the sentence below from paragraph 2.

I was aware of two things: the Reverend was a man of strict veracity, and his judgment about men was good.

What does the phrase strict veracity mean as it is used in the sentence?

- A. flexible opinion
- B. disciplinary instinct
- C. superb upbringing
- D. undeniable honesty

This question refers to Excerpt from Luck

4. Which two details support the idea that the Reverend was resentful about involving himself with Scoresby?

"Although he was a clergyman now, he had spent the first half of his life in the camp and field and as an instructor in the military school at Woolwich." (paragraph 2)

"I meant to find out, at some convenient moment, how the Reverend, all solitary and alone, had discovered this secret." (paragraph 2)

"Consider what I did—I who so loved repose and inaction." (paragraph 4)

"For this reason, I took the poor little capital that I had saved, left with a sigh, and joined in his regiment." (paragraph 4)

"That is necessarily what would have happened in ninety-nine cases out of a hundred." (paragraph 7)

This question refers to Excerpt from Luck

5. Read the sentences below from paragraph 9.

He has been a shining soldier in all our wars for half a generation; he has littered his military life with blunders, and yet has never committed one that didn't make him a knight or a baronet or a lord or something. Look at his uniform; why, he is just covered in domestic and foreign medals! Well, sir, every one of those decorations is a record of some shouting stupidity or other.

Which tone is created by the author's use of the phrases littered his military life and shouting stupidity?

- A. apprehensive
- B. compliant
- C. indifferent
- D. satirical

This question refers to Excerpt from Luck

6. Based on paragraph 1, what can the reader infer about the narrator?

- A. The narrator views Scoresby as an unfamiliar hero.
- B. The narrator views Scoresby as an egotistical individual.
- C. The narrator hopes to save Scoresby from embarrassment.
- D. The narrator hopes to enlist Scoresby on another military mission.

This question refers to Excerpt from Luck

7. Read the sentence below from paragraph 2.

In the midst of the proceedings, a veiled and singular light glimmered in his eyes, and he leaned down and muttered confidentially to me.

What does the phrase veiled and singular light glimmered in his eyes mean in context?

- A. It implies that the Reverend is uncertain of his choice to become a clergyman.
- B. It suggests that the Reverend wanted to share his opinion with a trustworthy person.
- C. It illustrates that the Reverend hopes to know more about the identity of the narrator.
- D. It shows that the Reverend would rather be teaching at the military school once again.

This question refers to Excerpt from Luck

8. Which detail supports the central idea that a distinguished reputation is sometimes unearned?

A. "I was at a banquet in London to honor an illustrious military hero." (paragraph 1)

B. "Although he was a clergyman now, he had spent the first half of his life in the camp and field and as an instructor in the military school at Woolwich." (paragraph 2)

C. "The thing that always kept me in a sweat of apprehension was the fact that every fresh blunder he made seemed to increase the luster of his reputation!" (paragraph 5)

D. "At this critical moment, what does this immortal fool Scoresby do but command the regiment to leave and charge over a neighboring hill, where there wasn't even a suggestion of an enemy!" (paragraph 6)

Grammar Pretest
Honors Freshman English

Students who do not demonstrate adequate understanding of grammar and proper use concepts on this pretest may be counseled to reconsider their placement in honors freshman English. This pretest contains questions about elements of proper usage and grammar that you should have learned prior to entering high school.

Capitalization

Rewrite the following sentences adding capital letters where necessary.

1. he was concerned that his two years of high school spanish would not be adequate for a months-long tour of south america.

2. when luisa bumped into her dad at the vampire weekend concert, not only was she surprised, but she knew she would be grounded until october.

3. sam's favorite movie, the empire strikes back, is part of the star wars movie series which was written and directed by george lucas.

4. on tuesday, i have an important appointment with mr. appleman, the president of our company.

End Marks

Add the appropriate end mark to the following sentences.

1. If you want to go with us, you need to buy your own ticket
2. What is the location of the party next week
3. He stole my purse, stop him
4. She wondered why he carried a purple monster doll with him

Comma Use

Add commas where necessary in the following sentences. Circle or highlight commas you add.

1. My mom asked my sister and me to go to the store to buy bread milk bananas and cheese.

2. On Wednesday August 22 I plan to go to the mall with my friends or my siblings.
3. When my boyfriend was six his family moved from Seattle Washington to Tuscon Arizona.
4. My brothers and I fight all the time but I can't imagine what my life would be like without them.

Misused/Confusing Words

Rewrite each sentence replacing any misused words for the correct word. The words you will be swapping will be homophones: words that sound the same, but are spelled differently and have different meanings.

1. Whose going with them to their house?

2. I couldn't find your keys until I realized there over there.

3. You're the worst friend I could of ever imagined!

4. Since you're mad at him, I am to.

Parts of Speech

Sentences are made up of words, and each word is a different type of word, performing a specific task within a sentence. Answer the questions about the sentences below to show your understanding of the different parts of speech.

Sentence One: In the meadow near my house, dozens of wild flowers grow.

1. Identify a verb in the above sentence.
2. Identify the nouns in the above sentence.
3. Write a prepositional phrase from the above sentence.

Sentence Two: When Brianna found out she had won the lottery, she immediately quit her boring, thankless job.

1. Identify an adverb from the above sentence.
2. Identify an adjective from the above sentence.
3. Identify a pronoun from the above sentence.

Sentence Three: The motorcyclist changed lanes quickly, barely avoiding a collision

1. Identify the nouns in the above sentence.
2. Identify the verbs in the sentence above.
3. Identify an adverb from the above sentence.

Subjects and Predicates

For each sentence below, underline the subject of the sentence once and the predicate of the sentence twice. Then, circle the main noun (simple subject) and the main verb (simple predicate).

1. Dylan's sister is a freshman at Sunnyslope this year.
2. When I was in third grade, I wanted to be a marine biologist.
3. In the morning the squirrels climbed the trees to avoid the kids at the bus stop.
4. Shark attacks are rare but serious.

Complete sentences

Identify whether each sentence below is a correctly written, complete sentence, a run-on (when two or more sentences are written as a single sentence) or a fragment (an incomplete sentence.) Write S, RO or F on the preceding line to indicate your answer.

_____ 1. Because bees sting suddenly, people with bee allergies should be extremely cautious when they notice bee activity nearby.

_____ 2. Yesterday my family went to the circus, I loved seeing the acrobats!

_____ 3. Since Eleanor Roosevelt was an independent, fiery woman.

_____ 4. He cried loudly.

_____ 5. The doctor was running late so I sat in the waiting room for an hour.

_____ 6. My favorite book is very long but definitely worth reading nonetheless.

_____ 7. Caught in a trap set by the evil villain Dr. Duffenshmirtz.

_____ 8. Siblings can be challenging, but they can also be wonderful friends.

Apostrophes

Add apostrophes where necessary in the following sentences. Highlight or circle the apostrophes you add.

1. My uncles dog is named Duke; hes my uncles baby.
2. I couldnt believe it when Sarah told me that she was Seans sister.
3. The mens restroom is located down the hall from the womens.
4. The cats toys were in the Kitty Kastle, but they wouldnt go in to get them.

Editing

Rewrite the following selection finding and fixing any grammatical mistakes or errors in usage.

Our school, Apollo high school, was named for the Apollo Space Program. This program ran from 1961 thru 1972 and it's goal was to land a man on the moon. Although there were some problems and setbacks the Apollo space program was deemed a great success in the end. When Apollo high school opened in 1970, the first manned space craft had land on the moon just the year before, the United States was caught up in a frenzy of excitement about space exploration. Our Apollo was named in honor of the accomplishments of NASA and the Apollo Program and because of the popularity of the missions astronauts and space in general.

Name: _____ Date: _____ Period: _____

1. Direct observation-
2. Precise-
3. Independent variable-
4. Dependent variable-
5. Constant-
6. Observation-
7. Hypothesis-
8. Data-
9. Conclusion-
10. pH-
11. Acid-
12. Base-
13. Hydrogen bond-
14. Ionic bond-
15. Covalent bond-
16. Adhesion-
17. Cohesion-
18. Atomic number-
19. Proton-
20. Neutron-
21. Electron-
22. Atomic mass-
23. How many electrons does an atom need to be full?
24. Animal cell vs plant cell: how are they different

Name: _____ Date: _____ Period: _____

25. Golgi-

26. Cell membrane-

27. Rough ER-

28. Smooth ER-

29. Microtubules-

30. Lysosomes-

31. Ribosomes-

32. Lysosomes-

33. Chloroplast-

34. Mitochondria-

35. Macromolecules (what makes each of these and what do they do?)

a. Carbohydrates

b. Lipids

c. Proteins

d. Nucleic Acids

36. Difference in sexual and asexual reproduction

37. Hypotonic vs Hypertonic vs Isotonic

38. Cell Theory

a. Schwann

b. Schleiden

c. Virchow

d. Leeuwenhoek

e. Hooke

39. Levels of Organization-----cells, tissues, organs, organ systems, organism

Math

Algebra I

Item Sampler

1. What is the product of the polynomials $4 - a$ and $a^2 + 7a - 18$?

Ⓐ $a^3 - 3a^2 + 10a - 72$

Ⓑ $a^3 + 3a^2 - 46a + 72$

Ⓒ $-a^3 - 3a^2 + 46a - 14$

Ⓓ $-a^3 - 3a^2 + 46a - 72$

2. A skydiver is 960 meters above the ground when she opens her parachute. After opening the parachute, she descends at a constant speed of 3.2 meters per second.

Write an equation to model the height of the skydiver above the ground, using h to represent her height above the ground and s to represent the number of seconds since she opened her parachute.

$h =$ $s +$



$$\begin{cases} y < \frac{1}{2}x - 1 \\ y \geq 2x + 3 \end{cases}$$

3. Consider the system of linear inequalities

Which points are in the solution set?

- Ⓐ (-4,-3)
- Ⓑ (1,3)
- Ⓒ (-5,-7)
- Ⓓ (3,0)
- Ⓔ (-6,-5)
- Ⓕ (-7,-2)
- Ⓖ (-4,-4)
- Ⓗ (-3,-3)

4. A lawn care company sells grass seed by the pound. There is one price per pound up to 5 pounds and a lower price per pound for each pound over 5 pounds. The expression $3(x-6)+25$ gives the total cost in dollars of x pounds of seed when a customer buys more than 5 pounds.

What does the number 25 represent in the expression?

- Ⓐ the total cost in dollars of the amount over 5 pounds
- Ⓑ the cost in dollars of each pound over 5 pounds
- Ⓒ the cost in dollars of each of the first 5 pounds
- Ⓓ the total cost in dollars of the first 5 pounds

5. When Hector found a rare coin a few years ago, it was worth \$190. Since then, it has been increasing in value by the same percentage each year. One year after Hector found the coin, it was worth \$209.

If $c(n)$ represents the value in dollars of the coin n years after Hector found it, which expression is equal to $c(n)$?

- Ⓐ $190(0.01^n)$
- Ⓑ $190(0.1^n)$
- Ⓒ $190(1.01^n)$
- Ⓓ $190(1.1^n)$

6. Three new websites launched at the same time. The table shows the number of visits they received each month since they came online.

Visits to Three Websites

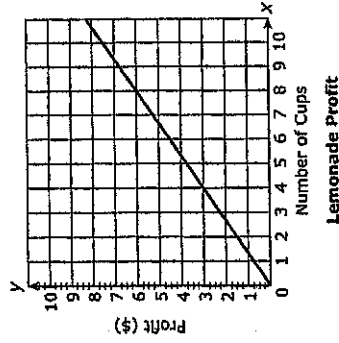
Month	Visits to Website A	Visits to Website B	Visits to Website C
1	8	8	2
2	38	11	4
3	68	16	8
4	98	23	16
5	128	32	32
6	158	43	64

Suppose the numbers of monthly visits to each website continues to increase at the same rate. What will be true about the number of visits to each website in Month 12?

Select the bubble to match the website to the correct description of the website's number of visitors in Month 12.

	Smallest Number of Visitors	Second Most Visitors	Largest Number of Visitors
Website A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Website C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. The graph below represents the profit Calvin makes at his lemonade stand. How much profit does he earn for each cup of lemonade that he sells?



- Ⓐ 1 cup of lemonade earns \$4.00 profit.
- Ⓑ 1 cup of lemonade earns \$3.00 profit.
- Ⓒ 1 cup of lemonade earns \$0.75 profit.
- Ⓓ 1 cup of lemonade earns \$0.25 profit.

8. A car is traveling along a highway. Its elevation, h , in feet above sea level can be modeled by the function $h = 0.1t^2 - 1.2t + 7.6$, where t is the time in minutes that the car has been traveling. Select the correct option from each table.

The car reached a

<input type="radio"/> maximum
<input type="radio"/> minimum

 elevation

of

<input type="radio"/> 4
<input type="radio"/> 6
<input type="radio"/> 7.6
<input type="radio"/> 12
<input type="radio"/> 36

 feet above sea level.

9. The kinetic energy, K , of an object in joules is given by the formula $K = \frac{1}{2}mv^2$, where m is the object's mass in kilograms, and v is the object's velocity in meters per second. If the kinetic energy of an object is known, which formula could be used to find the velocity v ?

$v = \sqrt{\frac{K}{2m}}$

$v = \sqrt{\frac{2K}{m}}$

$v = \sqrt{\frac{m}{2K}}$

$v = \sqrt{\frac{2}{Km}}$

10. The domain of the function $f(x) = -3x$ is restricted to the negative integers.

Which values are elements of the range?

- Ⓐ -12
- Ⓑ -3
- Ⓒ 0
- Ⓓ 7
- Ⓔ 9
- Ⓕ 12
- Ⓖ 21

11. Select one option from each table.

The process of rewriting an expression such as $x^2 - 6x - 24$ in the form $(x+a)^2 - b$ is known as _____.

<input type="radio"/> completing the square
<input type="radio"/> evaluating the expression
<input type="radio"/> factoring the expression

This method can be used to find that the minimum value of $y = x^2 - 6x - 24$ is _____.

<input type="radio"/> -33
<input type="radio"/> -24
<input type="radio"/> 24
<input type="radio"/> 33

12. Two landmarks are 65 miles apart. The distance between them on a map is 2 feet 5 inches. What is the distance between two other landmarks on the same map if the actual distance between them is 52 miles? Round your answer to the nearest inch.

- Ⓐ 1 foot 4 inches
- Ⓑ 1 foot 11 inches
- Ⓒ 2 feet 0 inches
- Ⓓ 3 feet 0 inches

13. Which of the following shows the expression $3x(2x+2) - 2x^2 + 2$ in simplest form?

- Ⓐ $4x^2 + 8$
- Ⓑ $10x^2 + 2$
- Ⓒ $4x^2 + 6x + 2$
- Ⓓ $4x^2 + 6x - 2$

14. Given the general form of a linear equation: $ax + by = c$

Solve for b in terms of a , c , x , and y .

- Ⓐ $b = \frac{c}{y} - ax$
- Ⓑ $b = \frac{ax + c}{y}$
- Ⓒ $b = c - a\frac{x}{y}$
- Ⓓ $b = \frac{c}{y} - \frac{a}{y}x$

15. Which expressions are equivalent to $m^4 - 5m^2 + 4$? Select all that apply.

- Ⓐ $(m^2 - 1)(m^2 - 4)$
- Ⓑ $(m - 1)(m + 1)(m^2 - 4)$
- Ⓒ $(m^2 - 1)(m - 2)(m + 2)$
- Ⓓ $(m - 1)(m - 1)(m + 2)(m + 2)$
- Ⓔ $(m - 1)(m + 1)(m - 2)(m + 2)$
- Ⓕ $(m + 1)(m + 1)(m - 2)(m - 2)$

16. A coffee shop invited its customers to fill out a survey. The results showed that the relationship between the number of minutes a customer spends waiting in line, m , and the numerical rating the customer gave the coffee shop, s , could be modeled by the equation $s = -0.10m + 5$.

According to the model, how many additional minutes waiting in line would cause a customer to lower his or her rating by 1?

- Ⓐ 0.1
- Ⓑ 5
- Ⓒ 10
- Ⓓ 40

17. Select a word from each table that makes each sentence true.

The graph of $y = f(x) + 2$ is the graph of $y = f(x)$ translated 2 units _____.

<input type="radio"/> up
<input type="radio"/> down
<input type="radio"/> left
<input type="radio"/> right

The graph of $y = f(x - 3)$ is the graph of $y = f(x)$ translated 3 units _____.

<input type="radio"/> up
<input type="radio"/> down
<input type="radio"/> left
<input type="radio"/> right

18. Consider the function $f(x) = 3x - 1$. What is $f(4)$?

- Ⓐ 9
- Ⓑ 11
- Ⓒ 33
- Ⓓ 80

20. Identify the vertex of the function $f(x) = (x + 12)^2 + 4$.

- Ⓐ (0, 4)
- Ⓑ (0, -4)
- Ⓒ (-12, 4)
- Ⓓ (-12, 0)

19. Select the expression in each row that matches the equivalent expression in each column.

	$(x+y)^2$	$(x-y)^2$	$y(x-1)$	$(x+y)(x-y)$	$(x+y)(x-y)^2$
$x^2 + 2xy + y^2$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$\frac{(x^2y - xy^2)}{x}$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
$x^2y - y^3$	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. Given the function:

$$f(x) = -\frac{3}{4}x + 5$$

As the value of x increases by 4, how will the value of y change?

- Ⓐ y will decrease by 3
- Ⓑ y will increase by 3
- Ⓒ y will decrease by 4
- Ⓓ y will increase by 4

22. A fitness club charges new members a one-time initiation fee and then a monthly fee of \$35. The equation $y = 35x + b$ describes this situation. What do the variables b , x , and y represent in the formula? Select the correct description of each variable.

	one-time initiation fee	number of months as a member	total amount charged
y represents the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
x represents the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b represents the	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. A mountain climber found that the relationship between his altitude and the surrounding air temperature is linear. The function $f(a) = -\frac{1}{100}a + 75$ represents this relationship, where a is the altitude in meters and $f(a)$ is the temperature in degrees Fahrenheit. According to this function, by how much is the temperature decreasing for every meter that the mountain climber's altitude increases?

- Ⓐ -75°F
- Ⓑ $-\frac{1}{100}^\circ\text{F}$
- Ⓒ $\frac{1}{100}^\circ\text{F}$
- Ⓓ 75°F

24. A program to restore an endangered frog species began 8 months ago. The table shows the population of the species at various times since the program began.

Month	Number of Frogs
0	11
2	69
4	195
6	547
8	1,231

On average, what has been the monthly change in the frog population over the last 4 months?

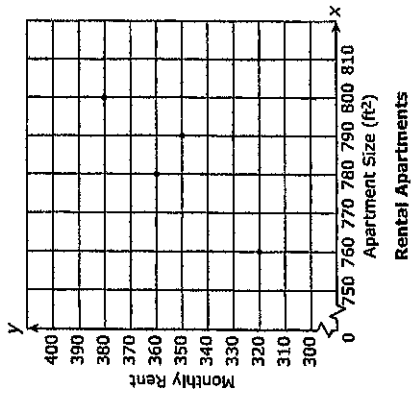
- Ⓐ 46
- Ⓑ 195
- Ⓒ 259
- Ⓓ 1,036

DIRECTIONS: Use the information provided in the passage to answer questions 1–8 that follow.

Chris and Jason are moving to Jackson, MS, for college and need to find an apartment to rent. They are interested in renting a 775-square-foot apartment that is listed for \$360 a month. They want to pay a fair price for the apartment, so they found information on apartment size (in ft²) and monthly rent for 5 apartments that were rented within the past week near campus.

Apartment	Apartment Size (ft ²)	Monthly Rent	Amenities
1	760	\$320	elevator
2	770	\$330	covered parking
3	790	\$350	laundry facilities
4	800	\$380	elevator, gym, covered parking
5	780	\$360	elevator, indoor pool, laundry facilities

1. The data for four of five apartments is plotted on the graph below. Use the graph to determine the coordinates of the missing data point.



Write the coordinates of the missing data point.

(,)

2. The regression equation $y = A + Bx$ can be used to model the data in the table. What do the variables B , x , and y represent in the equation? Select the correct description of each variable.

	monthly rent	slope of the regression line	size of the apartment
B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
x	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
y	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Using the model $y = A + Bx$, compute the regression equation for the data in the table.

Then, write the values for A and B into the text boxes in the equation below.

$y =$ $+$ x

4. What does the slope of the line in the regression equation represent? Select all that apply.
- Ⓐ There is no relationship between apartment size and rent.
 - Ⓑ There is a positive relationship between apartment size and rent.
 - Ⓒ There is a negative relationship between apartment size and rent.
 - Ⓓ As the area of the apartment increases, rent increases.
 - Ⓔ As the area of the apartment increases, rent decreases.

5. Compute the correlation coefficient for apartment size and monthly rent.
- Write your answer in the box below. Round to the nearest hundredth.
-

6. Select the words in the tables that correctly describe the correlation coefficient between apartment size and monthly rent.

<input type="radio"/> weak	<input type="radio"/> positive
<input type="radio"/> moderate	<input type="radio"/> negative
<input type="radio"/> strong	

The monthly rent has a _____ linear association with apartment size.

7. Using the original data, Chris and Jason concluded that the monthly rent that is listed for the 775-square-foot apartment was higher than the estimated monthly rent based on apartment size.
- What is the estimated monthly rent for a 775-square-foot apartment?

Write your answer in the box below. Round to the nearest whole number.

8. What should Chris and Jason conclude regarding the relationship between apartment size and monthly rent?
- Ⓐ Apartment size is the only factor that influences the monthly rent.
 - Ⓑ A smaller apartment would definitely be less expensive per month.
 - Ⓒ Other factors, such as a gym, laundry facilities, elevator, and parking, may also influence monthly rent.
 - Ⓓ There does not appear to be an association between monthly rent and the size of the apartment, so the size of the apartment does not matter.

Algebra Item Sampler Answer Document

Item Number	KEY	Standard
1	D	A-APR.1
2	Text Box 1: -3.2 Text Box 2: 960	A-CED.1
3	C, E, G, H	A-REI.12
4	D	A-SSE.1
5	D	F-BF.1
6	2A, 1B, 3C	F-LE.3
7	C	S-ID.7
8	DD1: minimum DD2: 4	A-SSE.3
9	B	A-CED.4
10	E, F, G	F-IF.1
11	DD1: completing the square DD2: -33	A-SSE.3
12	B	N-Q.1
13	C	A-APR.1
14	D	A-CED.4
15	A, B, C, E	A-SSE.2
16	C	A-REI.3
17	DD1: up DD2: right	F-BF.3
18	B	F-IF.2
19	1A, 2C, 3E	A-SSE.2

Algebra Item Sampler Answer Document

Item Number	KEY	Standard
20	C	F-IF.8
21	A	F-BF.3
22	B, X, Y	N-Q.2
23	C	F-LE.5
24	C	F-IF.6

Performance Task

Item Number	KEY	Standard
25	Text Box 1: 770 Text Box 2: 330	S-ID.6
26	Y, B, X	S-ID.7
27	Text Box 1: -744 Text Box 2: 1.4	S-ID.6
28	B, D	S-ID.6
29	0.99	S-ID.8
30	DD1: strong DD2: positive	S-ID.8
31	whole number in the range 340 - 345	S-ID.6
32	C	S-ID.9

Factoring Methods for $ax^2 + bx + c$

ANY METHOD: Before factoring, factor out the GCF

ANY METHOD: After factoring, check by multiplying to verify original polynomial

Guess and Check

1. Factor out GCF.
2. Draw parentheses.
3. Find factors of a; find factors of c.
4. Try different pairings of factors until a pair works.

Factor $10x^2 + 21x + 8$

Factors of 10: 1·10 and 2·5; Factors of 8: 1·8, 2·4

$(1x + 1)(10x + 8)$ No

$(1x + 8)(10x + 1)$ No

$(1x + 2)(10x + 4)$ No

$(1x + 4)(10x + 2)$ No

$(5x + 8)(2x + 1)$ Yes

Box Method

1. Factor out GCF.
2. Draw a 2x2 box.
3. Put first term (ax^2) in top left, last term (c) in bottom right
4. Multiply ac; find factors of ac that add to middle term b. Put these terms in top right and bottom left boxes.

Factor the GCF from each row and column.

6. These values make up the factors!

Factor $10x^2 + 21x + 8$

$10 \cdot 8 = 80$. Factors of 80 that add to 21: 16 & 5

	5x	8
2x	10x ²	16x
1	5x	8

Factors: $(5x + 8)(2x + 1)$

Grouping

1. Factor out GCF.
2. Multiply ac.
3. Find two factors of ac that add or subtract to b.
4. Split bx term into sum of those two numbers.
5. Group first two terms and last two terms (reverse distribute).
6. Factor the common polynomial.

Factor $10x^2 + 21x + 8$

$10 \cdot 8 = 80$. Factors of 80 that add to 21: 16 and 5

$10x^2 + 16x + 5x + 8$

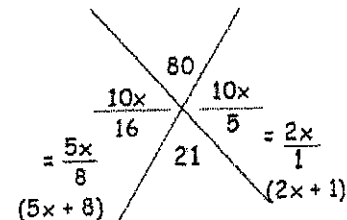
$2x(5x + 8) + (5x + 8)$

$(5x + 8)(2x + 1)$

Diamond Method

1. Factor out GCF.
2. Draw a big X. Multiply ac and put in top of x; put b in bottom of x.
3. Find two factors of ac that add to b.
4. Put those factors on the left and right of the "X," but make as denominators of fractions.
5. Make leading coefficient multiplied by variable as the numerator of the fraction.
6. Reduce fractions if possible. These are your factors!

Factor $10x^2 + 21x + 8$



Slide and Divide

1. Factor out GCF.
2. Multiply ac and rewrite the trinomial with a leading coefficient of 1 and the third term as the product of ac ("slide").
3. Factor using strategies when leading coefficient is 1 (type III factoring).
4. Divide each numerical term by the original leading coefficient, and reduce to simplest form ("divide").
5. Multiply the terms in each set of parentheses by the LCD of the two terms.

Factor $10x^2 + 21x + 8$

$ac = 80$; rewrite: $x^2 + 21x + 80$

Factor: $(x + 16)(x + 5)$

Divide by 10: $(x + \frac{16}{10})(x + \frac{5}{10})$

Reduce: $(x + \frac{8}{5})(x + \frac{1}{2})$

Multiply by LCD: $(5x + 8)(2x + 1)$

FACTORING QUADRATICS

8.1.1 through 8.1.4

Chapter 8 introduces students to rewriting quadratic expressions and solving quadratic equations. Quadratic functions are functions which can be rewritten in the form $y = ax^2 + bx + c$ (where $a \neq 0$) and when graphed, create a U-shaped curve called a parabola.

There are multiple methods that can be used to solve quadratic equations. One of them requires factoring the quadratic expression first. In Lessons 8.1.1 through 8.1.4, students factor quadratic expressions.

In previous chapters, students used algebra tiles to build “generic rectangles” of quadratic expressions. In the figure below, the length and width of the rectangle are $(x + 2)$ and $(x + 4)$. Since the area of a rectangle is given by (base)(height) = area, the area of the rectangle in the figure below can be expressed as a *product*, $(x + 2)(x + 4)$. But the small pieces of the rectangle also make up its area, so the area can be expressed as a *sum*, $4x + 8 + x^2 + 2x$, or $x^2 + 6x + 8$. Thus students wrote $(x + 2)(x + 4) = x^2 + 6x + 8$.

In the figure at right, the length and width of the rectangle, which are $(x + 2)$ and $(x + 4)$, are *factors* of the quadratic expression $x^2 + 6x + 8$, since $(x + 2)$ and $(x + 4)$ multiply together to produce the quadratic expression $x^2 + 6x + 8$. Notice that the $4x$ and the $2x$ are located diagonally from each other. They are like terms and can be combined and written as $6x$.

+ 4	4x	8
x	x ²	2x
	x + 2	

The factors of $x^2 + 6x + 8$ are $(x + 2)$ and $(x + 4)$.

The ax^2 term and the c term are always diagonal to one another in a generic rectangle. In this example, the ax^2 term is $(1x^2)$ and the c term is the constant 8; the product of this diagonal is $1x^2 \cdot 8 = 8x^2$. The two x -terms make up the other diagonal and can be combined into a sum since they are like terms. The b of a quadratic expression is the *sum* of the coefficients of these factors: $2x + 4x = 6x$, so $b = 6$. The product of this other diagonal is $(2x)(4x) = 8x^2$. *Note that the products of the two diagonals are always equivalent.* In the textbook, students may nickname this rule “Casey’s Rule,” after the fictional character Casey in problem 8-4.

To factor a quadratic expression, students need to identify the coefficients of the two x -terms so that the products of the two diagonals are equivalent, and also the sum of the two x -terms is b . Students can use a “diamond problem” to help organize their sums and products. For more information on using a diamond problem and generic rectangle to factor quadratic expressions, see the Math Notes box in Lesson 8.1.4.

For additional information, see the Math Notes boxes in Lessons 8.1.1 through 8.1.4. For additional examples and more practice, see the Checkpoint 10B materials at the back of the student textbook.

Example 1

Factor $x^2 + 7x + 12$.

Sketch a generic rectangle.

Place the x^2 and the 12 along one diagonal.

	12
x^2	

Find two terms whose product is $12x^2$ and whose sum is $7x$. In this case, $3x$ and $4x$. (Students are familiar with this situation as a “diamond problem” from Chapter 1.)

$3x$	12
x^2	$4x$

Write these terms along the other diagonal. Either term can go in either diagonal space.

Determine the base and height of the large outer rectangle by using the areas of the small pieces and finding the greatest common factor of each row and column.

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

Write the sum as a product (factored form).

$$x^2 + 7x + 12 = (x + 3)(x + 4)$$

Example 2

Factor $x^2 + 7x - 30$.

Sketch a generic rectangle.

Place the x^2 and the -30 along one diagonal.

	-30
x^2	

Find two terms whose product is $-30x^2$ and whose sum is $7x$. In this case, $-3x$ and $10x$.

$-3x$	-30
x^2	$10x$

Write these terms along the other diagonal. Either term can go in either diagonal space.

Determine the base and height of the large outer rectangle by using the areas of the small pieces and finding the greatest common factor of each row and column.

-3	$-3x$	-30
x	x^2	$10x$
	$x + 10$	

Write the sum as a product (factored form).

$$x^2 + 7x - 30 = (x - 3)(x + 10)$$

Example 3Factor $x^2 - 15x + 56$.

Sketch a generic rectangle.

Place the x^2 and the 56 along one diagonal.

	56
x^2	

Find two terms whose product is $56x^2$ and whose sum is $-15x$. Write these terms as the other diagonal.

$-8x$	56
x^2	$-7x$

Determine the base and height of the large outer rectangle by using the areas of the small pieces and finding the greatest common factor of each row and column.

-8	$-8x$	56
x	x^2	$-7x$
	$x - 7$	

Write the sum as a product (factored form).

$$x^2 - 15x + 56 = (x - 7)(x - 8)$$

Example 4Factor $12x^2 - 19x + 5$.

Sketch a generic rectangle.

Place the $12x^2$ and the 5 along one diagonal.

$-15x$	5
$12x^2$	$-4x$

 \rightarrow

-5	$-15x$	5
$4x$	$12x^2$	$-4x$

Find two terms whose product is $60x^2$ and whose sum is $-19x$. Write these terms as the other diagonal.

Find the base and height of the rectangle. Check the signs of the factors.

Write the sum as a product (factored form). $(3x - 1)(4x - 5) = 12x^2 - 19x + 5$

Example 5

Factor $3x^2 + 21x + 36$.

Note: If a common factor appears in all the terms, it should be factored out first.
For example, $3x^2 + 21x + 36 = 3(x^2 + 7x + 12)$.

Then $x^2 + 7x + 12$ can be factored in the usual way, as in Example.
 $x^2 + 7x + 12 = (x + 3)(x + 4)$.

Then, since the expression $3x^2 + 21x + 36$ has a factor of 3,
 $3x^2 + 21x + 36 = 3(x^2 + 7x + 12) = 3(x + 3)(x + 4)$.

Problems

- | | | | |
|-------------------------|------------------------|----------------------|----------------------|
| 1. $x^2 + 5x + 6$ | 2. $2x^2 + 5x + 3$ | 3. $3x^2 + 4x + 1$ | 4. $3x^2 + 30x + 75$ |
| 5. $x^2 + 15x + 44$ | 6. $x^2 + 7x + 6$ | 7. $2x^2 + 22x + 48$ | 8. $x^2 + 4x - 32$ |
| 9. $4x^2 + 12x + 9$ | 10. $24x^2 + 22x - 10$ | 11. $x^2 + x - 72$ | 12. $3x^2 - 20x - 7$ |
| 13. $x^3 - 11x^2 + 28x$ | 14. $2x^2 + 11x - 6$ | 15. $2x^2 + 5x - 3$ | 16. $x^2 - 3x - 10$ |
| 17. $4x^2 - 12x + 9$ | 18. $3x^2 + 2x - 5$ | 19. $6x^2 - x - 2$ | 20. $9x^2 - 18x + 8$ |

8-3 Study Guide and Intervention

Factoring Trinomials: $x^2 + bx + c$

Factor $x^2 + bx + c$ To factor a trinomial of the form $x^2 + bx + c$, find two integers, m and n , whose sum is equal to b and whose product is equal to c .

Factoring $x^2 + bx + c$	$x^2 + bx + c = (x + m)(x + n)$, where $m + n = b$ and $mn = c$.
--------------------------	--

Example 1 Factor each trinomial.

a. $x^2 + 7x + 10$

In this trinomial, $b = 7$ and $c = 10$.

Factors of 10	Sum of Factors
1, 10	11
2, 5	7

Since $2 + 5 = 7$ and $2 \cdot 5 = 10$, let $m = 2$ and $n = 5$.

$$x^2 + 7x + 10 = (x + 5)(x + 2)$$

b. $x^2 - 8x + 7$

In this trinomial, $b = -8$ and $c = 7$.

Notice that $m + n$ is negative and mn is positive, so m and n are both negative.

Since $-7 + (-1) = -8$ and $(-7)(-1) = 7$, $m = -7$ and $n = -1$.

$$x^2 - 8x + 7 = (x - 7)(x - 1)$$

Example 2 Factor $x^2 + 6x - 16$.

In this trinomial, $b = 6$ and $c = -16$. This means $m + n$ is positive and mn is negative. Make a list of the factors of -16 , where one factor of each pair is positive.

Factors of -16	Sum of Factors
1, -16	-15
-1 , 16	15
2, -8	-6
-2 , 8	6

Therefore, $m = -2$ and $n = 8$.

$$x^2 + 6x - 16 = (x - 2)(x + 8)$$

Exercises

Factor each trinomial.

1. $x^2 + 4x + 3$

2. $m^2 + 12m + 32$

3. $r^2 - 3r + 2$

4. $x^2 - x - 6$

5. $x^2 - 4x - 21$

6. $x^2 - 22x + 121$

7. $c^2 - 4c - 12$

8. $p^2 - 16p + 64$

9. $9 - 10x + x^2$

10. $x^2 + 6x + 5$

11. $a^2 + 8a - 9$

12. $y^2 - 7y - 8$

13. $x^2 - 2x - 3$

14. $y^2 + 14y + 13$

15. $m^2 + 9m + 20$

16. $x^2 + 12x + 20$

17. $a^2 - 14a + 24$

18. $18 + 11y + y^2$

19. $x^2 + 2xy + y^2$

20. $a^2 - 4ab + 4b^2$

21. $x^2 + 6xy - 7y^2$

8-3**Skills Practice****Factoring Trinomials: $x^2 + bx + c$** **Factor each trinomial.**

1. $t^2 + 8t + 12$

2. $n^2 + 7n + 12$

3. $p^2 + 9p + 20$

4. $h^2 + 9h + 18$

5. $n^2 + 3n - 18$

6. $x^2 + 2x - 8$

7. $y^2 - 5y - 6$

8. $g^2 + 3g - 10$

9. $s^2 + 4s - 12$

10. $x^2 - x - 12$

11. $w^2 - w - 6$

12. $y^2 - 6y + 8$

13. $x^2 - 8x + 15$

14. $b^2 - 9b + 8$

15. $c^2 - 15c + 56$

16. $-4 - 3m + m^2$

Solve each equation. Check your solutions.

17. $x^2 - 6x + 8 = 0$

18. $b^2 - 7b + 12 = 0$

19. $m^2 + 5m + 6 = 0$

20. $d^2 + 7d + 10 = 0$

21. $y^2 - 2y - 24 = 0$

22. $p^2 - 3p = 18$

23. $h^2 + 2h = 35$

24. $a^2 + 14a = -45$

25. $n^2 - 36 = 5n$

26. $w^2 + 30 = 11w$

11. If one leg of a right triangle is 8 inches long, and the other leg is 12 inches long, how many inches long is the triangle's hypotenuse?

- (A) $4\sqrt{13}$
- (B) $4\sqrt{10}$
- (C) $2\sqrt{10}$
- (D) $4\sqrt{5}$
- (E) 4

12. In an automobile factory, 0.06 percent of all automobiles produced are defective. On the average, there will be 3 defective automobiles out of how many produced?

- (A) 500
- (B) 1,800
- (C) 5,000
- (D) 18,000
- (E) 50,000

13. $|x - 5| \leq 2$

How many integers satisfy the inequality above?

- (A) None
- (B) One
- (C) Two
- (D) Three
- (E) Five

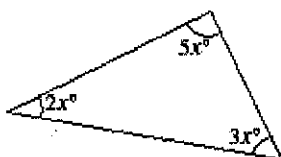
14. Which of the following is equal to $\sqrt{20}$?

- (A) $2\sqrt{5}$
- (B) $2\sqrt{10}$
- (C) $4\sqrt{5}$
- (D) 10
- (E) $10\sqrt{2}$

15. A student can write 3 essays every 4 hours. At that rate, how long will it take the student to write 5 essays?

- (A) 6 hr 20 min
- (B) 6 hr 40 min
- (C) 7 hr 15 min
- (D) 7 hr 30 min
- (E) 7 hr 45 min

16. The measures of the angles of a triangle are in the ratio of $2x:3x:5x$ as illustrated below. What is the measure of the smallest angle in the triangle?



- (A) 18°
- (B) 20°
- (C) 30°
- (D) 36°
- (E) 40°

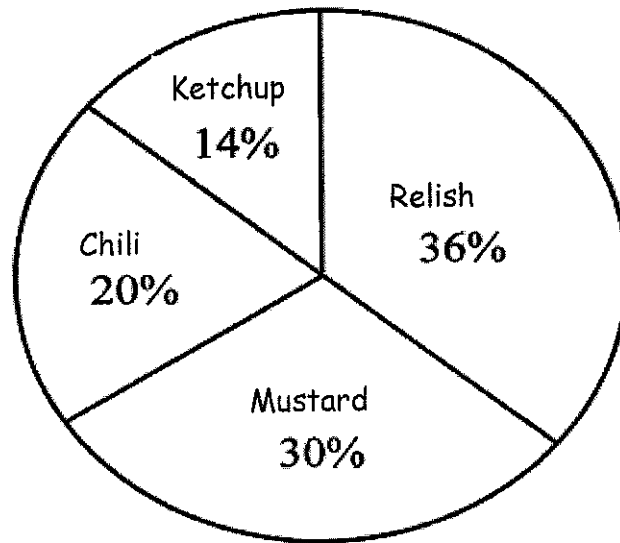
17. What is the volume of a cube with surface area $54x^2$?

- (A) $9x^2$
- (B) $27x^3$
- (C) $81x^2$
- (D) $81x^3$
- (E) $729x^3$

18. What is the least value of x that satisfies the equation $x^2 - 7x + 6 = 6$?

- (A) -7
- (B) -6
- (C) -4
- (D) 0
- (E) 1

FAVORITE MOVIE GENRE



19. In a survey, a group of students from were asked about their favorite hot dog topping. Each student in the group selected exactly one topping, and the data collected are summarized in the circle graph above. If 40 more students chose mustard than ketchup, how many students were surveyed in total?

- (A) 100
- (B) 150
- (C) 200
- (D) 250
- (E) 300

20. If the graph of the function f in the xy -plane contains the points $(0, -9)$, $(1, -4)$, and $(3, 0)$, which of the following CANNOT be true?

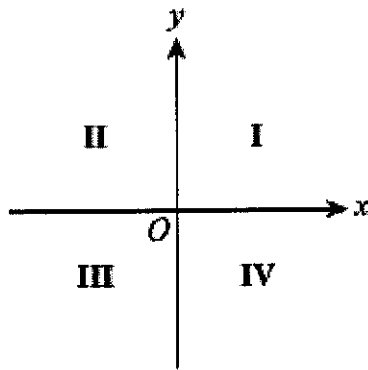
- (A) The graph of f has a maximum value.
- (B) $y \leq 0$ for all points (x, y) on the graph of f .
- (C) The graph of f is symmetric with respect to a line.
- (D) The graph of f is a line.
- (E) The graph of f is a parabola.

21. What integer most nearly approximates $(\sqrt{50})(\sqrt{80})$?

- (A) 20
- (B) 40
- (C) 63
- (D) 200
- (E) 2,000

22. What is the largest possible product for 2 even integers whose sum is 34?

- (A) 64
- (B) 68
- (C) 120
- (D) 240
- (E) 288



23.

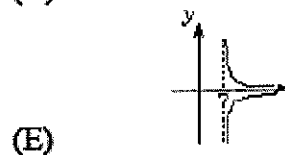
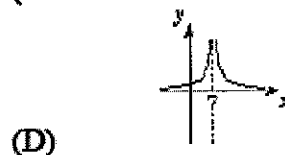
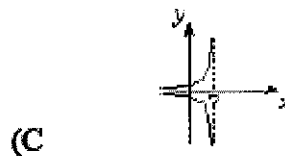
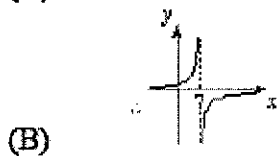
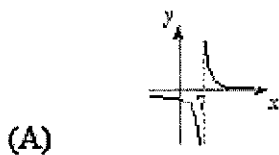
In the figure above, which quadrants contain pairs (x, y) that satisfy the condition $\frac{x}{y} = 1$?

- (A) I only
- (B) I and II only
- (C) I and III only
- (D) II and IV only
- (E) I, II, III, and IV

24. The graph of $y = \frac{7}{x-7}$ is shown below.



Among the following, which is the best representation of $y = \frac{7}{|x-7|}$?



25. The length of a rectangle is increased by 20%, and the width of the rectangle is increased by 30%. By what percentage will the area of the rectangle be increased?

- (A) 25%
- (B) 36%
- (C) 50%
- (D) 56%
- (E) 60%

26. Which of the following CANNOT be the lengths of the sides of a triangle?

- (A) 1,1,1
- (B) 1,2,4
- (C) 1,75,75
- (D) 2,3,4
- (E) 5,6,8

27. For all $x > 0$, $\frac{2x^2+14x+24}{x+4}$ simplifies to:

- (A) $x + 3$
- (B) $x + 4$
- (C) $2(x + 3)$
- (D) $2(x + 4)$
- (E) $2(x + 3)(x + 4)$

28. $f(2n) = 2f(n)$

$$f(4) = 4$$

If f is a function defined for all positive integers n , and f satisfies the two conditions above, which of the following could be the definition of f ?

- (A) $f(n) = n - 2$
- (B) $f(n) = n^2$
- (C) $f(n) = 2n$
- (D) $f(n) = 4$
- (E) $f(n) = 2n - 4$

29. There are n students in a class. If, among those students, $p\%$ play at least 1 musical instrument, which of the following general expressions represents the number of students who play NO musical instrument?

- (A) np
- (B) $.01np$
- (C) $\frac{(100-p)n}{100}$
- (D) $\frac{(1-p)n}{.01}$
- (E) $100(1-p)n$

30. If $\frac{24}{15n} = \frac{4}{n}$ what is the value of $4n$.

- (A) 6
- (B) 10
- (C) 12
- (D) 30
- (E) 60

31. When graphed in the (x,y) coordinate plane, at what point do the lines $x + y = 5$ and $y = 7$ intersect?

- (A) $(-2,0)$
- (B) $(-2,7)$
- (C) $(0,7)$
- (D) $(2,5)$
- (E) $(5,7)$

32. In a community of 416 people, each person owns a dog or a cat or both. If there are 316 dog owners and 280 cat owners, how many of the dog owners own no cat?

- (A) 36
- (B) 100
- (C) 136
- (D) 180
- (E) 316

33. Miguel is 180 centimeters tall. At 2:00 p.m. one day, his shadow is 60 centimeters long, and the shadow of a nearby fence post is t centimeters long. In terms of t , what is the height, in centimeters, of the fence post?

(A) $t + 120$

(B) $\frac{t}{3}$

(C) $3t$

(D) $3\sqrt{t}$

(E) $\left(\frac{t}{3}\right)^2$

34. $3 \times 10^{-4} = ?$

(A) $-30,000$

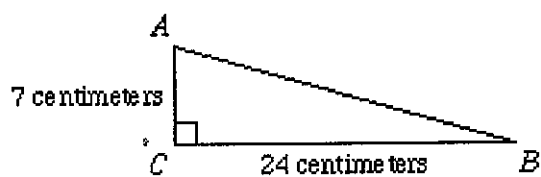
(B) -120

(C) 0.00003

(D) 0.0003

(E) 0.12

35. In right triangle $\triangle ABC$ below, what is the sine of $\angle A$?



(A) $\frac{7}{24}$

(B) $\frac{7}{25}$

(C) $\frac{24}{7}$

(D) $\frac{24}{25}$

(E) $\frac{25}{24}$

Science



Passage IV

Figure 1 is a diagram of an *RLC circuit*. The circuit has a power supply and 3 components: a resistor (R), an inductor (L), and a capacitor (C).

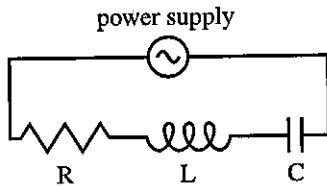


Figure 1

Electric current can flow through the circuit either clockwise (positive current) or counterclockwise (negative current). Figure 2 shows how the electric current in the circuit, I (in amperes, A), and the power supply voltage, V_s (in volts, V), both changed during a 20-millisecond (msec) time interval.

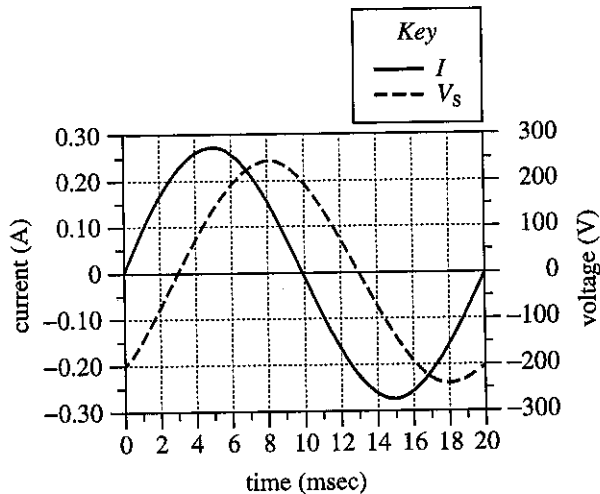


Figure 2

Figure 3 shows how the voltages across the components— V_R , V_L , and V_C , respectively—each changed during the same 20 msec time interval.

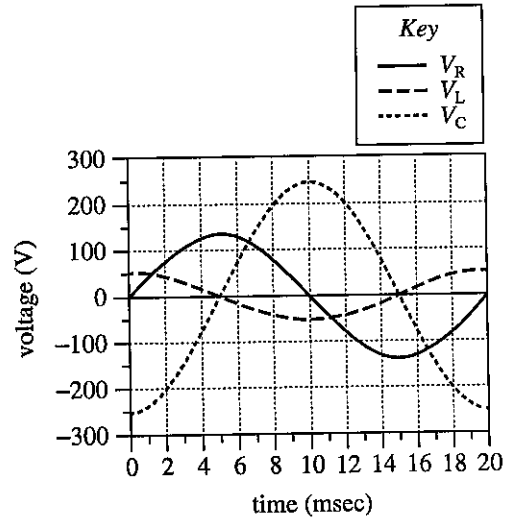


Figure 3

21. According to Figure 2, the maximum positive value of V_s was approximately:
- 125 V.
 - 200 V.
 - 250 V.
 - 275 V.
22. A *period* is the time required for a wave to complete one full cycle. Based on Figure 3, the period for V_L was:
- 5 msec.
 - 10 msec.
 - 20 msec.
 - 40 msec.



23. According to Figures 2 and 3, which voltage varied the *least* during the 20 msec interval?

- A. V_S
- B. V_R
- C. V_L
- D. V_C

24. *Polarity* refers to whether a voltage is positive or negative (a voltage of 0 V has no polarity and can be ignored). Based on Figures 2 and 3, which 2 voltages were always *opposite* in polarity?

- F. V_R and V_L
- G. V_R and V_S
- H. V_L and V_C
- J. V_L and V_S

25. Based on Figure 2, at which of the following times was the current in the circuit flowing counterclockwise?

- A. 0 msec
- B. 5 msec
- C. 10 msec
- D. 15 msec

26. The table below lists the electric charge (in microcoulombs, μC) stored on the capacitor at 3 different times during the 20 msec interval.

Time (msec)	Charge (μC)
7	0.51
10	0.87
13	0.51

Based on Figures 2 and 3, from time = 7 msec through time = 13 msec, did the charge on the capacitor more likely change in sync with I or with V_C ?

- F. I ; over that time interval, both the charge and I decreased and then increased.
- G. I ; over that time interval, both the charge and I increased and then decreased.
- H. V_C ; over that time interval, both the charge and V_C decreased and then increased.
- J. V_C ; over that time interval, both the charge and V_C increased and then decreased.



Passage V

Strains of bacteria carrying a genetic mutation that prevents them from synthesizing the amino acid *histidine* are called *His*⁻. These strains of bacteria must absorb histidine from their environment in order to sustain their growth. Exposing *His*⁻ strains of bacteria to *mutagens* (substances that induce DNA mutations) can cause new mutations that restore the ability of some bacteria to synthesize histidine. Any bacterium that regains the ability to synthesize histidine becomes *His*⁺ and is known as a *His*⁺ revertant.

The number of *His*⁺ revertants in a population of bacteria can indicate the potential of a substance to be mutagenic in humans. Scientists tested 4 substances, each suspected to be a mutagen, on a *His*⁻ strain of the bacteria *Salmonella typhimurium*.

Study

A sterile petri dish (Dish 1) containing a nutrient agar lacking histidine was prepared. Then, 1×10^8 cells of *His*⁻ *S. typhimurium* were added to Dish 1 and evenly spread over the surface of the nutrient agar. These procedures were repeated for 4 more nutrient agar dishes (Dishes 2–5), except that the bacteria were mixed with 1 of the 4 suspected mutagens before being spread over the surface of the nutrient agar. Table 1 lists, for each of Dishes 2–5, the substance that was mixed with the bacteria before they were added to the dish.

Dish	Substance
2	L
3	M
4	N
5	P

The 5 dishes were incubated at 37°C for 2 days. At the end of the incubation period, the number of colonies growing on the nutrient agar in each dish was determined (see Table 2).

Dish	Number of colonies
1	2
2	14
3	25
4	107
5	6

27. Based on the results of the study, which of the suspected mutagens resulted in the greatest number of *His*⁺ revertants in a dish?
- A. Substance L
 B. Substance M
 C. Substance N
 D. Substance P
28. Which dish in the study was intended to serve the purpose of testing whether some of the *S. typhimurium* cells became *His*⁺ revertants without the addition of a mutagen?
- F. Dish 1
 G. Dish 2
 H. Dish 3
 J. Dish 4



29. Based on the results of the study, what is the order of the suspected mutagens, from the substance with the *least* potential to be mutagenic to the substance with the *most* potential to be mutagenic?
- A. P, M, N, L
 B. P, L, M, N
 C. N, L, P, M
 D. N, M, L, P

30. In the study, the scientists tested the effect of Substance P at a concentration of 5×10^{-9} g/mL. After the study, the scientists repeated their test of the effect of Substance P, but at 3 other concentrations. The 3 concentrations and their corresponding results are shown in the table below.

Concentration of Substance P	Number of colonies
10×10^{-9} g/mL	14
50×10^{-9} g/mL	54
100×10^{-9} g/mL	114

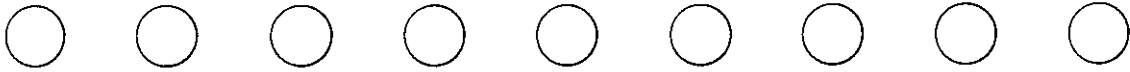
What is the relationship, if any, between the concentration of Substance P and its potential to cause mutations?

- F. As the concentration of Substance P increases, its potential to cause mutations increases only.
 G. As the concentration of Substance P increases, its potential to cause mutations decreases only.
 H. As the concentration of Substance P increases, its potential to cause mutations first decreases and then increases.
 J. There is no relationship between the concentration of Substance P and its potential to cause mutations.

31. Before bacteria were added to it, the dish that was intended to serve as the control dish in the study lacked which of the substances listed below?

I. Histidine
 II. Nutrient agar
 III. Suspected mutagen

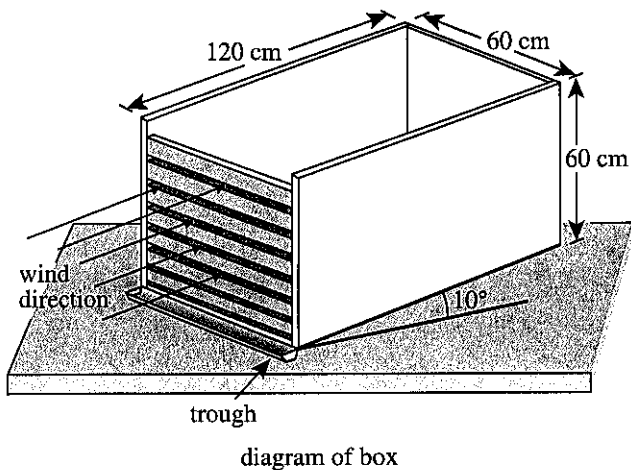
- A. II only
 B. III only
 C. I and II only
 D. I and III only
32. Which of the following statements about the numbers of bacteria that regained the ability to synthesize histidine is consistent with the results of the study for Dishes 2 and 3? The number of bacteria that became His⁺ revertants after exposure to:
- F. Substance M was about 2 times the number of bacteria that became His⁺ revertants after exposure to Substance L.
 G. Substance L was about 2 times the number of bacteria that became His⁺ revertants after exposure to Substance M.
 H. Substance M was about 4 times the number of bacteria that became His⁺ revertants after exposure to Substance L.
 J. Substance L was about 4 times the number of bacteria that became His⁺ revertants after exposure to Substance M.
33. The particular strain of *S. typhimurium* chosen for the study lacks normal DNA repair mechanisms. Which of the following statements gives the most likely reason this particular strain was chosen? The scientists:
- A. did not want the bacteria in the study to synthesize any DNA.
 B. did not want the bacteria in the study to synthesize any proteins.
 C. wanted the bacteria in the study to be able to repair the mutations caused by the substances.
 D. wanted the bacteria in the study to be unable to repair the mutations caused by the substances.



Passage VI

Three studies examined how the volume of runoff from melting ice is affected by wind speed and by the presence of sand beneath the ice.

In a lab kept at 18°C, runoff was collected from a plastic box containing melting ice. The box was tilted at 10° and had horizontal openings in its lower end. After flowing through the openings, the runoff fell into a trough (see diagram) and was conveyed to a measuring device.



Study 1

In each of the first 3 of 4 trials, the following steps were carried out:

1. A 30 cm deep layer of a particular clean, dry sand was placed in the box.
2. A 30 cm deep layer of *chipped ice* (density 0.4 g/cm³) was placed in the box on top of the layer of sand.
3. A fan was turned on to blow air at a constant speed onto the trough end of the box.
4. For the next 600 min, the volume of runoff collected over each 20 min period was measured.

The wind speed was 2.5 m/sec, 1.0 m/sec, and 0.5 m/sec in the first, second, and third trials, respectively.

In the fourth trial, all steps except Step 3 were carried out. (The fan was not turned on.)

The results of the 4 trials are shown in Figure 1.

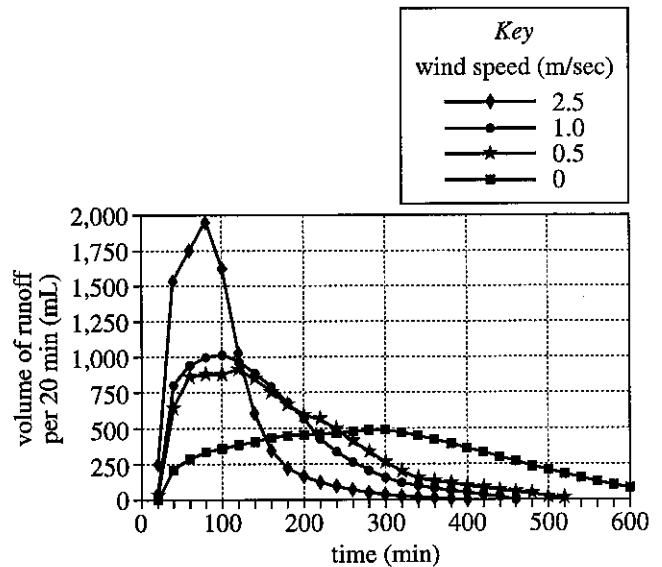


Figure 1

Study 2

The second trial of Study 1 was repeated. Then the second trial of Study 1 was again repeated, except that Step 1 was omitted. (No sand layer was placed in the box.) The results of the 2 trials are shown in Figure 2.

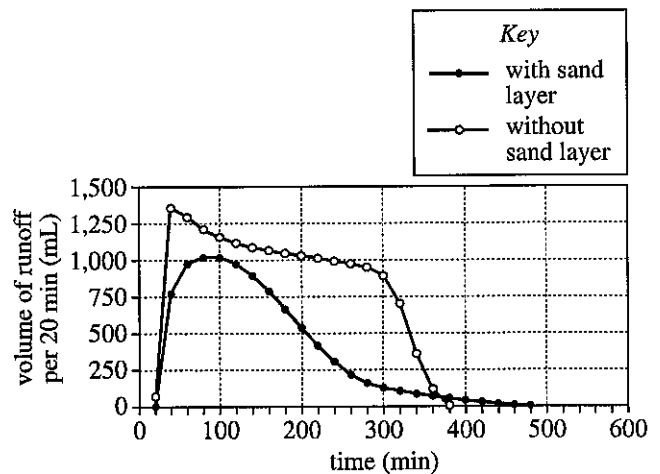


Figure 2

Figures adapted from Masahiko Hasebe and Takanori Kumekawa, "The Effect of Wind Speed on the Snowmelt Runoff Process: Laboratory Experiment." ©1994 by International Association of Hydrological Sciences Publishing.

Electives

Section 14-2

Summary**Your Skin, Hair, and Nails** (pp. 347–353)**Objectives**

- Identify the functions of the skin.
- Describe behaviors that can keep your skin healthy.
- Explain the functions of your hair and nails and how to care for them.

The skin covers and protects the body from injury, infection, and water loss. The skin also helps to regulate body temperature and gathers information from the environment. The skin shields and protects the organs and tissues beneath it. Sweat glands and blood vessels in skin help with temperature regulation. Nerves in the skin provide information to your central nervous system.

Your skin consists of two major layers. The outermost layer is the **epidermis** (ep uh DUR mis). The outer layer of the epidermis is made up of dead cells that contain the protein **keratin**, which makes the skin tough and waterproof. Cells deep in the epidermis produce the protein **melanin**, a dark pigment that gives skin some of its color.

The **dermis** (DUR mis) is the tough, elastic layer of skin that lies below the epidermis. Sweat is produced by glands in the dermis. Sweat travels to the skin's surface where it is excreted through a tiny opening called a **pore**. Hair grows in structures called **follicles**. Oil that keeps skin soft and moist is secreted by **sebaceous glands**.

Eating a balanced, healthy diet; drinking plenty of water; and sleeping enough will keep your skin healthy. **The most important things you can do for your skin, however, are to avoid damage from the sun and tanning lamps and to monitor moles.** Overexposure to ultraviolet (UV) radiation damages skin and can also lead to skin cancer, including a sometimes deadly form called **melanoma**. The first sign of melanoma is often an irregularly shaped mole.

One common skin problem in teens is acne. **Acne** forms when excess oil and dead cells plug a hair follicle. For a severe case of acne, you should see a **dermatologist**, a doctor who specializes in treating skin problems. Another skin disorder is **eczema** (EK suh muh), a condition in which an area of skin becomes red, swollen, hot, and itchy. Boils, cold sores, warts, ringworm, and athlete's foot are other common skin problems.

Hair protects the scalp from sunlight and provides insulation from the cold. Hairs in the nostrils and ears and your eyelashes prevent debris from entering the body. Keeping hair clean and well-groomed helps you look your best. Hair problems include head lice and dandruff.

Tough, platelike nails cover and protect the tips of your fingers and toes, which come in frequent contact with objects in your environment. Keep nails clean and smooth to stop the spread of microorganisms. Clip nails straight across to prevent ingrown toenails. Ingrown toenails occur when the sides of a nail grow into the skin.

Section 14-2

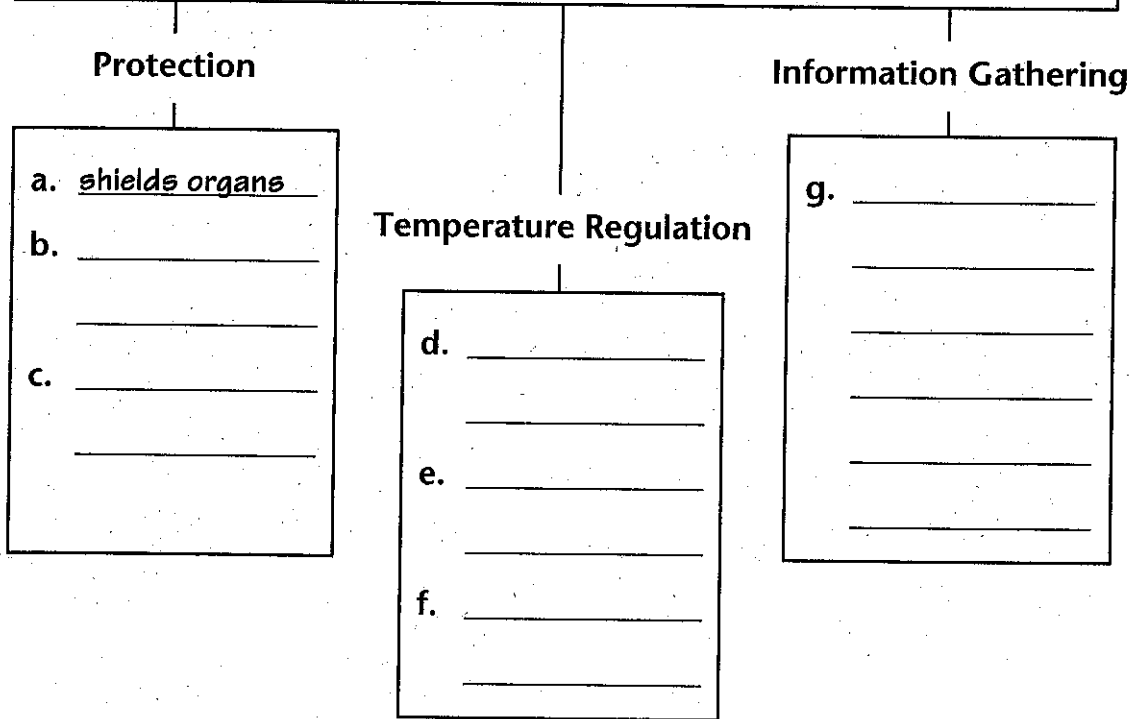
Note Taking Guide

Your Skin, Hair, and Nails (pp. 347-353)

Your Skin

1. Complete the graphic organizer with details about the functions of your skin.

Main Idea: The skin covers and protects the body from injury, infection, and water loss. The skin also helps to regulate body temperature and gathers information from the environment.



2. Describe the two major layers of skin.

a. _____

b. _____

Section 14-2: Note Taking Guide *(continued)*

Caring for Your Skin

3. Complete the table with details about skin problems.

Skin Problem	Description and Cause	Prevention
Skin damage	a. _____ _____ _____	b. _____ _____ _____
Acne	c. _____ _____ _____	d. _____ _____ _____
Eczema	e. _____ _____ _____	f. _____ _____ _____
Skin infections	g. _____ _____ _____	h. _____ _____ _____

Your Hair

4. List two hair care tips you should follow to keep your hair healthy.

a. _____

b. _____

Your Nails

5. List two nail care tips you should follow to keep your nails healthy.

a. _____

b. _____

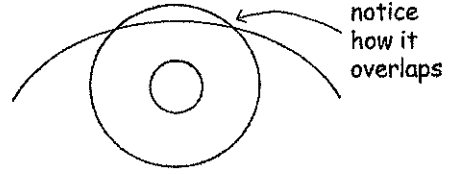
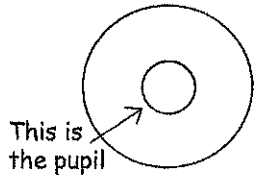
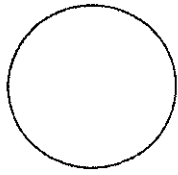
Draw a Human Eye

1. Start with a circle. This will be the iris.

2. Add a small circle in the center.

3. Draw an arch over the larger circle.

TIP: try and find a circle you can trace!

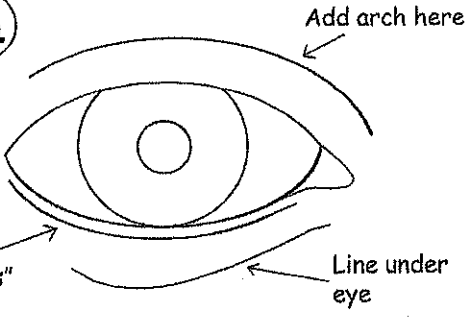
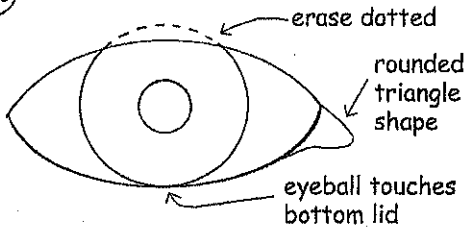


This is the pupil

notice how it overlaps

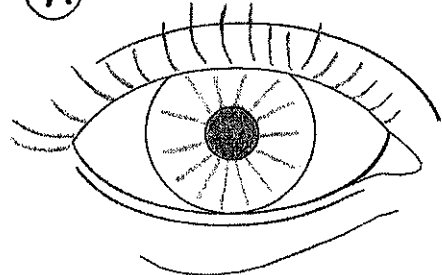
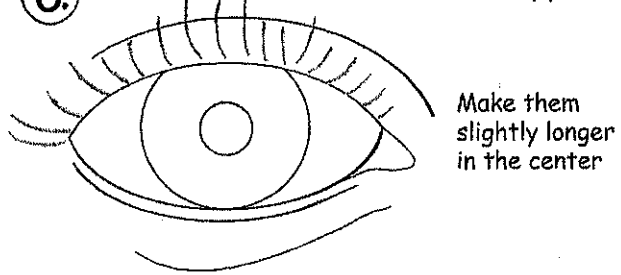
4. Add bottom lid area

5.



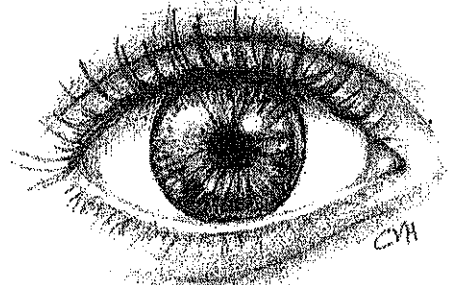
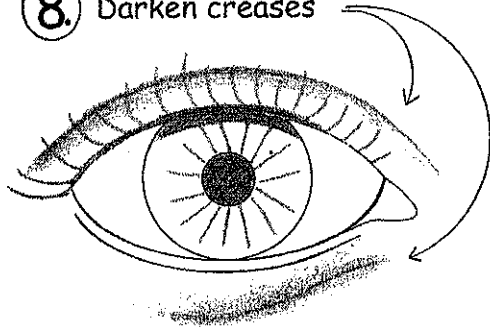
6. "Fan" a few lashes around the upper lid

7. Draw "spokes" around the pupil



8. Darken creases

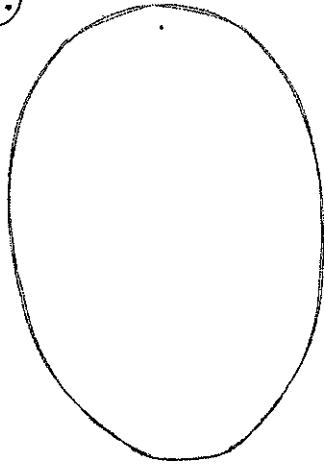
9. Shade. Add more lashes at top and some shorter ones on bottom lid.



Erase some spots in the iris area to indicate reflections. Add more spokes coming from pupil.

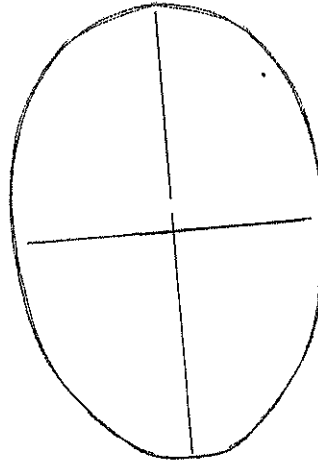
A Basic Human Face

1.



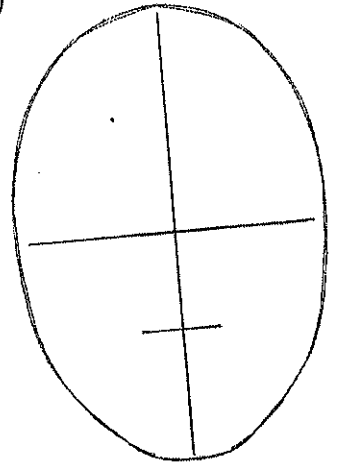
Start with an oval or "upside down" egg shape. The top part should be slightly fuller.

2.



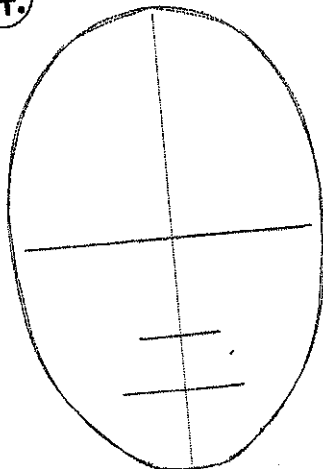
Make a lower case letter "t" in the center of the face.

3.



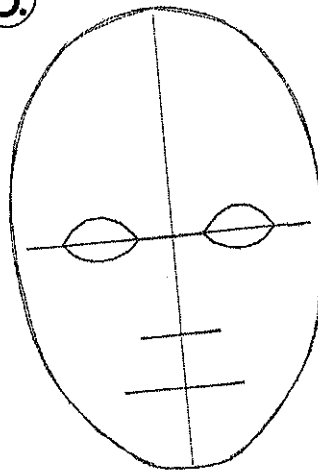
Put your finger in the center of the "t" and your other finger on the chin. Find the center and draw a line there. This will be the bottom of the nose.

4.



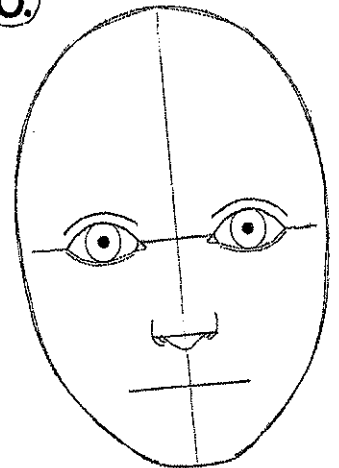
Put your finger in the center of the line you just made and your other finger on the chin. Find the middle; make one last line. This will be the mouth.

5.



On the top line, draw 2 almond/football shapes for the eyes.
TIP: The distance between your eyes is about the width of one eye.

6.



Add the iris, pupil, eye lids, et
On the second line, draw the bottom of the nose.
TIP: The width of the bottom of the nose is about the same as the width between the eyes.

NOUN + DE + NOUN

Write the English translation for each of the following

- abrigo de lana _____
- agencia de viajes _____
- agua de colonia _____
- ama de casa _____
- ama de llaves _____
- anillo de oro _____
- aniversario de bodas _____
- baño de sol _____
- billete de primera clase _____
- bocadillo de anchoas _____
- botella de vino _____
- cabeza de vaca _____
- camisa de manga corta _____
- chuleta de cordero _____
- cinturón de seguridad _____
- cuento de hadas _____
- dama de honor _____
- director de programas _____
- Domingo de resurrección _____
- emisora de radio _____
- equipo de béisbol _____
- estación de televisión _____
- facultad de derecho _____
- gafas de sol _____
- helado de chocolate _____
- hombre de negocios _____
- joyas de fantasía _____

Occupant Protection

Name: _____

Date: _____

1. Academic Literacy

- a. Shoulder harness _____
- b. Child restraint system _____

Use the DMV Handbook pages 20-23 to answer the following questions.

2. Which of the following children requires a child passenger restraint system?
 - a. An eight-year old who is 5 foot 3 inches tall.
 - b. A five-year old who is 3 foot 4 inches tall.
 - c. A six-year old who is 5 feet 1 inch tall.
3. Which of the following is true about safety belts and collisions?
 - a. They are unnecessary if your vehicle is equipped with front and side air bags
 - b. They keep you from being thrown clear to safety, which lowers your chances of surviving a collision
 - c. They increase your chances of survival in most types of collisions
4. When driving with airbags, you are safest when seated?
 - a. At least 10 inches away from the steering wheel
 - b. Within 6 ½ inches of the steering wheel
 - c. With your head positioned directly over the steering wheel
5. If you are riding in a vehicle equipped with a lap belt and also a separate shoulder belt, you are:
 - a. Only required to use the lap belt
 - b. Required to use both the lap belt and shoulder belts
 - c. Only required to use the shoulder belt
6. You are required to wear your safety belt in a moving vehicle:
 - a. Unless the vehicle was manufactured before 1975
 - b. Unless you are riding in the back of a pickup camper
 - c. And failure to do so will result in a traffic ticket
7. A law enforcement officer notices that one of your passengers is not wearing a seat belt and writes a citation. Which of the following is true?
 - a. Both you and your passenger will receive a citation
 - b. Your passenger will receive the citation, regardless of his or her age
 - c. You may receive the citation if the passenger is younger than 16

8. Who needs to wear their seat belts when driving on public or private property?

9. True or false. If you are driving and your passenger is under 16 years of age and not wearing a seatbelt, he or she can receive a citation? T / F

Why?

10. What is the distance needed for air-bag to safely inflate? _____

11. It is legal to leave a child six years of age or younger unattended in a motor vehicle:

- a. When keys left in the ignition could result in injuries
- b. If the child is supervised by a person 12 years or older
- c. When weather conditions present health or safety risk to child

12. Which of these statements is true about child passengers?

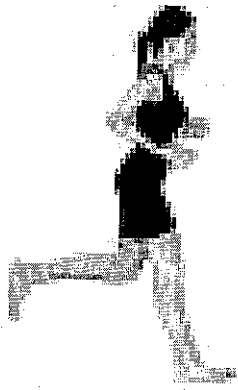
- a. Children 1 or older and over 20 pounds should ride in the front seat
- b. Children under age one should not ride in the front seat in airbag-equipped vehicles
- c. The front seat is generally the safest place in the car for children six years of age and older

13. Why is it illegal to leave a child under the age of six unattended?

- a. _____

- b. _____

FOLLOW THIS WARM UP ROUTINE BEFORE EXERCISING



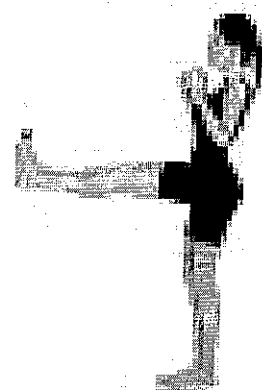
JOGGING



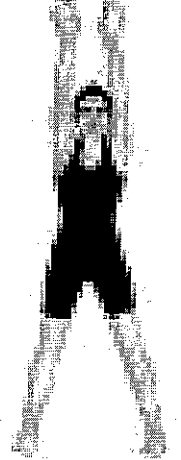
MARCHING



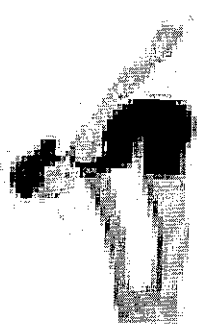
BACK-KICKING
EXERCISE



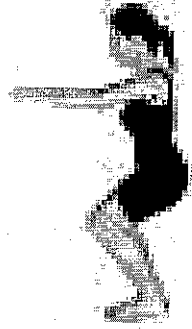
FRONT-KICKING
EXERCISE



HANDS-IN-THE-
AIR EXERCISE



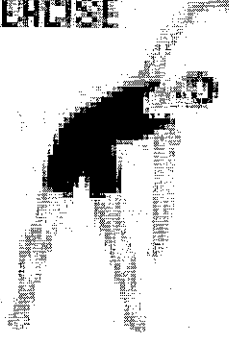
FEET-TOUCHING
EXERCISE



KNEE-BENDING
EXERCISE



ANKLE-HOLDING
STRETCH



ARM, LEG AND
TORSO STRETCH



To explore more, visit www.Top10FitnessRemedies.com

Location of Indian Tribes

Name:

Class:

Teacher:

Date:

Directions: Prior to being relocated to reservations, Native American Indians live on broad areas of land throughout North America. Below are just a few of these American Indian Tribes. Place the correct culture group onto the area in which they traditionally lived.

ITEMBANK:

Apache - This is the name given to an ethnic group of Native Americans found in the southwestern portion of the United States, and represented by famous leaders such as Geronimo and Cochise.

Cherokee - This group of people were forcibly relocated west in the 1830s on what became known as the Trail of Tears.

Cheyenne - This group is sometimes divided into Tsitsistas and Sutaio tribes. Black Kettle was the Chief of the Southern Cheyenne.

Choctaw - This is a Native American group originally found in the American South and was considered to be one of the "Five Tribes" by white settlers.

Nez Perce - This Indian tribe, led by Chief Joseph, attempted to flee to Canada rather than go to a reservation, though this eventually failed in 1877.

Seminole - This is a Native American group who originally lived in areas controlled by Spain and are sometimes called the "Unconquered People" for never surrendering to the United States government.

Sioux - This is the name given to the Native American ethnic group of the Great Plains, represented by such leaders as Sitting Bull, Crazy Horse, and Red Cloud.

World War II Locations



Name:

Class:

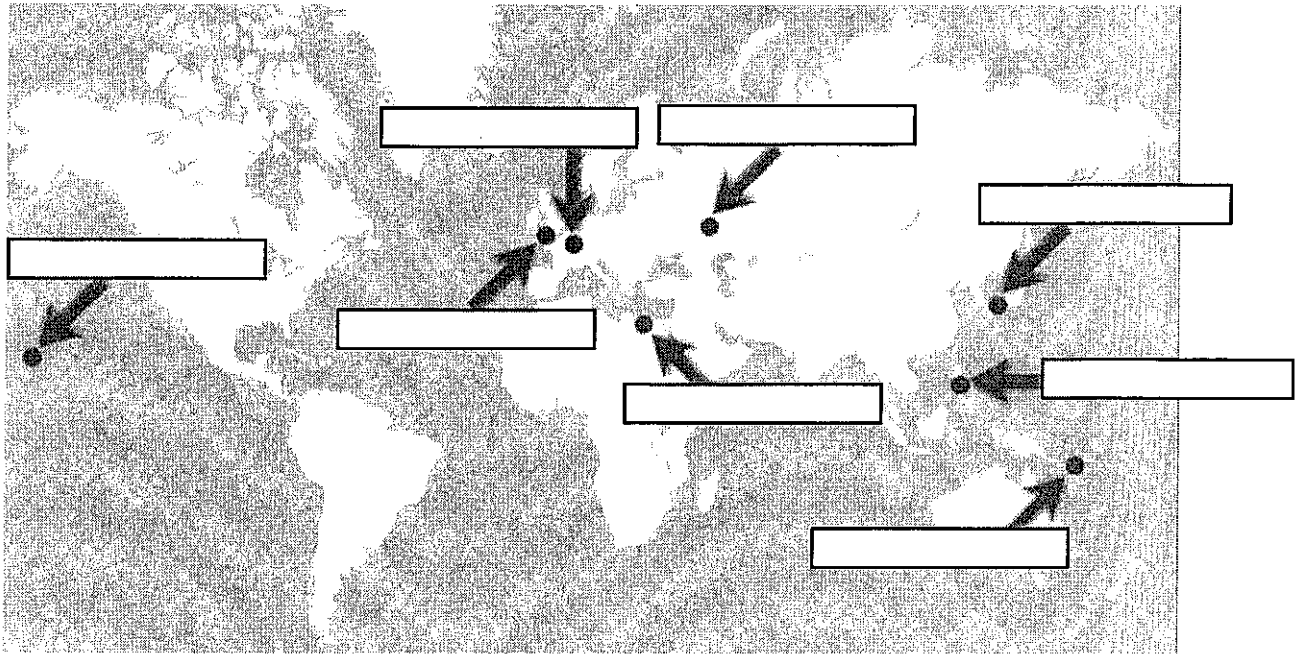
Teacher:

Date:

Directions: Locate the spots of these conflicts. You only need to write in the name of the battle, not the description.

ITEMBANK:

- Battle of the Bulge - Dec. 1944-Jan. 1945: Allied forces stop a late German push, advance towards Berlin.
- D-Day Invasion - June 6, 1944: The Allied invasion of western Europe that began with this amphibious landing.
- El Alamein - July-Nov. 1942: Allied forces twice defeat Axis attempts in 1942 to advance towards the Suez Canal.
- Guadalcanal - Aug. 1942-Feb. 1943: Allied forces stop the Japanese navy from advancing to Australia.
- Hiroshima - Aug. 6, 1945: U.S. atomic bombs destroy this city, ending the war just 9 days later.
- Pearl Harbor - Dec. 7, 1941: Japan attacks U.S. naval base here, bringing U.S. into WW II.
- Philippines - Oct. 1944-Aug. 1945: Allied forces attempt to take back this chain of islands from Japanese occupation.
- Stalingrad - July 1942-Feb. 1943: German forces fail to take this Soviet city; 750,000 Germans and ~500,000 are casualties.



Landmark Supreme Court Cases



Name:

Class:

Teacher:

Date:

Directions: Place each item in the correct order.

ITEMBANK:

Brown v Board of Education	Gibbons v. Ogden	Gideon v. Wainwright	Marbury v Madison	McCulloch v. Maryland
Miranda v Arizona	Plessy v. Ferguson	Reynolds v. Sims	Roe v. Wade	Texas v. Johnson
University of California v. Bakke				

This was the first decision of the Supreme Court of the United States to declare an act of Congress unconstitutional, thus establishing the doctrine of judicial review.

This was a U.S. Supreme Court decision that established the legality of racial segregation so long as facilities were "separate but equal."

This Supreme Court case, decided in 1954, declared that the segregation doctrine of "separate but equal," was not Constitutional when applied to the public school system.

This is the court case that upheld that the Fifth Amendment privilege against self-incrimination requires law officials to advise a suspect of his rights to remain silent and to obtain a lawyer.

This was the Supreme Court case that declared that most state and federal laws restricting abortion were unconstitutional and violated women's rights according to the 14th amendment.

This Supreme Court decision held that the act of burning, or desecrating, the American flag was protected under the First Amendment to the Constitution.

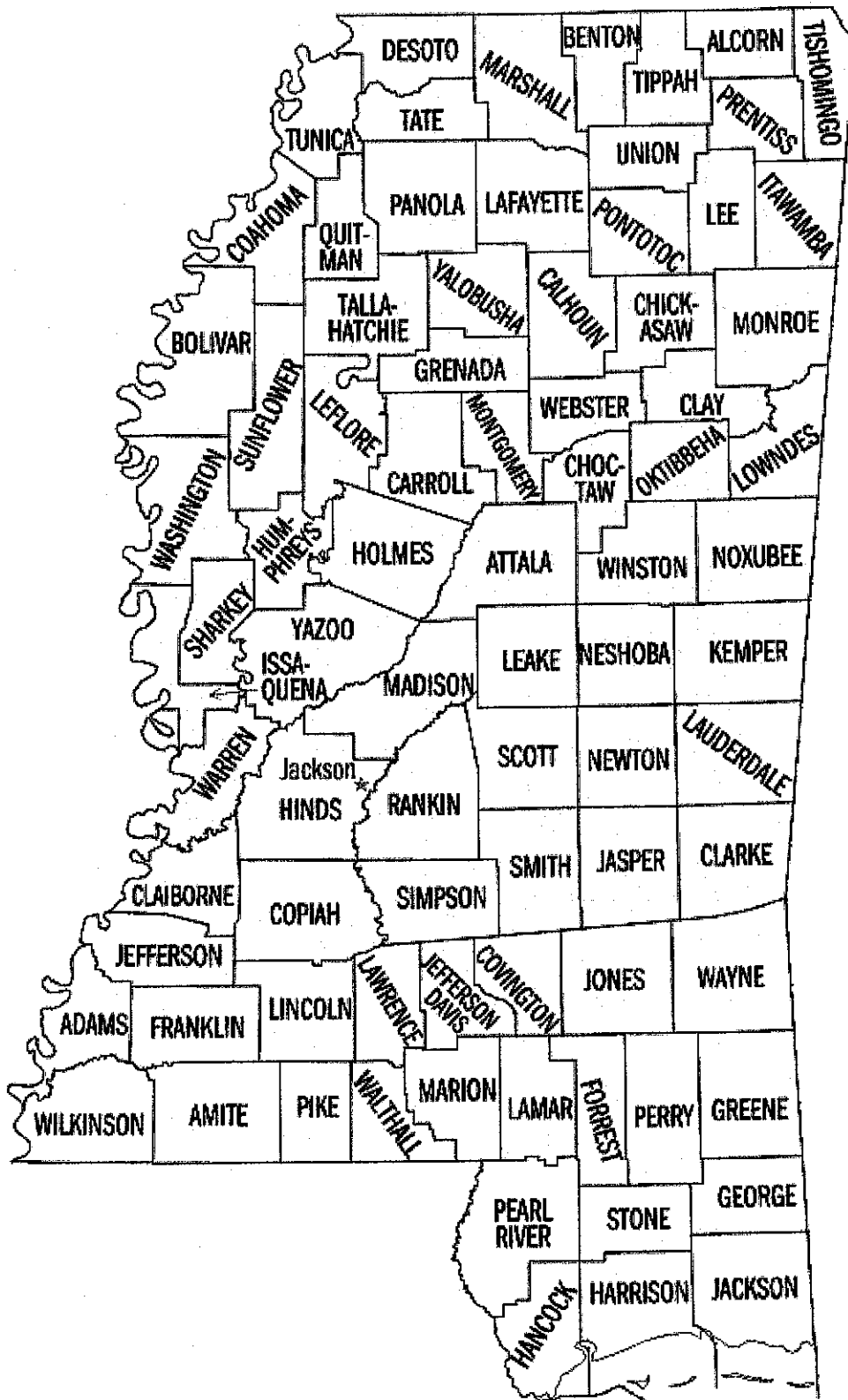
This 1978 Supreme Court case barred quota systems in determining college admissions, but allowed affirmative action programs to remain Constitutional.

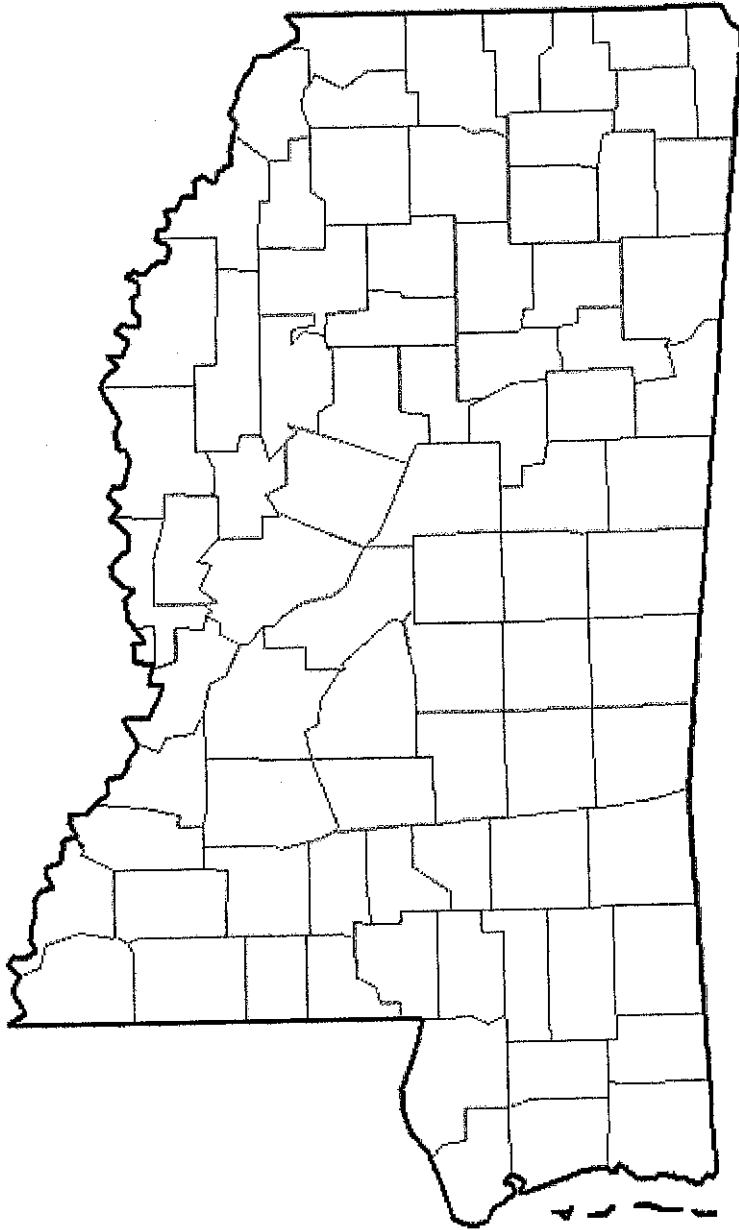
This 1964 Supreme Court decision held that State legislative districts had to have roughly the same number of people in them.

This 1963 Supreme Court case ruled that states are required by the 6th Amendment to provide legal counsel for defendants if they can not afford their own lawyer.

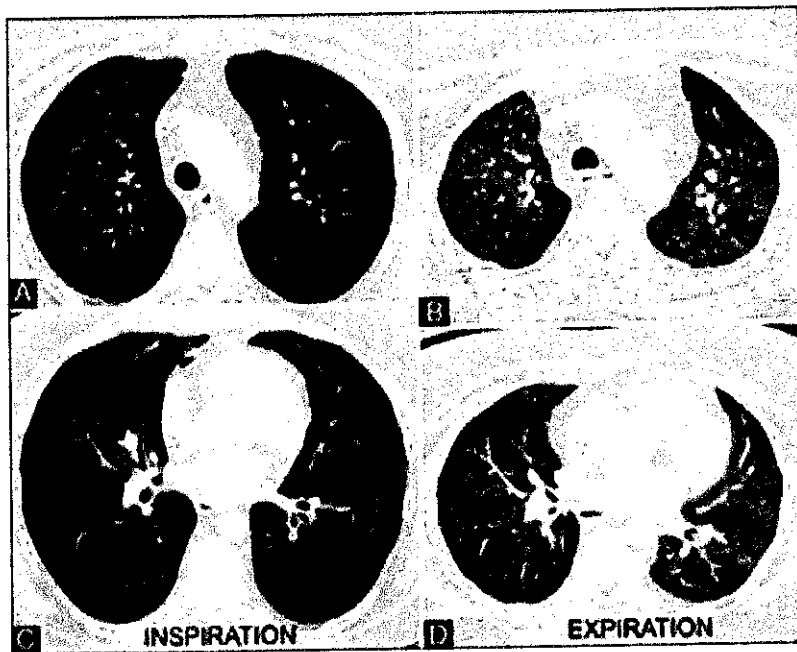
This Supreme Court case upheld the Federal government's use of "implied powers," those that are necessary to keep the government running and are not expressly listed in the Constitution.

In this 1824 case, the Supreme Court upheld the power of the Federal government to regulate commerce between states.





WHAT IS POPCORN LUNG (AND IS IT REALLY DANGEROUS)?



Since the popularity of vaping has grown, the term “popcorn lung” has hit the mainstream in a way that would almost be laughable, if there were anything funny about pulmonary obstruction. The vaping-popcorn lung connection has been driven home by the media, making “What is popcorn lung?” one of the most popular vaping-related searches on Google. Because “popcorn lung” sounds at once completely absurd and unsettlingly creepy, it’s caught public attention more than any other possible side effect of vaping.

So what is popcorn lung? The medical name is “bronchiolitis obliterans,” unfortunately abbreviated to BO – if it’s embarrassing to ask a doctor if you might have “popcorn lung,” just try asking a doctor if you have BO. Bronchiolitis obliterans can result from exposure to many different chemicals that cause inflammation and obstruction of the bronchioles, the smallest passages in the lungs.

But the specific chemical associated with popcorn lung symptoms is diacetyl, a food additive that was once used to make popcorn taste buttery without butter. That’s where the name comes from – BO was first linked to diacetyl when workers in a popcorn factory began getting sick.

One of the particular dangers of popcorn lung is that popcorn lung symptoms look indistinguishable from lots of other lung diseases, like asthma or *bronchiolitis obliterans organizing pneumonia* (which has the inappropriately whimsical acronym BOOP). Popcorn lung symptoms include:

- Shortness of breath
- Wheezing
- Dry cough
- Exhaustion

Because numerous other lung diseases cause the same symptoms, popcorn lung can often go undiagnosed, and therefore improperly treated, allowing the damage and scarring that causes popcorn lung symptoms to increase.

So what is the vaping-popcorn lung connection? Most high-end vape makers don't use diacetyl, but in 2015, more than half of the mass-market e-cigarettes studied were found to contain the chemical – especially flavored vape juice. The diacetyl makes the flavors richer, but because the vapor is being breathed in, it exposes users to the risk of popcorn lung, which increases the longer these liquids are vaped. Particularly concerning is the fact that diacetyl is primarily found in flavored e-liquids – which tend to be more appealing to teenagers.