



College Placement Test Information and Study Guide

Counseling and Advising Center

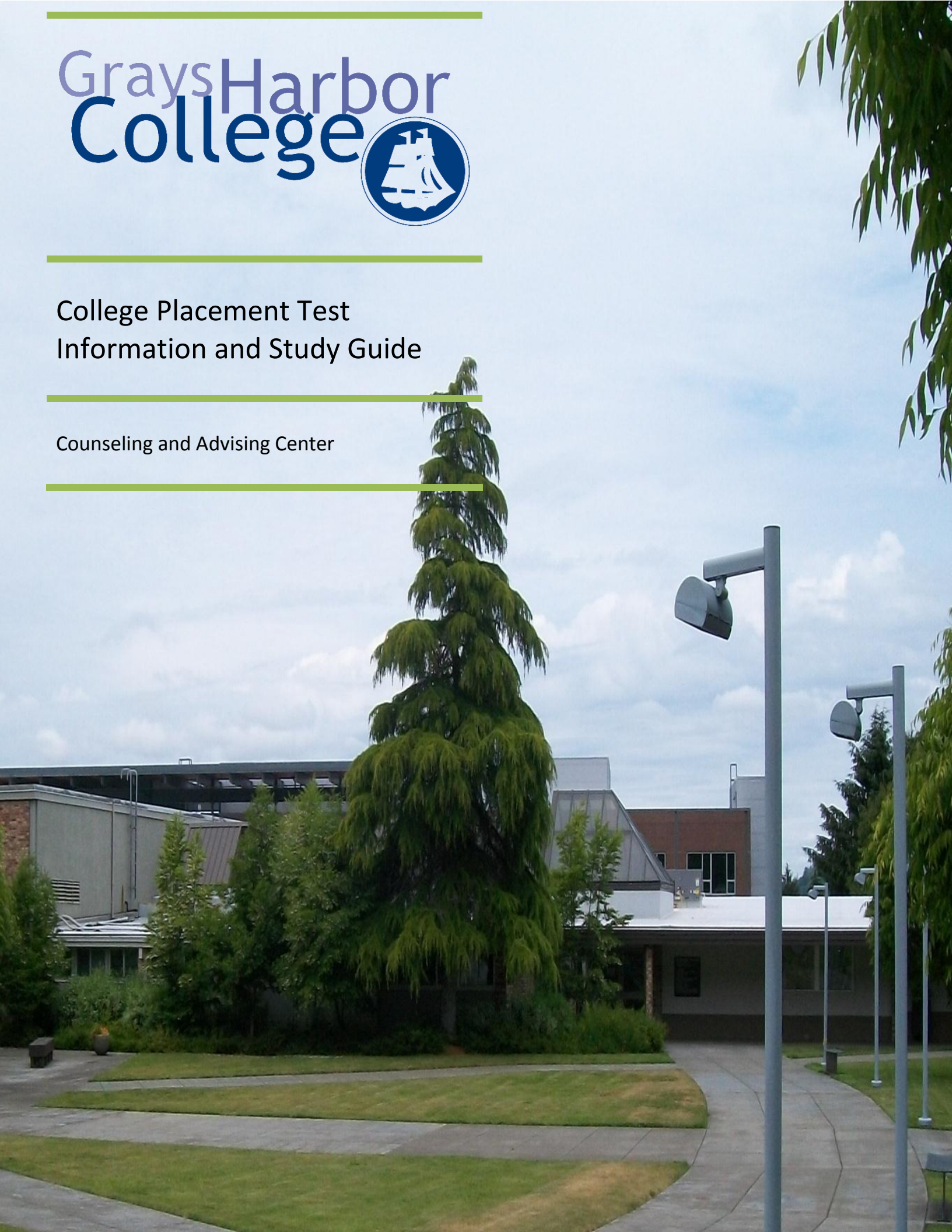


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College Placement Test Information

Rationale

The placement test (ACCUPLACER) is a computer-based program delivered via the Internet. Testing aids academic success by revealing each prospective student's skill level in Reading, English and Mathematics. By using the recommended placements, students will begin classes at a level where they are most likely to succeed.

Requirements

All new students need to take the College Placement Test (CPT). A student who has taken the Accuplacer test at another college may have their scores transferred to GHC. A student who has taken the Compass Placement test at another college can transfer their scores if they tested at or above college level. A student with a Bachelor's or Associate's degree does not need to take the placement test. A student who has passed an English class does not need to take the Sentence Skills portion of the Placement test. A student who has passed a math class does not need to take the Math portion for the Placement test; however, if it has been over 3 years they are encouraged to take the Math portion to determine their current level. If a student has passed several college level classes they may not need to take the reading portion of the CPT. Please see the Counseling Center to determine necessity for taking the Reading portion of the test. **Photo ID (driver's license, student ID, work ID, etc.) is required at the time of check-in in order to test.**

Testing Schedule

Testing is done on a walk-in basis only. The testing schedule is online at <http://www.ghc.edu/counseling/testing.htm>, or you can call (360) 538-4049 for the testing schedule. Ability to Benefit and accommodations testing is by appointment only.

Testing Instructions & Guidelines

To ensure ideal testing conditions for all students, students will be asked to do the following:

- Minimize noise in the center at all times
- Turn off cell phones
- Do not bring dictionaries or calculators into the testing center
- Do not bring study guides or other review information into the testing center
- Do not bring food or drink into the testing center
- Do not bring children

Computer Delivered Testing

No previous computer skills are needed to complete the test. All information is entered by using the mouse and/or the keyboard and only a small amount of information is typed. A proctor will always be present to assist with concerns related to test format or computer usage. Proctors may not answer any academic related questions associated with the test. There is no time limit for the CPT.

Adaptive Testing

The placement test is an adaptive test. This means that the computer uses student's answers to determine the level of difficulty of each successive question. Using this technique, appropriate skill level can be determined on each section of the test by asking relatively few questions.

Accommodations for Students with Disabilities

Students who require accommodations for testing must provide appropriate documentation to the Disability Support Services. Please send documentation to:

[Disability Support Services](#)

Phone: (360) 538-4068

TDD/TYY: (360) 538-4223

Fax: (360) 538-4293

1620 Edward P. Smith Drive

Aberdeen, WA 98520



PREPARING FOR THE PLACEMENT TEST

Introduction

Preparation for any test or exam is important to increase one's chance of success. Students are encouraged to take the time to review, similar to the way one would approach any exam. Students should complete each of the steps outlined below to increase the possibility of improving results.

Test Taking Tips

Tips you can follow to prepare for the test:

- Review basic concepts in reading, grammar, arithmetic, and algebra
- Take practice tests
- Get at least 7 to 9 hours of rest the night before the test
- Be sure to eat a balanced meal
- Use positive self-talk (i.e, "I will do the best I can.")

Where to Go



The Grays Harbor College placement test is given in room 140 in the [HUB building](#) at the Counseling and Advising Center at our main campus in Aberdeen, Washington and at our branch campuses at the Riverview Education Center in Raymond, Washington and Columbia Education Center in Ilwaco, Washington.

You will need a [Visitor Parking Permit for GED testing](#).

Resources for Preparation

Students may refer to the resources below to prepare.

Internet Web Sites:

http://www.testprepreview.com/accuplacer_practice.htm

Website produced by TestPrepReview.com. Encompasses all test sections of Accuplacer.

<http://www.khanacademy.org>

This site provides 1400+ videos covering everything from basic arithmetic and algebra to differential equations.

<http://www.AAAMath.com>

This site focuses on basic math skills, interactive practice, explanation of concepts, challenge games and random mathematics problems.

<http://www.MyMathTest.com>

This test, created by the Nassau Community College Math Department, is an excellent test that parallels the format of ACCUPLACER.

<http://www.Math.com>

This comprehensive site reviews principles from basic mathematics to calculus. We recommend the Pre-algebra and Algebra sections for review.

GHC Learning Links

Study Guide Publications

- GED review book.
- SAT review books (publishers include: Arco, Kaplan, Nova and Barrons).
- New York State English Regents exam review book.
- *Essential Mathematics: Basic Math for Everyday Use*, Williams and Atkins, Barrons.
- *Contemporary's Building Basic Skills in Mathematics*, Contemporary Books.
- *Forgotten Algebra*, Bleau, Barrons.
- *Quick Algebra Review: A Self-Teaching Guide*, Selby and Slavin, Wiley.

Additional Information



To learn more about the actual test, please go to the following URL address
<http://www.ghc.edu/counseling/testing.htm> or call (360) 538-4049.

ACCUPLACER Tests Overview

The placement tests may consist of:

- Answering questions covering reading, mathematics, writing and language use skills
- Writing an essay on a familiar topic
- All questions are multiple choice, except the essay

Sentence Skills

There are 20 Sentence Skills questions of two types.

- The first type is **sentence correction** questions that require an understanding of sentence structure. These questions ask you to choose the most appropriate word or phrase to substitute for the underlined portion of the sentence.
- The second type is **construction shift** questions. These questions ask that a sentence be rewritten according to the criteria shown while maintaining essentially the same meaning as the original sentence.

Within these two primary categories, the questions are also classified according to the skills being tested. Some questions deal with the logic of the sentence, others with whether or not the answer is a complete sentence, and still others with the relationship between coordination and subordination.

Reading Comprehension

There are 20 questions of two primary types on the Reading Comprehension test.

- The first type consists of a reading passage followed by a question based on the text. Both short and long passages are provided. The reading passages can also be classified according to the kind of information processing required including explicit statements related to the main idea, explicit statements related to a secondary idea, application, and inference.
- The second type of question, sentence relationships, presents two sentences followed by a question about the relationship between these two sentences. The question may ask, for example, if the statement in the second sentence supports that in the first, if it contradicts it, or if it repeats the same information.

Arithmetic Test

This test measures your ability to perform basic arithmetic operations and to solve problems that involve fundamental arithmetic concepts. There are 17 questions on the Arithmetic tests divided into three types.

- Operations with whole numbers and fractions: topics included in this category are addition, subtraction, multiplication, division, recognizing equivalent fractions and mixed numbers, and estimating.
- Operations with decimals and percents: topics include addition, subtraction, multiplication, and division with decimals. Percent problems, recognition of decimals, fraction and percent equivalencies, and problems involving estimation are also given.

- Applications and problem solving: topics include rate, percent, and measurement problems, simple geometry problems, and distribution of a quantity into its fractional parts.

Elementary Algebra

A total of 12 questions are administered in this test.

- The first type involves operations with integers and rational numbers, and includes computation with integers and negative rationals, the use of absolute values, and ordering.
- A second type involves operations with algebraic expressions using evaluation of simple formulas and expressions, and adding and subtracting monomials and polynomials. Questions involve multiplying and dividing monomials and polynomials, the evaluation of positive rational roots and exponents, simplifying algebraic fractions, and factoring.
- The third type of question involves the solution of equations, inequalities, word problems. solving linear equations and inequalities, the solution of quadratic equations by factoring, solving verbal problems presented in an algebraic context, including geometric reasoning and graphing, and the translation of written phrases into algebraic expressions.

College Level Math Test

There are 20 questions on the College-Level Mathematics.

The College-Level Mathematics test assesses from intermediate algebra through precalculus.

- Algebraic operations includes simplifying rational algebraic expressions, factoring, expanding polynomials, and manipulating roots and exponents.
- Solutions of equations and inequalities includes the solution of linear and quadratic equations and inequalities, equation systems and other algebraic equations.
- Coordinate geometry includes plane geometry, the coordinate plane, straight lines, conics, sets of points in the plane, and graphs of algebraic functions.
- Applications and other algebra topics ask about complex numbers, series and sequences, determinants, permutations and combinations, fractions, and word problems.
- The last category, functions and trigonometry, presents questions about polynomials, algebraic, exponential, logarithmic and trigonometric functions.

CPT Study Guide

Sample Questions

The following section provides basic examples of the types of questions on the placement test. Reviewing these questions does not guarantee an improved score but a thorough understanding of how each correct answer was derived is an excellent starting point.

Reading Comprehension

The Reading Comprehension section contains 20-25 questions. Designed to measure how well you understand what you read, some questions will require reading passages of various lengths and answering a series of questions about the content in the passage. Other questions will require the tester to read two sentences and answer a question regarding the relationship of these two sentences.

Directions

Read the statement or passage and then choose the best answer to the question. Answer the question based on what is stated or implied in the statement or passage.

1. Myths are stories, the products of fertile imagination, sometimes simple, often containing profound truths. They are not meant to be taken too literally. Details may sometimes appear childish, but most myths express a culture's most serious beliefs about human beings, eternity and God.

The main idea of this passage is that myths

- A. are created primarily to entertain young children.
- B. are purposely written for the reader who lacks imagination.
- C. provide the reader with a means of escape from reality.
- D. illustrate the values that are considered important to a society.

2. In the words of Thomas DeQuincy, "It is notorious that the memory strengthens as you lay burdens upon it." If, like most people, you have trouble recalling the names of those you have just met, try this: The next time you are introduced, plan to remember the names. Say to yourself, "I'll listen carefully; I'll repeat each person's name to be sure I've got it, and I will remember." You'll discover how effective this technique is and probably recall those names for the rest of your life.

The main idea of the paragraph maintains that the memory

- A. always operates at peak efficiency.
- B. breaks down under great strain.
- C. improves if it is used often.
- D. becomes unreliable if it tires.

3. The ultimate source of energy for all plants and animals is sunlight. But the sun's energy can be harnessed by plants, through photosynthesis, and stored in molecules of carbohydrates. When animals eat these enzymes, large amounts of energy become available. Animals immediately convert this energy into molecules of high-energy ATP (adenosine triphosphate) – the universal currency of energy in living things. Excluding only the very first stages in carbohydrate breakdown, which are called glycolysis, the entire complicated process of energy transfer to ATP takes place within the mitochondria.

Glycolysis refers to

- A. the initial stages of carbohydrate breakdown.
- B. the process of plants producing oxygen and carbohydrates.
- C. the production of ATP.
- D. the production of body heat which occurs in the mitochondria.

4. Unemployment was the overriding fact of life when Franklin D. Roosevelt became President of the United States on March 4, 1933. An anomaly of the time was that the government did not systematically collect statistics of joblessness; actually it did not start doing so until 1940. The Bureau of Labor Statistics later estimated that 12,830,000 persons were out of work in 1933, about one-fourth of a civilian labor force of over 51,000,000.

Roosevelt signed the Federal Emergency Relief Act on May 12, 1933. The President selected Harry L. Hopkins, who headed the New York relief program, to run FERA. A gifted administrator, Hopkins quickly put the program into high gear. He gathered a small staff in Washington and brought the state relief organizations into the FERA system. While the agency tried to provide all the necessities, food came first. City dwellers usually got an allowance for fuel, and rent for one month was provided in case of eviction. FERA paid for medicine; some doctor bills, but no hospital costs; work-relief; sewing rooms; and renovated hand me-down clothing.

This passage is primarily about

- A. unemployment in the 1930's.
- B. the effect of unemployment on United States families.
- C. President Franklin D. Roosevelt's presidency.
- D. President Roosevelt's FERA program.

5. It is said that a smile is universally understood. And nothing triggers a smile more universally than a taste of sugar. Nearly everyone loves sugar. Infant studies indicate that humans are born with an innate love of sweets. Based on statistics, a lot of people in Great Britain must be smiling, because on average, every man, woman and child in that country consumes 95 pounds of sugar each year.

From this passage it seems safe to conclude that the English

- A. do not know that too much sugar is unhealthy.
- B. eat desserts at every meal.
- C. are fonder of sweets than most people.
- D. have more cavities than any other people.

6. With varying success, many women around the world today struggle for equal rights. Historically, women have achieved greater equality with men during periods of social adversity. The following factors initiated the greatest number of improvements for women: violent revolution, world war, and the rigors of pioneering in an undeveloped land. In all three cases, the essential element that improved the status of women was a shortage of men, which required women to perform many of society's vital tasks.

We can conclude from the information in this passage that

- A. women today are highly successful in winning equal rights.
- B. only pioneer women have been considered equal to men.
- C. historically, women have only achieved equality through force.
- D. Historically, the principle of equality alone has not been enough to secure women equal rights.

7. Plastics are synthetic materials that are so common today that we barely notice them. The process of making plastics, called polymerization, is a little over a hundred years old. Vinyl chloride was polymerized in 1838, acrylics in 1843, and polyester in 1847. Oddly, those newly synthesized plastics languished in polymer laboratories for decades because no one had yet found a use for the new materials.

We can see from the information in this passage that

- A. commercial use of a material does not always rapidly follow its discovery.
- B. people had no need for plastics in the 1800s.
- C. the introduction of plastics in the 1800s would have upset the world economy.
- D. no practical types of plastics were invented until the 20th century.

8. Primitive people tended to be highly superstitious. Anything out of the ordinary that happened was regarded with superstitious fear. Most people throughout history have been right-handed. For that reason, left-handedness was regarded as an evil omen. The Latin word for left is sinister. Since many people regarded left-handedness as bad, the word sinister entered the English language meaning “evil.”

From this passage we can conclude that fear and superstition usually grew from

- A. lack of knowledge.
- B. left-handedness.
- C. evil omens.
- D. terrifying circumstances.

9. In 1848, Charles Burton of New York City made the first baby carriage, but people strongly objected to the vehicles because they said the carriage operators hit too many pedestrians. Still convinced that he had a good idea, Burton opened a factory in England. He obtained orders for the baby carriages from Queen Isabella II of Spain, Queen Victoria of England, and the Pasha of Egypt. The United States had to wait another ten years before it got a carriage factory, and the first year only 75 carriages were sold.

Even after the success of baby carriages in England,

- A. Charles Burton was a poor man.
- B. Americans were still reluctant to buy baby carriages.
- C. Americans purchased thousands of baby carriages.
- D. the United States bought more carriages than any other country.

10. All water molecules form six-sided structures as they freeze and become snow crystals. Temperature, vapor, and wind conditions in the upper atmosphere determine the shape of the crystal. Snow crystals are always symmetrical because these conditions affect all six sides simultaneously.

The purpose of the passage is to present

- A. a personal observation.
- B. a solution to a problem.
- C. actual information.
- D. opposing scientific theories.

Sentence Skills

The sentence skills section includes 20 - 25 questions. *Sentence Correction* questions ask you to choose a word or phrase to substitute for an underlined portion of a sentence. *Construction shift* questions ask that a sentence be rewritten in a specific way without changing the meaning.

Directions: Rewrite the underlined portions of each sentence. Keep in mind that your new sentence should be well written and should have essentially the same meaning as the sentence given to you. The first choice is the same as the original sentence. If you think the original sentence is best, choose the first answer.

1. She hoped to find a new job. One that would let her earn money during the school year.

- A. job. One that
- B. job. The kind that
- C. job, one that
- D. job, so that it

2. Knocked sideways, the statue looked as if it would fall.

- A. Knocked sideways, the statue looked
- B. The statue was knocked sideways, looked
- C. The statue looked knocked sideways
- D. The statue, looking knocked sideways,

3. When you cross the street in the middle of the block, this is an example of jaywalking.

- A. When you cross the street in the middle of the block, this
- B. You cross the street in the middle of the block, this
- C. Crossing the street in the middle of the block
- D. The fact that you cross the street in the middle of the block

4. To walk, biking, and driving are Pat's favorite ways of getting around.

- A. To walk, biking, and driving
- B. Walking, biking, and driving
- C. To walk, biking, and to drive
- D. To walk, to bike, and also driving

5. Walking, by the corner the other day, a child, I noticed, was watching for the light to change.

- A. a child, I noticed, was
- B. I noticed a child watching
- C. a child was watching, I noticed,
- D. there was, I noticed, a child watching

6. In his songs, Gordon Lightfoot makes melody and lyrics intricately intertwine. Rewrite, beginning with Melody and lyrics... Your new sentence will include

- A. Gordon Lightfoot has
- B. make Gordon Lightfoot's
- C. in Gordon Lightfoot's
- D. does Gordon Lightfoot

7. It is easy to carry solid objects without spilling them, but the same cannot be said of liquids. Rewrite, beginning with Unlike liquids... The next words will be

- A. it is easy to
- B. we can easily
- C. solid objects can easily be
- D. solid objects are easy to be

8. Excited children ran toward the loud music, and they told others about the ice cream truck outside. Rewrite, beginning with The excited children, who had run toward the loud... The next words will be

- A. music, they told
- B. music, told
- C. music, telling
- D. music and had told

9. If he had enough strength, Todd would move the boulder. Rewrite, beginning with Todd cannot move the boulder... The next words will be

- A. when lacking
- B. because he
- C. although there
- D. without enough

10. The band began to play, and then the real party started. Rewrite, beginning with The real party started... The next words will be

- A. after the band began
- B. and the band began
- C. although the band began
- D. the band beginning

11. Chris heard no unusual noises when he listened in the park. Rewrite, beginning with Listening in the park... The next words will be

- A. no unusual noises could be heard
- B. when Chris heard no unusual noises
- C. and hearing no unusual noises
- D. Chris heard no unusual noises

Arithmetic

The Arithmetic Accuplacer test contains 17 questions and measures your skills in three primary categories:

- Operations with whole numbers and fractions. This includes addition, subtraction, multiplication, division, and recognizing equivalent fractions and mixed numbers.
- Operations with decimals and percents. This category includes addition, subtraction, multiplication, and division as well as percent problems, decimal recognition, fraction and percent equivalencies, and estimation problems.
- Applications and problem-solving. Questions include rate, percent, and measurement problems, geometry problems, and distribution of a quantity into its fractional parts.

NOTE: If you score high on the Arithmetic test, you will automatically take the Elementary Algebra test.

Directions: Solve the following problems and select your answer from the alternatives given. You may use scrap paper. No hand held calculators are permitted without prior approval. You are, however, permitted to use the calculator icon that appears at the bottom of the screen for some questions.

1. A soccer team played 160 games and won 65 percent of them. How many games did they win?
- A. 95
 - B. 104
 - C. 114
 - D. 246

The Number of Employees of Company K Who Were Involved in Accidents		
Position at Company K	Plant X	Plant Y
Mechanic	11	30
Power Machine Operators	9	12

2. The table above shows the results of an industrial health survey of 10,000 people employed at Company K for more than five years. If 2,500 employees were surveyed in each of the four categories, which group of employees had the highest accident rate?

- A. Mechanics in Plant X
- B. Mechanics in Plant Y
- C. Power Machine Operators in Plant X
- D. Power Machine Operators in Plant Y

3. $\frac{1}{2} + \frac{1}{3} =$

- A. $\frac{5}{6}$
- B. $\frac{1}{6}$
- C. $\frac{1}{5}$
- D. $\frac{2}{5}$

4. $\frac{7}{20} =$

- A. .35%
- B. $\frac{28}{100}$
- C. 0.35
- D. 3.5

5. Which of the following is the least?

- A. 0.105
- B. 0.501
- C. 0.015
- D. 0.15

6. The average weight for a group of 20 women is 130 pounds. If the average weight for $\frac{3}{4}$ of these women was 140 pounds, what was the average weight, in pounds, for the rest of the women?

- A. 100
- B. 110
- C. 120
- D. 1357

NOTE: If you score high on the Arithmetic test, you will automatically take the Elementary Algebra test.

Elementary Algebra

There are 12 questions on the Elementary Algebra section. The questions relate to the following three areas:

1. Operations with integers and rational numbers, including computation with integers and negative rationals, the use of absolute values, and ordering.
2. Operations with algebraic expressions testing skills in evaluating simple formulas and expressions, and in adding and subtracting monomials and polynomials.

Both of the preceding categories include questions about multiplying and dividing monomials and polynomials, evaluating positive rational roots and exponents, simplifying algebraic fractions, and factoring.

3. The third category tests skill in solving equations, inequalities, and word problems. These questions include solving systems of linear equations, quadratic equations by factoring, verbal problems presented in algebraic context, geometric reasoning, the translation of written phrases into algebraic expressions, and graphing.

Directions: Solve the following problems and choose your answer from the alternatives given. You may use scrap paper. No hand held calculators are permitted without prior approval. You are, however, permitted to use the calculator icon that appears at the bottom of the screen for some questions.

1. If A represents the number of apples purchased at 15 cents each and B represents the number of bananas purchased at 10 cents each, which of the following represents the total value of the purchases?

- A. $A + B$
- B. $25(A + B)$
- C. $10A + 15B$
- D. $15A + 10B$

2. $\sqrt{2} \times \sqrt{15} =$

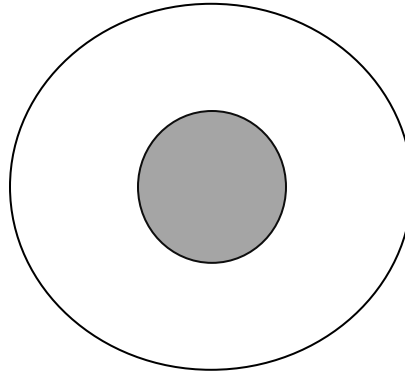
- A. 17
- B. 30
- C. $\sqrt{30}$
- D. $\sqrt{17}$

3. The Greens scored one less than twice as many points as the Yellows. If the Yellows scored "N" points, which expression represents the total number of points scored by the two teams?

- A. $2N - 1$
- B. $2N$
- C. $3N - 1$
- D. $2(N-1)$

4. In the figure below, both circles have the same center, and the radius of the larger circle is R . If the radius of the smaller circle is three units less than R , which of the following represents the area of the non shaded region?

- A. R^2
- B. $(R-3)^2$
- C. $R^2 - 3^2$
- D. $R^2 - (R-3)^2$



5. $(3x - 2y)^2 =$

- A. $9x^2 - 4y^2$
- B. $9x^2 + 4y^2$
- C. $9x^2 + 4y^2 - 6xy$
- D. $9x^2 + 4y^2 - 12xy$

Answers to the Sample Questions

Reading Comprehension	Sentence Skills	Arithmetic	Elementary Algebra
1. D	1. C	1. B	1. D
2. C	2. A	2. B	2. C
3. A	3. C	3. A	3. C
4. D	4. B	4. C	4. D
5. C	5. B	5. A	5. D
6. D	6. C		
7. A	7. A		
8. A	8. B		
9. B	9. B		
10. C	10. A		
	11. D		

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