Student Name _____

Teacher Name _____

School _____

System _____

Tennessee Comprehensive Assessment Program

Achievement Test ~ Grade 7

Item Sampler

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Introduction

What is the TCAP Achievement Test?

The TCAP Achievement Test is a multiple-choice test designed to measure student achievement in certain skills in four content areas: Reading/Language Arts, Mathematics, Science, and Social Studies. The sample questions in this on-line Item Sampler are representative of the item types and item formats that will be used in the actual test, including those questions with and without art.

What are the questions testing?

Questions are written to test student performance in state content standards. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education. These Standards and Performance Indicators are listed on the State Department of Education Web site at http://www.state.tn.us/education/curriculum.shtml.

Who will be tested?

All students in grades 3 through 8 will be tested.

How long will the tests take?

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits only apply to students who are eligible for special or English Language Learner (ELL) accommodations.

How do I use the sample questions?

These questions provide information about the TCAP Achievement Test. The questions in the on-line Item Sampler are representative of questions that will be on the TCAP Achievement Test.

In a classroom learning session, these questions can be used to prepare students for the actual test. Item types with and without art are presented to better familiarize students with the actual test format.

An answer key for the sample questions is provided at the end of this on-line Item Sampler.

How will the tests be scored?

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

May calculators be used?

Calculators may be used on Part 1 and 2 of the Mathematics portions of the TCAP Achievement Test (grades 3–8) as per system policy.

Which test accommodations may be used?

The Achievement Test may be administered using various procedures that are used during the student's daily educational program. Certain conditions must be met for students to be eligible for special and ELL accommodations.

Here are some tips for preparing students for the test.

Remind students to:

Relax: It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

Listen: Listen to and read the test directions carefully.

Plan Use of Time: First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

Pause and Think: If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

Reading/Language Arts

Directions **Luisa wrote the following essay. It contains mistakes. Read the essay and answer Numbers 1 through 11.**

Now I See!

(1) I never appreciated my eyeglasses until I had to write this report for history class. (2) Now I am having an appreciation for this wonderful invention.

(3) I always thought that Benjamin Franklin invented eyeglasses. (4) He simply added to the invention by creating bifocal lenses that allow a person to see both near and far out of the same lens. (5) In 1286 well before Benjamin Franklin the first eyeglasses were created in Italy.

(6) The first glasses were made by placing small magnifieing lenses into two round frames connected by rivets. (7) People used these glasses for seeing things up close. (8) The first lenses were cloudy and fragile. (9) Cloudy lenses were not the only problem with early eyeglasses holding them in place was a challenge. (10) People had to hold them in place by hand. (11) If they didn't hold them in place by hand, their noses were pinched severely. (12) The Spanish and Chinese tried ways of attaching ribbons to the frames to help keep those in place, but the attempts were unsuccessful because the lenses were too heavy.

(13) Even with all these problems, sales of eyeglasses never decreased. (14) In fact, when books became available, the demand for eyeglasses increased. (15) There in those days were no eye doctors, so people visited eyeglass peddlers. (16) People tried on pair after pair until they found one they could see through clear.

(17) In the early 1700s, Edward Scarlett solved the problem of keeping eyeglasses where they belonged. (18) He added wire sidepieces that pressed against the temple to hold the glasses in place. (19) About twenty-five years later sidepieces were invented.

(20) It is hard to imagine that it took seven hundred years to perfect eyeglasses. (21) This invention has a long and interesting history.

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Reporting Category:	1 Language
Performance Indicator:	0701.1.1 Identify the correct use of nouns (i.e., common/proper, singular/plural, possessives, direct/indirect objects, predicate) and pronouns (i.e., agreement, reflexive, interrogative, demonstrative) within context.

1 **Read Sentence 12.**

The Spanish and Chinese tried ways of attaching ribbons to the frames to help keep those in place, but the attempts were unsuccessful because the lenses were too heavy.

What is the correct way to write the underlined word?

A them

B him

C these

D correct as is

Reporting Category:	1 Language
Performance Indicator:	0701.1.2 Identify the correct use of verbs (i.e., action/linking, regular/irregular, agreement, perfect tenses, verb phrases) within context.

2 **Read Sentences 1 and 2.**

I never appreciated my eyeglasses until I had to write this report for history class. Now I am having an appreciation for this wonderful invention.

What is the correct way to write the underlined part of Sentence 2?

F has

G have

H are having

J been having

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.3 Identify the correct use of adjectives (i.e., common/proper, comparative/superlative, adjective clauses) and adverbs (comparative and superlative forms) within context.**

3 **Read Sentence 16.**

People tried on pair after pair until they found one they could see through clear.

What is the correct way to write the underlined part of this sentence?

A see through clearly

B see through more clear

C see through clearest

D see through more clearer

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.5 Identify the correct use of prepositional phrases (place correctly according to the words they modify within the sentence) within context.**

4 **Read Sentence 15.**

There in those days were no eye doctors, so people visited eyeglass peddlers.

What is the best way to write this sentence?

F So in those days there were no eye doctors because people visited eyeglass peddlers.

G So people visited eyeglass peddlers because in those days there were no doctors.

H In those days there were no eye doctors, so people visited eyeglass peddlers.

J In those days, so people visited eyeglass peddlers; there were no doctors.

Go On ▶

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.6 Identify the correct use of commas (i.e., compound sentences, coordinating conjunctions, introductory words, appositives, interrupters) within context.**

5 **Read Sentence 5.**

In 1286 well before Benjamin Franklin the first eyeglasses were created in Italy.

Choose the correct way to punctuate this sentence.

A In 1286, well before Benjamin Franklin, the first eyeglasses, were created in Italy.

B In 1286 well before, Benjamin Franklin, the first eyeglasses, were created in Italy.

C In 1286, well before Benjamin Franklin, the first eyeglasses were created in Italy.

D In 1286, well before Benjamin Franklin the first eyeglasses, were created in Italy.

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.6 Identify the correct use of commas (i.e., compound sentences, coordinating conjunctions, introductory words, appositives, interrupters) within context.**

6 **Read Sentence 19.**

About twenty-five years later sidepieces were invented.

Choose the revision that shows correct comma usage in the sentence.

F About twenty-five years later, sidepieces, were invented.

G About twenty-five years later, sidepieces were invented.

H About twenty-five years later sidepieces, were invented.

J About, twenty-five years later, sidepieces were invented.

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.7 Identify within context a variety of appropriate sentence-combining techniques (i.e., comma + coordinating conjunction, use of semicolon, introductory phrases or clauses).**

7 **Read Sentences 10 and 11.**

People had to hold them in place by hand. If they didn't hold them in place by hand, their noses were pinched severely.

What is the best way to combine these sentences?

A People had to hold them in place by hand, or, if they didn't hold them in place by hand, they severely pinched their noses.

B Pinched severely were their noses if people did not hold them in place by hand.

C When people did not hold them in place by hand, their noses were pinched severely.

D People had to hold them in place by hand, so they held them in place by hand and were not pinched severely on their noses.

Go On ▶

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.8 Select the most appropriate method to correct a run-on sentence (i.e., conjunctions, semicolons, periods to join or separate elements) within context.**

8 **Read Sentence 9.**

Cloudy lenses were not the only problem with early eyeglasses holding them in place was a challenge.

What is the best way to correct this run-on sentence?

F Cloudy lenses were not the only problem with early eyeglasses; and holding them in place was a challenge.

G Cloudy lenses were not the only problem with early eyeglasses. Holding them in place was a challenge.

H Cloudy lenses were not the only problem with early eyeglasses, holding them in place was a challenge.

J Cloudy lenses were not the only problem with early eyeglasses, so holding them in place was a challenge.

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.16 Identify correctly and incorrectly spelled words in context.**

9 **Read Sentence 6.**

The first glasses were made by placing small magnifieing lenses into two round frames connected by rivets.

What is the correct way to spell the underlined word?

A magnafying

B magnefieing

C magnifying

D maganifing

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Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.1 Identify the purpose for writing (i.e., to inform, to describe, to explain, to persuade, to entertain).**

10 **What is the main purpose of this essay?**

F to persuade readers of the importance of eyeglasses

G to describe to readers the many uses of eyeglasses

H to entertain readers with a funny experience about eyeglasses

J to inform readers of interesting facts about eyeglasses

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.9 Select illustrations, explanations, anecdotes, descriptions and/or facts to support key ideas.**

11 **To best support the essay, Luisa should include an illustration of**

A a person wearing modern eyeglasses.

B both modern and old-fashioned eyeglasses.

C an eyeglass peddler's cart with customers.

D the glass and sidepieces used in making early lenses.

Directions **Read the speech. Then answer Numbers 12 through 25.**

Females and Football

© Image Source Black/Alamy #ABCXP7

1 Most people have had someone tell them that they could not do something before seeing what their abilities really were. I have, and I am here to share some information with you and to ask you for your help. My name is Evelyn Foster, and it has always been my dream to play football for a school team.

2 Ever since I was a young girl, I have loved kicking the football as high and as far as I could. The more I practiced, the better I became at kicking field goals. Each of my brothers went on to play football for both West Middle School and West High School. I hope to do the same. I would be honored to be the first female to play football for West Middle School. However, the one obstacle standing in the way of my being part of the school's only football team is that I am a girl.

3 I have been told that my trying out for the boys' football team would upset the rest of the student body. I am here today to ask you to listen to my request and to please sign a petition that would allow me to try out for the boys' football team.

4 According to the Women's Sports Foundation, about 700 girls in the United States play football each year. This was made possible in 1972, when Congress passed Title IX of the Educational Amendments Act. Title IX was created to ensure fairness to public elementary, middle, and high school students. Chapter 38 of the law was written to protect students from discrimination based on gender or blindness. Any school that uses federal money is not allowed to discriminate against people based on these characteristics. Since our school uses government money, I believe that our school risks breaking the law if it remains impermissible for girls to try out for the boys' football team.

5 Some of you may think that football is too dangerous for girls to play. At the middle school level, this is simply untrue. From late elementary school through early high school, girls are often taller than boys. It is unlikely that boys at this age will have much greater strength.

6 Additionally, there are different positions on a football team, and some of these are considered to be less dangerous. It is true that players on the offensive and defensive line crash into each other. However, punters and kickers have no physical contact with other players. Many of you probably know that a punter kicks the ball when the offensive team doesn't move ten or more yards in three tries. Then, the punter leaves the playing field. A kicker makes the opening kickoff to start the first and second halves of the game. That person also kicks the ball after every touchdown and field goal. I want the opportunity to play either of these positions.

7 Football is a great sport, and I know it would be a great experience for me because I would be part of one of the best middle school teams. Any coach will tell you that it's good for students to be involved in sports and school activities. Sports teach kids how to get along with others and to meet goals. Sports also

Go On ▶

help individuals learn self-control. Sports teach kids about teamwork. Also, playing sports keeps kids out of trouble. In addition, regular physical activity helps students stay healthier, as well as sleep and manage stress better. As you can see, opening up one more sport to female students here at West Middle School will benefit us greatly.

8 Friends, I am asking for your help. I am collecting signatures from students who would support female students joining the football team. These signatures will be part of a petition that will be presented to the athletic department and to the school administration. With your help, West School District might open the sport of football to all players. Pick up a pen and do your part to make history today.

Reporting Category:	2 Vocabulary
Performance Indicator:	0701.1.20 Recognize and use grade appropriate and/or content specific vocabulary within context.

12 **Read this sentence from Paragraph 2.**

I would be honored to be the first female to play football for West Middle School.

What does honored mean in this sentence?

F eager

G proud

H surprised

J anxious

Reporting Category:	2 Vocabulary
Performance Indicator:	0701.1.21 Decode unknown grade level words in context, using previously learned strategies as aids in determining meaning.

13 **Read this sentence from Paragraph 4.**

Since our school uses government money, I believe that our school risks breaking the law if it remains impermissible for girls to try out for the boys' football team.

What does impermissible mean in this sentence?

A complete directions

B not in need of

C having the right to do

D not being allowed

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Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.1 Identify the purpose of a speech (i.e., to inform, to describe, to explain, to persuade, to entertain).**

14 **Evelyn gives this speech in order to**

F inform school administrators of the importance of sports in schools.

G persuade people to sign a petition requesting a change in school policy.

H explain to the school athletic department that she is a talented football player.

J entertain people with a story about appreciating the value of school athletics and activities.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.2 Identify the targeted audience of a speech.**

15 **Who is Evelyn asking for help?**

A lawmakers in Congress

B the school administrators

C the school athletic department

D students at West Middle School

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.3 Identify the thesis and main points of a speech.**

16 **Which sentence from the speech best expresses the thesis?**

F I have, and I am here to share some information with you and to ask you for your help.

G Ever since I was a young girl, I have loved kicking the football as high and as far as I could.

H However, the one obstacle standing in the way of my being part of the school's only football team is that I am a girl.

J Additionally, there are different positions on a football team, and some of these are considered to be less dangerous.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.4 Determine the most effective methods for engaging an audience during an oral presentation (e.g., making eye contact, adjusting speaking rate).**

17 **What can Evelyn do to best engage her audience?**

A make eye contact with people around the room

B laugh many times to make the audience feel relaxed

C have others add comments to what she is saying

D speak softly so people have to make an effort to hear her

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Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.2.6 Discern the organizational pattern of a speech (e.g., sequential, chronological, problem-solution, comparison-contrast, cause-effect).**

18 **What organizational pattern is used in this speech?**

F cause-effect

G comparison-contrast

H problem-solution

J sequential

Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.2.8 Identify the functions and responsibilities of individual roles within an organized group (i.e., reporter, recorder, information gatherer, leader, timekeeper).**

19 **If Evelyn must organize a group to help her gather signatures, which group member should keep track of the number of signatures on her petition?**

A the leader

B the recorder

C the reporter

D the timekeeper

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.9 Distinguish between a summary and a critique.**

20 **Which paragraph is a critique of this speech?**

F Many boys play football at West Middle School, and Evelyn Foster would like to join them. She has played for many years with her older brothers and believes she would be a good asset to the team. She would like to try for the position of kicker or punter.

G Evelyn Foster gives some interesting points to think about, but she does not consider the whole population of students. Not all students are interested in football.

H At West Middle School, girls are not allowed to play on the football team. Evelyn Foster would like to change this. She hopes that other students will join her efforts.

J Evelyn Foster has enjoyed playing football for many years and would like to participate on the middle school team. However, Evelyn has been told that playing on the boys' team may upset the student body. She would like for students to sign a petition to open football to all players.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.4.1 Select the most focused research topic.**

21 **After listening to Evelyn's speech, Tonya wants to learn more about the benefits of team sports. Which of these is the most focused research topic?**

A rules of football

B girls in school sports

C sports funding through donations

D character development in team sports

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Reporting Category: **5 Logic**

Performance Indicator: **0701.5.2 Evaluate text for fact and opinion.**

22 **Choose the sentence from the speech that is a fact.**

F Any school that uses federal money is not allowed to discriminate against students based on these characteristics.

G It is unlikely that boys at this age will have much greater strength.

H Football is a great sport, and I know it would be a great experience for me because I would be part of one of the best middle school teams.

J As you can see, opening up one more sport to female students here at West Middle School will benefit us greatly.

Reporting Category: **5 Logic**

Performance Indicator: **0701.5.4 Identify examples of persuasive devices (i.e., bandwagon, loaded terms, testimonial, name-calling, plain folks).**

23 **Which persuasive device does Evelyn use most in her speech?**

A plain folks

B name-calling

C bandwagon

D loaded terms

Reporting Category: **5 Logic**

Performance Indicator: **0701.5.7 Identify a false premise in text.**

24 **Which sentence from the speech is an example of false premise?**

F Most people have had someone tell them that they could not do something before seeing what their abilities really were.

G The more I practiced, the better I became at kicking field goals.

H Title IX was created to ensure fairness to public elementary, middle, and high school students.

J Some of you may think that football is too dangerous for girls to play.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.7.2 Select the visual image that best reinforces a viewpoint or enhances a presentation.**

25 **Which picture could Evelyn use to make the speech more effective?**

A a football field

B her kicking the football

C the football team

D her playing football as a small child

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Directions **A student wrote this report. It contains mistakes. Read the report and answer Numbers 26 through 35.**

1 Many insects wear a natural camouflage that helps them to hide from predators. Without this camouflage, these creatures might not survive.

2 Other insects do not blend in with their environment, but they still have fascinating disguises. The tails of swallowtail butterfly wings can be mistaken for antennae, and the red and blue spots can be mistaken for eyes. This makes it hard for other creatures to predict which way the swallowtail butterfly will go when it moves, allowing it to fly away quickly.

3 Most people are aware of the insects that blend in with their environment to avoid unwanted attention. For example, the walking stick appears to be an ordinary twig. Some insects are shaped like leaves. These insects are usually green or light brown and often look like a cluster of several leaves of different sizes.

4 Some kinds of moths are disguised to look like completely different creatures. Clearwing moths resemble bees. Clearwing moths can hover in flight, and they make a buzzing sound by beating their clear wings very quickly. The hummingbird clearwing moth has a two-inch wingspan and is often mistaken for a hummingbird. The slightly smaller snowberry clearwing moth has black and yellow bands of color on its body, often causing it to be mistaken for a bumblebee.

5 Some insects are disguised to look more dangerous than they really are. _____, swallowtail butterfly caterpillars act the part of the creature they look like. These caterpillars have big, yellow dummy "eyes" on their backs. When one of these caterpillars is hidden in leaves, it looks very much like a small snake. Even though it is not a snake, its appearance is deceiving. When the caterpillar is annoyed by a predator, it will rise up and pose like a snake that is about to strike.

6 These are just a few of the many different kinds of disguises in the insect world. There are many more insects to explore and to learn about!

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.2 Identify the audience for which a text is written.**

26 **Who would most likely be interested in reading this report?**

F a person wanting to know about nature

G a teacher looking for an entertaining story

H a scientist who studies reptiles

J a student who is learning about insects

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.3 Select an appropriate thesis statement for a writing sample.**

27 **Which sentence from the report is the thesis statement?**

A Many insects wear a natural camouflage that helps them to hide from predators.

B Without this camouflage, these creatures might not survive.

C Some kinds of moths are disguised to look like completely different creatures.

D There are many more insects to explore and to learn about!

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Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.4 Rearrange a multi-paragraphed work in a logical and coherent order.**

28 **Paragraph 2 is not in the correct place in the report. Where should it be moved?**

F after Paragraph 3

G after Paragraph 4

H after Paragraph 5

J after Paragraph 6

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.5 Select the appropriate time-order or transitional words/phrases to enhance the flow of a writing sample.**

29 **Read these sentences from Paragraph 5.**

Some insects are disguised to look more dangerous than they really are. _____, swallowtail butterfly caterpillars act the part of the creature they look like.

Choose the transition word or phrase that belongs in the blank.

A For instance

B However

C Consequently

D Without a doubt

Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.3.6 Choose the supporting sentence that best fits the context and flow of ideas in a paragraph.**

30 **Which sentence best supports the ideas in Paragraph 3?**

F Predators of the walking stick are birds, reptiles, and other insects.

G Bright colors are important to many living creatures.

H Many insects can fool predators because of their unique shape.

J Many students have probably seen a walking stick in a science class or textbook.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.3.7 Identify the sentence(s) irrelevant to a paragraph's theme or flow.**

31 **Which sentence from Paragraph 5 is repetitive and unnecessary?**

A Some insects are disguised to look more dangerous than they really are.

B These caterpillars have big, yellow dummy "eyes" on their backs.

C Even though it is not a snake, its appearance is deceiving.

D When the caterpillar is annoyed by a predator, it will rise up and pose like a snake that is about to strike.

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Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.3.8 Select an appropriate concluding sentence for a well-developed paragraph.**

32 **Which sentence is the best conclusion for Paragraph 3?**

F Insects shaped like twigs and leaves avoid danger by looking like parts of a tree.

G All these insects have to do to escape notice is to stay still.

H Because these insects look like twigs and leaves, they prefer to live in trees.

J Many predators search trees, looking for these tasty insects.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.3.10 Select an appropriate title that reflects the topic of a written selection.**

33 **What would be a good title for this report?**

A It Isn't Easy Being an Insect

B Fun With Insects

C Insects in Disguise

D Insect Safety

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.11 Identify individual writing selections as technical, narrative, persuasive and/or descriptive in mode.**

34 **This report is an example of which type of writing?**

F narrative

G technical

H persuasive

J descriptive

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.3.12 Complete a graphic organizer (e.g., clustering, listing, mapping, webbing) with information from notes for a writing selection.**

35 **Look at the list the student made before writing this report.**

Insect Camouflage

- Resemble parts of a tree
- Imitate other creatures
- _____

What information is missing from the list?

A Fly away quickly

B Live high up in trees

C Make loud buzzing sounds with their wings

D Appear more dangerous than they are

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Directions **Read the passage. Then answer Numbers 36 through 48.**

Eat Your Microbes, They're Good for You!

by Nidhi Kamra


© Leonid Nyshko/iStockphoto #5797724

1 Remember Little Miss Muffet? Yeah—the easily startled girl who sat on a tuffet,[1] eating her microbes.

2 " 'Microbes'? I think that's curds and whey!" you say.

3 Relax. It's the same thing. And I bet that you don't even know what curds and whey are, anyway, do you?

Microbes in Your Food

4 Fermented dairy foods like curds (yogurt to you) and cheese (made from curds) contain probiotics—live microbes that provide numerous health benefits. Such "alive" foods are made by mixing a starter culture[2] containing microbes into pasteurized milk. Lactic acid bacteria (LAB) such as *lactobacillus bulgaricus* and *streptococcus thermophilus* are used as a starter for curds.

5 These bacteria, preferring desserts, make a meal out of lactose—the sugar found in milk. Once they've had their fill, they release lactic acid as a byproduct of their metabolism.[3] If the milk is warm, the LAB multiply and increase the lactic acid. This makes milk sour and curdles the proteins in it, forming a gel-like curd. A greenish liquid, whey, floats on top (you've seen it on the top of a carton of yogurt) and is the result of noncurdled proteins. A gram of freshly made curds can contain 1,000,000,000 (one billion) LAB!

Eat 'Em While They're Alive

6 If eaten regularly, LAB can kill pathogens[4] in your intestines and prevent diseases. However, these friendly microbes need to be eaten while they're alive, energetic, and plentiful. (LAB in yogurt that are worn out due to an expired shelf-life, processing, and preservatives aren't much help.) The acid in your stomach kills most microbes. If you eat enough LAB, though, some will survive and travel to your intestines.

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[1]**tuffet:** a clump of low grass, or a low seat like a stool
[2]**culture:** living cells in a medium in which they can grow and multiply
[3]**metabolism:** the complex of physical and chemical processes occurring within a living cell or organism that are necessary for the maintenance of life
[4]**pathogens:** bacteria or viruses that cause disease

7 Your intestines are like a city—with many types of microbes living together. The LAB will compete for a home in this city, and once they're well settled in, they'll police the bad guys. Many people who are lactose-intolerant eat yogurt, as LAB produce lactase—the enzyme that helps digest lactose. Ancient cultures ate yogurt to strengthen their immune systems and aid digestion, among many other benefits.

8 Now that you know what a bowl of curds and whey really is, have one yourself. (Find a spider and a tuffet, if you want the right effect.) Or, better yet, make yogurt at home. Little Miss Muffet used leftover curds as a starter to make more curds. Leftover LAB can provide a lifetime of delicious, warrior microbes!

Reporting Category:	**2 Vocabulary**
Performance Indicator:	**0701.1.18 Use context clues and background knowledge of roots and affixes to determine the meaning of unfamiliar words.**

36 **Read this sentence from Paragraph 6.**

> *(LAB in yogurt that are worn out due to an expired shelf-life, processing, and preservatives aren't much help.)*

The underlined root word helps the reader to understand that preservatives will make the product

F look attractive.

G sell quickly.

H last longer.

J taste better.

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Reporting Category:	**2 Vocabulary**
Performance Indicator:	**0701.1.19 Replace unknown words in context with appropriate synonyms or antonyms.**

37 **Read this sentence from Paragraph 7.**

> *The LAB will compete for a home in this city, and once they're well settled in, they'll police the bad guys.*

Which word is a synonym for police as used in this sentence?

A find

B arrest

C control

D use

Reporting Category:	3 Writing and Research
Performance Indicator:	0701.4.2 Identify levels of reliability among resources (e.g., eyewitness account, newspaper account, supermarket tabloid account, Internet source).

38 **Which of these would provide the most reliable information about the active bacterial cultures in a carton of purchased yogurt?**

F an Internet article about yogurt

G an advertisement for the product

H a recipe for homemade yogurt

J a nutrition label on the product

Reporting Category:	3 Writing and Research
Performance Indicator:	0701.4.3 Determine the most appropriate research source for a given research topic.

39 **Which of these would be the best source for additional information on symptoms of lactose intolerance?**

A a magazine article

B a journal entry

C a newspaper article

D a health textbook

Go On ▶

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0701.4.4 Distinguish between primary (i.e., interviews, letters, diaries, newspapers, personal narratives) and secondary (i.e., reference books, periodicals, Internet, biographies) sources.**

40 **Nadine is writing a report for her science class on how to ferment dairy foods. Which source is her primary source?**

F a magazine article on the benefits of yogurt

G a Web site about current dairy-farming practices

H an interview with a local cheese maker

J a video explaining the process of making yogurt

Reporting Category:	5 Logic
Performance Indicator:	0701.5.5 Select the correct word or phrase to complete an analogy, using synonyms, antonyms, homonyms, categories, subcategories, whole/part, functions, verb forms).

41 **Complete the analogy based on the passage.**

Energetic is to active as preventive is to _____.

A suspicious

B able

C healthful

D carefree

Reporting Category:	5 Logic
Performance Indicator:	0701.5.6 Identify an example of deductive or inductive reasoning in text.

42 **Which sentence from the passage shows an example of deductive reasoning?**

F Fermented dairy foods like curds (yogurt to you) and cheese (made from curds) contain probiotics—live microbes that provide numerous health benefits.

G A greenish liquid, whey, floats on top (you've seen it on the top of a carton of yogurt) and is the result of noncurdled proteins.

H If eaten regularly, LAB can kill pathogens in your intestines and prevent diseases.

J Now that you know what a bowl of curds and whey really is, have one yourself.

Go On ▶

Reporting Category: **5 Logic**

Performance Indicator: **0701.5.8 Make inferences and draw conclusions based on evidence in text.**

43 **A reader can conclude that the food with the best source of friendly microbes is**

A ice cream.

B aged cheese.

C cold, sweetened milk.

D freshly cultured yogurt.

Reporting Category: **6 Informational Text**

Performance Indicator: **0701.6.1 Formulate clarifying questions before, during, or after reading.**

44 **Which question is not answered in the passage?**

F Which dairy products have the most LAB?

G What type of food do LAB prefer?

H Why should a person eat LAB?

J How many LAB can live in a gram of curds?

Reporting Category:	**6 Informational Text**
Performance Indicator:	**0701.6.2 Identify the main idea and supporting details in text.**

45 **Which sentence best supports the importance of eating LAB in foods?**

A Lactic acid bacteria (LAB) such as *lactobacillus bulgaricus* and *streptococcus thermophilus* are used as a starter for curds.

B If the milk is warm, the LAB multiply and increase the lactic acid.

C (LAB in yogurt that are worn out due to an expired shelf-life, processing, and preservatives aren't much help.)

D Leftover LAB can provide a lifetime of delicious, warrior microbes!

Reporting Category:	**6 Informational Text**
Performance Indicator:	**0701.6.3 Use text features to locate information and make meaning from text (e.g., headings, key words, captions, footnotes).**

46 **Where in the passage would the reader find the meaning of probiotics?**

F in the footnotes

G in the summary paragraph

H in the section titled "Microbes in Your Food"

J in the section titled "Eat 'Em While They're Alive"

Go On ▶

Reporting Category:	**6 Informational Text**
Performance Indicator:	**0701.6.4 Interpret factual, quantitative, technical, or mathematical information presented in text features (e.g., maps, charts, graphs, time lines, tables, and diagrams).**

47 **Read this recipe.**

Homemade Yogurt

1 gallon of milk
1 package of plain gelatin
¼ cup of boiling water
3 to 4 tbsp. of plain store-bought yogurt

Heat milk in large pot until very warm, yet not scalding hot because it will kill yogurt culture. Stir in the yogurt. Dissolve gelatin in boiling water. Cool and add to warm milk and yogurt mixture. Pour into pint-size jars. Place closed jars into two large pots of very hot water. Set in oven or other warm place to incubate[1] for about four or five hours until set. Refrigerate for weeks. Now you have delicious plain yogurt.

[1] **incubate:** maintain a favorable temperature to promote development

Based on the passage and the recipe, which step is <u>most</u> important when making yogurt?

A using the correct cooking utensils

B mixing the ingredients correctly

C keeping the mixture at a warm temperature

D storing the mixture for any amount of time

Reporting Category:	**6 Informational Text**
Performance Indicator:	**0701.6.6 Identify the organizational structure of an informational text (i.e., chronological, cause-effect, comparison-contrast, sequential, problem-solution).**

48 **What is the main organizational structure of Paragraph 6?**

F chronological

G cause-effect

H comparison-contrast

J problem-solution

Go On ▶

Directions **Read the poem. Then answer Numbers 49 through 57.**

The Lighthouse Keeper and the Herring Gull

by Bill Scott

The lighthouse keeper sat on a rock and a sad, salt tear wept he.
'I'm tired of biscuits and tins of beef, I want a fish for tea!
But I haven't a hook and I haven't a line to throw in the salty sea.'

He peered to the east where the breakers broke, he blinked his teary eye.
He looked behind where his tower rose like a steeple in the sky
And he saw a wise old herring gull perched on a rock close by.

Said the keeper, 'A gull has an easy time when he wants a fish to swallow.
He rises up till he spies a shoal where the billows bellow hollow.
He dives down deep and he gulps a fish, with another one to follow.'

The keeper found a rusty nail and hammered it into a hook;
He ravelled a string both long and strong from his cozy sea-boot sock;
He baited the line and cast it in with a crafty, hungry look.

He caught a whiting and a bream, he almost caught a whale.
He hooked a crab by its big, round claws and a flathead by the tail,
And he tossed each fish behind him, where they fell in an old tin pail.

Then he snavelled a shark that broke his line. He didn't really care.
He had fish enough to fry for tea, and for breakfast, and to spare,
And even enough for the herring gull that he thought deserved a share.

So he turned around to view his catch with shouts of joy and mirth,
But his roar of rage at what he saw was heard from Cairns to Perth[1]—
An empty pail, and the fullest, fattest herring gull on earth.

"The Lighthouse Keeper and the Herring Gull" by Bill Scott, © Dolphin Creative. Used by permission.

[1]**Cairns and Perth:** cities on opposite coasts of Australia

Reporting Category:	2 Vocabulary
Performance Indicator:	0701.1.18 Use context clues and background knowledge of roots and affixes to determine the meaning of unfamiliar words.

49 **Read Lines 12 and 13.**

He baited the line and cast it in with a crafty, hungry look.

He caught a whiting and a bream, he almost caught a whale.

Based on context, the reader can conclude that a whiting is a

A special food.

B type of fish.

C kind of fishing hook.

D small animal.

Reporting Category:	5 Logic
Performance Indicator:	0701.5.1 Make predictions about the outcome of a given text.

50 **Based on events described in the poem, what will the lighthouse keeper probably do the next time he catches a fish?**

F protect the fish from the herring gull

G keep only enough fish to eat that day

H divide the fish with the herring gull

J eat the fish before he leaves the beach

Go On ▶

Reporting Category:	7 Literature
Performance Indicator:	0701.8.3 Distinguish among different genres (e.g., poetry, drama, biography, novel) using their distinguishing characteristics.

51 **Which description identifies "The Lighthouse Keeper and the Herring Gull" as a poem?**

A It has a plot that involves conflict and a solution.

B It uses imagery, rhyme, and a regular rhythmical pattern.

C It relates a true account of real people, places, and events.

D It tells a story about imaginary people, places, and events.

Reporting Category:	7 Literature
Performance Indicator:	0701.8.4 Determine the common characteristics of literary drama, nonfiction, novels, poetry, and short stories.

52 **The poem is similar to a short story in that the poem**

F has a unique setting.

G contains dialogue.

H is told in first person.

J has a conflict.

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.7 Identify flashback, foreshadowing, and symbolism within context.**

53 **The empty bucket at the end of the poem is a symbol of the lighthouse keeper's**

A hopefulness.

B carelessness.

C confidence.

D boredom.

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.8 Analyze the effects of sound (i.e., accent, alliteration, onomatopoeia, repetition, rhyme, internal rhyme) in context.**

54 **Which sound device does the author use <u>most</u> often in this poem?**

F accent

G onomatopoeia

H repetition

J rhyme

Go On ▶

Reporting Category:	7 Literature
Performance Indicator:	0701.8.9 Identify the kind(s) of conflict present in a literary plot (i.e., person vs. person, person vs. self, person vs. environment, person vs. technology).

55 **Which conflict is demonstrated in this poem?**

A person vs. person

B person vs. self

C person vs. environment

D person vs. technology

Reporting Category:	7 Literature
Performance Indicator:	0701.8.10 Identify and analyze figurative language (i.e., hyperbole, simile, metaphor, personification, pun) within context.

56 **Read Line 20.**

But his roar of rage at what he saw was heard from Cairns to Perth—

The author uses hyperbole in this sentence to

F express the overwhelming emotions of the lighthouse keeper.

G emphasize how far away the lighthouse keeper is from other people.

H establish how aggressive the herring gull is.

J explain how quickly the herring gull reacted.

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.11 Recognize and identify words within context that reveal particular time periods and cultures.**

57 **Which line best suggests that this poem takes place outside the United States?**

A The lighthouse keeper sat on a rock and a sad, salt tear wept he.

B 'I'm tired of biscuits and tins of beef, I want a fish for tea!

C He ravelled a string both long and strong from his cozy sea-boot sock;

D And he tossed each fish behind him, where they fell in an old tin pail.

Go On ▶

Directions **Read the passage. Then answer Numbers 58 through 65.**

Sierra Oscar Sierra

by Lynn Murray

1 Outside Eric's bedroom window the January blizzard raged. Treetops swayed dangerously as gusting winds sculpted snow into huge drifts.

2 Eric turned on his ham radio and tuned into a station talking about the weather. An operator was reporting, "The National Weather Service has just issued a heavy snow alert for the Colorado Rocky Mountains at 1 P.M. today. Accumulations of up to two feet of snow are expected."

3 Bored, Eric programmed the receiver to scan different frequencies. If he heard any of his radio friends, he'd contact them. The radio squawked conversation then static as it flipped from frequency to frequency. He heard no familiar voices, though.

4 Then, the radio paused, emitting a series of loud sounds. It continued to cycle through the frequencies, stopping briefly at each one. Eric kept listening. Once more, the radio paused when it located the sounds; then it moved on again.

5 *How odd.*

6 Eric watched the numbers changing rapidly as the radio scanned. When it stopped on the sounds, he read the display: 144.200 MHz.

7 *That's not interference. It's too regular, too rhythmic. . . .* Eric jolted to attention. Three short clicks, three long, three short. Morse code!

8 It was an SOS!

9 He couldn't believe it. Answering emergencies had come up on his licensing test, but this was no test. This was real.

10 The distress call repeated itself.

11 Eric grabbed his radio. "This is KC0ZSZ. Go ahead, SOS."

12 A steady stream of Morse code erupted. All the dits and dahs blurred together. Eric could decode only two words—*hurt* and *help*. He felt as if he'd forgotten all his code. For his Technician Plus license, he'd learned to copy five words a minute, but this speed was sonic!

13 *Calm down. Think*. He grabbed a pen and paper, then said, "This is KC0ZSZ. Name's Eric Bailey. I can't copy that fast. Slow down and tell me your location." He concentrated, deciphering one letter at a time until they made words, then phrases: BLACK BEAR ROAD. UP SLIDE MOUNTAIN. MAX K0IDX.

14 Slide Mountain was ninety miles away! And could this be Mac from the ham-radio club. The burly instructor he has taken classes from? He couldn't forget Mac, the only man he knew with the same name as a semi-truck.

15 "Where on Black Bear?"

16 LASE RAVINE. TRUCK OVER EDGE.

17 "Stay on the radio. I'll send help." Eric bolted to the phone in the living room. The line was dead, probably severed by a falling tree. "No!" he shouted.

18 "What's wrong?" asked Eric's father, lowering his book.

19 "Someone on Slide Mountain needs help, and our phone's dead. I need to do something fast."

20 "That's pretty far," his father said. "He needs help from someone close. There must be another way to get him help."

21 Eric's mouth dropped open. "I know what to do."

22 Eric ran back to his room. Outside, the wind moaned, but inside, his radio sat silent. He keyed the mike. "Mac, I'm still trying to get help. I'll need to switch frequencies for a minute. Hang in there."

23 Mac's code returned garbled.

Go On ▶

24 Eric switched to another frequency. He drew in a shaky breath. "HELP. EMERGENCY. KC0ZSZ."

25 No response. He tried other frequencies. Finally he made contact.

26 "This is KC0WAA," a man's voice responded. "What's the emergency? Go ahead."

27 "This is Eric—KC0ZSZ. I've answered an SOS call—repeat, a Sierra Oscar Sierra call—on another frequency. My phone line is dead. Can you call for help?"

28 "Yes. What's the location and problem?"

29 Eric rattled off the information, then added, "Mac's not responding well anymore. Please hurry."

30 "Hold on while I call."

31 Eric's body felt cold and numb. What was Mac feeling out there in the blizzard?

32 "Eric? Slide Mountain Rescue is on their way with a team and ambulance. They know the place you're describing. I'll monitor this frequency for a while yet. Good luck. KC0WAA—clear."

33 Eric thanked him and signed off, switching back to 144.200. "Can you hear me, Mac? Help's coming! They're on their way."

34 There was no reply, only dead air.

35 Eric kept trying and got a slow response from Mac.

36 "You're doing great," Eric said. "Keep talking. Stay with me."

37 Mac responded occasionally, but slower each time.

38 Suddenly the radio crackled.

39 "This is Slide Mountain Rescue. We have Mac McKenzie."

40 "Yee-haw!" Eric shouted as he punched the air. "How is he?"

41 "He was getting pretty cold, but we arrived in time. Luckily he was able to tap code to you on the steering wheel. He wants to talk to you."

42 A barely audible voice asked, "You the Eric Bailey from ham-radio class in Leadville?"

43 "Yes, sir."

44 "Great rescue, son."

45 "Thanks. Great lessons, Mr. McKenzie."

46 "Seventy-three, Eric."

47 "Best regards to you, too," Eric said. "Get better soon."

Reporting Category:	2 Vocabulary
Performance Indicator:	0701.1.17 Use context clues and background knowledge of roots and affixes to determine the meaning of multi-meaning words.

58 **Read this excerpt from Paragraph 13.**

> *He concentrated, deciphering one letter at a time until they made words, then phrases . . .*

In the sentence above, the underlined word most likely means

F writing carefully.

G sounding out.

H taking slowly.

J understanding meaning.

Reporting Category:	5 Logic
Performance Indicator:	0701.5.3 Identify stated or implied cause-effect relationships.

59 **According to the passage, what causes Eric to change the radio channel?**

A He is unable to contact his friends.

B His home phone line does not work.

C He is unable to write down the message.

D His father will not allow him to help.

Go On ▶

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.1 Demonstrate an understanding of the basic elements of plot: exposition, rising action, climax, falling action, resolution/denouement.**

60 **Choose the paragraph from the passage that best shows the climax.**

F Paragraph 7

G Paragraph 17

H Paragraph 25

J Paragraph 41

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.2 Identify the author's point of view (i.e., first person, third-person objective, third-person limited, third-person omniscient).**

61 **The reader knows this passage is told from a third-person limited point of view because**

A Mac tells about Eric rescuing him in his own voice.

B a narrator explains the details of Mac's accident without providing any feelings.

C Eric's thoughts and feelings about Mac's accident are explained by Eric.

D a narrator reveals only Eric's thoughts about rescuing Mac.

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.5 Identify the stated or implied theme of a literary text.**

62 **Which sentence best states the theme of the passage?**

F Technology isolates people from the rest of the world.

G By utilizing resources, people are able to overcome challenges.

H Nature is an unpredictable force that people take for granted.

J By making friends, people are able to share joint interests.

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.6 Identify how the author reveals character (i.e., what the author tells us, what the characters say about him or her, what the character does, what the character says, what the character thinks).**

63 **In the passage, the character of Mac is best revealed by what**

A he says.

B other characters say about him.

C he thinks.

D the author tells the reader.

Go On ▶

Reporting Category: **7 Literature**

Performance Indicator: **0701.8.9 Identify the kind(s) of conflict present in a literary plot (i.e., person vs. person, person vs. self, person vs. environment, person vs. technology).**

64 **What is Eric's main conflict?**

F person vs. person

G person vs. self

H person vs. environment

J person vs. technology

Reporting Category: **7 Literature**

Performance Indicator: **0701.8.12 Identify the author's purpose for writing.**

65 **The author wrote this passage most likely to**

A entertain the reader with a tale of a rescue mission.

B persuade the reader to visit the Rocky Mountains.

C inform the reader about the use of Morse code.

D show the reader how a snowstorm affects a town.

Directions Read and answer Numbers 66 through 85.

Reporting Category:	**1 Language**
Performance Indicator:	**0701.1.4 Identify the correct use of conjunctions (i.e., coordinating, correlative, subordinating) and interjections within context.**

66 **Read the sentence.**

_____ *I have not done laundry in a couple of weeks, I must wear plaid pants with a striped shirt today.*

Which subordinating conjunction belongs on the blank line?

F Because

G Although

H However

J Whenever

Go On ▶

Reporting Category:	1 Language
Performance Indicator:	0701.1.9 Recognize usage errors occurring within context (i.e., double negatives, troublesome word pairs: {to/to/two, their/there/they're, its/it's, sit/set, lie/lay, affect/effect, sit/set, lie/lay, may/can, leave/let, teach/learn, accept/except, capitol/capital, principle/principal, between/among, rise/raise, stationary/stationery}).

67 **Which sentence correctly uses the underlined word?**

A Except for soccer, Darius has tried all sports offered at school.

B I would like to send a note to everyone accept Melissa.

C Harold did not know that all of the cast members, accept him, had been told about the surprise.

D Should Carmen except the job offer from the local library?

Reporting Category:	1 Language
Performance Indicator:	0701.1.10 Identify the correct use of colons (i.e., in business letters, preceding list of items) within context.

68 **Read the sentence.**

The teacher suggested that each student bring these items for the field trip water, a sandwich, and a good book.

How should the underlined part of the sentence be revised to correctly use a colon?

F suggested that each student bring: these items for the field trip water

G suggested that each student bring these items for the field trip: water

H suggested that each student: bring these items for the field trip water

J suggested that: each student bring these items for the field trip water

Reporting Category: **1 Language**

Performance Indicator: **0701.1.11 Identify the correct use of appositives and appositive phrases within context.**

69 **Which sentence correctly uses an appositive phrase?**

A The caterpillar, a large one with black spikes scared Paul when it fell from a tree and onto his shirt.

B Patti must clean her room the messiest room in the house, before her grandmother arrives for a weeklong visit.

C Did you hear that Darius the kid who lives around the block from my house was voted class president?

D Missy Truman, one of my favorite basketball players, is currently playing for a team in Minnesota.

Reporting Category: **1 Language**

Performance Indicator: **0701.1.12 Identify the correct use of infinitives and infinitive phrases within context.**

70 **Read this sentence.**

We hoped to be invited again, so we promised to speak respectfully, to walk and not to run, and to properly dispose of trash.

Which part of the sentence uses an infinitive incorrectly?

F to be invited

G promised to speak respectfully

H to walk and

J and to properly dispose

Go On ▶

Reporting Category: **1 Language**

Performance Indicator: **0701.1.13 Select the appropriate use of underlining/italicizing with titles, specific words, numbers, and letters.**

71 **Which sentence uses italics correctly?**

A The *word* capital has many meanings.

B The *Titanic* is one of the most well-known ships that tragically sank.

C All her sweaters are monogrammed with *JWM*.

D I attended the *Learning and Technology* meeting at school last night.

Reporting Category: **1 Language**

Performance Indicator: **0701.1.14 Form singular and plural possessives using apostrophes correctly.**

72 **Which sentence is written correctly?**

F The students project's will be displayed in the cafeteria.

G Teds' book report included an excellent summary of the plot.

H The children's toys were scattered throughout the room.

J Elections for the Spanish clubs officer's will be held next month.

Reporting Category:	1 Language
Performance Indicator:	0701.1.15 Choose the correct use of quotation marks and commas (i.e., in direct quotations, with explanatory material within the quote, proper use with end marks).

73 **Which sentence is correctly written using quotation marks?**

A "What will we learn today"? one student asked, entering the classroom.

B "Our goal for today," Mr. Jiménez announced, "is to read Chapter 8."

C "I think that's the chapter about molecules, Trish told her friend Erik."

D "I hope we get to do some experiments", Erik replied.

Reporting Category:	2 Vocabulary
Performance Indicator:	0701.1.22 Identify commonly used foreign words and phrases (i.e., RSVP, *déjà vu, faux pas, du jour, bon voyage*).

74 **In a restaurant, the soup offered or served for the day is called the soup**

F *bon voyage*.

G *déjà vu*.

H *du jour*.

J *faux pas*.

Go On ▶

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.2.5 Organize ideas in the most effective order for an oral presentation.**

75 **Michael is preparing to talk to his science class about his pet ferret. He plans to address the following topics.**

1. *meeting the pet's dietary needs*
2. *choosing a pet by studying the available options*
3. *preparing the pet's living space for safety and comfort*
4. *learning how to care for the pet through classes and reading*

In what order should Michael present these topics?

A 1, 3, 4, 2

B 2, 4, 3, 1

C 3, 4, 2, 1

D 4, 2, 1, 3

Reporting Category:	4 Communication and Media
Performance Indicator:	0701.2.7 Select the most appropriate behaviors for participating productively in a team (e.g., ask primarily relevant questions that move the team toward its goal and contribute to the topic of discussion, articulate the goals that have been provided for the team work and ask clarifying questions, come to agreement by seeking consensus or following the majority).

76 **Once a team has been put together and assigned a task, what is the first step that the team should do to begin its task?**

F outline the assigned goals to clarify the assignment

G contribute individually to the assigned work

H work together to determine how each team member should proceed

J assign roles for each team member

Reporting Category:	3 Writing and Research
Performance Indicator:	0701.3.13 Select the most appropriate format for writing a specific work-related text (i.e., instructions, directions, letters, memos, e-mails, reports).

77 **Leo will assume Troy's responsibilities at the mail desk while Troy is out of town. What is the best tool for Troy to use in training Leo to do this job?**

A a detailed report

B a report to their supervisor

C a lengthy office memo

D a list of instructions

Go On ▶

Reporting Category: **3 Writing and Research**

Performance Indicator: **0701.4.5 Discern irrelevant research material from written text.**

78 **A student created these notes after researching how to maintain a healthy diet. Read the notes and answer the question.**

	Choosing a Healthful Diet
	• The United States Department of Agriculture (USDA)
	recommends that people eat a Recommended Daily
	Allowance (RDA) of food to maintain a healthful diet.
	• There are five food groups: milk, vegetable, meat,
	fruit, and bread.
	• Yogurt is a food from the milk group that is good for
	digestion.
	• The USDA suggests that each person should eat a
	specific number of servings from each food group to
	create balanced meals throughout the day.
	• Avoiding fats, oils, and sweets is recommended.

If the student were to write a report on this topic, which fact in the notes should not be included?

F The United States Department of Agriculture (USDA) recommends that people eat a Recommended Daily Allowance (RDA) of food to maintain a healthful diet.

G Yogurt is a food from the milk group that is good for digestion.

H The USDA suggests that each person should eat a specific number of servings from each food group to create balanced meals throughout the day.

J Avoiding fats, oils, and sweets is recommended.

Reporting Category: **6 Informational Text**

Performance Indicator: **0701.6.5 Choose the correct order of a set of instructions.**

79 **Read these steps for washing dishes.**

1. *Run warm water in the sink and add detergent.*
2. *Put the dirty dishes into the sink.*
3. *Use the dish cloth to wipe dishes clean.*
4. _____
5. *Dry the dishes and put them away.*

Which step belongs on Line 4?

A Separate the dishes by type.

B Rinse the dishes with clean water.

C Save the dirtiest dishes for last.

D Soak the dishes in cold water.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0701.7.1 Choose the most appropriate medium for a prescribed purpose and audience.**

80 **Jasmine is giving a report on her favorite author, Christopher Paul Curtis. Which of these would <u>best</u> suit her purpose for convincing her classmates to read his work?**

F a photograph of the author and a book he wrote

G a list of the awards that the author has earned for his writing

H a video recording of an interview with the author

J an outline of the latest book by the author

Go On ▶

Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.7.3 Identify the purpose of a medium (i.e., to inform, to persuade, to entertain, to describe).**

81 **A television commercial shows a video of a remote control car climbing up stairs and over large rocks, as well as jumping long distances over ramps. What is the most likely purpose of the commercial?**

A to inform viewers about the variety of uses of the remote control car

B to describe the strength of the remote control car

C to entertain viewers with the exciting abilities of the remote control car

D to persuade viewers to buy the remote control car for its interesting features

Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.7.4 Draw an inference from a non-print medium.**

82 **Use the image below to answer the question.**

© Silvia Janser/iStockphoto #5095404

What can the reader tell about the subjects of the image?

F They are selling homemade instruments.

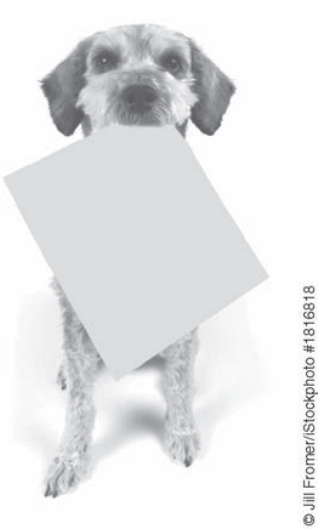
G They are performing a community service.

H They are gathering together for a shared interest.

J They are playing for a school audience.

Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.7.5 Choose the statement that best summarizes/communicates the message presented by a medium.**

83 **Look at the picture.**



What would be an appropriate caption for a company selling paper products?

A Pet ownership demands careful attention to the actions of the pet.

B Dogs are smarter than many people imagine.

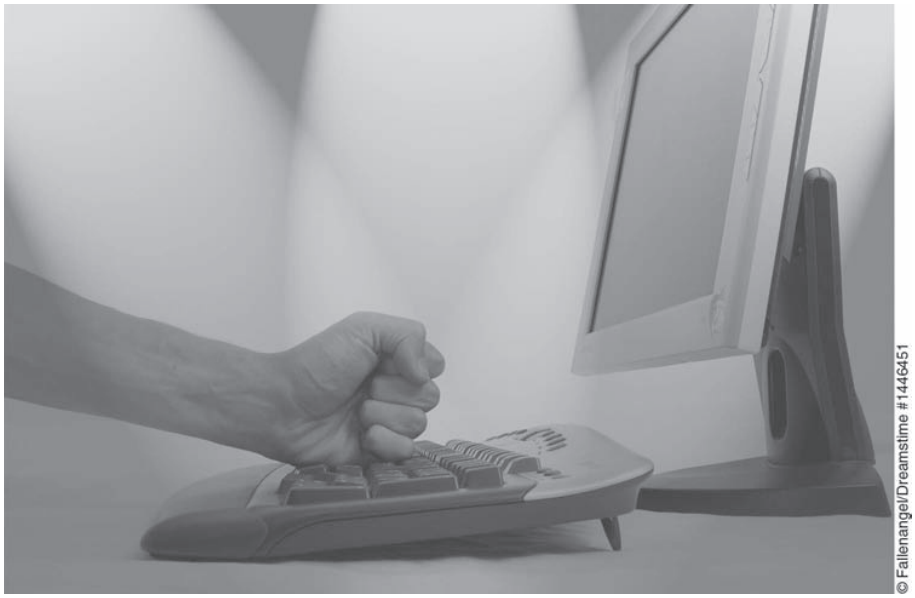
C Even your dog understands the value of a personal letter.

D Please clean up after your pets.

Go On ▶

Reporting Category:	**4 Communication and Media**
Performance Indicator:	**0701.7.6 Identify the type of conflict (i.e., person vs. person, person vs. self, person vs. environment, person vs. technology) represented in a non-print medium.**

84 **Look at the picture below.**



What type of conflict is shown in the picture?

F person vs. environment

G person vs. self

H person vs. person

J person vs. technology

Reporting Category:	**7 Literature**
Performance Indicator:	**0701.8.3 Distinguish among different genres (e.g., poetry, drama, biography, novel) using their distinguishing characteristics.**

85 **What characteristic do nonfiction and poetry have in common?**

A They have a plot.

B They have major and minor characters.

C They have conflict.

D They have a tone that reflects the author's attitude.

STOP

Mathematics

Reporting Category: **1 Mathematical Processes**

Performance Indicator: **0706.1.1 Use proportional reasoning to solve mixture/concentration problems.**

1 A recipe for making 4 cups of soup requires 3 cups of water. At this rate, how many cups of water are required to make 24 cups of soup?

A 6 cups

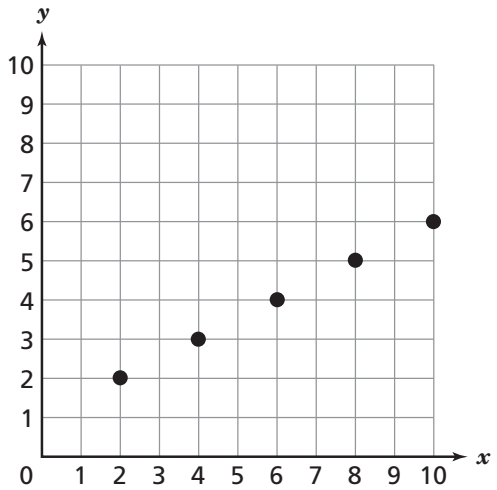
B 18 cups

C 32 cups

D 96 cups

Reporting Category:	**1 Mathematical Processes**
Performance Indicator:	**0706.1.2 Generalize a variety of patterns to a symbolic rule from tables, graphs, or words.**

2 The graph shows five points of a relation.



Which equation best represents this relation?

F $y = x - 1$

G $y = 2x - 2$

H $y = \frac{1}{2}x + 1$

J $y = \frac{1}{2}x + 7$

Go On ▶

Reporting Category: **1 Mathematical Processes**

Performance Indicator: **0706.1.2 Generalize a variety of patterns to a symbolic rule from tables, graphs, or words.**

3 The table shows values of w and t.

w	t
–2	5
0	1
2	5
4	17

Which equation represents the pattern shown by the data in the table?

A $t = 1 - 2w$

B $t = 3w - 1$

C $t = w^2 + 1$

D $t = (w + 1)^2$

Reporting Category: **1 Mathematical Processes**

Performance Indicator: **0706.1.3 Recognize whether information given in a table, graph, or formula suggests a directly proportional, linear, inversely proportional, or other nonlinear relationship.**

4 Which best describes the relationship between the input values and the output values shown in the table below?

Input	Output
3	$\frac{1}{6}$
5	$\frac{1}{10}$
7	$\frac{1}{14}$
9	$\frac{1}{18}$

F inversely proportional

G directly proportional

H exponential

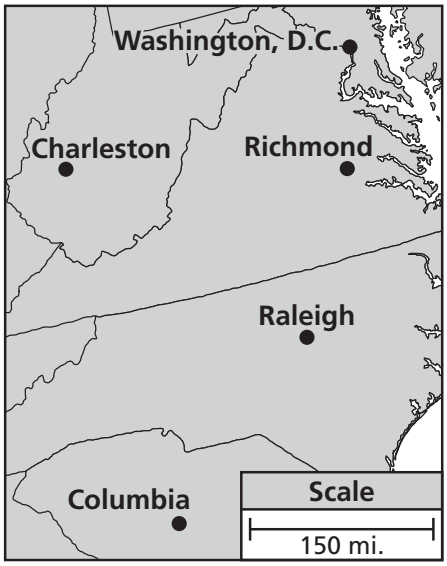
J linear

Go On ▶

Reporting Category: **1 Mathematical Processes**

Performance Indicator: **0706.1.4 Use scales to read maps.**

5 The scale drawing shows the location of Washington, D.C., and the capitals of several nearby states.



According to the scale drawing, which city is approximately 250 miles from Richmond?

A Washington, D.C.

B Charleston

C Columbia

D Raleigh

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**0706.2.1 Simplify numerical expressions involving rational numbers.**

6 What is the value of this expression?

$$1\frac{3}{5} + 2.4 \div \frac{4}{5}$$

F $3\frac{1}{5}$

G 4

H $4\frac{3}{5}$

J 5

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**0706.2.2 Compare rational numbers using appropriate inequality symbols.**

7 Which inequality is <u>true</u>?

A $0.35 < \frac{8}{25}$

B $0.45 < \frac{11}{25}$

C $0.55 < \frac{14}{25}$

D $0.65 < \frac{16}{25}$

Go On ▶

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**0706.2.2 Compare rational numbers using appropriate inequality symbols.**

8 Which value of m does not make this inequality true?

$$0.625 \leq m < 0.875$$

F $\frac{5}{8}$

G $\frac{7}{10}$

H $\frac{8}{10}$

J $\frac{7}{8}$

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**0706.2.5 Solve contextual problems that involve operations with integers.**

9 At 8:00 A.M. on Monday, the outside temperature was 11 degrees below freezing. At 3:00 P.M. on Monday, the outside temperature was 16 degrees above freezing. Which integer best represents the change in temperature from 8:00 A.M. to 3:00 P.M. on Monday?

A −27

B −5

C 5

D 27

Go On ▶

Reporting Category: **2 Number and Operations**

Performance Indicator: **0706.2.6 Express the ratio between two quantities as a percent, and a percent as a ratio or fraction.**

10 Mr. Smith asked his students whether they prefer to go to a museum or the zoo for a field trip. He found that 35% of the students prefer to go to a museum, 45% prefer to go to the zoo, and the rest have no preference. What is the ratio of students who have no preference to the students who prefer to go to the museum?

F 1:4

G 1:5

H 4:7

J 4:9

Reporting Category: **2 Number and Operations**

Performance Indicator: **0706.2.7 Use ratios and proportions to solve problems.**

11 The price for 8 rolls of paper towels is $5.36. Which of the following represents the same price per roll?

A 3 rolls for $2.01

B 2 rolls for $2.68

C 7 rolls for $4.36

D 12 rolls for $10.72

Reporting Category:	**3 Algebra**
Performance Indicator:	**0706.3.1 Evaluate algebraic expressions involving rational values for coefficients and/or variables.**

12 What is the value of $7x^2y$, when $x = \frac{3}{5}$ and $y = \frac{5}{7}$?

F $1\frac{4}{5}$

G $2\frac{1}{7}$

H 3

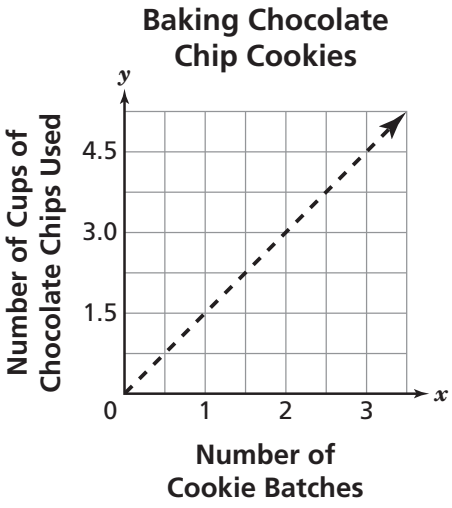
J 9

Go On ▶

Reporting Category: **3 Algebra**

Performance Indicator: **0706.3.4 Interpret the slope of a line as a unit rate given the graph of a proportional relationship.**

13 Ms. Jimenez baked chocolate chip cookies for a bake sale. The graph shows the relationship between the number of cookie batches baked and the number of cups of chocolate chips used.



What does the slope of the line represent?

A the total number of cookie batches Ms. Jimenez baked

B the total number of cups of chocolate chips Ms. Jimenez used

C the number of cookie batches per cup of chocolate chips used

D the number of cups of chocolate chips used per cookie batch

Reporting Category:	**3 Algebra**
Performance Indicator:	**0706.3.5 Represent proportional relationships with equations, tables and graphs.**

14 Which equation does not describe an inverse proportional relationship?

F $x = \frac{16}{y}$

G $y = \frac{20}{x}$

H $xy = 25$

J $y = \frac{7x}{10}$

Reporting Category:	**3 Algebra**
Performance Indicator:	**0706.3.6 Solve linear equations with rational coefficients symbolically or graphically.**

15 What value of p makes this equation true?

$$\frac{4}{5}p - 8 = 20$$

A $9\frac{3}{5}$

B $22\frac{2}{5}$

C 33

D 35

Go On ▶

Reporting Category:	**3 Algebra**
Performance Indicator:	**0706.3.7 Translate between verbal and symbolic representations of real-world phenomena involving linear equations.**

16 An art teacher had a total of t markers. He gave an equal number of markers to each of 18 students and had 16 markers left over. Which equation could be used to find n, the number of markers each student received?

F $t = 18n$

G $t = 34n$

H $t = 18n + 16$

J $t = 16n + 18$

Reporting Category:	**3 Algebra**
Performance Indicator:	**0706.3.8 Solve contextual problems involving two-step linear equations.**

17 Carolyn spent $40.00 to purchase 1 adult ticket and 5 child tickets for a movie. The price of the adult ticket was $7.50. The following equation can be used to find p, the price of each child ticket.

$$5p + 7.5 = 40$$

What was the price of each child ticket?

A $3.20

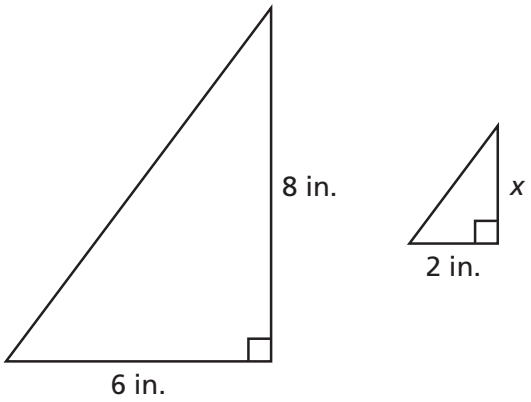
B $6.50

C $6.70

D $9.50

Reporting Category:	**4 Geometry and Measurement**
Performance Indicator:	**0706.4.1 Solve contextual problems involving similar triangles.**

18 The two similar triangles shown are patterns used to create a design on a jacket.



What is the value of *x*, the height of the smaller triangle, in inches?

F $1\frac{1}{2}$ inches

G $2\frac{2}{3}$ inches

H 4 inches

J 6 inches

Go On ▶

Reporting Category:	**4 Geometry and Measurement**
Performance Indicator:	**0706.4.3 Apply scale factor to solve problems involving area and volume.**

19 Two squares are similar. The area of the smaller square is 12 square inches. The area of the larger square is 768 square inches. What is the ratio of the side length of the smaller square to the side length of the larger square?

A $\frac{1}{64}$

B $\frac{1}{32}$

C $\frac{1}{8}$

D $\frac{1}{4}$

Reporting Category:	**5 Data Analysis, Statistics and Probability**
Performance Indicator:	**0706.5.3 Calculate and interpret the mean, median, upper-quartile, lower-quartile, and inter-quartile range of a set of data.**

20 What is the upper quartile of the numbers listed below?

6, 47, 54, 15, 42, 41, 7, 39, 36, 41, 43

F 28

G 41

H 43

J 48

Reporting Category:	**5 Data Analysis, Statistics and Probability**
Performance Indicator:	**0706.5.4 Use theoretical probability to make predictions.**

21 Each letter of the following name is written on a different card, and the cards are placed in a bag.

M U R F R E E S B O R O

One card is randomly selected from the bag. What is the probability that the selected card shows the letter R?

A $\frac{1}{12}$

B $\frac{1}{6}$

C $\frac{1}{4}$

D $\frac{1}{3}$

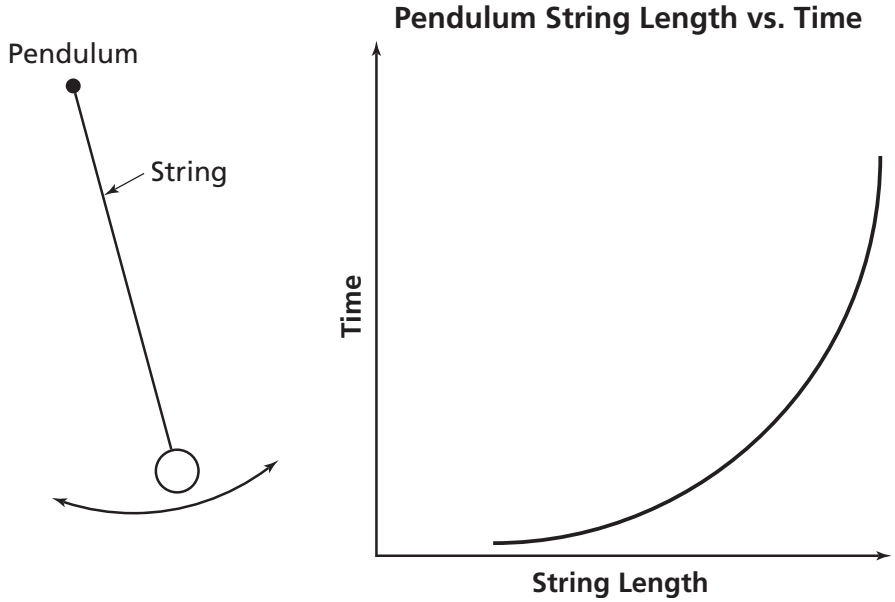
STOP

Science

Reporting Category: **INQUIRY AND TECHNOLOGY & ENGINEERING**

Performance Indicator: **0707.INQ.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.**

1 **Students investigated pendulums. The students plotted a graph to show the relationship between different lengths of the string and the time it took the pendulum to complete one full swing.**



Which conclusion is <u>best</u> supported by the graph?

A The shorter the string, the fewer times the pendulum swings.

B The time it takes the pendulum to swing back and forth decreases over a period of time.

C The time it takes the pendulum to swing back and forth is unpredictable based on the length of the string.

D As the length of the string increases, the pendulum takes longer to swing back and forth each time.

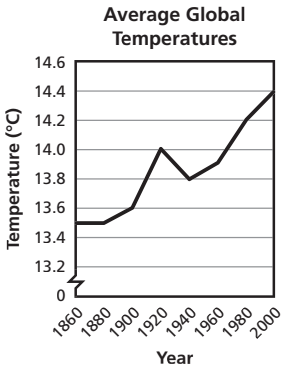
2 Students are studying average global temperatures over time. They review the data table below.

Average Global Temperatures

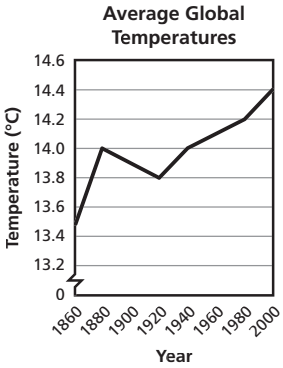
Year	Temperature (°C)
1860	13.5
1880	13.8
1900	13.7
1920	13.6
1940	13.8
1960	13.9
1980	14.0
2000	14.4

Which graph correctly displays these data?

F



H



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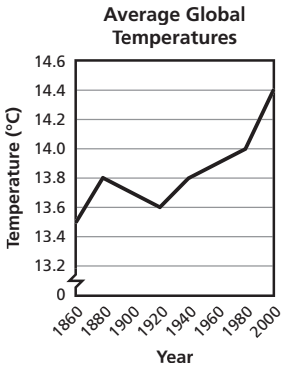

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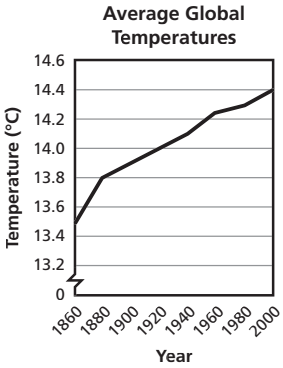

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Reporting Category: INQUIRY AND TECHNOLOGY & ENGINEERING

Performance Indicator: 0707.TE.2 Evaluate a protocol to determine if the engineering design process was successfully applied.

3 **Technicians plan to develop a new type of keyboard that will have alphabet letters in different positions from a standard keyboard. Which will best help the technicians decide if the new keyboard is an improvement over the standard one?**

A asking people their opinions of how they like standard keyboards

B analyzing the problems that people have using standard keyboards

C determining how much it will cost to make a new keyboard

D comparing the speeds at which people type on each style of keyboard

Reporting Category: INQUIRY AND TECHNOLOGY & ENGINEERING

Performance Indicator: 0707.TE.4 Differentiate between adaptive and assistive engineered products.

4 **A scientist is unable to speak or move most of the muscles in his body. This scientist uses his cheek to push buttons on a type of keyboard that translates the words into a computerized voice. Which of these best describes the scientist's device?**

F assistive, because the device makes the scientist famous

G assistive, because the device enables the scientist to communicate

H adaptive, because the scientist can use the device for other tasks

J adaptive, because the scientist can still move some parts of his body

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.1 Identify and describe the function of the major plant and animal cell organelles.**

5 **Which best describes the function of a ribosome?**

A storing waste products

B manufacturing proteins

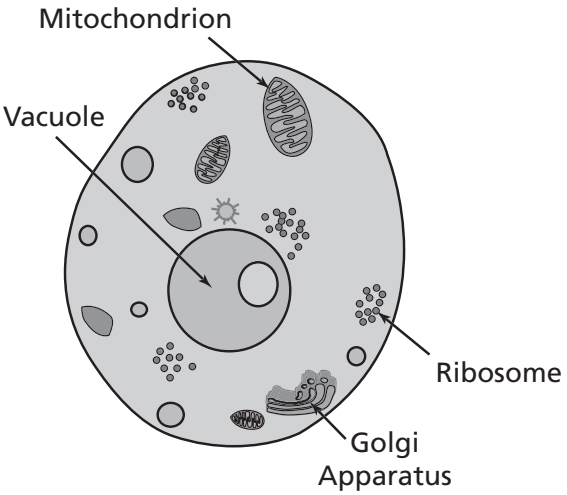
C digesting food particles

D providing support

Go On ▶

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.1 Identify and describe the function of the major plant and animal cell organelles.**

6 **A student draws and labels the parts of an animal cell, as shown below.**



What organelle is labeled incorrectly?

F Mitochondrion

G Golgi Apparatus

H Vacuole

J Ribosome

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.2 Interpret a chart to explain the integrated relationships that exist among cells, tissues, organs, and organ systems.**

7 **The chart shows some levels of organization in an organism.**

Cell ⟶ Tissue ⟶ Organ ⟶ **?** ⟶ Organism

Which term best completes the chart?

A Organelle

B Organ System

C Muscle

D Chemical

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.3 Explain the basic functions of a major organ system.**

8 **Which organ system is correctly matched with its main function?**

F The excretory system defends the body from disease-causing organisms.

G The nervous system controls body responses to the environment.

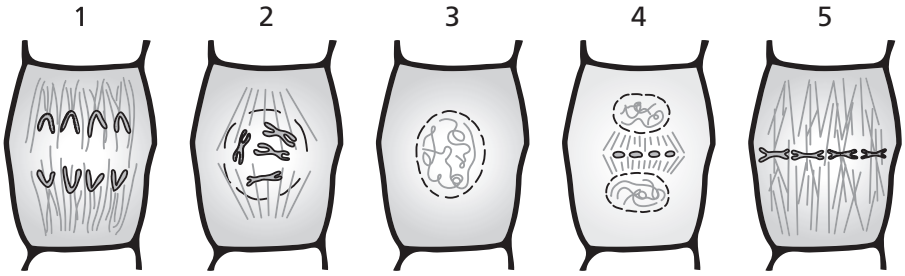
H The skeletal system distributes energy throughout the body.

J The digestive system removes waste products from the body.

Go On ▶

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.4 Sequence a series of diagrams that depict chromosome movement during plant cell division.**

9 **Diagrams of a plant cell dividing are shown out of sequence.**



What is the correct sequence of plant cell division?

A 3, 2, 5, 1, 4

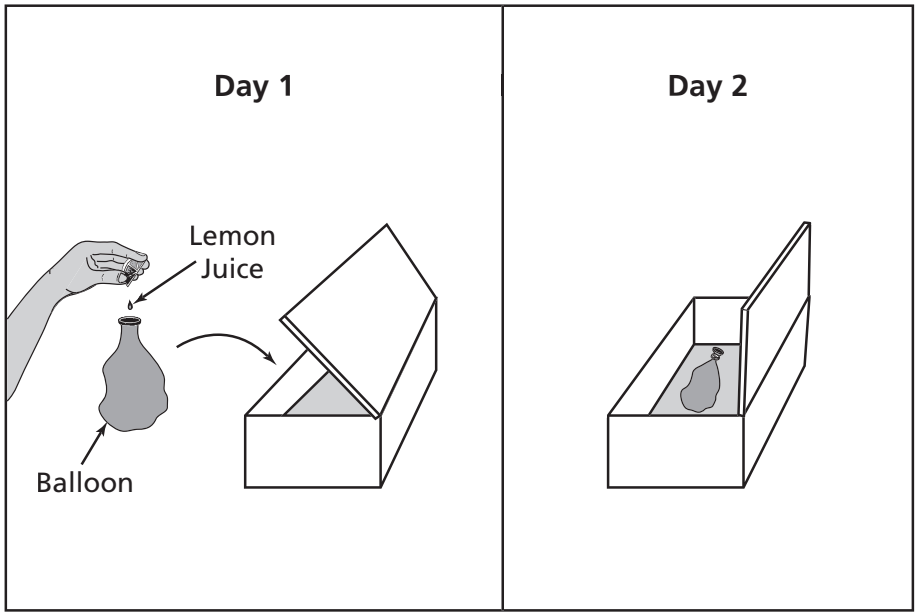
B 4, 3, 2, 1, 5

C 3, 4, 5, 1, 2

D 5, 1, 2, 4, 3

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.1.5 Explain how materials move through simple diffusion.**

10 **A student put a few drops of lemon juice into an uninflated balloon. The student tied a knot in the balloon, placed it in a shoebox and covered it with a lid.**



The following day, the student opened the box and was able to smell lemon in the box. Through what process were molecules able to pass through the balloon?

F respiration

G fermentation

H diffusion

J radiation

Go On ▶

Reporting Category:	INQUIRY AND TECHNOLOGY & ENGINEERING
Performance Indicator:	0707.INQ.2 Select tools and procedures needed to conduct a moderately complex experiment.

11 **Students were studying how temperature affects water movement. The students added drops of food coloring to different temperatures of water. They measured the rates at which the food coloring spread throughout the water. Which tools would best help the students complete their investigation?**

A beaker, thermometer, stopwatch

B meter stick, thermometer, beaker

C spring scale, thermometer, stopwatch

D graduated cylinder, thermometer, balance

Reporting Category:	LIFE SCIENCE 1: Cells, Flow of Matter & Energy
Performance Indicator:	0707.3.1 Compare the chemical compounds that make up the reactants and products of photosynthesis and respiration.

12 **During photosynthesis, carbon dioxide (CO_2) and water (H_2O) react in the presence of sunlight to produce**

F oxygen (O_2) and carbon (C).

G glucose $(C_6H_{12}O_6)$ and carbon monoxide (CO).

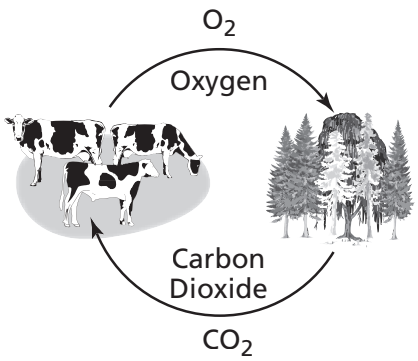
H glucose $(C_6H_{12}O_6)$ and oxygen (O_2).

J hydrogen (H_2) and oxygen (O_2).

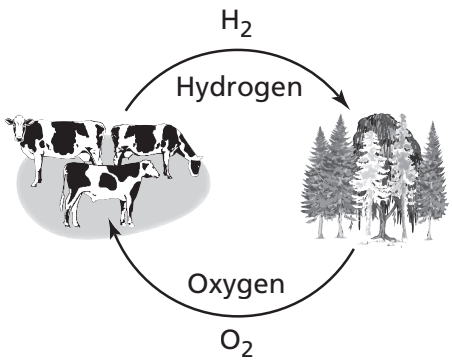
Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.3.2 Interpret a diagram to explain how oxygen and carbon dioxide are exchanged between living things and the environment.**

13 Which diagram <u>best</u> represents an exchange of gases between plants and animals?

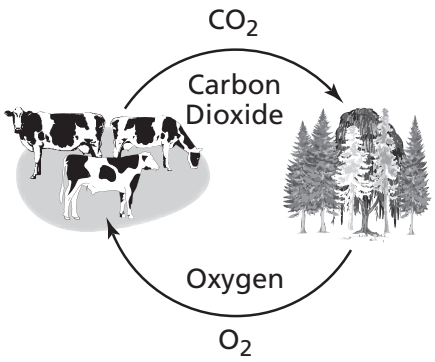
A



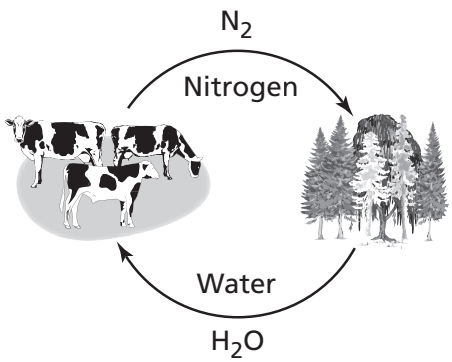
C



B



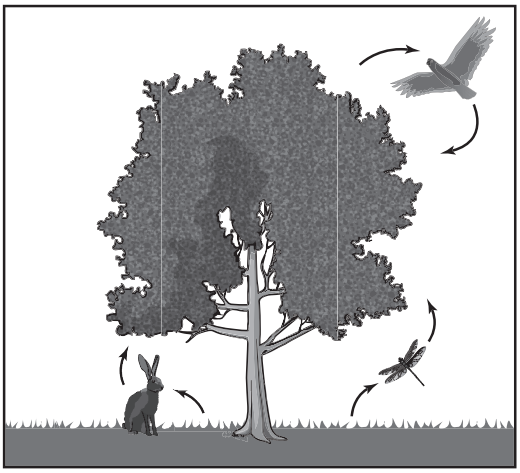
D



Go On ▶

Reporting Category:	**LIFE SCIENCE 1: Cells, Flow of Matter & Energy**
Performance Indicator:	**0707.3.2 Interpret a diagram to explain how oxygen and carbon dioxide are exchanged between living things and the environment.**

14 **The arrows in the diagram represent the exchange of gases between different organisms and the environment.**



Which of the organisms must take in carbon dioxide to survive?

F bird

G insect

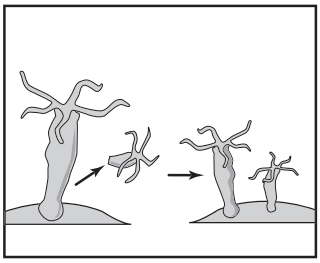
H tree

J rabbit

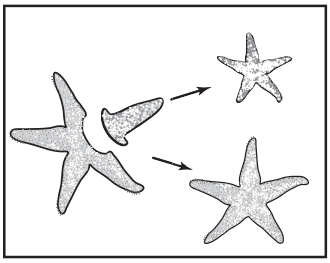
Reporting Category: LIFE SCIENCE 2: Heredity

Performance Indicator: 0707.4.1 Classify methods of reproduction as sexual or asexual.

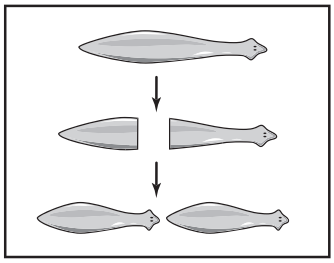
15 The diagrams represent the way that three different organisms reproduce.



Hydra



Sea Star



Planaria

Which of these classifies the reproductive method of all the organisms shown above?

A segmentation

B budding

C asexual reproduction

D sexual reproduction

Reporting Category: LIFE SCIENCE 2: Heredity

Performance Indicator: 0707.4.2 Match flower parts with their reproductive functions.

16 Which parts of a flower are most likely to attract pollinators?

F sepals

G petals

H anthers

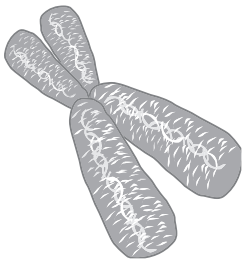
J pistils

Go On ▶

Reporting Category:	**LIFE SCIENCE 2: Heredity**
Performance Indicator:	**0707.4.3 Describe the relationship among genes, chromosomes, and inherited traits.**

17 **The image shows a chromosome.**

Chromosome



What is located on the chromosome?

A cells

B genes

C enzymes

D organelles

Reporting Category:	**LIFE SCIENCE 2: Heredity**
Performance Indicator:	**0707.4.4 Interpret a Punnett square to predict possible genetic combinations passed from parents to offspring during sexual reproduction.**

18 **In pea plants, tall plants (T) are dominant to short plants (t). The cross of two heterozygous tall plants is shown in the Punnett square below.**

	T	t
T		
t		

What ratio describes the most probable phenotypes resulting from this cross?

F 4 tall : 0 short

G 3 tall : 1 short

H 2 tall : 2 short

J 1 tall : 3 short

Go On ▶

Reporting Category: EARTH AND SPACE SCIENCE: The Earth

Performance Indicator: 0707.7.1 Use a table of physical properties to classify minerals.

19 **Students were observing a green, odorless mineral, with no visible crystals. The mineral was very soft, with a slick feel. They compared its characteristics to the table below.**

Mineral Characteristics

Mineral	Most Common Colors	Hardness	Other Common Characteristics
Talc	Gray, green, white, silver	1	Soapy feel
Sulfur	Yellow, yellow-brown	1.5	Greasy feel, mild rotten egg smell
Halite	Colorless, white, pink, yellow, gray	2	Salty taste
Quartz	All colors	7	Six-sided prism-shaped crystal

Which of these were the students most likely observing?

A Talc

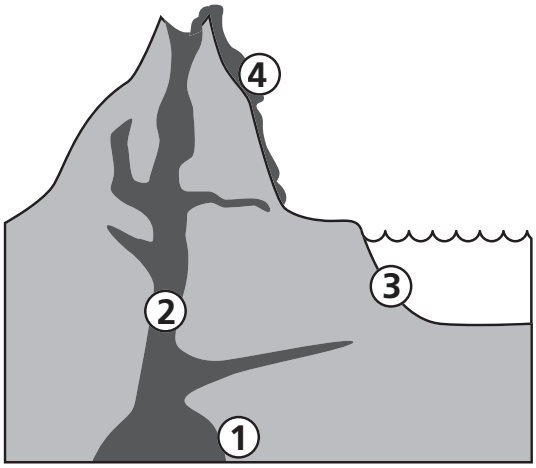
B Sulfur

C Halite

D Quartz

Reporting Category:	**EARTH AND SPACE SCIENCE: The Earth**
Performance Indicator:	**0707.7.2 Label a diagram that depicts the three different rock types.**

20 **Different locations are labeled on the diagram of the volcano.**



Where would the most metamorphic rocks likely be located?

F 1

G 2

H 3

J 4

Go On ▶

Reporting Category:	**EARTH AND SPACE SCIENCE: The Earth**
Performance Indicator:	**0707.7.3 Identify the major processes that drive the rock cycle.**

21 **Which best describes one way igneous rocks form?**

A Sedimentary rocks erode.

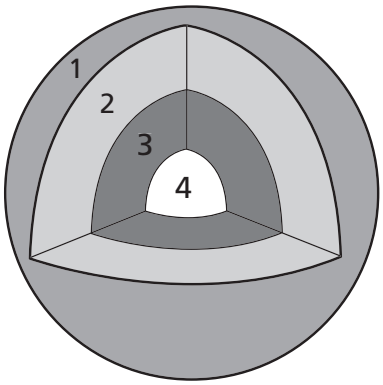
B Sedimentary rocks are compacted.

C Metamorphic rocks are melted, then cooled.

D Metamorphic rocks are deposited and cemented.

Reporting Category:	**EARTH AND SPACE SCIENCE: The Earth**
Performance Indicator:	**0707.7.4 Differentiate among the characteristics of the earth's three layers.**

22 **A cross section of Earth is shown below.**



Which layer of Earth is made mostly of liquid metal?

F 1

G 2

H 3

J 4

Reporting Category:	**EARTH AND SPACE SCIENCE: The Earth**
Performance Indicator:	**0707.7.5 Recognize that lithospheric plates on the scale of continents and oceans continually move at rates of centimeters per year.**

23 **The Himalaya Mountains formed from a collision of the Indo-Australian plate with the Eurasian plate. Which best approximates the rate of movement of the Indo-Australian plate?**

A 0.67 millimeter per year

B 6.7 centimeters per year

C 6.7 meters per year

D 67 meters per year

Reporting Category:	**EARTH AND SPACE SCIENCE: The Earth**
Performance Indicator:	**0707.7.6 Describe the relationship between plate movements and earthquakes, mountain building, volcanoes, and sea floor spreading.**

24 **Which geological feature was most likely formed when two lithospheric plates collided?**

F Lake Michigan

G Grand Canyon

H Mississippi River delta

J Sierra Madre mountain range

Go On ▶

Reporting Category:	EARTH AND SPACE SCIENCE: The Earth
Performance Indicator:	0707.7.7 Analyze and evaluate the impact of man's use of earth's land, water, and atmospheric resources.

25 **Which is the most likely effect of a rise in global temperatures caused by human activities?**

A rising sea levels

B more earthquakes

C fewer tropical storms

D increased soil erosion

Reporting Category:	INQUIRY AND TECHNOLOGY & ENGINEERING
Performance Indicator:	0707.TE.3 Distinguish between the intended benefits and the unintended consequences of a new technology.

26 **Which of these is the most likely unintended consequence of using ethanol made from corn as a replacement for gasoline in automobile engines?**

F a reduction in the use of nonrenewable fuels

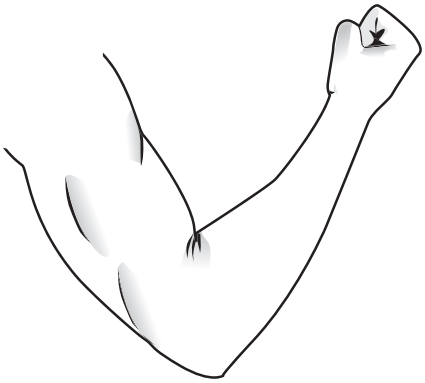
G lower emissions of sulfur and nitrogen compounds in auto exhaust

H a decrease in the amount of farmland available to produce food crops

J lower fuel costs for consumers

Reporting Category:	**PHYSICAL SCIENCE: Motion**
Performance Indicator:	**0707.11.1 Differentiate between the six simple machines.**

27 **A portion of a human arm works as a simple machine.**



Which simple machine is most like a human arm?

A a lever

B a wedge

C an inclined plane

D a screw

Go On ▶

Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.2 Determine the amount of force needed to do work using different simple machines.

28 **Use the equation below to solve the problem.**

Force (F) = Work (w) ÷ Distance (d)

How much force was applied to a box that required 45 joules of work to push it up a 3-meter-long ramp?

F 15 newtons

G 42 newtons

H 48 newtons

J 135 newtons

Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.3 Apply proper equations to solve basic problems pertaining to distance, time, speed, and velocity.

29 **Use the equation below to solve the problem.**

$s = d \div t$

A student rode a bicycle 15 miles in 1.5 hours. What was the student's average speed?

A 10.0 miles per hour

B 13.5 miles per hour

C 16.5 miles per hour

D 22.5 miles per hour

Reporting Category:	INQUIRY AND TECHNOLOGY & ENGINEERING
Performance Indicator:	0707.INQ.5 Identify a faulty interpretation of data that is due to bias or experimental error.

30 **A student rolled a toy car down a ramp and timed how long it took to reach the bottom. After one trial, the student doubled the height of the ramp and added sandpaper to its surface. The student conducted three more trials. After reviewing the data, the student concluded the height of the ramp had no effect on the speed that the car traveled. Which is the most likely reason this conclusion is flawed?**

F More trials were needed during the investigation.

G The student misunderstood how to calculate speed.

H A control should have been added to the investigation.

J Too many variables were changed during the investigation.

Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.4 Identify and explain how Newton's laws of motion relate to the movement of objects.

31 **An equation is shown in the box below.**

$$F = ma$$

Which statement best describes the variables in this equation?

A An object at rest tends to stay at rest.

B For every action there is an equal and opposite reaction.

C An object will only accelerate if an unbalanced force acts upon it.

D The acceleration of an object depends upon the force acting upon it and its mass.

Go On ▶

Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.4 Identify and explain how Newton's laws of motion relate to the movement of objects.

32 **Which example best describes Newton's third law of motion?**

F When a glass slid across a table, it spilled water when it stopped suddenly.

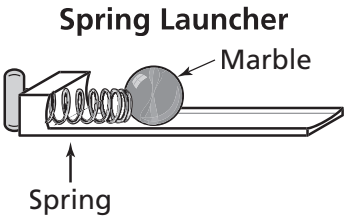
G An engine used less work to move a lighter car than when it moved a heavier car.

H When a passenger stepped from a boat to the shore, the boat moved away from the shore.

J A bowling ball rolled in a straight path when it was thrown towards bowling pins.

Reporting Category:	INQUIRY AND TECHNOLOGY & ENGINEERING
Performance Indicator:	0707.INQ.1 Design a simple experimental procedure with an identified control and appropriate variables.

33 **Students put a spring launcher on a wooden floor. The students applied different amounts of force on a marble with the spring. They used a meter stick to measure how far the marble rolled.**



What is the dependent variable in this investigation?

A mass of the marble

B amount of friction from the floor

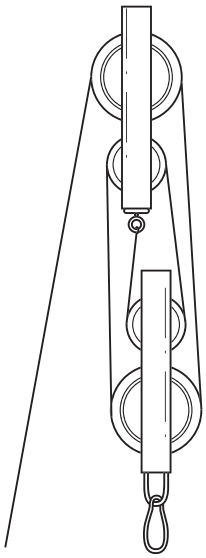
C amount of stretch in the spring

D distance traveled by the marble

Reporting Category:	**INQUIRY AND TECHNOLOGY & ENGINEERING**
Performance Indicator:	**0707.TE.1 Identify the tools and procedures needed to test the design features of a prototype.**

34 **Engineers built a prototype of a new pulley system. They wanted to determine the maximum weight the pulley can lift safely.**

Pulley System



Which is the best way for the engineers to test the weight limits of the pulley system?

F hang objects with different volumes from the pulleys

G hang objects with different shapes from the pulleys

H raise objects with increasing densities on the pulleys

J raise objects with increasing masses on the pulleys

Go On ▶

Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.5 Compare and contrast the different parts of a wave.

35 As a wavelength decreases, the crests of the wave

A become wider.

B become shorter.

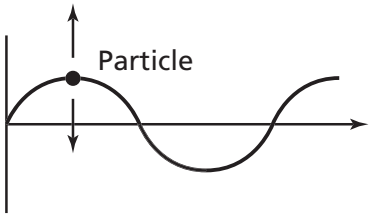
C get closer together.

D get farther apart.

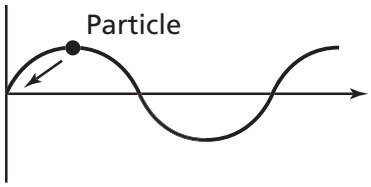
Reporting Category:	PHYSICAL SCIENCE: Motion
Performance Indicator:	0707.11.6 Differentiate between transverse and longitudinal waves in terms of how they are produced and transmitted.

36 Which diagram <u>best</u> represents particle movement in a transverse wave?

F



H



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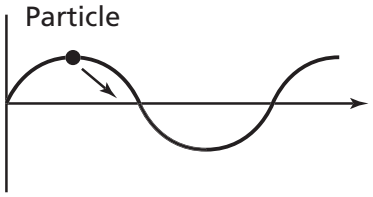
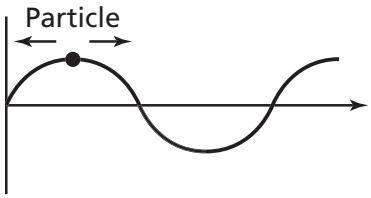


J



STOP

Social Studies

Reporting Category:	**1 Economics**
Performance Indicator:	**7.2.1 Recognize basic economic concepts (i.e., imports, exports, barter system, tariffs, closed and emerging markets, supply and demand, inflation, recession, depression).**

1 **A tariff is a tax on**

A domestic goods.

B personal income.

C private property.

D imported goods.

Reporting Category:	**1 Economics**
Performance Indicator:	**7.2.2 Define renewable and nonrenewable resources.**

2 **Why is wind power defined as a renewable resource?**

F Wind can change the environment.

G The supply of wind will not run out.

H Wind is used to produce electricity.

J It does not cost anything to use wind power.

Go On ▶

Reporting Category: **1 Economics**

Performance Indicator: **7.2.4 Interpret economic issues as expressed with maps, tables, diagrams, and charts.**

Selected Agricultural Products Exported from Tennessee Value (in millions of dollars)

	2003	2004	2005	2006	2007
Wheat	$75.3	$84.2	$74.0	$80.0	$86.2
Soybeans	$158.5	$139.5	$120.2	$114.0	$74.5
Tobacco	$73.9	$71.5	$87.5	$63.4	$55.5
Meat	$34.5	$39.0	$45.9	$51.7	$56.2
Dairy Products	$1.7	$2.9	$3.7	$3.4	$4.4

Source: US Dept Ag, Economic Research Service, State Export Data

3 **Which agricultural product increased its export value each year between 2003 and 2007?**

A Wheat

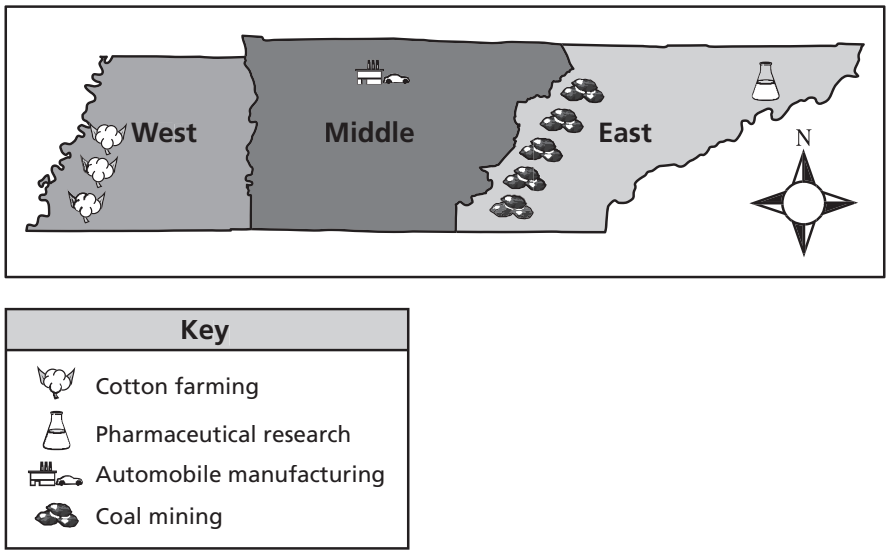
B Soybeans

C Tobacco

D Meat

Reporting Category:	**1 Economics**
Performance Indicator:	**7.2.5 Select the major resources, industrial, and agricultural products for the three grand divisions from a map of Tennessee.**

Three Grand Divisions of Tennessee



4 **Which of these industries is important in Middle Tennessee?**

F Cotton farming

G Pharmaceutical research

H Automobile manufacturing

J Coal mining

Go On ▶

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.4.1 Define the different types of governments (i.e., democracy, autocracy, oligarchy, monarchy, dictatorship).**

5 **Which statement describes a central feature of democratic government?**

A rulers appointed by supreme council

B laws made by religious authority

C laws made by foreign leaders

D rulers selected by the citizens

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.4.1 Define the different types of governments (i.e., democracy, autocracy, oligarchy, monarchy, dictatorship).**

6 **Which form of government is <u>most</u> commonly led by a hereditary ruler?**

F oligarchy

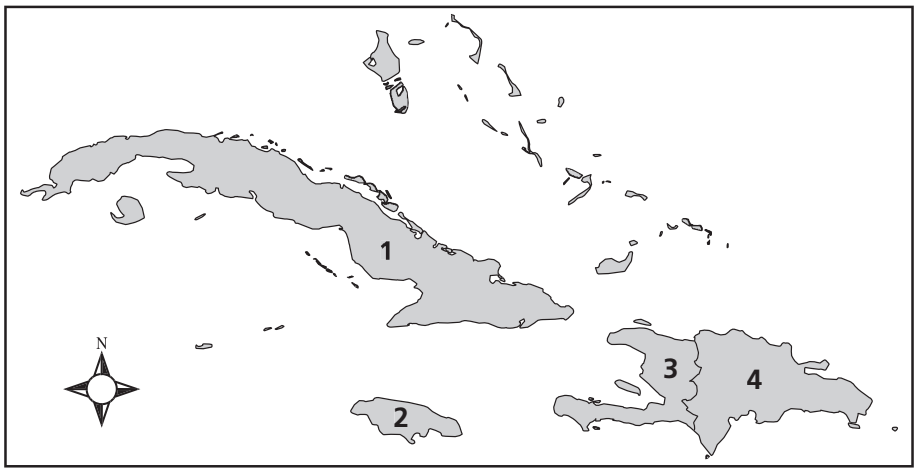
G plutocracy

H monarchy

J autocracy

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.4.2 Using a map key, locate various governance systems.**

The Caribbean



Key			
1	Communist	2	Parliamentary democracy
3	Republic	4	Democratic republic

7 **Which country on the map above has a government that restricts political freedom?**

A Country 1

B Country 2

C Country 3

D Country 4

Go On ▶

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.4.3 Recognize how the boundaries of Congressional districts change in the state of Tennessee (i.e., statutory requirements, population shifts, political power shifts).**

8 **Tennessee's congressional district boundaries change based on**

F census returns.

G economic activity.

H tax revenue.

J candidates' qualifications.

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.4.4 Identify political leaders from selected contemporary settings (i.e., United States, India, Canada, Mexico, Great Britain, Russia, China).**

9 **What is the title of the political leader of the United Kingdom?**

A viceroy

B president

C prime minister

D general secretary

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.6.2 Differentiate between the rights, roles and state of the individual in relation to the general welfare in various regions of the world.**

> I have a dream that my four young children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character . . .
>
> — Rev. Martin Luther King, Jr., August 28, 1963

10 **Based on the excerpt above, the Reverend Martin Luther King, Jr., called for**

F a code of conduct for adolescents.

G ending the system of discrimination.

H a law funding religious schools.

J funding preschool education.

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.6.2 Differentiate between the rights, roles, and state of the individual in relation to the general welfare in various regions of the world.**

11 **Which sentence describes a responsibility that supports an individual's right to speak freely?**

A Limit discussions to major issues.

B Respect the rights of others to state opinions.

C Political viewpoints should be based on experiences.

D The best place for opinions is a newspaper.

Go On ▶

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**7.6.3 Recognize the causes, consequences and possible solutions applied by governing bodies to persistent global issues (i.e., health, security, resource allocation, economic development, environmental quality).**

> The Environmental Protection Agency yesterday tightened [lowered] the regulatory limit on airborne lead for the first time in 30 years . . . The lead in the air eventually falls to the ground, and most of the exposure comes from indoor dust and soil.
>
> — *Washington Post*, October 17, 2008

12 **Based on the excerpt above, which issue has the Environmental Protection Agency addressed?**

F resource distribution

G economic development

H national security operations

J public health conditions

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.1.1 Recognize cultural definitions (i.e., language, religion, customs, political system, economic system).**

- Factories are owned by the government
- Government decides what will be produced
- Variety of products defined by government

13 **Which type of political system is described in the list above?**

A fascist

B theocratic

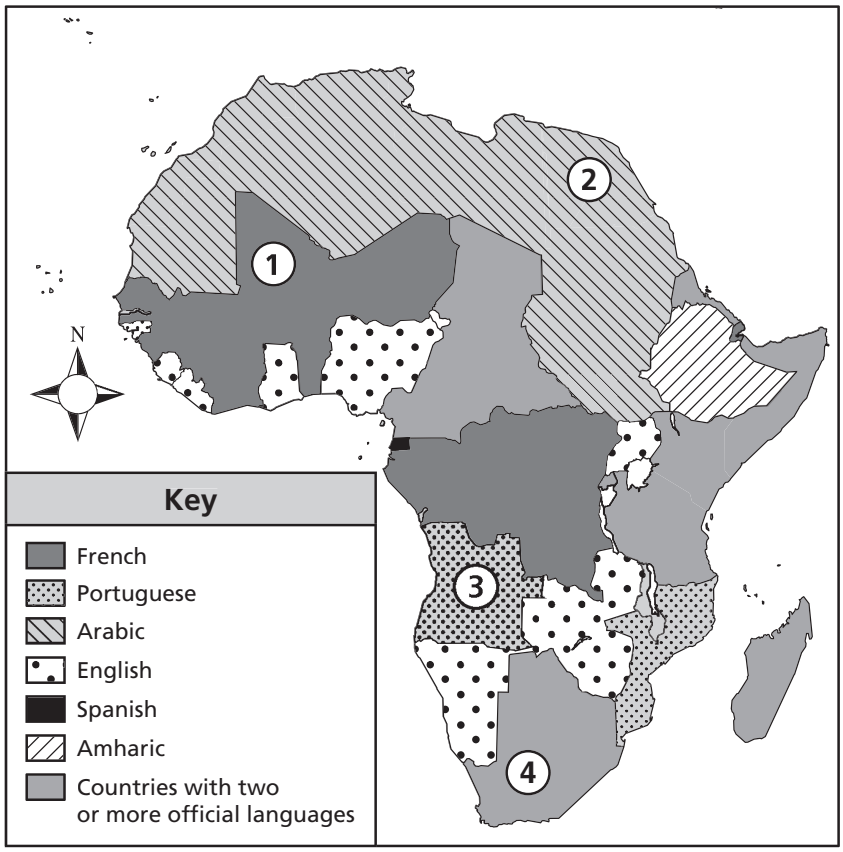
C democratic

D communist

Go On ▶

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.1.2 Locate cultural information on a thematic map (i.e., languages, political systems, economic systems, religions).**

Major Languages of Africa



14 **Which numbered region on the map above has an official language that reflects the influence of the spread of Islam?**

F 1

G 2

H 3

J 4

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.2.3 Define demographic concepts (i.e., population, population distribution, population density, growth rate).**

15 **The number of people living in a square mile is a measure of**

A the rate of dispersal.

B population density.

C the rate of change.

D population distribution.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.3.4 Distinguish the differences among rural, suburban, and urban communities.**

16 **Which of the following activities is more common in urban communities than in suburban communities?**

F farming the land

G shopping in malls

H using public transportation

J building on undeveloped land

Go On ▶

Reporting Category:	3 Human Geography
Performance Indicator:	7.3.8 Define demographic concepts (i.e., population, population distribution, population density, growth rate, family size, and infant mortality).

Growth Rate

- Birth rate
- Death rate
- **?**

17 **Which demographic measure is also needed to calculate the growth rate?**

A Population distribution

B Graduation rate

C Population density

D Migration rate

Reporting Category:	3 Human Geography
Performance Indicator:	7.3.13 Recognize the definitions of modifications on the physical environment (i.e., global warming, deforestation, desert, urbanization).

18 **Greenhouse gases affect the environment by**

F preserving glaciers.

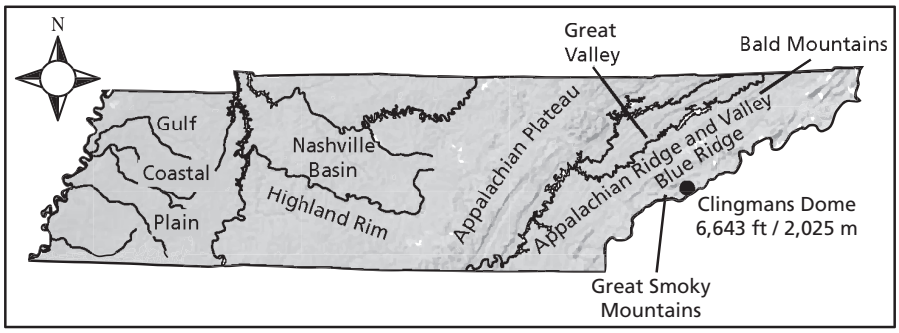
G expanding farm output.

H increasing temperatures.

J protecting nature reserves.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.3.14 Distinguish between types of maps (i.e., political, physical, climatic, land-use, resource, contour, elevation, topographic).**

Tennessee



19 **Which type of map is shown above?**

A political

B physical

C economic

D climate

Go On ▶

Reporting Category: **3 Human Geography**

Performance Indicator: **7.3.16 Demonstrate understanding of characteristics and implications of a diverse global culture.**

Ethnic Festivals in Tennessee

Festival	Location
Oktoberfest (German)	Crossville
Gatlinburg Scottish Festival and Games	Gatlinburg
The Hola! Festival – Hispanic Heritage Month	Knoxville
Irish Celebration	Erin

20 **Which statement is best supported by the table above?**

F Tennessee festivals are mainly based on changing seasons.

G People from many different cultures have settled in Tennessee.

H Many people in Tennessee enjoy going to state parks.

J Tennessee's ethnic population has declined in the last ten years.

Reporting Category: **3 Human Geography**

Performance Indicator: **7.3.18 Analyze the environmental consequences of humans changing their physical environment (i.e., air and water pollution, mining, deforestation, global warming).**

21 **Which environmental consequence is most likely a result of water pollution?**

A deforestation

B habitat loss

C soil erosion

D desertification

Reporting Category:	**3 Human Geography**
Performance Indicator:	**7.3.19 Predict the consequences of population changes on the Earth's physical environment (i.e., air and water pollution, mining, deforestation, global).**

22 **Which of these is the most likely result of rapid population growth?**

F air pollution

G school closings

H lower food prices

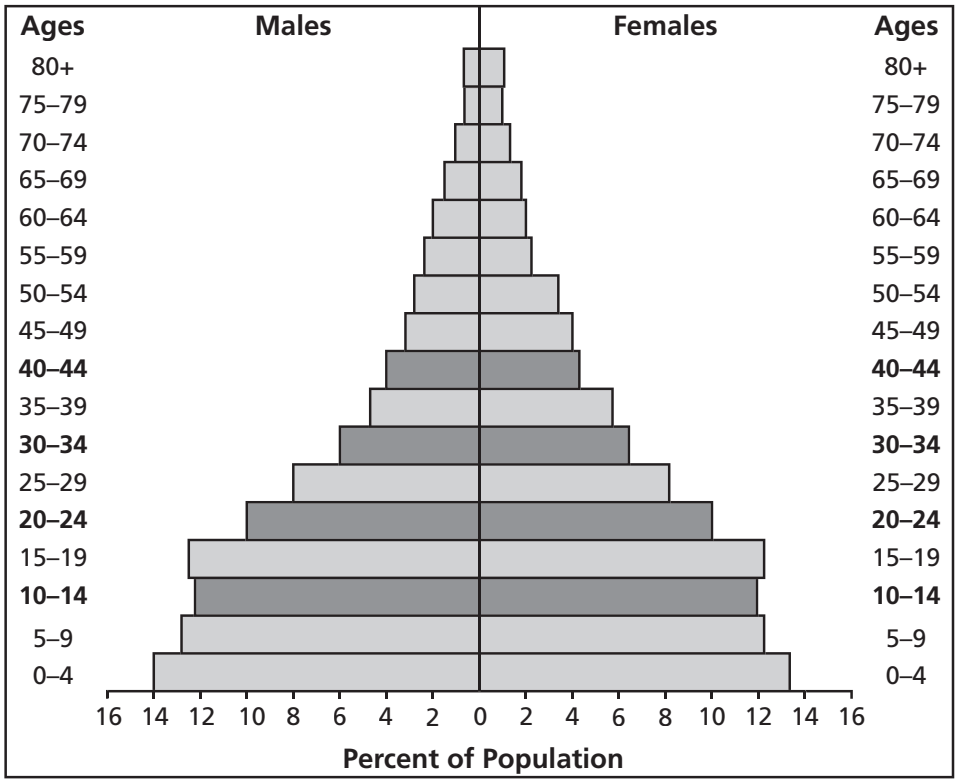
J reduced government spending

Go On ▶

Reporting Category: **3 Human Geography**

Performance Indicator: **7.3.20 Interpret a population pyramid.**

Population of Mexico, 1990



23 **Which age group in the population pyramid above makes up approximately 25 percent of Mexico's population?**

A 10–14

B 20–24

C 30–34

D 40–44

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.1 Identify and use the basic elements of maps and mapping.**

24 **A compass rose appears on a map in order to**

F show direction.

G measure population.

H predict urbanization.

J measure distance.

Go On ▶

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.2 Locate the Earth's major physical characteristics (i.e., 7 continents, 4 oceans).**

25 **Which number on the map above represents the continent of Australia?**

A 1

B 2

C 3

D 4

Reporting Category: **4 Physical Geography**

Performance Indicator: **7.3.3 Identify the major river systems of Tennessee.**

26 **The western border of Tennessee is formed by the**

F Mississippi River.

G Cumberland River.

H Elk River.

J Holston River.

Reporting Category: **4 Physical Geography**

Performance Indicator: **7.3.5 Select the natural resources found in the 3 grand divisions of Tennessee (coal, copper, timber, plants, animals).**

27 **Which part of Tennessee has the largest deposits of coal?**

A Mississippi River Valley

B East Tennessee

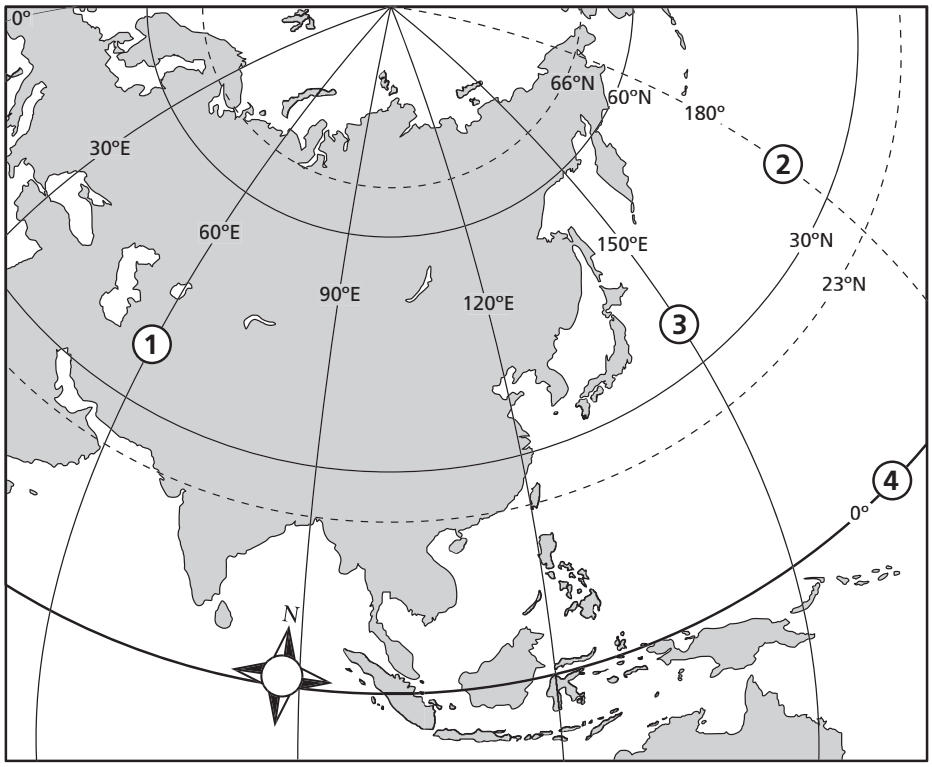
C Central Basin Region

D West Tennessee

Go On ▶

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.6 Locate on a map specific lines of longitude and latitude (i.e., Prime Meridian, International Date Line, Equator, North and South Poles, Tropics of Cancer and Capricorn, Arctic and Antarctic circles).**

Asia



28 **Which number on the map above represents the equator?**

F 1

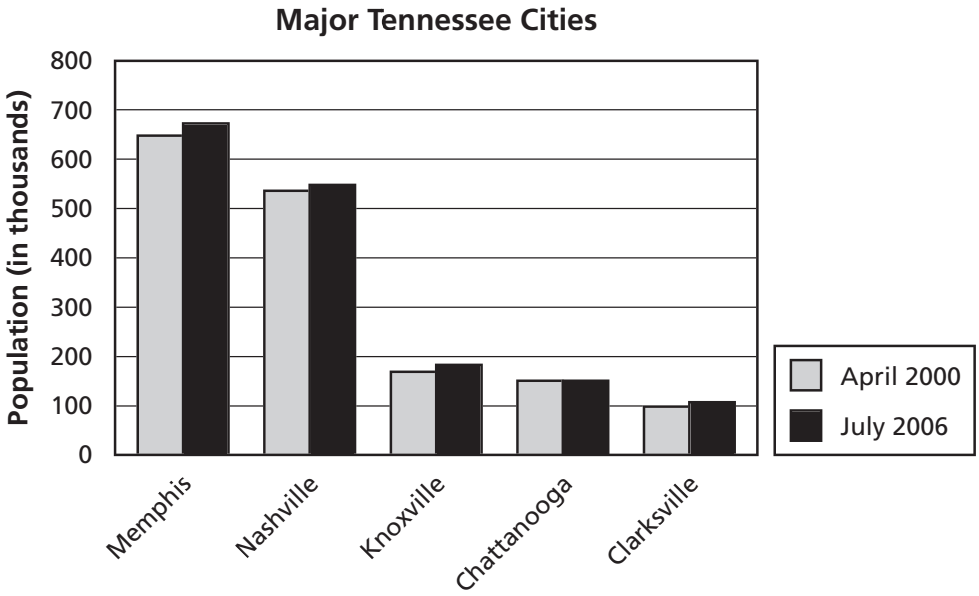
G 2

H 3

J 4

Reporting Category: **4 Physical Geography**

Performance Indicator: **7.3.7 Compare the five largest cities of Tennessee using a bar graph.**



29 **Which city on the graph above had the smallest population change between 2000 and 2006?**

A Memphis

B Nashville

C Knoxville

D Chattanooga

Go On ▶

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.9 Identify the location of Earth's major landforms and bodies of water (i.e., Rockies, Andes, Himalayas, Alps, Urals, Sahara Desert, Nile River Valley, Great Plains, Mississippi River, Amazon River, Thames River, Seine River, Rhine River, Danube River, Tigris River, Euphrates River, Ganges River, Volga River, Yellow River).**

30 **On which continent is the Nile River Valley located?**

F Asia

G Europe

H Africa

J South America

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.10 Identify the characteristics that define a region geographically.**

31 **A region defined by places with similar landforms is**

A a cultural region.

B a physical region.

C a political region.

D an economic region.

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.11 Recognize specific physical processes that operate on the Earth's surface (i.e., erosion, volcanoes, earthquakes, wind and water currents, plate tectonics, weathering).**

32 **Which of these geological forces causes earthquakes?**

F tectonic plates sliding past each other

G creation of sedimentary rock

H formation of petrified wood

J water eroding river valleys

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.12 Identify the six physical regions of Tennessee (i.e., Unaka Mountains, Valley and Ridge, Cumberland Plateau, Highland Rim, Central Basin, Gulf Coastal Plain).**

33 **Which region of Tennessee borders the Mississippi River?**

A Highland Rim

B Unaka Mountains

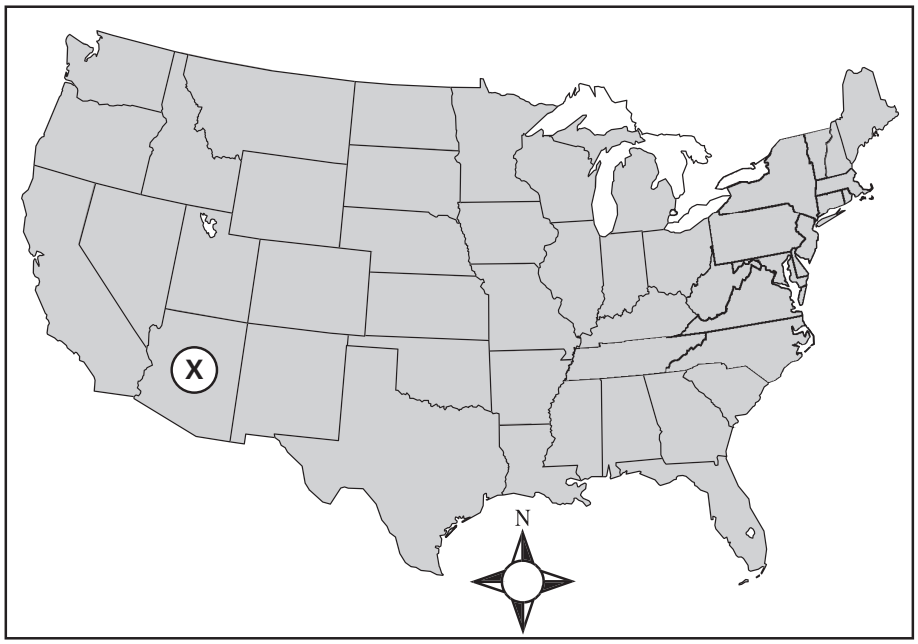
C Gulf Coastal Plain

D Cumberland Plateau

Go On ▶

Reporting Category:	**4 Physical Geography**
Performance Indicator:	**7.3.15 Interpret a map indicating scale, distance, and direction.**

Contiguous United States



34 **In which direction from Tennessee is the state marked with an X?**

F north

G south

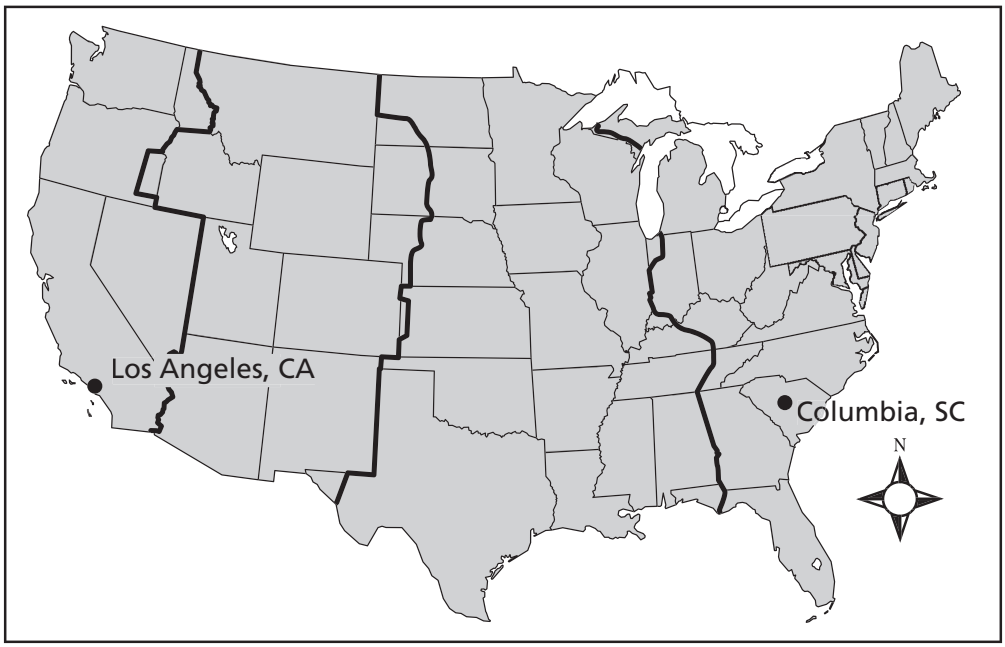
H east

J west

Reporting Category: **4 Physical Geography**

Performance Indicator: **7.3.17 Read and interpret a time zone map.**

U.S. Time Zones



35 **Based on the map above, what time is it in Columbia, South Carolina, when it is 6:30 P.M. in Los Angeles, California?**

A 8:30 P.M.

B 9:30 P.M.

C 10:30 P.M.

D 11:30 P.M.

Go On ▶

Reporting Category:	**5 History**
Performance Indicator:	**7.1.3 Compare and contrast the tenets of the five major world religions (i.e., Christianity, Buddhism, Islam, Hinduism, Judaism).**

36 **Which of these major religions has many gods?**

F Judaism

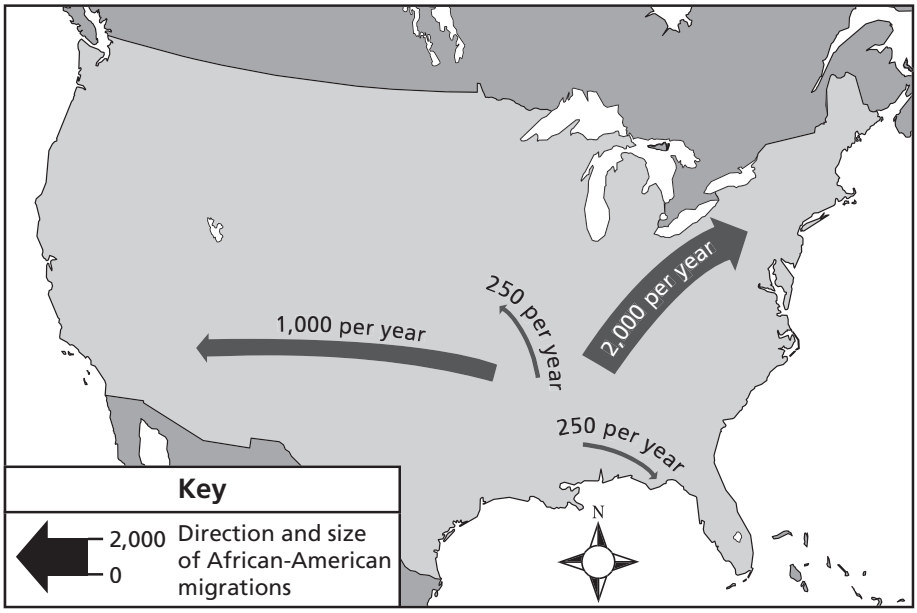
G Christianity

H Islam

J Hinduism

Reporting Category:	**5 History**
Performance Indicator:	**7.3.21 Examine reasons and patterns of human migration through the use of maps, charts, diagrams (i.e., famine, natural disasters, political and religious oppression, wars).**

Selected U.S. Migration Patterns, 1940 – 1960s



37 **According to the map above, African Americans who migrated went primarily to states in the**

A southwest.

B northeast.

C west.

D east.

Go On ▶

Reporting Category: **5 History**

Performance Indicator: **7.5.1 Identify the causes and consequences of urbanization (i.e., industrial development, education, health care, cultural opportunities, poverty, overcrowding, disease, pollution, crime).**

Population of Memphis, Tennessee

	Memphis
1860	22,623
1880	33,582
1900	102,320
1920	162,351
1940	292,942

Source: US Census Bureau

38 **What was the primary reason for the demographic trend in the table above?**

F People wanted to begin farming.

G People sought job opportunities.

H People wanted to enjoy the climate.

J People sought areas with low crime rates.

Reporting Category:	**5 History**
Performance Indicator:	**7.5.2 Identify reasons why people choose to settle in different places (i.e., occupation, family, climate, natural resources).**

39 **Which reason describes why a country would attract new immigrants?**

A food shortages

B lack of religious freedom

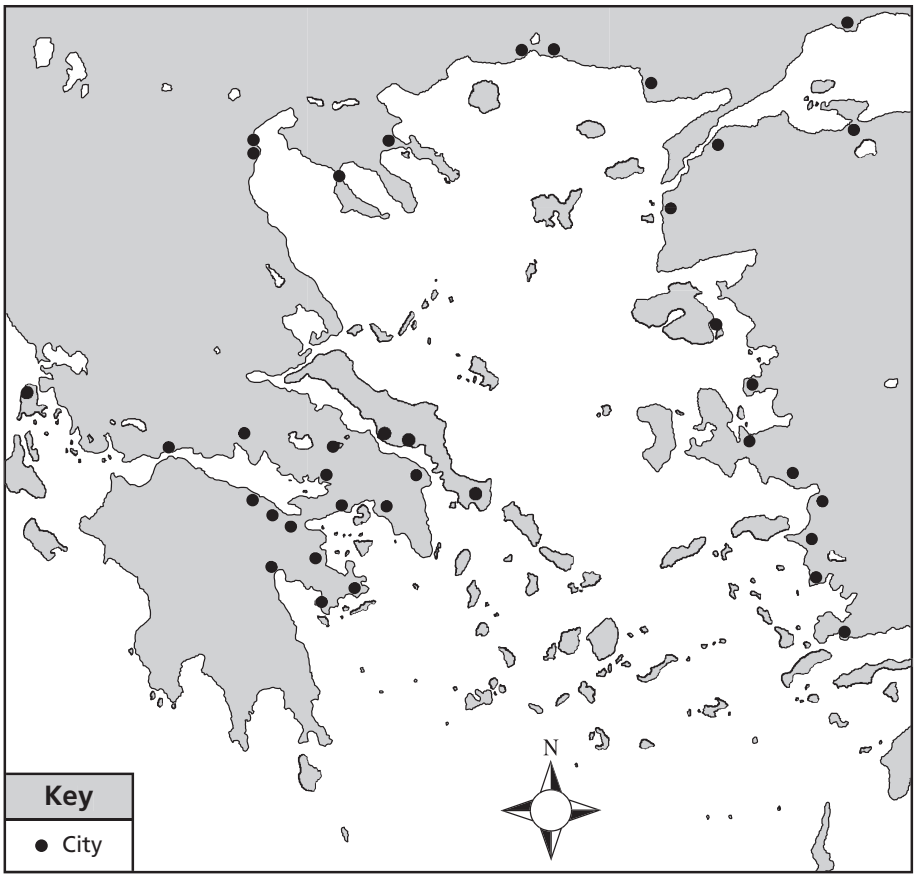
C availability of jobs

D mandatory military service

Go On ▶

Reporting Category:	**5 History**
Performance Indicator:	**7.5.3 Map large civilizations to discover the impact of water as a main reason behind a society's founding.**

Aegean Sea Region, c. 400 B.C.E.



40 **The cities shown on the map above were well suited to**

F farming.

G trade.

H worship.

J mining.

Reporting Category: 5 History

Performance Indicator: 7.5.4 Analyze the causes and effects of change in a place over time from a written passage.

- Greenhouse gas concentrations have increased since 1750 and exceed pre-industrial values.
- Temperatures are increasing, sea levels are rising and ice is melting.

— Intergovernmental Panel on Climate Change, 2007

41 **What is the most likely cause of the problems listed above?**

A burning fossil fuels

B runoff into the Amazon River

C dust from the Sahara

D depending on solar energy

Reporting Category: 5 History

Performance Indicator: 7.6.1 Identify ways family, groups, and community influence daily life and personal choices.

42 **European immigrants to the United States often moved to areas where other people from their homeland settled because**

F these neighborhoods were close to local recreational facilities.

G they found high-paying jobs in these neighborhoods.

H they received help in these communities.

J these neighborhoods had land set aside for new countrymen.

STOP

Reading/Language Arts
Answer Key

1	A
2	G
3	A
4	H
5	C
6	G
7	C
8	G
9	C
10	J
11	B
12	G
13	D
14	G
15	D
16	F
17	A
18	H
19	B
20	G
21	D
22	F

23	C
24	F
25	B
26	J
27	A
28	F
29	A
30	H
31	C
32	G
33	C
34	J
35	D
36	H
37	C
38	J
39	D
40	H
41	C
42	H
43	D
44	F

45	D
46	H
47	C
48	G
49	B
50	F
51	B
52	J
53	B
54	J
55	C
56	F
57	B
58	J
59	B
60	H
61	D
62	G
63	D
64	J
65	A
66	F

67	A
68	G
69	D
70	J
71	B
72	H
73	B
74	H
75	B
76	F
77	D
78	G
79	B
80	H
81	D
82	H
83	C
84	J
85	D

Math
Answer Key

1	B
2	H
3	C
4	F
5	B
6	H

7	C
8	J
9	D
10	H
11	A
12	F

13	D
14	J
15	D
16	H
17	B
18	G

19	C
20	H
21	C

Science
Answer Key

1	D
2	G
3	D
4	G
5	B
6	H
7	B
8	G
9	A

10	H
11	A
12	H
13	B
14	H
15	C
16	G
17	B
18	G

19	A
20	F
21	C
22	H
23	B
24	J
25	A
26	H
27	A

28	F
29	A
30	J
31	D
32	H
33	D
34	J
35	C
36	F

Social Studies
Answer Key

1	D
2	G
3	D
4	H
5	D
6	H
7	A
8	F
9	C
10	G
11	B

12	J
13	D
14	G
15	B
16	H
17	D
18	H
19	B
20	G
21	B
22	F

23	A
24	F
25	D
26	F
27	B
28	J
29	D
30	H
31	B
32	F
33	C

34	J
35	B
36	J
37	B
38	G
39	C
40	G
41	A
42	H

Tennessee Comprehensive Assessment Program

Achievement Test ~ Grade 7

Item Sampler

542240 1 2 3 4 5 A B C D E Printed in the USA ISD4530

Tennessee Comprehensive Assessment Program

TCAP

TNReady — Grade 7 Math Part I

PRACTICE TEST

Student Name

Teacher Name

Tennessee Department of Education

!

Directions

This Practice Test booklet contains sample items for Grade 7 Math. Write your answers in this Practice Test booklet.

You MAY use a calculator with all test items in this test booklet.

Sample A: Selected-Response

Circle **all** expressions equivalent to 4(9 + 3).

A. 4(12)

B. 36 + 3

C. 36 + 12

D. 4 + (9 + 3)

E. (9 + 3) + (9 + 3) + (9 + 3) + (9 + 3)

Sample B: Table

Select **True** or **False** to indicate whether each comparison is true.

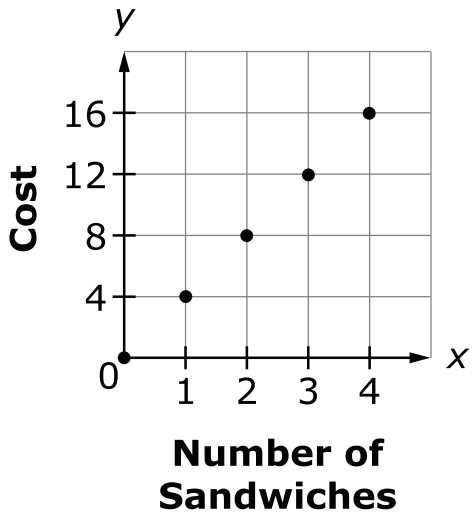
	True	False
$3^2 < \frac{4}{9} + \frac{2}{3}$		
$2(2^3 + 14 \bullet 2) \geq 9 \bullet 8$		
$16.2 \bullet 3 - 24.6 < 72 \div 3 + 2.78$		

Sample Answers

A. A, C, E

B. False, True, True

1. Use the information shown in the graph to complete the sentences.



Part A

Select the ordered pair that would correctly complete the sentence.

The point (___, ___) represents the unit rate.

A. (0, 0)

B. (1, 4)

C. (2, 8)

D. (3, 12)

E. (4, 16)

Part B

Circle one number from Box A for blank A and one number from Box B for blank B to correctly complete the sentence.

The point (3, 12) means that for $ **A** you can buy **B** sandwiches.

Box A	Box B
3 12	3 12

2. Which expression is equivalent to $\frac{12}{5}x - 2$?

A. $\frac{12x - 2}{5}$

B. $2\left(\frac{2}{5}x - 1\right)$

C. $\frac{2}{5}(6x - 1)$

D. $\frac{1}{5}(12x - 10)$

3. The first column contains five pairs of relationships. Determine if each pair forms a proportional relationship. Draw an **X** under "Proportional" or "Not Proportional" for each relationship in the table.

	Proportional	**Not Proportional**
3 games played in 2.5 hours and 9 games played in 7.5 hours		
18 points scored in 3 games and 20 points scored in 5 games		
2 apples for $1.50 and 8 apples for $6.50		
$35.00 for 12.5 gallons of gasoline and $16.80 for 6 gallons of gasoline		
15 miles from home after 20 minutes and 36 miles from home after 48 minutes		

4. Chris has \$1500 in the bank and takes out $\frac{1}{3}$ of the money.

He decides to use $\frac{3}{5}$ of the money he took from his account to pay part of a \$700 debt. After he makes this payment, how much, in dollars, does he still owe?

Write your answer in the space provided.

5. Trinity operates a lemonade stand every weekend. This weekend, she made 45% more money than the previous weekend. The previous weekend she made x dollars.

Write an expression that shows how much money Trinity made this weekend in the space provided.

6. A recipe for 1 pumpkin pie calls for $1\frac{1}{4}$ cups of sugar. Alaina has only $\frac{1}{2}$ cup of sugar and she needs to make 4 pumpkin pies.

How much more sugar will Alaina need to make all 4 pies?

Write your answer in the space provided.

7. The menu shows the prices for food and drink at a stadium. Customers can purchase separate items or choose from four combination (combo) packages. Combos are sold at a discounted price, lower than the price would be if each item in the combo were bought separately.

Stadium Menu

Separate Item Prices ($)				Combo Prices ($)	
Hamburger	6.50	Popcorn	3.00	Combo 1	10.00
Hot Dog	4.00	Water	3.00	Combo 2	10.25
Nachos	5.50	Soda	3.50	Combo 3	10.50
Peanuts	4.50	–	–	Combo 4	13.00

Part A

The items in combo 1 and combo 3 are given in the table. For each combo, determine the amount of the discount compared to purchasing each item in the combo separately, and then determine the percent discount. Round to the nearest whole percent.

Combo	Items Included	Discount Amount ($)	Percent Discount (%)
1	Nachos, popcorn, and water		
3	Peanuts, popcorn, and soda		

Item continues on next page.

Stadium Menu

Separate Item Prices ($)				Combo Prices ($)	
Hamburger	6.50	Popcorn	3.00	Combo 1	10.00
Hot Dog	4.00	Water	3.00	Combo 2	10.25
Nachos	5.50	Soda	3.50	Combo 3	10.50
Peanuts	4.50	–	–	Combo 4	13.00

Part B

The combined sales for combo 3 and combo 4 on one particular day totaled $1586.00. The number of combo 2 packages sold was 13 more than $\frac{1}{4}$ of the total number of all of the combos sold. The table is missing some information. Complete the table using the information given.

Combo	Items Included	Number Sold	Amount Earned ($)
1	Nachos, popcorn, and water		
2	Hot dog, peanuts, and soda	88	902
3	Peanuts, popcorn, and soda		
4	Hamburger, nachos, and water	59	767

Part C

How much more money would the stadium have earned in sales if combos were not offered and the same number of items from all the combos were purchased individually?

Write your answer in the space provided.

8. Jerry is mowing his lawn. It takes him $\frac{1}{6}$ of an hour to mow $\frac{3}{20}$ of his yard. How much time will it take him to mow the entire yard?

A. $\frac{19}{60}$ hr

B. $\frac{9}{10}$ hr

C. $\frac{10}{9}$ hr

D. $\frac{10}{3}$ hr

9. Each of the three tables shows a relationship.

Cost of Movies

Number of Movies	Cost ($)
1	$10
2	$15
3	$20
4	$25

Photo Album

Number of Pages	Number of Pictures
1	15
2	30
3	55
4	75

Minutes Read

Number of Days	Minutes Read
1	20
2	40
3	60
4	80

For each of the sentences shown below, circle the answer in the box below the sentence that would correctly complete the sentence.

The table that shows a proportional relationship is the **A** table.

Box A
Cost of Movies
Photo Album
Minutes Read

The constant of proportionality is **B**.

Box B
5
10
15
20

10. Last month, Karmin made $480 working for 30 hours. This month, she will get a 15% increase in the amount she earns per hour. What will be her hourly rate, in dollars per hour, after the raise?

Write your answer in the space provided.

11. Audra makes and sells bracelets. It costs her $8 to make a bracelet, and she sells them at a markup of 210%. Audra wants to have a sale, so she marks all of her bracelets 20% off the normal selling price. What will be the price of each bracelet during the sale?

A. $15.20

B. $16.80

C. $19.84

D. $23.20

12. Over the summer, Marty read 4 times as many pages as the number of pages Nelson and Jennifer read combined. Marty read 1860 pages and Nelson read 240 pages.

Part A
Select an equation that could be solved to find the number of pages, p, Jennifer read.

A. $1860 + 240 = 4p$

B. $4(240 + p) = 1860$

C. $1860 - (960 \div 4) = p$

D. $240 + 4p = 1860$

Part B
How many pages did Jennifer read?

Write your answer in the space provided.

Tennessee Comprehensive Assessment Program

TCAP

TNReady — Grade 7 Math Part II

PRACTICE TEST

Student Name

Teacher Name

Tennessee Department of Education

Directions

Subtest 1 of this Practice Test booklet contains sample items for Grade 7 Math. Write your answers in this Practice Test booklet.

You MAY NOT use a calculator in Subtest 1 of this test booklet.

Sample A: Selected-Response

Circle **all** expressions equivalent to 4(9 + 3).

A. 4(12)

B. 36 + 3

C. 36 + 12

D. 4 + (9 + 3)

E. (9 + 3) + (9 + 3) + (9 + 3) + (9 + 3)

Sample B: Table

Select **True** or **False** to indicate whether each comparison is true.

	True	False
$3^2 < \frac{4}{9} + \frac{2}{3}$		
$2(2^3 + 14 \bullet 2) \geq 9 \bullet 8$		
$16.2 \bullet 3 - 24.6 < 72 \div 3 + 2.78$		

Sample Answers

A. A, C, E

B. False, True, True

1. Evaluate:

$$4\frac{2}{3} - \left(-1\frac{4}{5}\right)$$

A. $-7\frac{2}{15}$

B. $2\frac{13}{15}$

C. $6\frac{7}{15}$

D. $7\frac{2}{15}$

2. Solve for m:

$$-\frac{2}{9}m + 12 = -8$$

Write your answer in the space provided.

3. While on a camping trip, Calvin was monitoring the temperature.

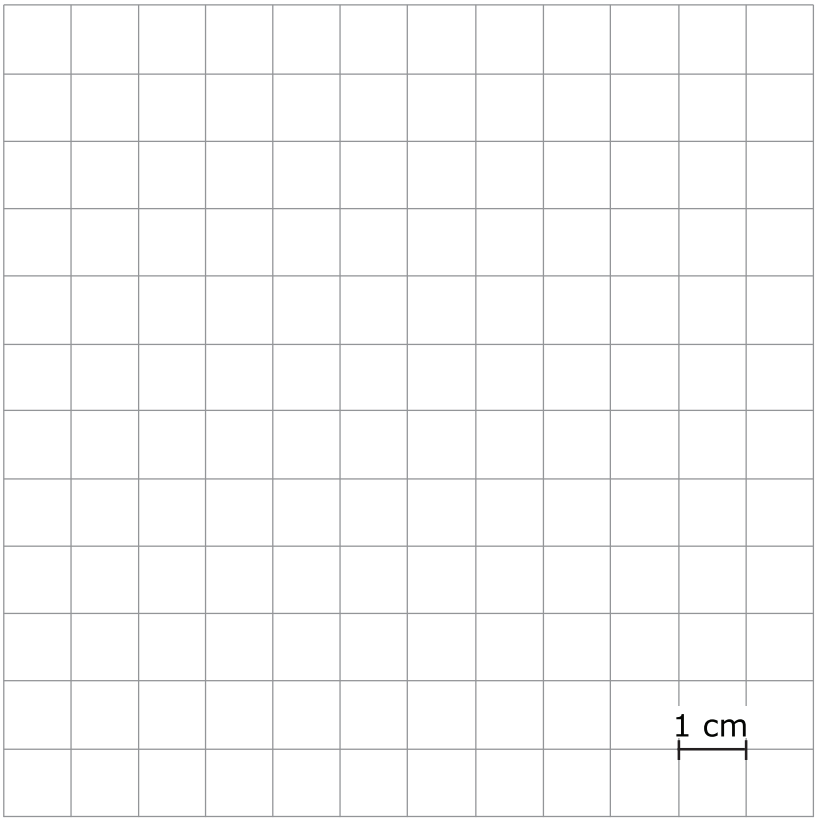
- In the afternoon, the temperature was –4°C.
- As the evening progressed, the temperature dropped 7°C.
- By mid-morning the next day, the temperature had risen 3°C.

What was the temperature, in degrees Celsius, after these changes?

Write your answer in the space provided.

4. A square garden has sides that are 10 feet in length.

Draw a scale drawing of the garden using a scale of 3 centimeters = 5 feet.



5. At a local gym, a random sample of 75 members took a survey about their favorite type of exercise.

Gym Survey Results

Type	Number of Members
Bicycling	18
Exercise Classes	22
Running on Treadmill	15
Weight Lifting	20

There are 350 total gym members. Based on the results of the survey, what is the **most** reasonable estimate for the number of gym members who prefer running on the treadmill?

A. 23

B. 70

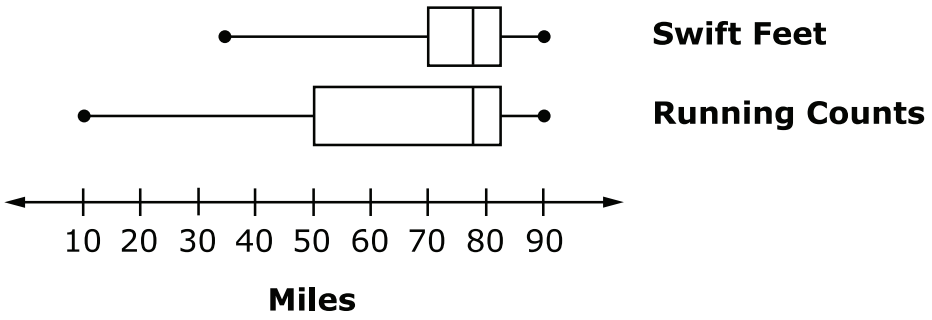
C. 85

D. 93

6. Look at the rational numbers in both lists.
Match the fraction in the first column with the equivalent decimal in the second column.

Fractions	Decimals
$\frac{5}{11}$	0.375
	$0.37\overline{5}$
$\frac{3}{8}$	$0.\overline{45}$
	0.45

7. The members of two running clubs entered their daily running totals into a computer program. The leaders of the two clubs randomly selected 25 days of the year and created box-and-whisker plots showing the total number of miles run by club members on the 25 selected days.



Which inference about the running groups is valid based on the samples given?

A. The Swift Feet club has fewer members than the Running Counts club.

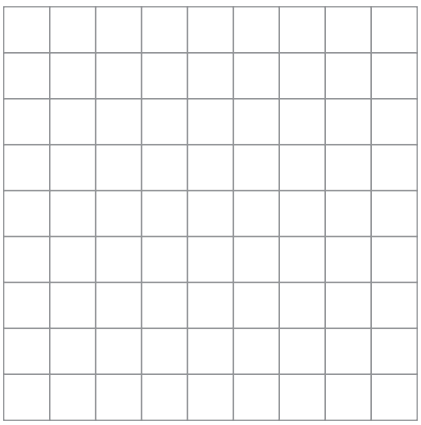
B. The members of the Running Counts club run more slowly than the members of the Swift Feet club.

C. The median number of miles run by members of both clubs was close to 80 miles.

D. The total miles run by members of both clubs vary by about the same amount.

8. A right square pyramid is sliced by a horizontal plane parallel to the base.

Draw a possible plane section of the right square pyramid as described.



9. Nancy is buying a new pair of boots. The store is having a sale and all boots are 20% off.

Circle **one** value from the box below each sentence to correctly complete the sentence.

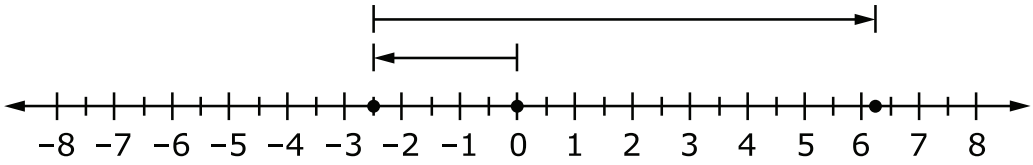
An expression that can represent the sale price of the boots is [**A**], where x is the original price of the boots.

Box A
$0.2x$
$0.8x$
$1.2x$

This means the sale price of the boots is [**B**] of the original cost.

Box B
20%
80%
120%

10. Which situation is **best** described by this number line?



A. Ryder owed his mom $2.50. He does some chores and makes $6.25.

B. Ryder had $6.25. He needs to buy school supplies and ends up owing his mother $2.50.

C. Ryder owed his mom $2.50. He babysits his sister and makes $8.75.

D. Ryder owed his mom $2.50. He also owes his father $8.75.

11. Select **all** expressions shown that are equivalent to $\frac{3}{5}a + 10$.

A. $\frac{1}{5}a + 10 + \frac{2}{5}a$

B. $a\left(\frac{3}{5} + 10\right)$

C. $14 + \frac{3}{5}a - 4$

D. $\frac{1}{5}(3a + 50)$

E. $10 + \frac{2}{5}a - a + \frac{1}{5}a$

12. Karen gets 3 books from her book club for $12. She creates a graph to show the relationship between the number of books and the total cost of the books. Points on the graph include (0,0), (1, 4), (2, 8), and (3, 12).

Circle **one** coordinate or phrase from the box below each sentence to correctly complete the sentence.

The ordered pair **A** represents unit rate.

Box A
(0, 0)
(1, 4)
(2, 8)
(3, 12)

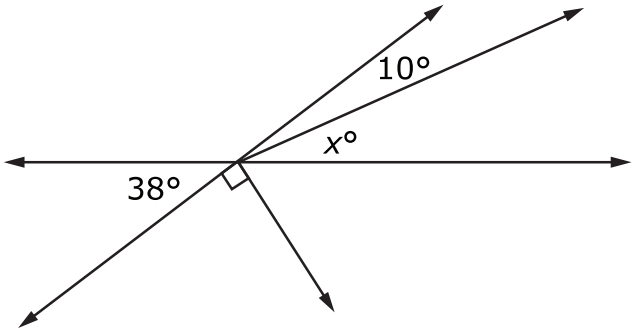
The *x*-value of the ordered pair represents the **B**.

Box B
number of books
cost of the books

The *y*-value of the ordered pair represents the **C**.

Box C
number of books
cost of the books

13. What is the value of x?



Write your answer in the space provided.

Directions

Subtest 2 of this Practice Test booklet contains sample items for Grade 7 Math. Write your answers in this Practice Test booklet.

You MAY use a calculator in Subtest 2 of this test booklet.

14. Select **all** of the expressions that are equivalent to $\frac{2}{3}(9x + 6) - \frac{1}{2}(8x - 4)$.

A. $2(x + 1)$

B. $2x + 6$

C. $2x + 2$

D. $2(x + 3)$

E. 8x

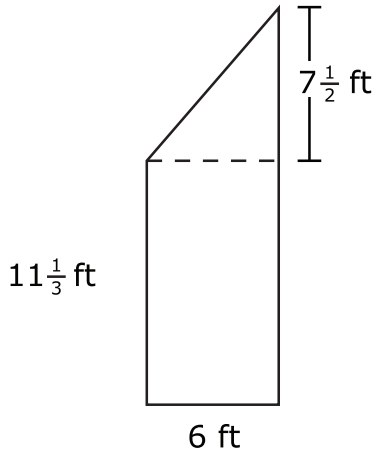
15. A random sample of 40 blocks was removed from a container. The blocks removed included 9 black, 15 red, 11 yellow, and 5 orange blocks.

Based on the experimental results, determine the probability of removing each color of block from the container.

Draw an **X** in the table to match each color with the probability for that color.

	$\frac{1}{8}$	$\frac{3}{8}$	0.225	0.275
Black				
Red				
Yellow				
Orange				

16. The measurements of a figure are shown.



What is the area, in square feet, of the figure?

Write your answer in the space provided.

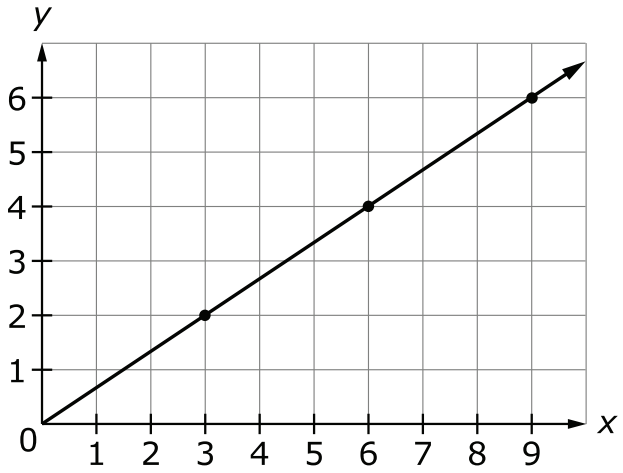
17. Sandals are on sale for 30% off. The original price of one pair of sandals is $15.

What is the total cost, in dollars, of **two** pairs of sandals at the sale price and including 7% sales tax?

Write your answer in the space provided.

18. Select **all** that represent a proportional relationship.

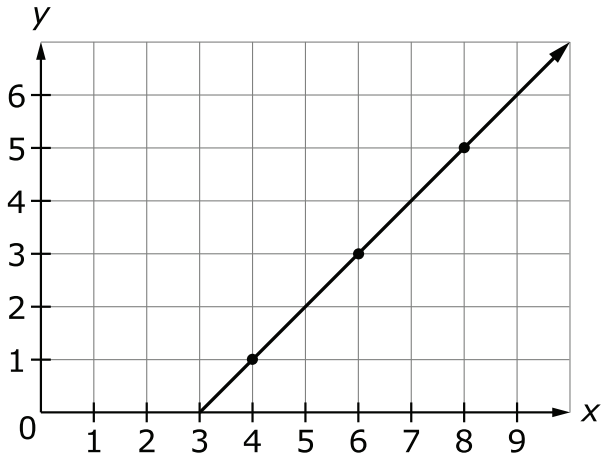
A.



B.

X	***y***
2	3
4	4
6	5
8	6

C.



D.

X	***y***
3	1
6	2
9	3
12	4

19. In the year 2010, the population of Kingsford was 8000. By 2014 the population had increased by 15% and $\frac{2}{5}$ of the population was age 12 or under.

How many people in Kingsford were age 12 or under in the year 2014?

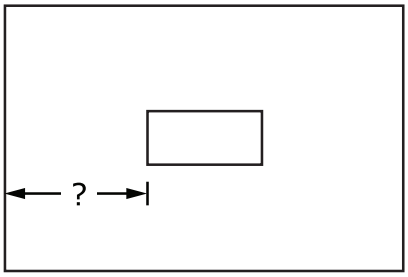
A. 1200

B. 3200

C. 3680

D. 5520

20. Margaret is placing a picture on a wall that is $7\frac{1}{2}$ feet long. The picture is 27 inches across and will be hung in the center of the wall, as shown in the drawing.



$7\frac{1}{2}$ ft

What is the distance, in inches, from one edge of the wall to the picture?

Write your answer in the space provided.

21. Nathan conducted a probability experiment in which he dropped 5 toothpicks at the same time. He recorded the number of toothpicks that were touching when they landed. He then picked up the toothpicks and repeated the experiment. After dropping the toothpicks and recording the results 50 times, Nathan concluded that it was more likely than not that at least 2 toothpicks would be touching when they landed. He also observed that sometimes no toothpicks were touching. Which **best** represents the probability that at least 2 toothpicks will be touching when they land?

A. $\frac{1}{4}$

B. $\frac{1}{2}$

C. $\frac{3}{4}$

D. 1

22. The lengths or angles given represent the sides or angles of a triangle.

For each set of angles or sides, draw an **X** in the appropriate box: Unique Triangle, More Than One Triangle, or No Triangle.

	Unique Triangle	**More Than One Triangle**	**No Triangle**
5 cm, 10 cm, 12 cm			
40°, 50°, 80°			
8 ft, 12 ft, 20 ft			
28°, 51°, 101°			

23. Ms. Allen filled a glass jar with marbles. Students guessed the number of marbles in the jar.

Jen guessed there were 127 marbles in the jar. The jar contained 132 marbles.

To the nearest tenth of a percent, what is the percentage of error for Jen's guess?

Write your answer in the space provided.

24. Margo records the relationship between the amounts of raisins and peanuts she mixes to create different batches of her trail mix.

Batch	**A**	**B**	**C**	**D**	**E**
Ounces of raisins	1	2	3	4	5
Cups of peanuts	1.25	2.5	3.75	5	6.25

Using the information provided in the table, circle **one** choice from the box below each sentence to correctly complete the sentence.

The ordered pair **A** has a *y*-coordinate that is the constant of proportionality for the relationship.

Box A
(1, 1.25)
(2, 2.5)
(4, 5)

Based on the proportional relationship, 8 ounces of raisins require **B** cups of peanuts.

Box B
6.5
7.75
10
11.25

25. The music preferences of a random sample of 75 middle-school students are recorded in the table. There are 1257 students in the middle school.

Music Preference Sample	
Music Type	**Number of Students**
Rock	19
Pop	27
Country	29

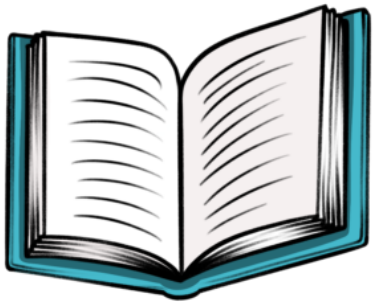
Select **two** statements that are valid for the entire middle school based on the information from the random sample.

A. Approximately 452 of the students prefer pop music.

B. Approximately 19 of the students prefer rock music.

C. Approximately 39% of the students prefer country music.

D. Approximately $\frac{1}{3}$ of the students prefer rock music.



Reading Log

Date:_____

Title of Book:_____

How Many Pages Did You Read? _____

How Long Did You Read? _____ minutes

Write A Brief Description of What You Read

NAME _____

Check What You Know

Adding and Subtracting Rational Numbers

Evaluate each expression.

	a	b	c
1.	opposite of 45 _____	opposite of −9 _____	opposite of −10 _____
2.	opposite of 21 _____	opposite of 6 _____	opposite of −31 _____
3.	opposite of 52 _____	opposite of −89 _____	opposite of 18_____
4.	$\lvert 7 \rvert =$ _____	$\lvert -34 \rvert =$ _____	$\lvert 58 \rvert =$ _____
5.	$-\lvert 35 \rvert =$ _____	$-\lvert -56 \rvert =$ _____	$\lvert -39 \rvert =$ _____

Identify the property of addition described as *commutative*, *associative*, or *identity*.

6. The sum of any number and zero is the original number. _____

7. When two numbers are added, the sum is the same regardless of the order of addends.

_____

8. When three or more numbers are added, the sum is the same regardless of how the addends are grouped. _____

	a	b
9.	$7 + (1 + 9) = (7 + 1) + 9$	$3 + 0 = 3$
	_____	_____
10.	$9 + 5 = 5 + 9$	$8 + 10 = 10 + 8$
	_____	_____
11.	$6 + (-6) = 0$	$(6 + 3) + 7 = 6 + (3 + 7)$
	_____	_____
12.	$15 + 0 = 15$	$13 + 2 = 2 + 13$
	_____	_____

NAME _____

Check What You Know

Adding and Subtracting Rational Numbers

Add or subtract. Write fractions in simplest form.

	a	b	c	d
13.	$2\frac{1}{4} + 2\frac{2}{3}$	$3\frac{1}{2} + 2\frac{1}{7}$	$2\frac{1}{8} + 4\frac{2}{3}$	$1\frac{5}{7} + 2\frac{4}{5}$
14.	$6\frac{1}{3} - 2\frac{1}{4}$	$\frac{3}{8} - \frac{1}{4}$	$5\frac{3}{10} - 2\frac{4}{5}$	$3\frac{4}{7} - 1\frac{1}{2}$

	a	b	c
15.	$-3 + 2 =$ _____	$3 + (-2) =$ _____	$7 + (-4) =$ _____
16.	$-8 + (-3) =$ _____	$-7 + 6 =$ _____	$-4 + (-9) =$ _____
17.	$6 - 12 =$ _____	$3 - (-4) =$ _____	$-2 - 4 =$ _____

SHOW YOUR WORK

Solve each problem.

18. One box of clips weighs $4\frac{2}{3}$ ounces. Another box weighs $5\frac{3}{8}$ ounces. What is the total weight of the two boxes?

The total weights is _____ ounces.

18.

19. Luggage on a certain airline is limited to 2 pieces per person. Together, the 2 pieces can weigh no more than $58\frac{1}{2}$ pounds. If a passenger has one piece of luggage that weighs $32\frac{1}{3}$ pounds, what is the most the second piece can weigh?

The second piece can weigh _____ pounds.

19.

20. Mavis spends $1\frac{1}{4}$ hours on the bus every weekday (Monday through Friday). How many hours is she on the bus each week?

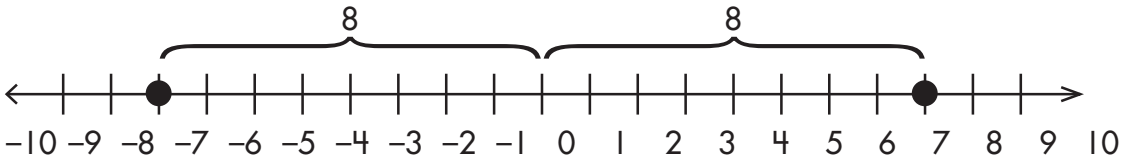
She is on the bus _____ hours each week.

20.

NAME _____

Lesson 1.1 Understanding Absolute Value

The **absolute value** of a number is a number that is the same distance from zero on a number line as the given number, but on the opposite side of zero.



−8 and 8 are absolute value because they are the same distance from zero on opposite sides of the number line.

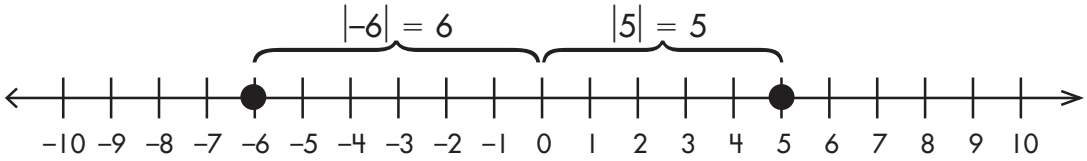
Evaluate the expressions below.

	a	b	c
1.	opposite of 19 _____	opposite of −7 _____	opposite of −2 _____
2.	opposite of 28 _____	opposite of −50 _____	opposite of 10 _____
3.	opposite of 92 _____	opposite of −31 _____	opposite of −74 _____
4.	opposite of 936 _____	opposite of 76 _____	opposite of 65 _____
5.	opposite of −32 _____	opposite of −36 _____	opposite of 73 _____
6.	opposite of 55 _____	opposite of −47 _____	opposite of 87 _____
7.	opposite of −61 _____	opposite of 37 _____	opposite of −23 _____
8.	opposite of 25 _____	opposite of 68 _____	opposite of −53 _____
9.	opposite of 71 _____	opposite of −99 _____	opposite of 90 _____
10.	opposite of 40 _____	opposite of 44 _____	opposite of −77 _____
11.	opposite of −52 _____	opposite of 66 _____	opposite of −95 _____
12.	opposite of 15 _____	opposite of −20 _____	opposite of −9 _____

NAME _____

Lesson 1.2 Absolute Values and Integers

The **absolute value** of a number is the distance between 0 and the number on a number line. Remember that distance is always a positive quantity (or zero). Absolute value is shown by vertical bars on each side of the number.



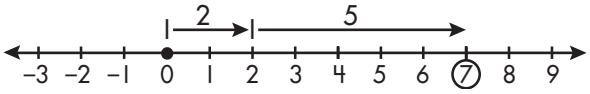
Evaluate the expressions below.

	a	b	c
1.	$\lvert 91 \rvert =$ _____	$\lvert -19 \rvert =$ _____	$\lvert -9 \rvert =$ _____
2.	$\lvert 1 \rvert =$ _____	$\lvert -199 \rvert =$ _____	$\lvert 0 \rvert =$ _____
3.	$\lvert -762 \rvert =$ _____	$\lvert 78 \rvert =$ _____	$\lvert -302 \rvert =$ _____
4.	$\lvert -4002 \rvert =$ _____	$-\lvert 668 \rvert =$ _____	$-\lvert -8701 \rvert =$ _____
5.	$\lvert 23 \rvert =$ _____	$\lvert -56 \rvert =$ _____	$-\lvert 432 \rvert =$ _____
6.	$\lvert -53 \rvert =$ _____	$\lvert 694 \rvert =$ _____	$-\lvert -274 \rvert =$ _____
7.	$\lvert -516 \rvert =$ _____	$\lvert 883 \rvert =$ _____	$-\lvert 637 \rvert =$ _____
8.	$\lvert 413 \rvert =$ _____	$\lvert -590 \rvert =$ _____	$\lvert 739 \rvert =$ _____
9.	$\lvert -281 \rvert =$ _____	$\lvert 40 \rvert =$ _____	$-\lvert -826 \rvert =$ _____
10.	$\lvert 206 \rvert =$ _____	$\lvert 372 \rvert =$ _____	$\lvert 973 \rvert =$ _____
11.	$-\lvert 533 \rvert =$ _____	$\lvert -836 \rvert =$ _____	$\lvert 954 \rvert =$ _____
12.	$\lvert -344 \rvert =$ _____	$-\lvert -711 \rvert =$ _____	$\lvert -219 \rvert =$ _____

NAME _____

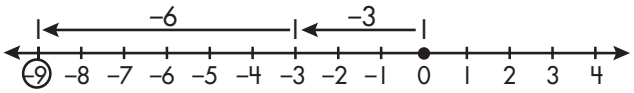
Lesson 1.5 Adding Integers

The sum of two positive integers is a positive integer.



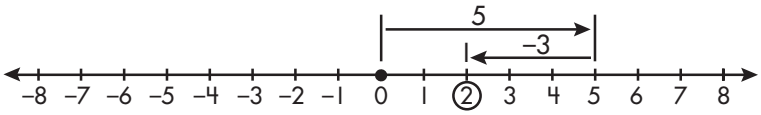
$2 + 5 = 7$

The sum of two negative integers is a negative integer.



$-3 + -6 = -9$

To find the sum of two integers with opposite signs, subtract the digit of lesser value from the digit of greater value and keep the sign of the greater digit.



$5 + (-3) = 5 - 3 = 2$

Add.

	a	b	c	d
1.	$3 + 4$ _____	$-3 + (-4)$ _____	$3 + (-4)$ _____	$-3 + 4$ _____
2.	$-3 + (-3)$ _____	$3 + (-3)$ _____	$-3 + 3$ _____	$3 + 3$ _____
3.	$5 + (-1)$ _____	$-5 + 1$ _____	$-5 + (-1)$ _____	$5 + 1$ _____
4.	$-7 + 3$ _____	$-7 + (-3)$ _____	$7 + (-3)$ _____	$7 + 3$ _____
5.	$4 + 7$ _____	$4 + (-7)$ _____	$-4 + (7)$ _____	$-4 + (-7)$ _____
6.	$8 + (-8)$ _____	$-8 + (-8)$ _____	$8 + 8$ _____	$-8 + 8$ _____
7.	$-3 + 0$ _____	$3 + 0$ _____	$-5 + (-6)$ _____	$-5 + 6$ _____
8.	$5 + (-6)$ _____	$5 + 6$ _____	$-8 + 0$ _____	$8 + 0$ _____
9.	$-3 + 6$ _____	$-3 + (-6)$ _____	$3 + 6$ _____	$3 + (-6)$ _____
10.	$-6 + (-4)$ _____	$-6 + 4$ _____	$6 + (-4)$ _____	$6 + 4$ _____

NAME _____

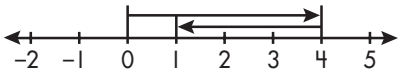
Lesson 1.5 Adding Integers

To find the sum of two integers with different signs, find their absolute values. Remember, **absolute value** is the distance (in units) that a number is from 0, expressed as a positive quantity. Subtract the lesser number from the greater number. Absolute value is written as $|n|$.

The sum has the same sign as the integer with the larger absolute value.

$-4 + 3 = -1$

$|-4| = 4 \quad 4 - 3 = 1$



$4 > 3$, so the sum is negative.

Add.

	a	b	c
1.	$6 + 2 =$ _____	$9 + (-4) =$ _____	$7 + (-9) =$ _____
2.	$-4 + 7 =$ _____	$-3 + (-6) =$ _____	$-12 + 11 =$ _____
3.	$-16 + 0 =$ _____	$13 + (-24) =$ _____	$-6 + 8 =$ _____
4.	$0 + (-9) =$ _____	$-1 + 2 =$ _____	$1 + (-2) =$ _____
5.	$-4 + 4 =$ _____	$3 + (-6) =$ _____	$7 + (-17) =$ _____
6.	$-45 + 21 =$ _____	$41 + 44 =$ _____	$33 + 25 =$ _____
7.	$27 + (-39) =$ _____	$20 + 1 =$ _____	$3 + (-3) =$ _____
8.	$-12 + (-12) =$ _____	$35 + (-26) =$ _____	$-22 + 16 =$ _____
9.	$31 + 17 =$ _____	$-9 + (-6) =$ _____	$-47 + 36 =$ _____
10.	$4 + 5 =$ _____	$-43 + 35 =$ _____	$24 + (-33) =$ _____

NAME _____

Lesson 1.6 Subtracting Integers

Subtract.

	a	b	c
1.	$-32 - (-27) =$ _____	$-26 - 3 =$ _____	$28 - (-20) =$ _____
2.	$7 - (-37) =$ _____	$-9 - 48 =$ _____	$28 - (-15) =$ _____
3.	$16 - (-1) =$ _____	$24 - (-49) =$ _____	$-30 - (-36) =$ _____
4.	$-44 - 24 =$ _____	$-31 - 34 =$ _____	$-31 - (-13) =$ _____
5.	$-49 - (-46) =$ _____	$-16 - 49 =$ _____	$18 - 28 =$ _____
6.	$-32 - (-50) =$ _____	$-32 - (-21) =$ _____	$-48 - (-47) =$ _____
7.	$-5 - (-30) =$ _____	$14 - (-20) =$ _____	$9 - (-47) =$ _____
8.	$-33 - 39 =$ _____	$4 - (-8) =$ _____	$1 - (-42) =$ _____
9.	$32 - (-41) =$ _____	$40 - 44 =$ _____	$-13 - (-39) =$ _____
10.	$-50 - 19 =$ _____	$48 - (-32) =$ _____	$-14 - (-39) =$ _____
11.	$-18 - (-4) =$ _____	$-45 - 13 =$ _____	$8 - (-67) =$ _____
12.	$56 - (-21) =$ _____	$-11 - 34 =$ _____	$24 - (-17) =$ _____
13.	$31 - (-31) =$ _____	$26 - (-9) =$ _____	$-83 - (-3) =$ _____
14.	$-87 - 6 =$ _____	$-90 - 12 =$ _____	$-46 - (-9) =$ _____

NAME _____

Lesson 1.9 Problem Solving

SHOW YOUR WORK

Solve each problem.

1. At closing time, the bakery had $2\frac{1}{4}$ apple pies and $1\frac{1}{2}$ cherry pies left. How much more apple pie than cherry pie was left?

There was _____ more of an apple pie than cherry.

1.

2. The hardware store sold $6\frac{3}{8}$ boxes of large nails and $7\frac{2}{5}$ boxes of small nails. In total, how many boxes of nails did the store sell?

The store sold _____ boxes of nails.

2.

3. Nita studied $4\frac{1}{3}$ hours on Saturday and $5\frac{1}{4}$ hours on Sunday. How many hours did she spend studying?

She spent _____ hours studying.

3.

4. Kwan is $5\frac{2}{3}$ feet tall. Mary is $4\frac{11}{12}$ feet tall. How much taller is Kwan?

Kwan is _____ foot taller.

4.

5. This week, Jim practiced the piano $1\frac{1}{8}$ hours on Monday and $2\frac{3}{7}$ hours on Tuesday. How many hours did he practice this week? How much longer did Jim practice on Tuesday than on Monday?

Jim practiced _____ hours this week.

Jim practiced _____ hours longer on Tuesday.

5.

6. Oscar caught a fish that weighed $4\frac{1}{6}$ pounds and then caught another that weighed $6\frac{5}{8}$ pounds. How much more did the second fish weigh?

The second fish weighed _____ pounds more.

6.

NAME _____

Lesson 1.9 Problem Solving

SHOW YOUR WORK

Solve each problem.

1. One cake recipe calls for $\frac{2}{3}$ cup of sugar. Another recipe calls for $1\frac{1}{4}$ cups of sugar. How many cups of sugar are needed to make both cakes?

_____ cups of sugar are needed.

1.

2. Nicole and Daniel are splitting a pizza. Nicole eats $\frac{1}{4}$ of a pizza and Daniel eats $\frac{2}{3}$ of it. How much pizza is left?

_____ of the pizza is left.

2.

3. The Juarez family is making a cross-country trip. On Saturday, they traveled 450.8 miles. On Sunday, they traveled 604.6 miles. How many miles have they traveled so far?

They have traveled _____ miles.

3.

4. Kathy's science book is $1\frac{1}{6}$ inches thick. Her reading book is $1\frac{3}{8}$ inches thick. How much thicker is her reading book than her science book?

It is _____ inches thicker.

4.

5. A large watermelon weighs 10.4 pounds. A smaller watermelon weighs 3.6 pounds. How much less does the smaller watermelon weigh?

It weighs _____ pounds less.

5.

6. Terrance picked 115.2 pounds of apples on Monday. He picked 97.6 pounds of apples on Tuesday. How many pounds of apples did Terrance pick altogether?

Terrance picked _____ pounds of apples.

6.

NAME _____

Check What You Learned

Adding and Subtracting Rational Numbers

Evaluate each expression.

	a	b	c
1.	opposite of −54 _____	opposite of 19 _____	opposite of 31 _____
2.	opposite of −6 _____	opposite of 21 _____	opposite of −10 _____
3.	opposite of 54 _____	opposite of −34 _____	opposite of 86 _____
4.	$\lvert -35 \rvert =$ _____	$-\lvert -43 \rvert =$ _____	$\lvert 35 \rvert =$ _____
5.	$-\lvert 75 \rvert =$ _____	$-\lvert 83 \rvert =$ _____	$-\lvert 99 \rvert =$ _____

Identify the property of addition described as *commutative*, *associative*, or *identity*.

6. When two numbers are added, the sum is the same regardless of the order of addends.

_____

7. When three or more numbers are added, the sum is the same regardless of how the addends are grouped.

_____

8. The sum of any number and zero is the original number.

_____

	a	b
9.	$4 + 10 = 10 + 4$ _____	$1 + (-1) = 0$ _____
10.	$(1 + 8) + 2 = 1 + (8 + 2)$ _____	$3 + 5 = 5 + 3$ _____
11.	$8 + 0 = 8$ _____	$2 + (6 + 4) = (2 + 6) + 4$ _____
12.	$12 + 9 = 9 + 12$ _____	$(8 + 5) + 3 = 8 + (5 + 3)$ _____

CHAPTER 1 POSTTEST

The People of Africa

Africa is a huge continent and has more independent countries in it than any other continent, over 50 countries. Since Africa extends thousands of miles from north to south and much of Africa sits on the equator, there is great variety in the climate and vegetation across the continent. All of these things influence the culture of people living in Africa. Unfortunately Africa is the world's poorest region and this has a great impact on how the people of Africa live. Most people live in poor rural areas without roads connecting the villages and no electricity or clean water. Rural people who move to the cities to look for work end up living in terrible slums.

The cultures of Africa can be divided into North Africa and Africa south of the Sahara Desert. North Africa borders the Mediterranean Sea and these Africans, like those in Egypt, traded with Greeks, Romans and others thousands of years ago using the Mediterranean Sea for transportation of goods. Many of these people speak Arabic and share the ethnic and religious heritage of the Mediterranean area.

Africa is home to a large number of tribal people. To give an idea of the diversity of African people, there are over 2,000 languages spoken by the people living there. For example, Nigeria has 500 languages and Ethiopia has 80. Africa also has many people of European descent who migrated there during the period of colonization. European countries colonized Africa like they colonized North and South America. But the countries of Africa did not receive their independence until the late 1900s. Namibia became independent in 1990 and Eritrea in 1993. The Europeans divided Africa into countries without considering old tribal territories and rival tribes continue to fight amongst each other. The people of Africa face many difficult problems to provide healthcare, education and a decent way of life for themselves and their children.

Name: _____ Date: _____

Multiple Choice Questions - People

Circle the correct answer.

1. Africa

    a. Has more countries than any other continent
    b. Has over 2,000 languages
    c. Is the poorest area of the world
    d. All of the above

2. North African people

    a. Are culturally similar to people around the Mediterranean Sea
    b. Speak 2,000 languages
    c. Are of European descent
    d. All of the above

3. The culture of Africa is influenced by

    a. Climate
    b. Many tribes
    c. Both a. and b.
    d. None of the above

4. People who live in rural African villages

    a. Don't have electricity
    b. Don't have clean water
    c. Don't have good roads
    d. All of the above

5. Countries in Africa that were European colonies received their independence in the

    a. 1700s like the United States
    b. 1800s
    c. 1900s
    d. None of the above

6. Which of the following countries are in Africa?

    a. Egypt
    b. Nigeria
    c. Eritrea
    d. All of the above

Booker T. Washington

For Booker Taliaferro Washington, born April 5th 1856, life didn't start out so well. Booker T. Washington was born on a tobacco farm in Franklin County, Virginia, to a world of slavery and segregation. By the time he died on November 14th 1915 Booker T. Washington had educated the American people, been an orator, an author and most notably a fierce leader of the nation's African-American community from the 1890's onwards. Booker T. Washington was born with nothing but the will to make the world a better place, which he accomplished and is remembered for.

Educating a slave was considered a crime at this time. Booker did go to school, not to learn as he would have liked, but to carry the books for one of James Burroughs's daughters. In Booker T Washington's book *Up from Slavery* he says "I had the feeling that to get into a schoolhouse and study would be about the same as getting into paradise."

In 1865, after the Emancipation Proclamation ended slavery, Booker's family moved to Malden, West Virginia to be with Booker's stepfather. After being refused the right to learn and study as a slave, Booker had a great desire to learn, and attended school in Malden. Booker worked in a salt mine, starting each day before dawn so he could earn money and have time to go to school.

He was so desperate to learn that at the age of 16, Booker walked 500 miles back to Virginia to enroll in a new school for black students. At first, he didn't make a very good first impression on the head teacher with his ragged clothes and country ways. It was only after he cleaned a room to her satisfaction that he was allowed to stay at the school. Booker went on to teach at Hampton, he then became the principal and leading force behind the Tuskegee Institute in Alabama, which he founded in 1881.

Booker T Washington never forgot his roots and remained loyal to his philosophy of hard work. From his book *Up from Slavery*, Booker says 'There was no period of my life that was devoted to play. From the time that I can remember anything, almost every day of my life has been occupied in some kind of labor.'

In 1881 Booker became recognized as the nation's foremost black educator and one of the most influential men of his generation. Booker T. Washington knew that the end of slavery legally didn't mean the end of the fight for his people. Booker knew freedom only began the hard journey African Americans had ahead for them in becoming equal citizens.

In the last season of his life, Booker T. Washington openly attacked the social disease of racism. In 1915, Booker, along with others, protested against the stereotypical portrayal of blacks in the film *Birth of a Nation*.
At the premature age of 59, Booker T Washington died, but in a few decades Booker had broken through the obstacles of a corrupt society and helped African Americans break free from the economic slavery and injustice that lingered long after the laws had been changed.

Name_____ **Date**_____

Booker T. Washington: Graphic Organizer

Location:

Best Known For:

Time Period

Highlights of Career/Life

What Significant Role Did He Play In African American History?

Marcus Garvey

Born August 17, 1887, in St. Ann's Bay, Jamaica, Marcus Garvey would go on to become a speaker, leader, and founder of the UNIA, the Universal Negro Improvement Association. He is best known for his efforts in the "Back to Africa" movement, which encouraged African-Americans to return to their home roots in Africa. He encouraged African American citizens to be independent, believe in their own self worth, and proclaimed "black is beautiful" long before the 1960's.

Marcus Garvey was the youngest of 11 siblings. His father loved to read, and passed the love of books on to young Marcus. By the time Marcus turned 14, he had left school, and begun working as a printer's apprentice. He later edited several newspapers in Panama and Costa Rica, before arriving in the United States in 1916.

In 1914, Marcus Garvey founded the UNIA, and began promoting his message of black pride and independence to the world. He called for freedom for black citizens in African nations, and for African-Americans to return to their roots in Africa. Garvey and his views were often at odds with other civil rights advocates of the time, and the NAACP itself. His insistence that American citizens should return to Africa, a country that some had never seen, caused many in the Civil Rights movement to treat him with scorn.

Garvey was a powerful speaker, and could motivate large crowds of people with ease. He attracted many supporters, and continued to urge his followers to return to their homeland. His speeches attracted followers, who came to see him in person. Garvey lobbied the country of Liberia to grant lands for settlement by African American citizens, but was unsuccessful at securing land for his cause.

He formed the Black Star Line shipping company in 1919, to promote trade between black nations, and to provide transport for passengers wishing to return to Africa. The Black Star Line would later be a source of trouble for Garvey—in 1923 he was charged and convicted of mail fraud, and would spend the next four years in prison.

There is some suspicion that Marcus Garvey was prosecuted more for political reasons than criminal ones, but no confirmation of this exists. There were some legitimate problems with the Black Star Line, and the way it conducted its financial affairs, but questions remain about the conviction.

After Marcus Garvey was released from prison in 1927, he was deported to Jamaica, and would live out the rest of his life in relative obscurity. He moved to London, where died in 1940. Though Marcus Garvey's work was often the subject of controversy, he paved the way for later radical leaders like Malcolm X, and holds a place alongside Civil Rights leaders of his time.

Name: _____ Date: _____

Short Answer Questions – Marcus Garvey

1. What was the "Back to Africa" movement?

2. What was Garvey's relationship with other civil rights activists and the NAACP like?

3. How did Marcus Garvey put his message out to followers?

4. What was the purpose of the Black Star Line?

5. How did Marcus Garvey try to secure a spot in Africa for American citizens to return to?

6. What did Marcus Garvey want African Americans to do?

7. What do you think was Marcus Garvey's most important achievement?

Name _____ Capitalism

Capitalism

Capitalism is a type of economic system. In a capitalist system, businesses are owned and managed by the people, rather than by the government. The opposite of capitalism is a command economy. In a command economy, the government determines what products are available for sale and how much they should cost.

Capitalism is also known as a free market system. The free market system was first described in a book called *The Wealth of Nations* by Adam Smith in 1776. In this book, Smith asserted that governments should not get involved in the economy because the most healthy economies are those that find their own equilibrium. Examples of the kinds of issues that get worked out by a free market include what products are for sale, how much they should cost, what products people decide to buy, and how much they are willing to pay for them.

The free market system is based on the concept of supply and demand. The balance between supply and demand affects the price of a product. If demand is very high and supply is very low, the price of a product will be artificially high. If demand is very low and supply is very high, the price of a product will be artificially low. The concept of supply and demand says that the ideal price of a product is the one at which there is as much demand for a product as there is supply.

Today, most countries have what is actually a mixed economy. Private businesses set their own prices and determine what products will be sold, but the government still plays a role. There are laws against a company having a monopoly (exclusive control) over one particular product or service. There are also laws requiring workplace safety and environmental protection, and prohibiting discrimination. Other governmental interventions like taxes and Social Security redistribute wealth and provide some economic support to those who need it the most.

Name _____ Capitalism

QUESTIONS: Capitalism

Circle the correct answer.

1. In a capitalist system, businesses are owned and managed by:
   A. the government
   B. the people
   C. the market
   D. Adam Smith

2. What is the opposite of capitalism?
   A. the free market system
   B. a mixed economy
   C. a command economy
   D. supply and demand

3. Capitalism is based on the concept of:
   A. supply and demand
   B. the free market
   C. the command economy
   D. laws against monopolies

4. A company with a monopoly has _____ over a particular business.
   A. no control
   B. government control
   C. exclusive control
   D. supply and demand

5. In a mixed economy:
   A. private businesses set their own prices
   B. private businesses determine what products will be sold
   C. the government plays a role by making and enforcing laws
   D. all of the above

Worksheet 1 Name _____

Determine the author's purpose for each of the following. Use inform, persuade or entertain.

1. HAMSTERS FOR SALE: Humble Pet Store, in the mall: We have a large selection of hamsters for sale this week. They are interesting pets, and you will enjoy having one! They are only $17.99 this week!! Come and buy yours today!

What is the author's purpose ? _____

2. Calligraphy is a form of handwriting . A special pen must be used. Letters are formed using up and down strokes. Most old documents were written in this form. Diplomas, certificates, and other awards are often written in calligraphy.

What is the author's purpose? _____

3. Katrina and her brother, Jesse were playing with the water hose outside one day. Jesse ran to the house to hide from Katrina so she wouldn't squirt him with the water. The back door opened, and Katrina pointed the water hose toward the door ready to squirt Jesse. To Katrina's surprise it was Mom who was now dripping wet!

What is the author's purpose? _____

Worksheet 2 Name _____

Determine the author's purpose for each of the following. Use inform, persuade or entertain.

1. *Skin Miracle*'s amazing Wrinkle Remover Cream will make you look younger in thirty days or less. This remarkable cream has special ingredients to make your wrinkles disappear. The cost for a thirty day supply is $25.99. You'll be amazed at what you see!

What is the author's purpose of this writing? _____

2. Tommy was not happy one little bit. His sister, Susan was making honor roll... again! His parents would let her do anything she wanted to do. Tommy was not making honor roll this time and he was not going to be allowed to do all the things he wanted to do. Poor Tommy! He decided he would just have to study harder and get back on the honor roll. He'd show them!

What is the author's purpose of this writing? _____

3. Laura Elizabeth Ingalls Wilder was born on February 7, 1867 in Pepin, Wisconsin to Charles and Caroline Ingalls. She met and married James Wilder in 1885. She published many books based on her travels to the West. Her writing became the basis for the " Little House" series. She died in 1957.

What is the author's purpose of this writing? _____

 Name _____

Context Clues

If you are not sure what a word means, one way of figuring out what the word may mean is by using context clues.

Using context clues means using the information around the word you don't know. These words may help you discover what the unknown word means. Sometimes a word's definition may become clearer after reading the entire paragraph where it appears. You can also use the information in the rest of the paragraph to help you figure out what the word means.

Read each sentence or paragraph and circle the correct answer.

1. The archaeologist carefully removed the **tome** from its ancient resting place and proceeded to read the pages related to marriage in ancient Greece.

   What does the word tome probably mean?
   a. pen b. weapon c. book d. sausage

2. The Navajo language is an unwritten language of extreme complexity with no alphabet or symbols, and is spoken only on the lands of the Navajo Nation in the American Southwest. During World War II a Navajo code was created for the U.S. Navy. This code was **virtually** undecipherable to anyone except Navajo speaking persons.

   What does the word virtually probably mean?
   a. pleasant b. almost c. never d. always

3. Lakes occupy less than two percent of the Earth's surface, yet they help **sustain** life. For instance, lakes give us fish to eat, irrigate crops, and generate electrical power.

   What does the word sustain probably mean?
   a. support b. obstruct c. prolong d. destroy

4. The ancient Greeks **pioneered** many of the kinds of writing we consider standard today. They wrote speeches, plays, poems, books about science and learning, long histories of the things that happened to them.

   What does the word pioneered probably mean?
   a. complicated b. developed c. destroyed d. explored

5. Fifty-five mostly **prominent**, male delegates attended the Philadelphia Convention in 1787. About seventy-five percent of the delegates had served in Congress and others were important people in their home states. These men are often referred to as the Framers of the Constitution.

   What does the word prominent probably mean?
   a. unimportant b. unknown c. common d. important

6. Bats that eat fruit and nectar spread seeds and help flowers grow. Without bats many important plants would not **thrive**.

   What does the word thrive probably mean?
   a. flourish b. die c. wither d. deteriorate

Context Clues

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Name:_____

Fact or Opinion?

	Statement	Fact or Opinion?
1.	Bats are nocturnal mammals.	_____
2.	Bats look very scary and mean.	_____
3.	I think it will rain today.	_____
4.	It is raining hard outside today.	_____
5.	I think the Hurricanes will win their game.	_____
6.	The Hurricanes won 6-0 last weekend.	_____
7.	Chocolate milk tastes great!	_____
8.	The milk we drink comes from cows.	_____
9.	I think my friend plays the piano.	_____
10.	The piano has 88 ivory keys on it.	_____
11.	The continent we live on is North America.	_____
12.	My school is the best school ever!	_____
13.	I love to play outdoors.	_____
14.	I think I'm a pretty good swimmer.	_____

Name:_____

Fact or Opinion?

	Statement	Fact or Opinion?
1.	Bats are nocturnal mammals.	F
2.	Bats look very scary and mean to me.	O
3.	I think it will rain today.	O
4.	It is raining hard outside today.	F
5.	I think the Hurricanes will win their game.	O
6.	The Hurricanes won 6-0 last weekend.	F
7.	Chocolate milk tastes great!	O
8.	The milk we drink comes from cows.	F
9.	I think my friend plays the piano.	O
10.	The piano has 88 ivory keys on it.	F
11.	The continent we live on is North America.	F
12.	My school is the best school ever!	O
13.	I love to play outdoors.	F
14.	I think I'm a pretty good swimmer.	O

Name:_____

Fact or Opinion?

	Statement	Fact or Opinion?
1.	Dogs are my favorite kind of animal.	_____
2.	Dogs come in many different breeds.	_____
3.	I think my dog is the best dog of all.	_____
4.	I think elephants are the heaviest animal.	_____
5.	Elephants eat grass, small branches and bark.	_____
6.	Blue is my favorite color.	_____
7.	Blue is the color of the sky.	_____
8.	Roses are the nicest smelling flower.	_____
9.	Roses have thorny stems.	_____
10.	The sun is actually a star.	_____
11.	Without the sun, earth could not support life.	_____
12.	Earth orbits the sun every 365 days.	_____
13.	I think tomorrow will be a sunny day.	_____
14.	My favorite season is the fall.	_____

Name:_____

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1.	Dogs are my favorite kind of animal.	F
2.	Dogs come in many different breeds.	F
3.	I think my dog is the best dog of all.	O
4.	I think elephants are the heaviest animal.	O (although a fact)
5.	Elephants eat grass, small branches and bark.	F
6.	Blue is my favorite color.	F
7.	Blue is the color of the sky.	F
8.	Roses are the nicest smelling flower.	O
9.	Roses have thorny stems.	F
10.	The sun is actually a star.	F
11.	Without the sun, earth could not support life.	F
12.	Earth orbits the sun every 365 days.	F
13.	I think tomorrow will be a sunny day.	O
14.	My favorite season is the fall.	F

Name _____

Setting and Steps in a Process

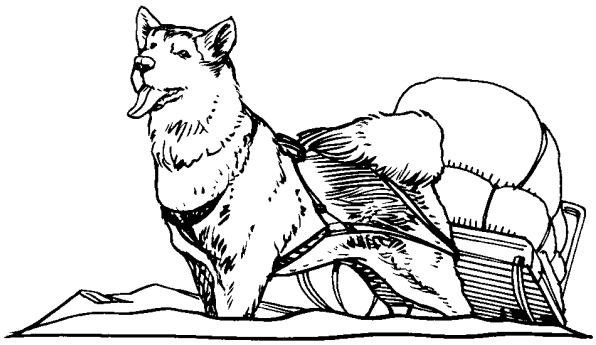
Directions: Read the passage. Then read each question about the passage. Choose the best answer to each question. Mark the letter for the answer you have chosen.

A Cold Journey

Roald Amundsen left Norway secretly. He wanted to beat the British explorer Robert Scott to the South Pole. No explorer had traveled so far.

Amundsen and his team reached the edge of Antarctica in January. They took a few trips inland to set up supplies of food and fuel. Then they waited for spring to arrive so they could travel.

In October, spring arrived. Amundsen's team began its trip through Antarctica to the South Pole. The trip was painstaking. They ran out of the food they had brought. In order to survive, they had to kill and eat the weaker sled dogs. But on December 14, 1911, Amundsen and his team became the first people to reach the South Pole. Soon Amundsen was famous throughout the world.



1. Most of this story is set—
- **A.** in Norway.
- **B.** in Britain.
- **C.** in Antarctica.
- **D.** all over the world.

2. How would this story be different if Robert Scott had already reached the South Pole?
- **F.** Amundsen would not have left secretly.
- **G.** Amundsen could have traveled in January.
- **H.** Amundsen could have gotten food from Scott.
- **J.** Amundsen would have been as famous as Scott.

3. What did Amundsen do first?
- **A.** He set up camp at the edge of Antarctica.
- **B.** He left Norway secretly.
- **C.** He set up supplies.
- **D.** He began his trip through the Antarctic.

4. Before Amundsen left the edge of the Antarctic, he—
- **F.** killed weaker sled dogs.
- **G.** set up supplies of food and fuel.
- **H.** met with Robert Scott.
- **J.** traveled to the South Pole.

5. How does the Antarctic setting affect Amundsen's actions?
- **A.** Dogs have to be killed and eaten when food runs out.
- **B.** He has to get more dogs to keep traveling.
- **C.** He has to send far away for help.
- **D.** He has to travel alone.

Notes for Home: Your child identified the time and place in which a story takes place, and the order in which story events happened. ***Home Activity:*** Have your child choose a favorite story. With your child, identify the time and place in which the story takes place.

Setting and Steps in a Process Answer Key (15871)

1. C
2. F
3. B
4. F
5. A

Name: _____

Making Predictions Worksheet 1

Directions: Read the following passages. Determine what event is likely to occur next. Explain your answer using textual evidence.

Vince Thunder waved to the crowd one more time before he put on his motorcycle helmet. The crowd cheered uproariously. Vince looked down the ramp and across the 17 school busses that he was about to attempt to jump. It was a difficult trick and everything would need to go right for him to nail it. His cape blew in the wind. As Vince hoped on his motorcycle and started down the ramp, he noticed something that he had not seen before. There was large oil slick at the end of the ramp. He attempted to stop the bike, but it was too late. He had already built up too much momentum...

1. What event is most likely to occur next? _____

2. What evidence from the text supports your prediction?

Rex sat at the mouth of the alley and chewed the bone that he had found by the dumpster. It was a meaty bone that had belonged to a larger animal, perhaps a state fair prize winning pig. Rex was attracted to the bone by its strong scent. Apparently, he was not the only one who could smell it. He heard the jangle of tags behind him and turned to see a larger dog. Rex released the bone and began growling at the other dog. The other dog began growling at Rex. The two dogs inched toward one another, maintaining eye contact. Each began growling louder as the other approached within striking distance...

3. What event is most likely to occur next? _____

4. What evidence from the text supports your prediction?

John sat in the classroom and drew pictures of the Tatakai Fighting Warriors in his notebook while his teacher lectured about biology or something. He didn't really know for sure. The last thing he remembered her saying was that there would be a test tomorrow. His heart jumped. He went home to study for the test, but he was soon drawn to his Game Box. He played Tatakai Fighting Warriors long into the night. When his alarm clock rang the next day, he was too tired to hit the snooze button, so he let it beep for about 20 minutes before he got up and went to school. As she had promised, the teacher has prepared a test. She reviewed the testing procedures and directions with the class and then passed out the test. John looked at his test and scratched his head...

5. What event is most likely to occur next? _____

6. What evidence from the text supports your prediction?

Angela threw the bedspread over the bed and fussed with it until it was free of wrinkles. She dusted her dresser and straightened the knickknacks. As she was leaving the room, she noticed that a picture frame on the nightstand was slightly crooked. She went back into the room and straightened the picture frame. She examined her bedroom one more time and gave it a satisfied nod, and then she went to vacuum the living room. As she was running the vacuum, her three-year-old son Jason walked into Angela's bedroom. He was drinking a glass of grape juice and playing with his cars. Angela's bedspread fell as he raced his cars off the bed. While hitting an imaginary jump with his cars, he bumped into the nightstand and knocked over Angela's picture frame. Then, while he lined his cars up at the starting line of a pretend race, he kicked over the grape juice and it spilled all over Angela's white carpet. Jason didn't notice. After Angela finished vacuuming the living room, she tied the cord around the vacuum and went to return it to her bedroom...

7. What event is most likely to occur next? _____

8. What evidence from the text supports your prediction?

Lance didn't cook much but he wanted to do something nice for his wife's birthday, so he decided to make her dinner. He was preparing a meal of steak and potatoes by following a recipe that he had found on the Internet. He put the steaks on the grill on low heat and quartered the potatoes. Then he threw the potatoes in a skillet with a little bit of oil and cooked them over medium heat. After browning the potatoes, he grabbed the skillet by the metal handle and put it into the oven at 400 degrees. Twenty minutes later he grabbed the steaks off of the grill and began preparing the plates. The last thing that he needed to do was take the potatoes out of the oven. He thought about using a potholder to remove the pan, but didn't want to bother with getting one out of the drawer. He reached into the hot oven, his hand nearing the metal handle of the skillet. He wrapped his hand around the handle and clenched tightly...

9. What event is most likely to occur next? _____

10. What evidence from the text supports your prediction?

Word Meanings From Context

Ryan is a great inventor. However, I don't think that his latest invention, edible socks, is likely to be too successful. Not many people want to eat socks. There are some things in life that should remain inedible.

1. Which word in the passage means "fit to be eaten"?

2. Which word in the passage means "not fit to be eaten"?

Marsha is really an introvert. When I took her to Jason's party, she sat in a corner without speaking to anyone. All she did was eat most of the snacks. The only reason she hangs out with me is because I never try to force her to be sociable. She would never forgive me if I introduced her to anyone.

3. An introvert is usually _____.

a. friendly
b. hungry
c. unclean
d. shy

Sunshine said, "Amber, why are you making such a big deal about Robert's hair? Yes, he did dye it purple. It is rather unusual for a guy to have purple hair. On the other hand, it's not exactly going to change the course of world history. It's really quite a trivial matter."

4. What does "trivial" mean?

a. strange
b. unimportant
c. disgusting
d. dangerous

Word Meanings From Context

The United States has a new president. Americans are hopeful that George W. Bush will succeed in dealing with some of the major problems that our nation faces. Some feel that the task will be made extremely difficult by the controversial way that the election ended. Others are very confident that our new leader is a man who will bring people together to get things done.

President Bush's top priority will be to improve education in our country. He is determined to see that no child will ever fail. He believes that local school districts should decide how to meet national standards. The president insists that parents should have greater choices about which schools their kids attend. He will work hard to find areas of agreement between the opposing parties so that important education reforms will become law.

1. Which word in the selection is a synonym of "important"?

2. Which word in the selection is an antonym of "succeed"?

3. Which word in the selection means to make better?

4. Use a word from the selection to complete the following sentence.

The Giants and the Ravens will be the _____ teams in the Super Bowl.

5. Which word in the selection is a synonym of "nation"?

6. Which word in the selection means the rank (place in order) of importance?

7. Which word in the selection means having a lot of disagreement.

Reading Comprehension, Volume 6, Number 16
http://rhlschool.com/read6n16.htm

Word Meanings From Context

edible
inedible
D
B

Reading Comprehension, Volume 6, Number 15
http://rhlschool.com/read6n15.htm

Word Meanings From Context

1. major
2. fail
3. improve
4. opposing
5. country
6. priority
7. controversial

Main Idea

The main idea of a paragraph is what all the sentences are about. Read the paragraph and ask, "What's your point?" That will help you zero in on the main idea.

Read each paragraph carefully. Choose the best answer to the questions that follow.

1. Juan loves to play games. His favorite game is chess because it requires a great deal of thought. Juan also likes to play less demanding board games that are based mostly on luck. He prefers Monopoly because it requires luck and skill. If he's alone, Juan likes to play action video games as long as they aren't too violent.

What is the main idea of this paragraph?

a. Juan dislikes violence.
b. Juan likes to think.
c. Juan enjoys Monopoly.
d. Juan enjoys playing games.

2. Maria is watching too much television. A toddler shouldn't be spending hours staring blankly at a screen. Worse yet, some of her wild behavior has been inspired by those awful cartoons she watches. We need to spend more time reading books with her and pull the plug on the TV!

What is the main idea of this paragraph?

a. Watching a lot of television isn't good for Maria.
b. Books are good.
c. All cartoons are bad.
d. Some cartoons are bad for Maria.

3. Samantha, I can't eat or sleep when you are gone. I need to hear your scratchy voice and see your lovely toothless smile. I miss that special way that you eat soup with your fingers. Please come home soon!

What is the main idea of this paragraph?

a. Samantha, you have bad manners.
b. Samantha, you should see a dentist.
c. Samantha, I miss you.
d. Samantha, I have lost my appetite.

4. Someday we will all have robots that will be our personal servants. They will look and behave much like real humans. We will be able to talk to these mechanical helpers and they will be able to respond in kind. Amazingly, the robots of the future will be able to learn from experience. They will be smart, strong, and untiring workers whose only goal will be to make our lives easier.

Which sentence from the paragraph expresses the main idea?

a. Someday we will all have robots that will be our personal servants.
b. We will be able to talk to these mechanical helpers and they will be able to respond in kind.
c. They will look and behave much like real humans.
d. Amazingly, the robots of the future will be able to learn from experience.

Grade 7

Reading Passages

The names of the reading passages are listed at the left.
Click the name of the passage you would like to view.

From *Around the World in 80 Days*

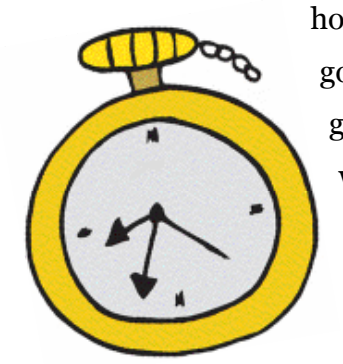
Chapter 37: In Which It Is Shown That Phileas Fogg Gained Nothing by His Tour Around the World, Unless It Were Happiness

by Jules Verne

Yes; Phileas Fogg in person.

The reader will remember that at five minutes past eight in the evening—about five and twenty hours after the arrival of the travelers in London—Passepartout had been sent by his master to engage the services of the Reverend Samuel Wilson in a certain marriage ceremony, which was to take place the next day.

Passepartout went on his errand enchanted. He soon reached the clergyman's house, but found him not at home. Passepartout waited a good twenty minutes, and when he left the reverend gentleman, it was thirty-five minutes past eight. But in what a state he was! With his hair in disorder, and without his hat, he ran along the street as never man was seen to run before, overturning passers-by, rushing over the sidewalk like a waterspout[1].



In three minutes he was in Saville Row again, and staggered back into Mr. Fogg's room.

He could not speak.

"What is the matter?" asked Mr. Fogg.

"My master!" gasped Passepartout—"marriage—impossible—"

"Impossible?"

---

[1] **waterspout:** a weak tornado that forms over water

"Impossible—for to-morrow."

"Why so?"

"Because to-morrow—is Sunday!"

"Monday," replied Mr. Fogg.

"No—to-day is Saturday."

"Saturday? Impossible!"

"Yes, yes, yes, yes!" cried Passepartout. "You have made a mistake of one day! We arrived twenty-four hours ahead of time; but there are only ten minutes left!"

Passepartout had seized his master by the collar, and was dragging him along with irresistible force.

Phileas Fogg, thus kidnapped, without having time to think, left his house, jumped into a cab, promised a hundred pounds to the cabman, and, having run over two dogs and overturned five carriages, reached the Reform Club.

The clock indicated a quarter before nine when he appeared in the great saloon.

Phileas Fogg had accomplished the journey round the world in eighty days!

Phileas Fogg had won his wager of twenty thousand pounds!

How was it that a man so exact and fastidious[2] could have made this error of a day? How came he to think that he had arrived in London on Saturday, the twenty-first day of December, when it was really Friday, the twentieth, the seventy-ninth day only from his departure?

[2] **fastidious:** showing great care

The cause of the error is very simple.

Phileas Fogg had, without suspecting it, gained one day on his journey, and this merely because he had traveled constantly eastward; he would, on the contrary, have lost a day had he gone in the opposite direction, that is, westward.

In journeying eastward he had gone towards the sun, and the days therefore diminished for him as many times four minutes as he crossed degrees in this direction. There are three hundred and sixty degrees on the circumference of the earth; and these three hundred and sixty degrees, multiplied by four minutes, gives precisely twenty-four hours—that is, the day unconsciously gained. In other words, while Phileas Fogg, going eastward, saw the sun pass the meridian eighty times, his friends in London only saw it pass the meridian seventy-nine times. This is why they awaited him at the Reform Club on Saturday, and not Sunday, as Mr. Fogg thought.

360°
x 4 minutes
1440 minutes
÷ 60 minutes per hour
24 hours

24 hours = 1 day!

London

And Passepartout's famous family watch, which had always kept London time, would have betrayed this fact, if it had marked the days as well as the hours and the minutes!

Phileas Fogg, then, had won the twenty thousand pounds; but, as he had spent nearly nineteen thousand on the way, the pecuniary[3] gain was small. His object was, however, to be victorious, and not to win money. He divided the one thousand pounds that remained between Passepartout and the unfortunate Fix, against whom he cherished no grudge. He deducted, however, from Passepartout's share the cost of the gas which had burned in his room for nineteen hundred and twenty hours, for the sake of regularity.

[3] **pecuniary:** relating to money

That evening, Mr. Fogg, as tranquil and phlegmatic[4] as ever, said to Aouda: "Is our marriage still agreeable to you?"

"Mr. Fogg," replied she, "it is for me to ask that question. You were ruined, but now you are rich again."

"Pardon me, madam; my fortune belongs to you. If you had not suggested our marriage, my servant would not have gone to the Reverend Samuel Wilson's, I should not have been apprised of my error, and—"

"Dear Mr. Fogg!" said the young woman.

"Dear Aouda!" replied Phileas Fogg.

It need not be said that the marriage took place forty-eight hours after, and that Passepartout, glowing and dazzling, gave the bride away. Had he not saved her, and was he not entitled to this honour?

The next day, as soon as it was light, Passepartout rapped vigorously at his master's door. Mr. Fogg opened it, and asked, "What's the matter, Passepartout?"

"What is it, sir? Why, I've just this instant found out—"

"What?"

"That we might have made the tour of the world in only seventy-eight days."

"No doubt," returned Mr. Fogg, "by not crossing India. But if I had not crossed India, I should not have saved Aouda; she would not have been my wife, and—"

Mr. Fogg quietly shut the door.

---

[4] **phlegmatic:** calm

Phileas Fogg had won his wager, and had made his journey around the world in eighty days. To do this he had employed every means of conveyance—steamers, railways, carriages, yachts, trading-vessels, sledges, elephants. The eccentric[5] gentleman had throughout displayed all his marvelous qualities of coolness and exactitude. But what then? What had he really gained by all this trouble? What had he brought back from this long and weary journey?

Nothing, say you? Perhaps so; nothing but a charming woman, who, strange as it may appear, made him the happiest of men!

Truly, would you not for less than that make the tour around the world?

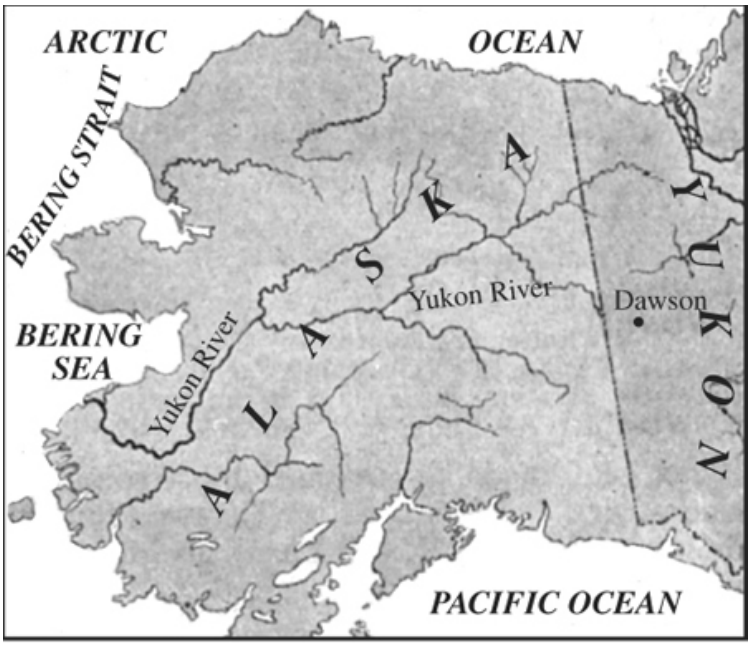
[5] **eccentric:** odd

From Chapter IV,

The Call of the Wild

by Jack London

It was a hard trip, with the mail behind them, and the heavy work wore them down. They were short of weight and in poor condition when they made Dawson, and should have had a ten days' or a week's rest at least. But in two days' time they dropped down the Yukon bank from the Barracks, loaded with letters for the outside. The dogs were tired, the drivers grumbling, and to make matters worse, it snowed every day. This meant a soft trail, greater friction on the runners, and heavier pulling for the dogs; yet the drivers were fair through it all, and did their best for the animals.



Each night the dogs were attended to first. They ate before the drivers ate, and no man sought his sleeping-robe till he had seen to the feet of the dogs he drove. Still, their strength went down. Since the beginning of the winter they had travelled eighteen hundred miles, dragging sleds the whole weary distance; and eighteen hundred miles will tell upon life of the toughest. Buck stood it, keeping his mates up to their work and maintaining discipline, though he, too, was very tired. Billee cried and whimpered regularly in his sleep each night. Joe was sourer than ever, and Sol-leks was unapproachable, blind side or other side.

But it was Dave who suffered most of all. Something had gone wrong with him. He became more morose[1] and irritable, and when camp was pitched at once made his nest, where his driver fed him. Once out of the harness and down, he did not get on his feet again till harness-up time in the morning. Sometimes, in the traces[2], when jerked by a sudden stoppage of the sled, or by straining to start it, he would cry out with pain. The driver examined him, but could find nothing. All the drivers became interested in his case. They talked it over at meal-time, and over their last pipes before going to bed, and one night they held a consultation. He was brought from his nest to the fire and was pressed and prodded till he cried out many times. Something was wrong inside, but they could locate no broken bones, could not make it out.

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[1] **morose:** gloomy
[2] **traces:** straps of a harness

By the time Cassiar Bar was reached, he was so weak that he was falling repeatedly in the traces. The Scotch half-breed called a halt and took him out of the team, making the next dog, Sol-leks, fast to the sled. His intention was to rest Dave, letting him run free behind the sled. Sick as he was, Dave resented being taken out, grunting and growling while the traces were unfastened, and whimpering broken-heartedly when he saw Sol-leks in the position he had held and served so long. For the pride of trace and trail was his, and, sick unto death, he could not bear that another dog should do his work.

When the sled started, he floundered in the soft snow alongside the beaten trail, attacking Sol-leks with his teeth, rushing against him and trying to thrust him off into the soft snow on the other side, striving to leap inside his traces and get between him and the sled, and all the while whining and yelping and crying with grief and pain. The half-breed tried to drive him away with the whip; but he paid no heed to the stinging lash, and the man had not the heart to strike harder. Dave refused to run quietly on the trail behind the sled, where the going was easy, but continued to flounder alongside in the soft snow, where the going was most difficult, till exhausted. Then he fell, and lay where he fell, howling lugubriously[3] as the long train of sleds churned by.

With the last remnant of his strength he managed to stagger along behind till the train made another stop, when he floundered past the sleds to his own, where he stood alongside Sol-leks. His driver lingered a moment to get a light for his pipe from the man behind.

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[3] **lugubriously:** sadly; mournfully

Then he returned and started his dogs. They swung out on the trail with remarkable lack of exertion, turned their heads uneasily, and stopped in surprise. The driver was surprised, too; the sled had not moved. He called his comrades to witness the sight. Dave had bitten through both of Sol-leks's traces, and was standing directly in front of the sled in his proper place.

He pleaded with his eyes to remain there. The driver was perplexed[4]. His comrades talked of how a dog could break its heart through being denied the work that killed it, and recalled instances they had known, where dogs, too old for the toil, or injured, had died because they were cut out of the traces. Also, they held it a mercy, since Dave was to die anyway, that he should die in the traces, heart-easy and content. So he was harnessed in again, and proudly he pulled as of old, though more than once he cried out involuntarily from the bite of his inward hurt. Several times he fell down and was dragged in the traces, and once the sled ran upon him so that he limped thereafter in one of his hind legs.

[4] **perplexed:** confused; puzzled

But he held out till camp was reached, when his driver made a place for him by the fire. Morning found him too weak to travel. At harness-up time he tried to crawl to his driver. By convulsive efforts he got on his feet, staggered, and fell. Then he wormed his way forward slowly toward where the harnesses were being put on his mates. He would advance his fore legs and drag up his body with a sort of hitching movement, when he would advance his fore legs and hitch ahead again for a few more inches. His strength left him, and the last his mates saw of him he lay gasping in the snow and yearning toward them. But they could hear him mournfully howling till they passed out of sight behind a belt of river timber.

Here the train was halted. The Scotch half-breed slowly retraced his steps to the camp they had left. The men ceased talking. A revolver-shot rang out. The man came back hurriedly. The whips snapped, the bells tinkled merrily, the sleds churned along the trail; but Buck knew, and every dog knew, what had taken place behind the belt of river trees.

Cathcart City Bus System
Guide for Young Riders

Are there times when you'd like to go to a movie or a ball game, do some homework at the downtown library, hang out at the mall, or get to a friend's house, but you don't have someone to drive you? You can get there yourself by riding a city bus.

Schedules

You can obtain bus schedules in any of the following ways:

- Visit the Cathcart City Transit Center at 101 Fifth Street (8:30 A.M. – 5:30 P.M.).
- Download a schedule from our web site at http://transit.gocathcart.gov.
- Call Passenger Information at 555-0120 (6:30 A.M. – 6:00 P.M.).

In addition, many local libraries, middle schools, high schools, and stores carry schedules for routes serving their areas.

Fares

- $1.25 Regular
- $3.00 Express (designated **E**)
- $0.75 Senior and disabled

Exact change. You need exact change to ride the bus. The bus driver cannot make change for you. You can use $1 bills, coins, or both to pay your fare.

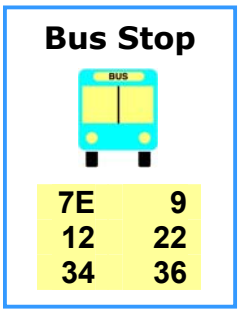
Bus pass. Students in grades K-12 who use city buses to get to school and who are Cathcart City residents are eligible for a reduced-rate student bus pass. You may use it to travel not just to and from school but on any city bus at any time.

Student discount. If you don't have a bus pass, you can still get a ten-cent discount with a student ID from a Cathcart City school. Just show your ID to the driver as you pay.

Transfers. If you paid cash and need to change buses to get to your destination, ask your driver for a free transfer. If you are using a pass, you do not need a transfer.

Riding the Bus

To ride a bus, you must wait at a bus stop. *The bus will not pick you up unless you are at a bus stop.* You can identify a bus stop from the sign like the one at the right. The sign displays the route numbers of the buses that stop at that stop. Be at the bus stop about five minutes before your bus is scheduled to arrive.



Remember that different buses stop at the same bus stop. You need to be careful to board the right bus. Look for the route number and destination, which are displayed above the windshield and on the side of the bus where you board. If you are not sure whether you have the right bus, step onto the bus and ask the driver.

Board the bus by the front door. Put your money in the coin box next to the driver or show your pass.

Rules for the Bus

These rules apply to passengers on city buses.

- Do not eat, drink, or smoke.
- If you listen to music, use headphones.
- Do not litter.
- Do not lie down on the seats.
- Be respectful of other passengers, the driver, and transit property.

Exercise common sense to ride the bus safely. Do not sit where you feel uncomfortable. Keep your valuables close by you. Avoid making yourself a target for thieves by not displaying large amounts of cash or leaving purses or book bags open and unattended.

Getting off at Your Stop

It's a good idea to note the names of the last two or three stops before yours. That will give you time to gather your belongings and be ready when you get to your stop. *Buses don't stop at every stop, and the bus driver doesn't announce every stop*. You need to pay attention so you know when your stop is coming up. You also need to alert the driver when your stop is the next one so the driver will know to stop the bus for you. Pull the cord that runs above the side windows. Pull just once. A bell will ring, alerting the driver to stop. If you're worried about getting off at the right stop, ask the driver to call out the stop for you.

Welcome aboard, and enjoy your ride on the Cathcart City Bus System!

Student Bus Pass Application

SERVICE OPTIONS
(choose one)

- ❍ **Year Pass ($200)**
- ❍ **Fall Semester Pass ($110)**
- ❍ **Spring Semester Pass ($110)**
- ❍ **Book (40 one-way tickets, $30)**

Last Name: _____ First Name: _____ Middle Initial: ___

School: _____ Grade: _____

Student ID # _____

Household Information

Street Address: _____ Apt.: _____

City: _____ State: _____ ZIP: _____

Phone Number: _____ E-mail Address: _____

Parent/Guardian Name: _____

By signing this form, we agree to the terms and conditions set forth on the reverse.

Student Signature: _____

Parent/Guardian Signature: _____

This form may be mailed or submitted in person to the Cathcart City Transit Center, 101 Fifth Street, Cathcart City, IL 60540, or may be submitted to the administrative office of your school. Your pass will be mailed to you. Allow two weeks to receive your pass.

Cathcart City Bus Schedule

22 Monday – Friday

All Rides Accessible

From Wilder Amusement Park / To Downtown						
Wilder	PM	2:05	3:47	5:32	7:19	9:05
North Forest Road		2:14	3:56	5:41	7:28	9:14
Argyle & Worcester		2:26	4:08	5:53	7:40	9:26
Brookfield Mall		2:39	4:21	6:06	7:53	9:39
Fifth Street		2:48	4:30	6:15	8:02	9:48
Courthouse Square		2:51	4:33	6:18	8:05	9:51

From Downtown / To Wilder Amusement Park							
Courthouse Square	AM	7:15	8:43	9:02	11:18	PM	1:36
Fifth Street		7:18	8:46	9:05	11:21		1:39
Brookfield Mall		7:27	8:55	9:14	11:30		1:48
Argyle & Worcester		7:40	9:08	9:27	11:43		2:01
North Forest Road		7:52	9:20	9:39	11:55		2:13
Wilder		8:01	9:29	9:48	12:04		2:22

22 Sat/Sun/Holiday

All Rides Accessible

From Wilder Amusement Park / To Downtown						
Wilder	PM	3:14	4:25	5:40	7:15	9:20
North Forest Road		3:23	4:34	5:49	7:24	9:29
Argyle & Worcester		3:35	4:46	6:01	7:36	9:41
Brookfield Mall		3:48	4:59	6:14	7:49	9:54
Fifth Street		3:57	5:08	6:23	7:58	10:03
Courthouse Square		4:00	5:11	6:26	8:01	10:06

From Downtown / To Wilder Amusement Park							
Courthouse Square	AM	7:30	9:45	11:02	PM	12:28	1:40
Fifth Street		7:33	9:48	11:05		12:31	1:43
Brookfield Mall		7:42	9:57	11:14		12:40	1:52
Argyle & Worcester		7:55	10:10	11:27		12:53	2:05
North Forest Road		8:07	10:22	11:39		1:05	2:17
Wilder		8:16	10:31	11:48		1:14	2:26

Coats of Arms

by Elizabeth Knapp

Two thousand years ago, armies carrying tall poles topped with metal eagles swept through most of the countries of Western Europe and conquered them. Everywhere, people knew that the eagle meant the mighty Roman Empire. From tribes of long ago to modern nations today, people have chosen animals like the eagle, stars, crosses, and other symbols to tell the world who they are and what they stand for. Symbols are often used to represent the invisible qualities of a person or thing. The practice of using and wearing symbols reached its height with coats of arms.

Coats of arms had their beginning in feudal times. In battle, knights' faces were covered by the visors on their helmets. As a result, one man in armor looked very much like another. So knights began to put the arms of their house on their shields and the flags they carried into battle. Some examples of arms are a green dragon on a gold background or a gold cross on a black background. Having their arms on their shields and flags allowed knights to know each other from a distance, like the uniforms that sports teams wear today. Also, few people could read and write in the Middle Ages. So pictures became an important way of identifying both friends and enemies.

Parthey Coat of Arms

Photo Courtesy of Elizabeth Knapp

In the early Middle Ages, kings and knights began to have their arms sewn onto their *surcoats*, tunics or long vests that they wore over their armor to

protect it from the sun. Arms even appeared on surcoats made for their horses! From *surcoats* came the term *coats of arms.*

Soon, coats of arms were used not only to identify knights in battles or contests but also to show that a person belonged to the upper classes. The oldest son would inherit his family's coat of arms just as it was. The younger sons would then add their own symbols to it. When a woman married, her family's coat of arms was often added to her husband's.

As the designs became crowded with more items, coats of arms were divided into four equal parts. This was called *quartering*. The man's coat of arms was located in the upper-left and lower-right quarters, while the woman's was in the remaining two quarters. Coats of arms were meant to be "read" like a book, starting at the upper-left quarter and then moving across and down.

COLOR	TINCTURE
Red	Gules
Blue	Azure
Green	Vert
Purple	Purpure
Black	Sable
Gold	Or
Silver	Argent

Coats of arms have several different parts. The main part is the *shield*. The background of the shield, called the *field*, contains one or more colors, or *tinctures*. A tincture is usually either the color of a metal, such as gold or silver, or a color such as red or blue. Each color has a particular meaning. For example, gold represents giving to others, and blue stands for truth and loyalty. Because French was the language used by the upper classes in the Middle Ages, the words used for these colors come from Old French.

Certain objects appear on the field of a coat of arms. They can be either line designs, called *ordinaries*, or symbols, called *charges*. Different versions of the Christian cross are common charges. In the Middle Ages, a cross on a coat of arms meant that its original owner had been to the Crusades.

Charges are also often animals, both real and imaginary. Some of the most common animal charges are lions, bears, eagles, horses, dragons, and unicorns.

These animals stand for certain human qualities. For example, a lion means bravery, and a bear means protectiveness.

The animals are rarely drawn as they look in real life. Instead, they are shown as flat figures, with their important features emphasized. For example, a lion may be shown with a huge mane and an eagle with long wings or sharp claws. Also, the charges are usually shown in special positions that are not realistic. Because they started out as battle symbols, the animals often appear in fighting poses. Like tinctures, these positions have special words from Old French to describe them.

POSITION	MEANING
Rampant	Standing on hind legs
Rampant Guardant	Standing on hind legs, face turned toward the viewer
Passant	Walking
Couchant	Lying down
Sejant	Sitting

Today, various groups use coats of arms to show their histories and their missions. Many countries, city and state governments, schools, and businesses use coats of arms. Even sports groups such as the National Football League and the National Hockey League have emblems, or symbols, that are like coats of arms.

People can learn about their families' coats of arms by doing research at a library or on the Internet. Online companies research coats of arms, and they also design them based on family names. For some people, the fun is in designing their own coat of arms. With all the different tinctures, charges, and ordinaries, the possibilities are almost endless. What would your coat of arms look like?

The Day of the Dead

by Elizabeth Knapp

Imagine a sea of twinkling lights in a graveyard in Mexico. Imagine bright flowers laid upon the graves. Then imagine families and friends eating cakes, candies, and sweets, while church bells ring throughout the night. This is the Day of the Dead (*Día de los Muertos*), an ancient tradition that is practiced every year in Mexico on November 1 and 2. On this special holiday, people all over the country come together to remember, honor, and welcome back the spirits of the dead.

The Day of the Dead began at least 3,000 years ago during the Aztec Empire. At that time, some ancient peoples believed that the souls of the dead return to the world of the living. For these people, death was not the end of life, but a new beginning. Instead of fearing death, they accepted it as part of life. To honor their dead relatives, they would plan large parties with special foods, drinks, and decorations. The souls of children who had died were especially honored, just as they are today.

At first, the Day of the Dead was a month-long holiday that began in July and continued through August. However, when the Spanish arrived in Mexico more than 500 years ago, they tried to put an end to the custom. As Christians, the Spanish did not understand the natives' religious beliefs about death. They tried to make the Day of the Dead more like their own religious holidays. So they changed the dates to fall on the Christian holidays of All Saints Day and All Souls Day. As a result, Mexicans today celebrate the Day of the Dead during the first two days of November.

On November 1, also known as All Saints Day, the souls of dead children are remembered and honored. This is called the Day of the Little Angels (*Día de los Angelitos*). On this day, people decorate children's graves with toys and colorful balloons. On November 2, also known as All Souls Day, dead adults are remembered. Candles; flowers, often a special type of marigold; and the dead person's favorite foods, drinks, and personal items are laid upon the grave. After decorating the graves, people light the candles, burn incense, and begin to pray and chant.

Next, they enjoy a picnic in the graveyard. Among the delicious foods and drinks are spicy meat dishes, chocolate drinks, and different kinds of candies and sweets in the shapes of skulls and skeletons. One of the most important foods is the traditional bread of the dead (*pan de muerto*), a rich coffee cake in the shape of

a skeleton. In some parts of Mexico, a plastic toy skeleton is baked within the bread. Biting into the toy skeleton is thought to bring good luck. Throughout the country, people view skulls and skeletons as the ancient peoples who began the tradition did—as signs of life rather than of death.

In addition to celebrating in graveyards, people also observe the Day of the Dead in their homes. To welcome their dead relatives back, people create special places called altars. Here they place objects they think will be beautiful and attractive to the souls of the dead. These objects include fresh flowers and tempting foods. They also place on the altars photographs, clothing, and other items that their relatives loved and enjoyed. In some areas of Mexico, people make a path of flower petals from the street to the altar. This is done to guide the souls of the dead back into their homes.

The way the Day of the Dead is celebrated in Mexico differs from region to region. In large cities, such as Mexico City, many people simply eat special foods, like the bread of the dead. In other more rural areas, such as the state of Oaxaca, the Day of the Dead is an important religious holiday. For these people, it is a time to worship the souls of their ancestors. But throughout Mexico, the Day of the Dead is a colorful, lively, and festive time. As it was thousands of years ago, it is a time for people to gather together to eat, drink, and be merry. It is also a time to celebrate the cycle of life and death.

The Birth of the Hawaiian Islands

by Elizabeth Knapp

On the big island of Hawaii, an ancient legend still stirs deep within the earth. The story begins with Pele, the beautiful yet fiery Goddess of Volcanoes. And while science now has its own version of the story, the legend of Pele lives on. For many, the goddess who gave birth to the Hawaiian Islands is now the lava and steam rising from Kilauea, the most active volcano on Earth.

Pele was a goddess who was both honored and feared. She was often angry and could cause volcanic eruptions with her magic stick, called Pa'oa. She could also cause earthquakes by stamping her feet. Pele and her older sister, Namakaokahai, Goddess of the Sea, were bitter enemies. According to legend, their stormy fight led to the birth of the Hawaiian Islands.

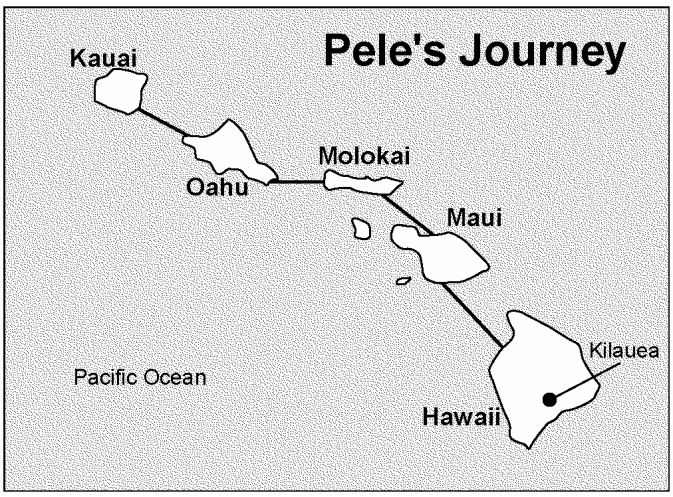
Pele first used her Pa'oa on Kauai, the island in the Hawaiian chain that is farthest north. After starting a fire, Pele was attacked by her sister and left for dead. But Pele recovered and moved southeast to Oahu. Here, she dug many "fire pits" to live in, including the crater known as Diamond Head in Honolulu. Each time she dug a fire pit, a new volcano (and island) was formed. Pele continued moving southeast to Molokai and then on to Maui, where she created Haleakala Volcano.

Photo Courtesy of Erin Heer

Diamond Head

When she learned that Pele was still alive, Namakaokahai went to Maui to fight her. After a great battle, Namakaokahai again believed that she had killed her sister. But Pele proved her wrong. Pele landed on the big island of Hawaii,

where she created Mauna Loa Volcano. Finally, realizing that she could never defeat Pele, Namakaokahai gave up the fight. According to legend, Pele now lives in the Halemaumau Crater at the top of Kilauea.



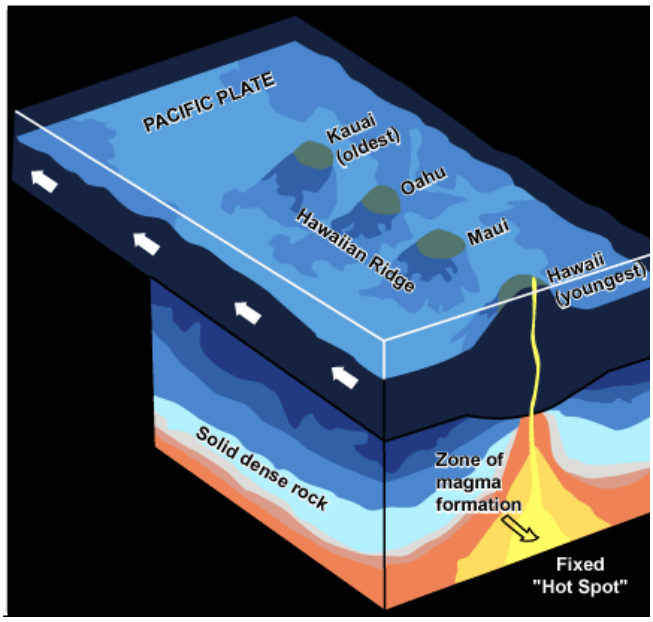
Through Pele, the ancient Hawaiians tried to piece together the story of their islands. In their travels, they noticed differences on each island. For example, they saw that the islands of Maui and Hawaii were much less *eroded*, or worn away, than the island of Kauai. Long before science had the answer, these people had a basic idea of how the Hawaiian Islands had formed.

In 1838, a scientist named James Dwight Dana made an important discovery. He found that, just as the legend states, the northwestern islands of Kauai and Oahu are older than the southeastern islands of Maui and Hawaii. Dana based his discovery mostly on the differences in erosion on each island. In addition, he found that the volcanoes that had not erupted in some time were the most eroded.

Dana believed that the Hawaiian Islands had formed along a *fissure zone*, an area of cracks or openings that ran across the floor of the Pacific Ocean. His “great fissure” idea was backed by most scientists for the next 125 years.

In 1963, a scientist named J. Tuzo Wilson came up with a new idea. His “hotspot” theory has since been accepted by many scientists. It builds in turn on a widely accepted idea called plate tectonics. According to this theory, the earth’s surface, or *crust*, consists of huge, flat plates of rock. These plates float on a layer of softer rock called the *mantle*. Wilson believed that there are small

regions under the crust where *magma*, very hot liquid rock from inside the mantle, has broken to the surface. As the plates move slowly over these "hotspots," volcanoes are formed.



According to Wilson, there is a hotspot in the middle of Pacific Plate, the plate that contains the Hawaiian Islands. Millions of years ago, as the plate moved over the hotspot, magma from the hotspot pushed up through the earth until it erupted on the sea floor. As more eruptions took place, a volcano formed underwater. It grew higher and higher until it finally rose above sea level to form Kauai, the first island volcano. As the plate continued moving over the hotspot, each of Hawaii's islands formed in the same way.

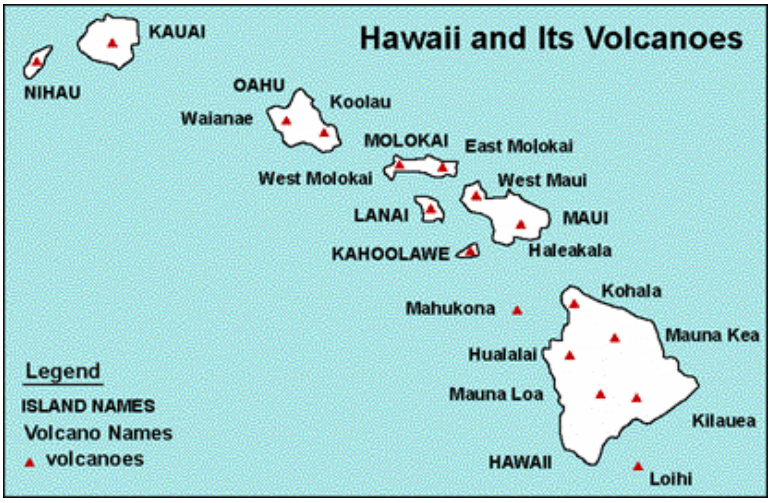
Like both the legend of Pele and Dana's great fissure idea, the hotspot theory says that the islands are older and more eroded the farther they are from the hotspot. Wilson found that the rocks on Kauai are much older and more eroded than those on the big island of Hawaii. Kauai's oldest rocks are about 5.5 million years old. Those on Hawaii are less than 0.7 million years old. And since Hawaii is still over the hotspot, new rocks are still being formed.

The living nature of volcanoes is most obvious in Kilauea, Pele's present home. There, lava continues to pour out of the volcano, as it has since 1983. As the youngest volcano in the Hawaiian chain, it sees quite a bit of activity. From beautiful lava flows to fiery fountains, Pele puts on an amazing show.

The Volcanoes of Hawaii

by Elizabeth Knapp

Did you know that Hawaii is the only state in the United States made entirely out of volcanoes? When we look at the Hawaiian Islands, we are really looking at the tops of a range of mountains—volcanic mountains—rising from the floor of the North Pacific Ocean. The Hawaiian *archipelago*, or island chain, is regarded as one of the greatest mountain ranges on Earth.



There are eight main volcanic islands and one smaller island that make up the state of Hawaii. Each island is made up of one or more volcanoes. Some of these volcanoes are under the ocean. Others, like Mauna Loa, the largest active volcano in the world, rise to a towering height above sea level. Some volcanoes in Hawaii rise more than 30,000 feet from the sea floor.

More than 70 million years ago, the first of Hawaii's volcanoes began to form on the ocean floor. Many scientists believe that the volcanoes grew from a *hotspot*, an area where liquid rock from the earth's interior pushes up through the earth's surface. This liquid rock is called *magma*, and it is very hot. In fact, magma is so hot that it can melt steel.

In many ways, Hawaii's volcanoes are different from other volcanoes in the world. But all volcanoes form in the same way. Rock melts into magma in the hot interior of the earth. Because this liquid rock is under pressure and lighter than the solid rock around it, it begins to rise. Sometimes the magma pushes up through weak spots in the ground called *vents*. Other times, it rises through *pipes*, or tunnels in the ground. When the magma pushes the ground up, it forms

a mountain. If it pushes through the top of the mountain or through the ground somewhere else, it forms a volcano.

Photo Courtesy of USGS.gov

Shield volcano

The volcanoes of Hawaii are called *shield volcanoes*. This is because they look like a warrior's shield. Shield volcanoes are large volcanoes with wide craters and low, gently sloping sides. In shield volcanoes, layers of *lava*, or magma that has broken through the earth's surface, harden and form the *cone*, the volcano's sloping sides.

Unlike other types of volcanoes, shield volcanoes do not produce violent explosions when they erupt. An eruption usually begins with a *lava fountain* bursting from a *fissure*, or crack in the volcano's slope. Often, several fountains along the length of a fissure form a *curtain of fire* that sends lava shooting several hundred feet in the air. While this may sound violent, it is quiet compared to how other volcanoes erupt. Some blast out ash and lava at more than 600 miles per hour.

Hawaiian lava has a low *viscosity*, meaning that it flows easily. As a result, it can travel long distances at tens of miles per hour. Lava flows from Mauna Loa have even traveled as far as 37 miles, to the city of Hilo. Also, because Hawaiian lava is so fluid, eruptions create beautiful lava fountains, rivers, and ponds. And since the eruptions are not violent, it is possible for people to get close to the lava flows—close enough even to roast marshmallows!

When the lava flows cool, they form a type of rock called *basalt*. Basalt is usually black or dark gray in color. Even after it has cooled and hardened, basalt shows how it was once liquid. Hawaiians use two words to describe the way basalt lava flows

and cools, words that scientists have adopted, too. The first, *pahoehoe* (pronounced *pa-hoy-hoy*), means "ropy." Pahoehoe basalt forms when a layer of "skin" covers the liquid lava. As the lava under the skin continues to flow, it wrinkles and creates a ropy surface.

Photo Courtesy of USGS.gov

Pahoehoe

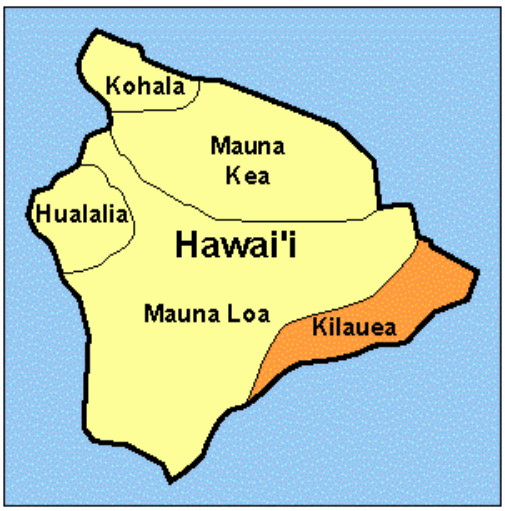
The second is *aa* (pronounced *ah-ah*). Unlike pahoehoe lava, aa lava produces sharp, jagged surfaces when it cools. In fact, some people think that the word *aa* is what a Hawaiian would say while walking on it—"ah, ah!"

Photo Courtesy of USGS.gov

Aa

Not all of Hawaii's volcanoes are active. Some are *dormant*, meaning they haven't erupted for many years. Others are *extinct*, meaning scientists believe they will never erupt again. But those that are still active are fascinating places. Kilauea, on the big island of Hawaii, is the most active volcano on Earth. Each day, enough lava flows down the sides of Kilauea to fill almost 300 Olympic-sized swimming pools.

Visitors to Hawaii Volcanoes National Park can see Kilauea up close, as hot lava pours from the volcano into the ocean. They can hike down roads lined with craters and see vast Mauna Loa in the distance. They can even tour a *lava tube*, a long tunnel formed under the surface of the lava flow as it hardens. Whatever they do, one thing's for sure—the action is hot!



"How Rome Happened"

From *The Story of Mankind*

by Hendrik van Loon

The Roman Empire was an accident. No one planned it. It "happened." No famous general or statesman or cut-throat ever got up and said "Friends, Romans, Citizens, we must found an Empire. Follow me and together we shall conquer all the land from the Gates of Hercules to Mount Taurus."

Rome produced famous generals and equally distinguished statesmen and cut-throats, and Roman armies fought all over the world. But the Roman empire-making was done without a preconceived plan. The average Roman was a very matter-of-fact citizen. He disliked theories about government. When someone began to recite "eastward the course of Roman Empire, etc., etc.," he hastily left the forum. He just continued to take more and more land because circumstances forced him to do so. He was not driven by ambition or by greed. Both by nature and inclination he was a farmer and wanted to stay at home. But when he was attacked he was obliged to defend himself and when the enemy happened to cross the sea to ask for aid in a distant country then the patient Roman marched many dreary miles to defeat this dangerous foe and when this had been accomplished, he stayed behind to administer his newly conquered provinces lest they fall into the hands of wandering Barbarians and become themselves a menace to Roman safety. It sounds rather complicated and yet to the contemporaries it was so very simple, as you shall see in a moment.

In the year 203 B.C. Scipio had crossed the African Sea and had carried the war into Africa. Carthage had called Hannibal back. Badly supported by his mercenaries, Hannibal had been defeated near Zama. The Romans had asked for his surrender and Hannibal had fled to get aid from the kings of Macedonia and Syria, as I told you in my last chapter.

The rulers of these two countries (remnants of the Empire of Alexander the Great) just then were contemplating[1] an expedition against Egypt. They hoped to divide the rich Nile valley between themselves. The king of Egypt had heard of this and he had asked Rome to come to his support. The stage was set for a number of highly interesting plots and counter-plots. But the Romans, with their lack of imagination, rang the curtain down before the play had been fairly started. Their legions completely defeated the heavy Greek phalanx which was still used by the Macedonians as their battle formation. That happened in the year 197 B.C. at the battle in the plains of Cynoscephalae, or "Dogs' Heads," in central Thessaly.

The Romans then marched southward to Attica and informed the Greeks that they had come to "deliver the Hellenes from the Macedonian yoke." The Greeks, having learned nothing in their years of semi-slavery, used their new freedom in a most unfortunate way. All the little city-states once more began to quarrel with each other as they had done in the good old days. The Romans, who had little understanding and less love for these silly bickerings of a race which they rather despised, showed great forebearance. But tiring of these endless dissensions they lost patience, invaded Greece, burned down Corinth (to "encourage the other Greeks") and sent a Roman governor to Athens to rule this turbulent province. In this way, Macedonia and Greece became buffer states which protected Rome's eastern frontier.

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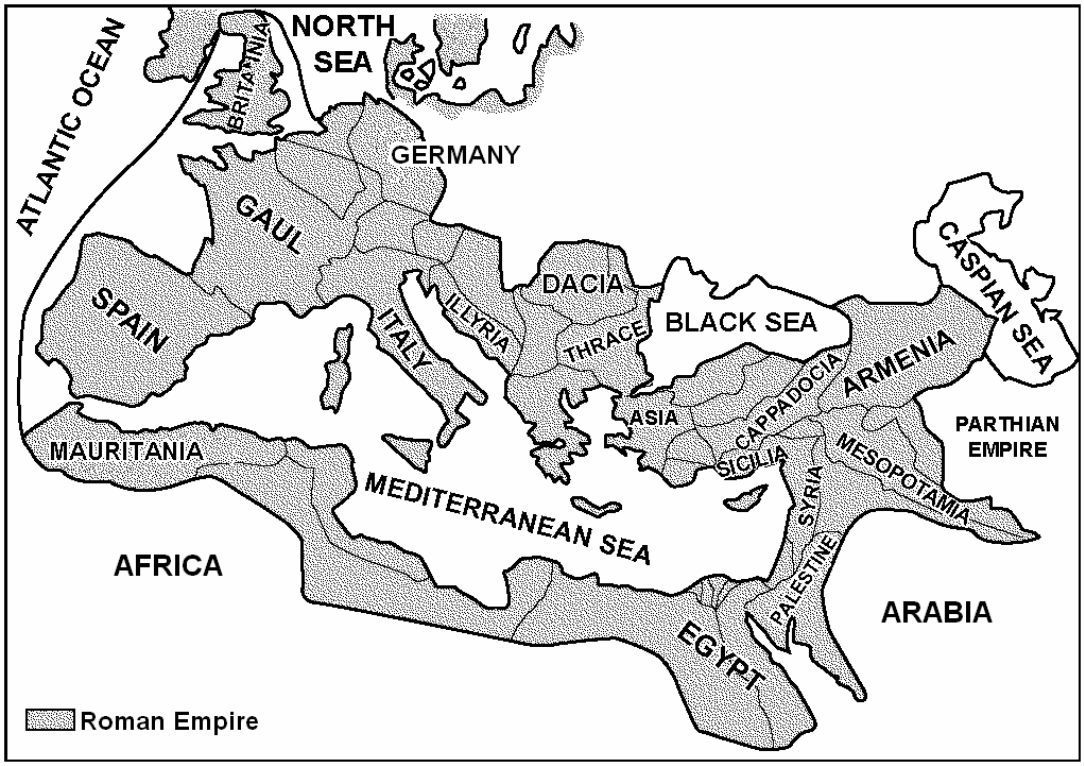
[1] **contemplating:** to consider or to think about something

Meanwhile right across the Hellespont lay the Kingdom of Syria, and Antiochus III, who ruled that vast land, had shown great eagerness when his distinguished guest, General Hannibal, explained to him how easy it would be to invade Italy and sack the city of Rome.

Lucius Scipio, a brother of Scipio the African fighter who had defeated Hannibal and his Carthaginians at Zama, was sent to Asia Minor. He destroyed the armies of the Syrian king near Magnesia (in the year 190 B.C.). Shortly afterwards, Antiochus was lynched by his own people. Asia Minor became a Roman protectorate and the small City-Republic of Rome was mistress of most of the lands which bordered upon the Mediterranean.

The Roman Empire at its Greatest Extent, A.D. 117



John Snow and Cholera

by Elaine Langlois

Dr. John Snow was worried. The year was 1854, and the great city of London was in the grip of a deadly epidemic of cholera. In the Soho area, 79 people had died in a single day. Snow thought he had the answer. But how could he prove it?

Epidemic: An unusually high number of cases of a disease among a group of people.

Cholera had come to England in 1831, in a pandemic that began in India. In the first two years, 22,000 English people died. Doctors did not know how to treat cholera. Nor did they understand what caused it. A series of discoveries in the last half of the century proved that germs exist and cause diseases. But that was still in the future when the cholera epidemics struck.

Pandemic: An epidemic that spreads through a country, a continent, or the world.

Snow first met cholera at age 18, when he was sent to help during an outbreak among coal miners. His interest in the disease lasted throughout his life. Snow began to keep careful records of cases, both those he treated and those he heard of from other doctors. It seemed clear that cholera could be spread from one person to another. At that time, many doctors believed that diseases were spread through "bad air"—the foul smell that came from rotting plant and animal material. Some thought that dirt led to disease, but they did not understand how.

Snow noted that in dirty, crowded settings, cholera was more likely to spread. "It is amongst the poor," Snow wrote, "where a whole family live, sleep, cook, eat, and wash in a single room, that cholera has been found to spread."

But people living close together were not the only ones who got cholera. The disease turned up in many different parts of the city. From treating patients and examining people who had died from cholera, Snow concluded that the disease

struck hardest in the stomach and intestines. He began to think that cholera could be spread by drinking dirty water.

CHOLERA FACTS	
Cause	*Vibrio cholerae* bacterium. The most common way of getting cholera is to drink water or eat food contaminated with the bacteria.
Symptoms	Severe diarrhea, vomiting, leg cramps.
Treatment	Quickly replacing fluids and salt. Antibiotics make the disease shorter and less severe.
Prevention	Safe water, good sewage disposal system, good hygiene. In areas with cholera, people are advised before drinking or eating to "boil it, cook it, peel it, or forget it."
In the world	A constant risk wherever water supplies, waste disposal, food safety, and hygiene are inadequate.
Sources: Centers for Disease Control and Prevention, World Health Organization.	

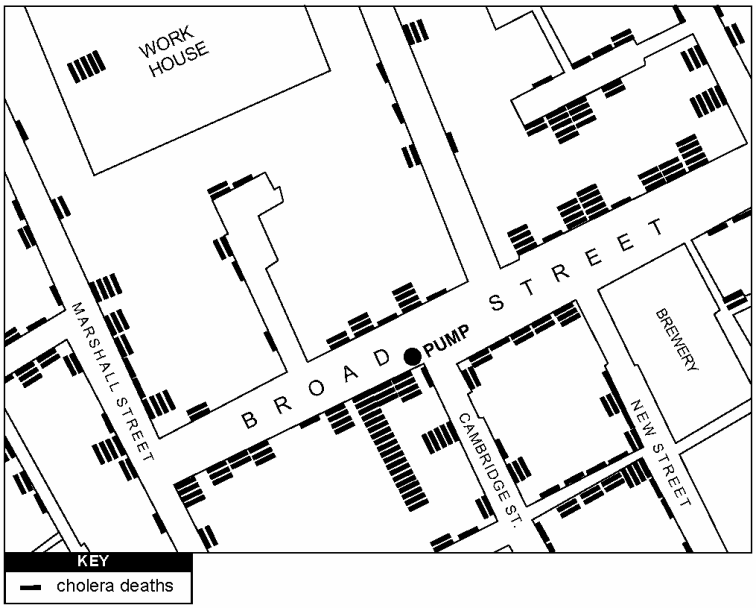
At that time, many homes did not have indoor toilets or running water. People and businesses dumped garbage, untreated sewage, and animal waste into open pits called *cesspools* or into the Thames River, which was also the water supply for most Londoners. People drank, cooked, and bathed in this dirty water.

Snow kept gathering information that might prove his idea. For example, he studied an outbreak of cholera in two sets of cottages called the Surrey Buildings and Trusscott's Court. The cottages shared the same alley in back, the Surrey Buildings on one side and the Trusscott's Court cottages on the other. In 1849, many people living in the Surrey Buildings got cholera. Yet in Trusscott's Court, only two people did.

It turned out that the well that people in the Surrey Buildings used for their drinking water had overflowed into a channel into which residents poured waste and dirty water. The water had then flowed back into the well. People in Trusscott's Court used a different well.

When John Snow learned of the Soho epidemic, he thought of a pump on Broad Street, from which many people in the area drew water. He suspected that people were getting cholera from the water in this pump. Snow went quickly to a government office and got a list of cholera deaths in Soho. He then investigated the 83 deaths reported in the first three days of the epidemic.

Snow went from house to house, asking questions. He found that 73 of the people who had died of cholera had lived near the pump on Broad Street and that 61 of them drank water from the pump. Of the other 12 people, he could get no information on six, and six others, he was told, did not drink from the pump.



The other ten people who died had lived nearer to other public pumps. Snow talked to their families and learned that five of these people had gotten their water from the Broad Street pump because they thought it tasted better. Three other victims were children who went to a school near the Broad Street pump.

Snow went to the officials in charge of water in that part of the city. He explained what he had found and urged that the Broad Street pump be shut down. The officials shut down the pump the next day. The epidemic, which had been slowing, stopped. In just ten days, within 250 yards of where Broad and Cambridge Streets meet, more than 500 people had died of cholera.

Several weeks later, Snow returned to Soho to search for more clues as to whether the pump had been the source of the outbreak. Here are three examples of what he discovered:

- Water from the Broad Street pump had been used in pubs, restaurants, and coffee-shops. A woman who ran a coffee-shop that served the pump water knew of nine customers who had died of cholera.
- A nearby workhouse, or prison, had only five cholera deaths among its 535 inmates, and those five people had been sick before they entered the workhouse. The workhouse did not get any of its water from the Broad Street pump.
- A woman who lived in Hampstead, five miles from Broad Street, had died of cholera, and so had her niece, who lived in Islington. There was no cholera in Hampstead or Islington at that time. Snow learned that the woman liked the water from the Broad Street pump and had it brought to her regularly. She and her visiting niece had drunk the water. Within days, they died.

Even with Snow's discovery, a year passed before London officials took the action needed to stop cholera. In 1855, when the Thames was so polluted that Parliament had to stop work because of the smell, lawmakers passed a bill redesigning the city's sewer system. After that, cholera never returned to London.

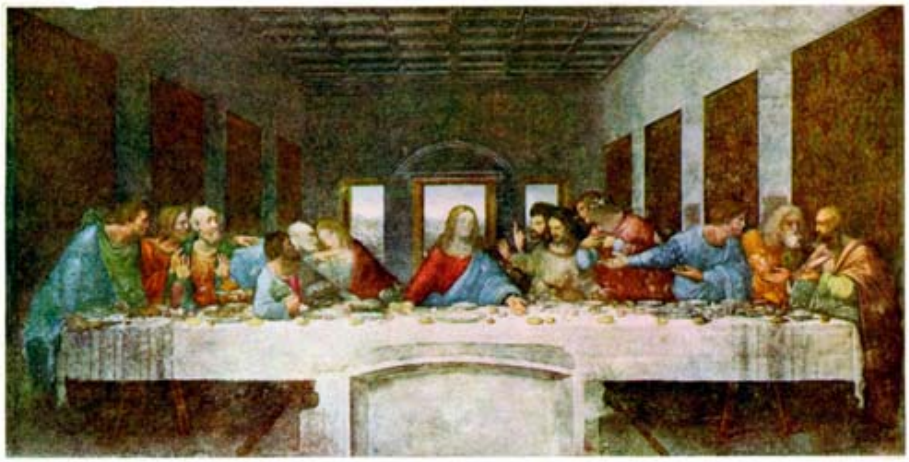
John Snow is known as the father of epidemiology. The methods he used to find out how cholera spreads and to track down the cause of the Broad Street epidemic are familiar to us today. He gathered information on many cases, among both his own patients and those of other doctors. He got public records. He also went to the scene of cholera outbreaks and talked to many people. Snow carefully recorded all this information and studied it to learn its meaning. For doctors and scientists fighting diseases—from smallpox to cancer to AIDS—Snow pointed the way.

Epidemiology: The study of how diseases are transmitted and spread within a population.

Master of the Renaissance: Leonardo da Vinci

by Elizabeth Knapp

The High Renaissance (1495–1520) was a time of great achievement in art. During this time, one man stood out among all others. He was a brilliant artist, scientist, and inventor whose work lives on in museums, libraries, and galleries around the world. Each year, millions of visitors flock to the Louvre Museum in Paris to see the mysterious smile of his famous *Mona Lisa*. They crowd to a convent, or community of nuns, in Milan, Italy, to admire *The Last Supper*, back on display after 19 years of careful repair. Both in his lifetime and today, Leonardo da Vinci has been considered one of the greatest minds of all time.

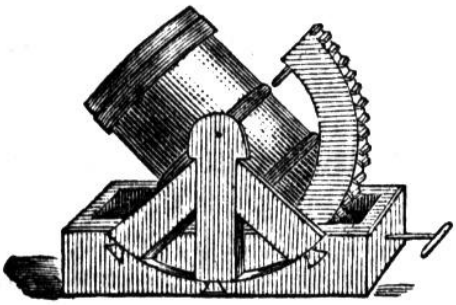


The Last Supper

Leonardo was born on April 15, 1452, in the small town of Vinci, Italy. When Leonardo was a teenager, his family moved to Florence, which was a major center for the arts and culture in Italy. There, Leonardo had the best education money could buy. His father, seeing how smart he was, got him a job as an assistant in the studio of a famous artist, Andrea del Verrocchio.

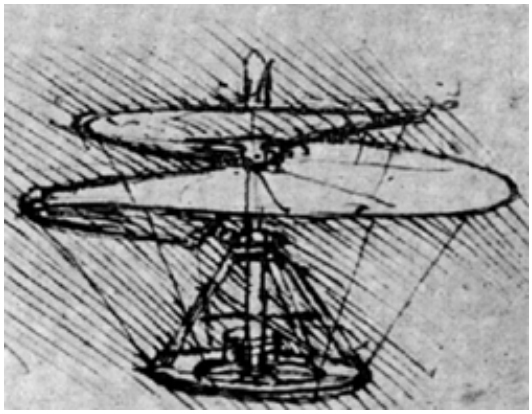
Here, Leonardo developed into a talented artist. From Verrocchio, he learned the art of *perspective*, creating the look of space and distance on a flat surface, such as a canvas or wall. This type of perspective, which used math, was known to the Greeks and Romans and had just been rediscovered. Leonardo mastered it quickly. By the time he was in his early twenties, he had surpassed his teacher and had become a famous artist himself.

Leonardo went out on his own at age 26. Like many artists, he found it hard to support himself with his art. But Leonardo was clever and had excellent drawing skills. A few years after leaving his teacher's studio, he wrote a letter to the Duke of Milan. In his letter, Leonardo explained how he could build bridges that could be moved from place to place, cannons, ships, and other war machines. Leonardo was against war. But he knew that designing and building war machines was good business. The Duke of Milan was impressed by Leonardo's letter. In 1482, he hired Leonardo as a war engineer.

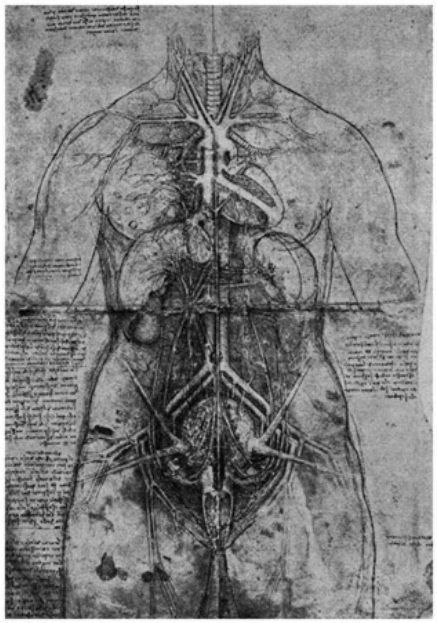


Just as he had shown himself to be a talented artist, Leonardo now proved himself to be a talented engineer. Not only was he skilled at drawing plans and sketches of machines, he was also a brilliant thinker. Unlike others in this field, Leonardo broke new ground. He wanted to create new machines for a new world. Instead of just improving on ancient machines—such as wheels, levers, and screws—to do work, Leonardo imagined new machines that could do more work at a faster rate.

Some of the machines that he imagined were far ahead of his time. For example, in his notebooks, Leonardo sketched several flying machines. One of which looks very much like the first helicopter. In addition, Leonardo imagined ways for humans to breathe underwater using special diving suits. In 1943, his idea was made real with the invention of the Aqua-Lung, the scuba gear that divers use today.



Besides being a great engineer, Leonardo was also a brilliant scientist. His notebook sketches contain not only ideas for machines but also drawings of the human body. While working in Milan, Leonardo became interested in the human body and how it works. Before Leonardo, knowledge about the human body was very limited. But Leonardo's passion for science drove him to know more.



By studying and drawing the human body, Leonardo learned how some of its systems work. For example, he studied and recorded the way blood flows through the body and how a baby forms in the womb.

But Leonardo did not stop with the human body. He examined, sketched, and wrote about many things in the natural world. His notebooks cover a wide range of topics. Some examples are the sun and moon, how fossils form, and the way birds fly.

Like his paintings and machines, Leonardo's way of studying the world was completely new. For him, science was based on seeing and recording nature firsthand. His method was direct, complete, and precise. Leonardo believed that the best way to understand a thing was to examine it closely, test what he had seen, and then draw and explain it. In his notebooks, he left behind one of the largest and greatest records of scientific research.

Leonardo brought the same passion for looking closely and carefully at things to his painting. His understanding of light and shadow helped him to paint in a very realistic way. So did his studies of the human body. In addition, his knowledge of perspective gave his paintings depth and power. These strengths have made the *Mona Lisa* and *The Last Supper* two of the most famous paintings of all time. In both, Leonardo combined his knowledge of science with the beauty and grace of his art. The result continues to inspire and move us.

Few people have had such a lasting impact on so many fields. As a scientist, inventor, and artist whose work changed the world and whose methods are still used today, Leonardo da Vinci remains one of the most important people in history.

Mona Lisa

Lincoln Hall Speech

Washington, D.C.

January 14, 1879

by Chief Joseph, Chief of the Nez Percé

1 At last I was granted permission to come to Washington and bring my friend Yellow Bull and our interpreter with me. I am glad I came. I have shaken hands with a good many friends, but there are some things I want to know which no one seems able to explain.

Chief Joseph

2 I cannot understand how the government sends a man out to fight us, as it did General Miles, and then breaks his word. Such a government has something wrong about it. I cannot understand why so many chiefs are allowed to talk so many different ways, and promise so many different things. I have seen the Great Father Chief;[1] the Next Great Chief;[2] the Commissioner Chief; the Law Chief; and many other law chiefs[3] and they all say they are my friends, and that I shall have justice. But while all their mouths talk right I do not understand why nothing is done for my people. I have heard talk and talk but nothing is done.

3 Good words do not last long unless they amount to something. Words do not pay for my dead people. They do not pay for my country now overrun by white men. They do not protect my father's grave. They do not pay for my horses and cattle. Good words do not give me back my children. Good words will not make good the promise of your war chief, General Miles. Good words will not give my people a home where they can live in peace and take care of themselves. I am tired of talk that comes to nothing. It makes my heart sick when I remember all the good words and all the broken promises. There has been too much talking by men who had no right to talk.

4 Too many misinterpretations have been made; too many misunderstandings have come up between the white men and the Indians. If the white man wants to live in peace with the Indian he can live in peace. There need be no trouble. Treat all men alike. Give them the same laws. Give them all an even chance to live and grow. All men were made by

[1] **Great Father Chief:** the President of the United States, President Rutherford B. Hayes
[2] **Next Great Chief:** the Secretary of the Interior
[3] **other law chiefs:** members of Congress

the same Great Spirit Chief. They are all brothers. The earth is the mother of all people, and all people should have equal rights upon it.

5 You might as well expect all rivers to run backward as that any man who was born a free man should be contented penned up and denied liberty to go where he pleases. If you tie a horse to a stake, do you expect he will grow fat? If you pen an Indian up on a small spot of earth and compel him to stay there, he will not be contented nor will he grow and prosper. I have asked some of the Great White Chiefs where they get their authority to say to the Indian that he shall stay in one place, while he sees white men going where they please. They cannot tell me.

6 I only ask of the government to be treated as all other men are treated. If I cannot go to my own home, let me have a home in a country where my people will not die so fast. I would like to go to Bitter Root Valley. There my people would be happy; where they are now they are dying. Three have died since I left my camp to come to Washington.

7 When I think of our condition, my heart is heavy. I see men of my own race treated as outlaws and driven from country to country, or shot down like animals.

8 I know that my race must change. We cannot hold our own with the white men as we are. We only ask an even chance to live as other men live. We ask to be recognized as men. We ask that the same law shall work alike on all men. If an Indian breaks the law, punish him by the law. If a white man breaks the law, punish him also.

9 Let me be a free man, free to travel, free to stop, free to work, free to trade where I choose, free to choose my own teachers, free to follow the religion of my fathers, free to talk, think, and act for myself—and I will obey every law or submit to the penalty.

Chief Joseph

10 Whenever the white man treats the Indian as they treat each other, then we shall have no more wars. We shall be all alike—brothers of one father and mother, with one sky above us and one country around us and one government for all. Then the Great Spirit Chief who rules above will smile upon this land and send rain to wash out the bloody spots made by brothers' hands upon the face of the earth. For this time the Indian race is waiting and praying. I hope no more groans of wounded men and women will ever go to the ear of the Great Spirit Chief above, and that all people may be one people.

11 Hin-mah-too-yah-lat-kekht[4] has spoken for his people.

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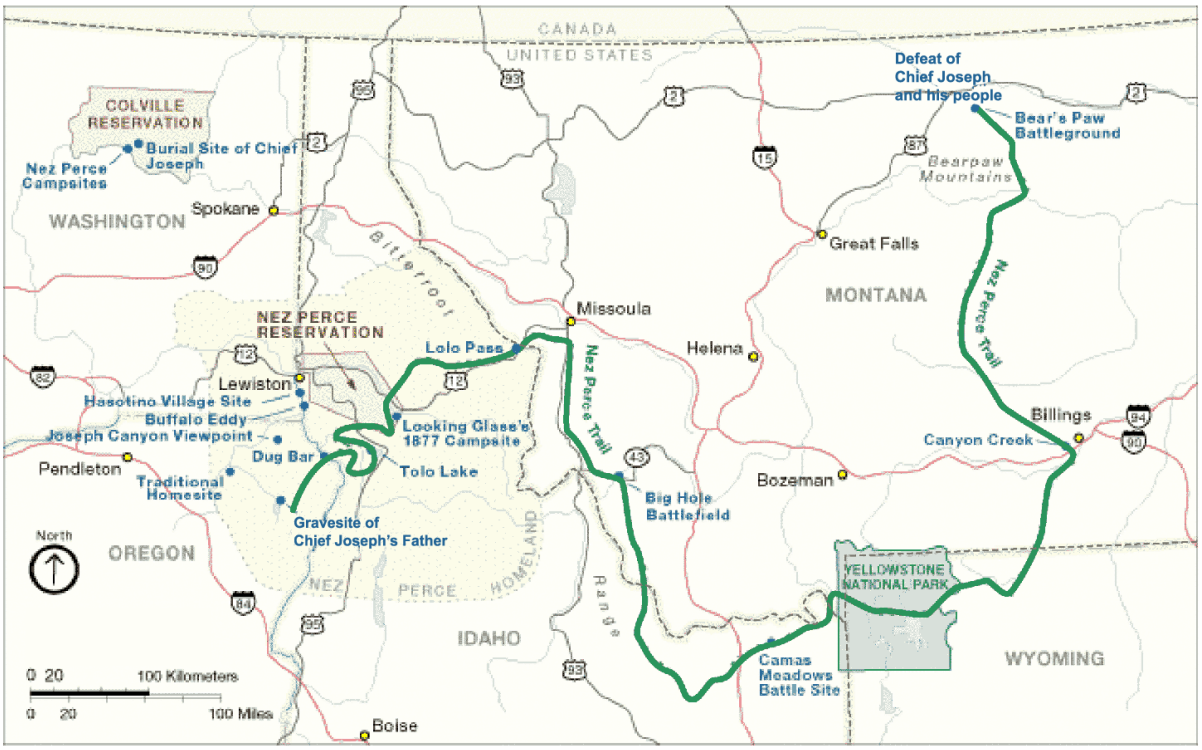
[4] **In-mut-too-yah-lat-lat:** Chief Joseph's Nez Percé name, meaning "Thunder Coming Up Over the Land From the Water"



Trail of the Nez Percé March to Canada

Note: *The Nez Percé march to Canada was led by Chief Joseph. It lasted three months and covered nearly 1,500 miles. The Nez Percé won several skirmishes and battles against U.S. troops during the march, but were eventually defeated only 40 miles from the Canadian border and freedom. Chief Joseph died in 1904. According to the reservation doctor, he died of a broken heart.*

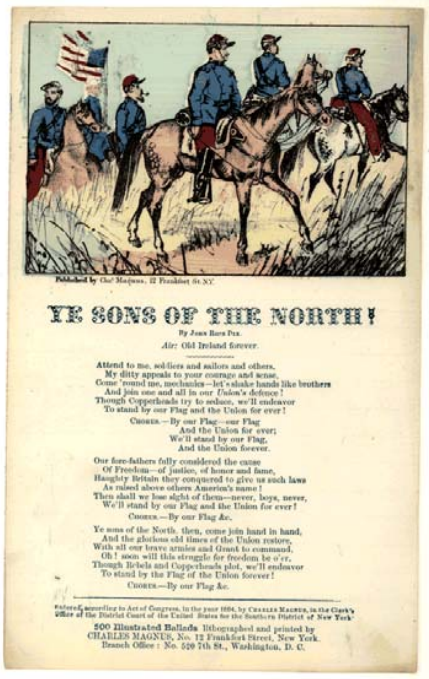
Music of the Civil War

by Elaine Langlois

During the Civil War, music was an important part of American life. More than 10,000 songs were written during the war, and after the Bible, the book most often found in a soldier's backpack was a songbook. "Not only was music a major source of entertainment," writes one historian, "it was also a way to give voice to feelings that words alone often could not express."

In the mid-1800s, Americans enjoyed music. On weekends, they went to concerts in parks or concert halls. Most towns had a band, and glee clubs, choirs, and choruses gave anyone who wanted to sing a chance. A piano in the parlor was a sign of prosperity, the way a nice car in the driveway is today, and before the war nearly every middle-class family that wanted one could afford it. Many an evening would be spent around the piano, playing and singing the latest tunes. Music publishers thrived in the cities, and they tracked sheet-music sales just as record companies chart CD sales today.

Of course, people in those times did not have CDs or the ability to download music from the Internet. If you liked a song, you went down to the music store and plunked 30 cents on the counter for the sheet music, if you were musical and could read it, or a few cents for a song sheet with just the words, if you were not. You might browse the shelves, looking at the sheet-music covers. They were designed—as CD covers are today—to catch your eye. The titles stood out in big, fancy letters. You would see pictures of men marching bravely into battle, flags waving, or famous people like President Abraham Lincoln.



YE SONS OF THE NORTH!

By Jesse Ross Fox.

Air: Old Ireland forever.

Attend to me, soldiers and sailors and others,
My ditty appeals to your courage and sense.
Come 'round me, mechanics—let's shake hands like brothers
And join one and all in our Union's defence!
Though Copperheads try to seduce, we'll endeavor
To stand by our Flag and the Union for ever!

Chorus.—By our Flag—our Flag
And the Union for ever;
We'll stand by our Flag,
And the Union forever.

Our fore-fathers fully considered the cause
Of Freedom—of justice, of honor and fame,
Haughty Britain they conquered to give us such laws
As raised above others America's name!
Then shall we lose sight of them—never, boys, never,
We'll stand by our Flag and the Union for ever!

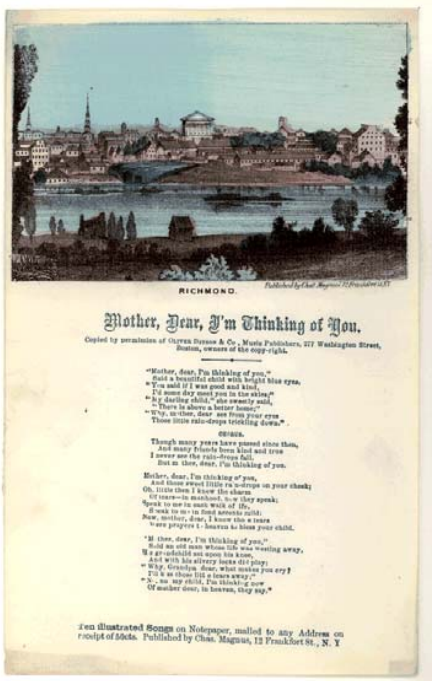
Chorus.—By our Flag &c.

Ye sons of the North, then, come join hand in hand,
And the glorious old times of the Union restore,
With all our brave armies and Grant to command,
Oh! soon will this struggle for freedom be o'er,
Though Rebels and Copperheads plot, we'll endeavor
To stand by the Flag of the Union forever!

Chorus.—By our Flag &c.

Entered, according to Act of Congress, in the year 1864, by Charles Magnus, in the Clerk's Office of the District Court of the United States for the Southern District of New York.

500 Illustrated Ballads lithographed and printed by CHARLES MAGNUS, No. 12 Frankfort Street, New York. Branch Office: No. 519 7th St., Washington, D. C.



RICHMOND.

Mother, Dear, I'm Thinking of You.

Copied by permission of Oliver Ditson & Co., Music Publishers, 277 Washington Street, Boston, owners of the copy-right.

"Mother, dear, I'm thinking of you,"
Said a beautiful child with bright blue eyes,
"You said if I was good and kind,
I'd some day meet you in the skies;"
"Why darling child," she sweetly said,
"There is above a better home;"
"Why, mother, dear see from your eyes
Those little rain-drops trickling down."

Chorus.

Though many years have passed since then,
And many friends been kind and true
I never see the rain-drops fall,
But in them, dear, I'm thinking of you.

Mother, dear, I'm thinking of you,
And those sweet little rain-drops on your cheek;
Oh, little then I knew the charm
Of tears—in manhood, how they speak;
Speak to me in each week of life,
Speak to me in fond accents mild;
Dear, mother, dear, I know the a tears
Were prayers!—heaven to bless your child.

"Mother, dear, I'm thinking of you,"
Held an old man whose life was wasting away,
His grandchild sat upon his knee,
And with his silvery locks did play;
"Why, Grandpa, dear, what makes you cry?
Tell me as those fill a tears away;"
"Oh, my child, I'm thinking now
Of mother dear, in heaven, they say."

Ten illustrated Songs on Notepaper, mailed to any Address on receipt of 50cts. Published by Chas. Magnus, 12 Frankfort St., N. Y.

Library of Congress, Rare Book and Special Collections Division, America Singing: Nineteenth-Century Song Sheets.

Song Sheets from the Civil War Era

As you might expect, some of the music that people liked best during the war was patriotic music. Songs like "Dixie" and "The Battle Hymn of the Republic" lifted people's spirits and made the hardships of the war easier to bear. Some of these songs spoke of the cause each side was fighting for. For example, these lyrics from "The Bonnie Blue Flag," a Confederate song, speak of the South's fight for its rights:

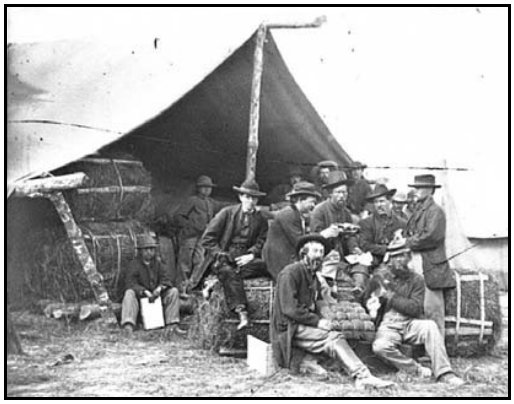
> We are a band of brothers and native to the soil,
> Fighting for our liberty with treasure, blood, and toil,
> And when our rights were threatened, the cry rose near and far:
> "Hurrah for our bonnie blue flag that bears a single star."
> Hurrah—hurrah—for southern rights, hurrah!
> Hurrah for our bonnie blue flag that bears a single star."

These words are from a Union song, “The Battle Cry of Freedom”:

> Yes, we’ll rally round the flag, boys, we’ll rally once again,
> Shouting the battle cry of freedom,
> We will rally from the hill-side, we’ll gather from the plain,
> Shouting the battle cry of freedom.
> The Union forever, hurrah, boys, hurrah!
> Down with the traitor, up with the star;
> While we rally round the flag, boys, rally once again,
> Shouting the battle cry of freedom.

Other songs told of important battles and other things that happened during the war. Music publishers would rush to get these songs out while the news was fresh. According to writer Stephen Currie, sometimes a song sheet would bring news before the newspapers did!

Many songs were written about the soldier’s life. They told of mothers sending sons off to war or heroes dying bravely in battle. They had titles like “The Dying Volunteer,” “Who Will Care for Mother Now?” and “For the Dear Old Flag I Die.” But these songs were for people at home, not soldiers. As Stephen Currie points out, soldiers knew the reality of war. They knew that one man alone couldn’t win a battle, and that death on the battlefield was anything but pretty.



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Civil War Soldiers at Leisure

Soldiers liked music that told the truth about their lives: the hard times and the many long, boring days between battles. Surprisingly, some of the songs they liked the most were funny songs they made up themselves, most often using new words put to well-known tunes. For example, not liking army food, they turned a song called "Dear Mother, I've Come Home to Die" into "Dear Mother, I've Come Home to Eat." And an 1855 tune by Stephen Foster, "Hard Times Come Again No More," became "Hard Crackers Come No More." Hard crackers were square biscuits made of flour and water that were tough to chew.

Soldiers made up songs about the officers, the bugs, men who were drafted into the army but got out of serving by paying money, and of course, the other side:

Yankee Doodle made a speech
'Twas very full of feeling,
"I fear," says he, "I cannot fight
But I am good at stealing."

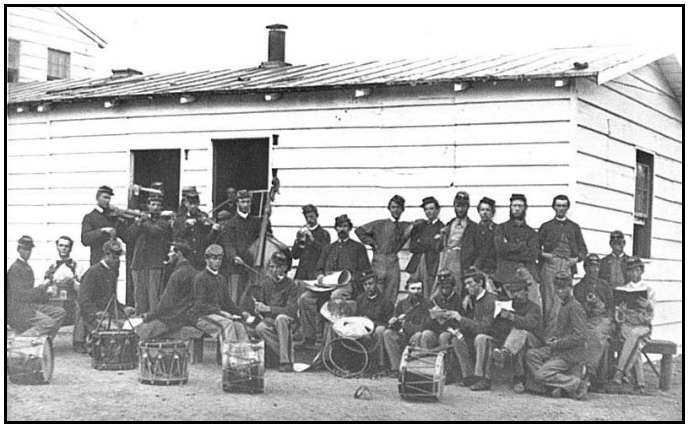
And, to the tune of "Maryland! My Maryland!":

The rebel feet are on our shore, Maryland, my Maryland!
I smell 'em half a mile or more, Maryland, my Maryland!

Other songs expressed more serious feelings, like being homesick and missing loved ones. These songs might be sung or played around the campfire when the day's work was done. One, called "Lorena," caused so many homesick soldiers to desert that many southern generals banned it. A song enjoyed by both sides was "Tenting Tonight on the Old Campground":

We're tenting tonight on the old campground
Give us a song to cheer
Our weary hearts, a song of home
And friends we love so dear.
Many are the hearts that are weary tonight
Waiting for the war to cease.
Many are the hearts looking for the right
To see the dawn of peace.

One December afternoon in 1862, just after the battle of Fredericksburg in Virginia, the Union and Confederate armies were camped on either side of the Rappahannock River. The Union band started to play. Soldiers on both sides listened. When the band had finished and was packing up, some Confederate soldiers shouted, "Don't quit yet! Now give us some of ours!" So the band played "Dixie," "The Bonnie Blue Flag," and other Confederate songs. At the end of the day, Union and Confederate soldiers joined in singing "Home, Sweet Home."



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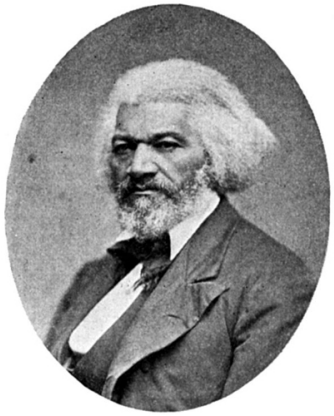
Civil War Military Band

Music played other roles in the four-year conflict. There were songs about prisoners of war and their hopes of rescue. There were songs for slaves like "Follow the Drinking Gourd," with hidden clues to freedom. There were songs *by* slaves that told how they felt to be free.

Civil War music expressed people's emotions and the values they shared. It moved them, showed how they differed, and showed even more what they had in common. It spoke of important things that happened and the humor in day-to-day life. Music did many of the same things for people then that it does for us today.

From *My Escape from Slavery*

by Frederick Douglass



It was the custom in the State of Maryland to require the free colored people to have what were called free papers. These instruments they were required to renew very often, and by charging a fee for this writing, considerable sums from time to time were collected by the State. In these papers the name, age, color, height, and form of the freeman were described, together with any scars or other marks upon his person which could assist in his identification. This device in some measure defeated itself—since more than one man could be found to answer the same general description. Hence many slaves could escape by personating[1] the owner of one set of papers; and this was often done as follows: A slave, nearly or sufficiently answering the description set forth in the papers, would borrow or hire them till by means of them he could escape to a free State, and then, by mail or otherwise, would return them to the owner. The operation was a hazardous one for the lender as well as for the borrower. A failure on the part of the fugitive to send back the papers would imperil his benefactor, and the discovery of the papers in possession of the wrong man would imperil both the fugitive and his

[1] **personating:** pretending to be

friend. It was, therefore, an act of supreme trust on the part of a freeman of color thus to put in jeopardy his own liberty that another might be free. It was, however, not unfrequently bravely done, and was seldom discovered. I was not so fortunate as to resemble any of my free acquaintances sufficiently to answer the description of their papers. But I had a friend—a sailor—who owned a sailor's protection, which answered somewhat the purpose of free papers—describing his person, and certifying to the fact that he was a free American sailor. The instrument had at its head the American eagle, which gave it the appearance at once of an authorized document. This protection, when in my hands, did not describe its bearer very accurately. Indeed, it called for a man much darker than myself, and close examination of it would have caused my arrest at the start.

In order to avoid this fatal scrutiny[2] on the part of railroad officials, I arranged with Isaac Rolls, a Baltimore hackman, to bring my baggage to the Philadelphia train just on the moment of starting, and jumped upon the car myself when the train was in motion. Had I gone into the station and offered to purchase a ticket, I should have been instantly and carefully examined, and undoubtedly arrested. In choosing this plan I considered the jostle of the train, and the natural haste of the conductor, in a train crowded with passengers, and relied upon my skill and address in playing the sailor, as described in my protection, to do the rest. One element in my favor was the kind feeling which prevailed in Baltimore and other sea-ports at the time, toward "those who go down to the sea in ships." "Free trade and sailors' rights" just then expressed the sentiment of

[2] **scrutiny:** inspection

the country. In my clothing I was rigged out in sailor style. I had on a red shirt and a tarpaulin hat, and a black cravat tied in sailor fashion carelessly and loosely about my neck. My knowledge of ships and sailor's talk came much to my assistance, for I knew a ship from stem to stern, and from keelson to cross-trees, and could talk sailor like an "old salt." I was well on the way to Havre de Grace[3] before the conductor came into the negro car to collect tickets and examine the papers of his black passengers. This was a critical moment in the drama. My whole future depended upon the decision of this conductor. Agitated though I was while this ceremony was proceeding, still, externally, at least, I was apparently calm and self-possessed. He went on with his duty--examining several colored passengers before reaching me. He was somewhat harsh in tone and peremptory[4] in manner until he reached me, when, strange enough, and to my surprise and relief, his whole manner changed. Seeing that I did not readily produce my free papers, as the other colored persons in the car had done, he said to me, in friendly contrast with his bearing toward the others:

"I suppose you have your free papers?"

To which I answered:

---

[3] **Havre de Grace:** "Harbor of Grace"; a Maryland town located 39 miles Northeast of Baltimore and 45 miles south of Philadelphia; where the Susquehanna River and the Chesapeake Bay join together

[4] **peremptory:** arrogant; stuck-up

"No sir; I never carry my free papers to sea with me."

"But you have something to show that you are a freeman, haven't you?"

"Yes, sir," I answered; "I have a paper with the American Eagle on it, and that will carry me around the world."

With this I drew from my deep sailor's pocket my seaman's protection, as before described. The merest glance at the paper satisfied him, and he took my fare and went on about his business. This moment of time was one of the most anxious I ever experienced. Had the conductor looked closely at the paper, he could not have failed to discover that it called for a very different-looking person from myself, and in that case it would have been his duty to arrest me on the instant, and send me back to Baltimore from the first station. When he left me with the assurance that I was all right, though much relieved, I realized that I was still in great danger: I was still in Maryland, and subject to arrest at any moment. I saw on the train several persons who would have known me in any other clothes, and I feared they might recognize me, even in my sailor "rig," and report me to the conductor, who would then subject me to a closer examination, which I knew well would be fatal to me.

Though I was not a murderer fleeing from justice, I felt perhaps quite as miserable as such a criminal. The train was moving at a very high rate of speed for that epoch of railroad travel, but to my anxious mind it was moving far too slowly. Minutes were hours, and hours were days during this part of my flight. After Maryland, I was to pass through

Delaware--another slave State, where slave-catchers generally awaited their prey, for it was not in the interior of the State, but on its borders, that these human hounds were most vigilant and active. The border lines between slavery and freedom were the dangerous ones for the fugitives. The heart of no fox or deer, with hungry hounds on his trail in full chase, could have beaten more anxiously or noisily than did mine from the time I left Baltimore till I reached Philadelphia. The passage of the Susquehanna River at Havre de Grace was at that time made by ferry-boat, on board of which I met a young colored man by the name of Nichols, who came very near betraying me. He was a "hand" on the boat, but, instead of minding his business, he insisted upon knowing me, and asking me dangerous questions as to where I was going, when I was coming back, etc. I got away from my old and inconvenient acquaintance as soon as I could decently do so, and went to another part of the boat. Once across the river, I encountered a new danger. Only a few days before, I had been at work on a revenue cutter, in Mr. Price's ship-yard in Baltimore, under the care of Captain McGowan. On the meeting at this point of the two trains, the one going south stopped on the track just opposite to the one going north, and it so happened that this Captain McGowan sat at a window where he could see me very distinctly, and would certainly have recognized me had he looked at me but for a second. Fortunately, in the hurry of the moment, he did not see me; and the trains soon passed each other on their respective ways. But this was not my only hair-breadth escape. A German blacksmith whom I knew well was on the train with me, and

looked at me very intently, as if he thought he had seen me somewhere before in his travels. I really believe he knew me, but had no heart to betray me. At any rate, he saw me escaping and held his peace.

Pharos:
The Great Lighthouse of Alexandria

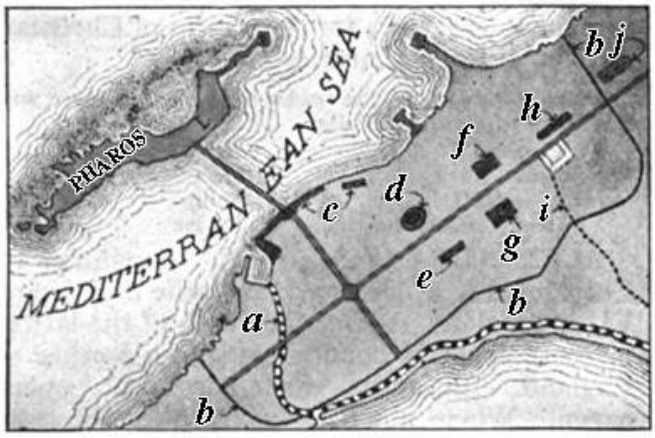
by Elizabeth Knapp

In 1994, in the waters off Alexandria, Egypt, a team of scuba divers searched the bottom of the Mediterranean Sea. Using floating masts, satellites, and a special measuring station on shore, they marked the exact position of some large blocks of stone under the water. Then they put the data into computers to create a map of the sea floor.

The divers were excited. They were sure they had found what they were searching for. There, at the bottom of the sea, lay the ruins of the Pharos, the great lighthouse of Alexandria, one of the Seven Wonders of the Ancient World.

The lighthouse stood on the island of Pharos, in the harbor of the city of Alexandria. Its story begins in Alexandria, which was founded by Alexander the Great in 332 B.C. Alexander wanted to build a splendid city that would bear his name. When he died before the city was completed, Ptolemy Soter, the new ruler of Egypt, finished his work.

Under Ptolemy, Alexandria thrived. Trade was important to the city, and its harbor was busy. As the city grew, it needed a way to guide ships through the harbor. Also, it needed a symbol, something that would stand for its riches and greatness. So Ptolemy ordered the building of the lighthouse in 290 B.C. Twenty years later, it was finished—the first lighthouse in the world and the tallest building on Earth, besides the Great Pyramid of Egypt.

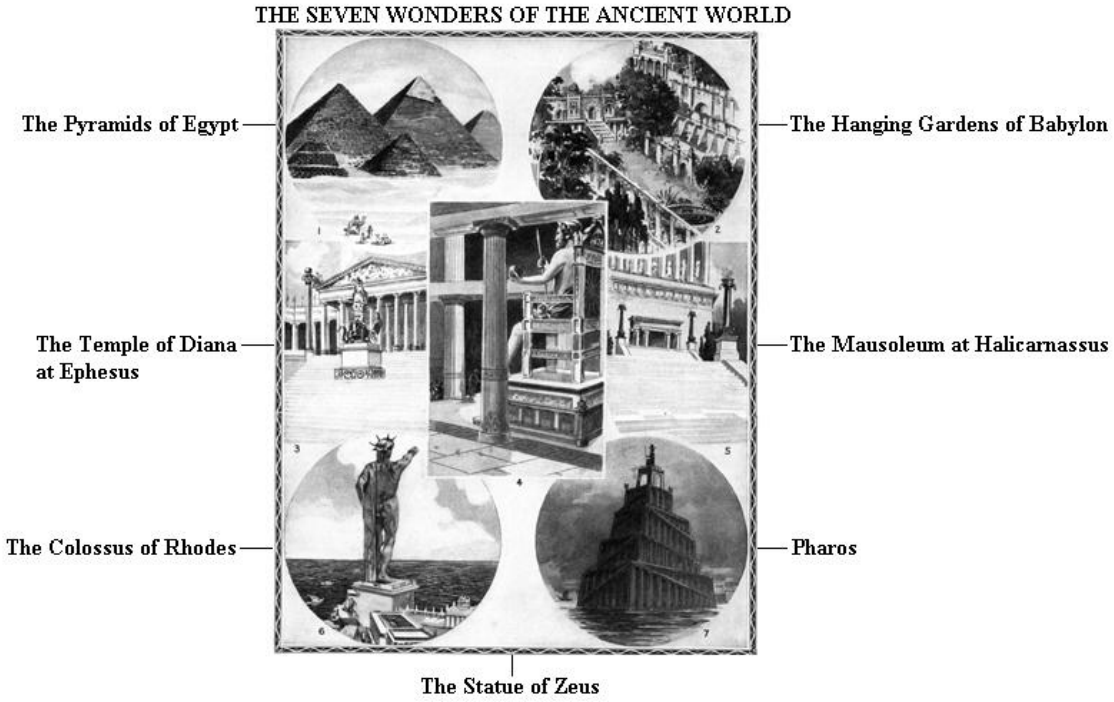


MAP OF ANCIENT ALEXANDRIA

(a) Canal
(b) City walls
(c) City dockyards and quays
(d) Amphitheater
(e) Gymnasium
(f) Library and museum
(g) Hall of justice
(h) Stadium
(i) Aqueduct from the Nile
(j) Hippodrome

The Pharos was designed by Sostrates, a Greek architect. Sostrates, proud of his work, wanted to carve his name into the base of the lighthouse. Ptolemy refused, ordering that only his own name appear on the building. But Sostrates found a way to trick him. At the base of the Pharos, Sostrates carved a message containing his own name. Then he covered it with plaster and carved Ptolemy's name over it. After many years, the plaster chipped away to show the true architect of the lighthouse.

Of the Seven Wonders of the Ancient World, six no longer exist. The Pharos was the last to be built and, except for the Great Pyramid, the last to stay standing. Much of what we know about the lighthouse comes from the writings of Arab conquerors. In 1166, an Arab traveler who visited the Pharos wrote a careful description of it. From his and other reports, people have been able to create models that probably look very much like the real thing.



The Pharos was about 384 feet tall, the same height as a modern 40-story building. It was made of marble blocks and had three levels. The lowest was a huge box about 200 feet high and 100 feet square. A large spiral ramp that began at this level was used to pull materials to the top in horse-drawn carts. Above the first level was an eight-sided tower, and above the tower was a cylinder. At the top of this cylinder was a *beacon*, the source of light for the lighthouse. Above the beacon stood a large statue of Poseidon, the Greek god of the sea.

The Pharos used two types of beacons. At night, a bonfire created the light. During the day, a mirror reflected the sun's rays to create the light. This mirror was probably a large, round disc made of polished metal. By some reports, the light from the Pharos could be seen from up to 100 miles away.

Other stories say that the mirror was used as a weapon as well as a light source. Some believe that the mirror was used to set enemy ships on fire as they entered the harbor by directing the sun's rays at them. While the idea is interesting, it is also highly unlikely.

From the beginning, the Pharos attracted tourists. At the top of the first level, food was sold to visitors. People could climb a stairway in the eight-sided tower to a balcony that looked out over the sea. The Pharos was a grand sight from the water. Its ever-present light was the bright eye of the city. Even Roman coins were stamped with its image.

In 1302 and 1323, two strong earthquakes hit Alexandria, damaging the lighthouse. Most reports say that in 1326, it finally fell into the sea. But another, more colorful tale persists. Alexandria competed with Constantinople, another Mediterranean port, for trade. This story says that the Emperor of Constantinople wanted to weaken Alexandria's hold on trade. So he came up with a plan to get rid of the Pharos. He told people that a great treasure was buried under the lighthouse. When the rumor spread to Egypt, the ruler of Alexandria ordered that the Pharos be torn down. By the time the top and second levels were gone, the ruler knew he had been tricked. Though he tried to rebuild the lighthouse, too much of it had already been removed. So he built a mosque in its place.

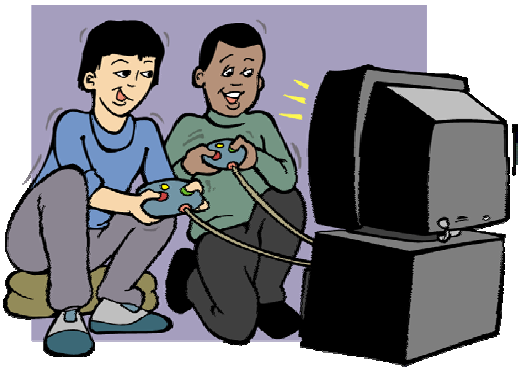
Many people have argued about whether the stone blocks found at the bottom of the sea were really once part of the lighthouse. After recovering and studying the blocks, scientists found that they date from a time before the lighthouse. Most now believe that the ancient Egyptians recycled materials from older buildings to build new ones. So it is likely that the divers did in fact find the ruins of the Pharos.

There are plans to turn the site of the Pharos into a park with a lighthouse museum. One day, visitors may also be able to snorkel and dive in the harbor where the Pharos once stood. Until that time, the great lighthouse will live on in both the area's architecture and its languages. The French, Italian, and Spanish words for *lighthouse* all come from the word *pharos*.

Playing Games in the Classroom

by Erin Huskey

1 How many hours a day do you spend playing video games? Did you know that most kids in America spend an average of 49 minutes a day playing video games? Because electronic games are such a big part of our culture, researchers are now studying the pros and cons of bringing gaming into the classroom.



2 Many people feel that video games have no place in school. They say that games cannot strengthen learning. Also, some people claim that games spoil the players, making them numb to or bored by typical classroom activities.

3 Even though there are people who believe that video games and technology take away from learning, these games are not going to disappear from our world. In fact, businesses, the government, and the military have all increased their use of video games and technology as teaching tools. With the widespread use of such tools in the "real world," teachers and researchers have noted a change in the way students learn. Students want to be excited about learning, and they want the chance to practice the skills they learn. While some view this change as a result of the graphics, sound, and technology in most games, researchers and teachers say that student interest is among the benefits of including games and simulations in the classroom.

4 There are two main types of games. The first involves more than one player and allows the players to interact with each other. The second type of game is the task-based simulation where multiple players work together in a virtual environment. Both types of games help students develop thinking and group problem-solving skills.

5 These games and simulations provide students with opportunities to develop the skills needed to solve problems and work together. They also allow students to feel that they are involved in their learning. These games are exciting for students who are using their bodies and minds in situations that they are likely to encounter in the "real-world." In some cases, the situations allow students to participate in new worlds and learn about careers, events, and ideas that they had not known about before.

6 Whether students are taking part in an interactive game or participating in a task-based simulation, both situations give them opportunities to develop how they behave with other people. Players learn the **jargon** (or special language) and the communication methods the game is based on. Often the games or simulations involve specific careers or jobs. Not only do players become familiar with the jargon, but also they learn the appropriate social rules and ways of thinking associated with that kind of work. The games can give students the opportunity to develop their own groups or communities. In these situations, as they play the game they create sets of values and behaviors. Not only do students practice using the knowledge they have gained, but also they get to practice it in a real-life way with other people.

7 In order for the games and simulations to be helpful in education, they have to include several key features. The first is that the game or situation should be tied to a skill or set of skills that students are learning. Educators and researchers are mainly concerned that the games require students to practice more than hand-eye coordination or motor skills. The game should require students to practice thinking skills in a believable and likely situation. Furthermore, the game must allow students to put the skills or knowledge into practice. If the game simply asks students to repeat a set of facts or to practice a skill without relating it to its real-world use, teachers believe the game will not support learning. Lastly, the game or simulation must allow students to participate in a community or group where social skills are developed and practiced.

Method of Teaching	Average Retention Rate
Teach others/use immediately	90%
Practice by doing	75%
Discussion group	50%
See a demonstration	30%
Learn from audio visual	20%
Reading	10%
Lecture	5%

8 Educational video games and task-based simulations thus offer several benefits to teachers and students alike. Teachers can tap into the excitement and technology of virtual environments that students already know. Students practice knowledge and skills in situations as members of a group or a community. Games and simulations provide countless learning opportunities that are exciting and meaningful in the classroom and in the real-world.

The Black Theater Movement

by Elaine Langlois

On March 11, 1959, at the Ethel Barrymore Theatre in New York City, Lorraine Hansberry waited for the curtain to rise on her play *A Raisin in the Sun.* The play had done well on tour. Tonight, it was opening on Broadway, the heart of theater in the United States. Hansberry held hands with her producer, Philip Rose. The preview had been received with little enthusiasm, and they didn't expect a success. But that is what they got.

As the curtain closed, wave after wave of thunderous applause filled the theater. The play was a first in many ways. It was the first play written by an African American woman to be produced on Broadway. It was the first play by an African American writer to win the prestigious New York Drama Critics Award. It was the first play to reach wide audiences that told the truth about black people's lives. And it started the black theater movement.

African American theater began in the Harlem Renaissance of the 1920s and 1930s. This was a time when big cities like New York saw a flowering of African American art, blues, jazz, poetry, and fiction. Black theater companies sprang up in Chicago, New York, and Washington, D.C. They produced musicals that were successful and popular with both whites and blacks, as well as plays about African American life.

But soon the Harlem Renaissance ended. And white investors, seeing how much money the musicals made, began to get into the business, shutting blacks out.

Help arrived during the Great Depression, in the form of a government jobs program called the Federal Theater Project, or FTP. The FTP served as a training ground for black actors, most of whom had only found work before as extras or chorus dancers. The project also employed and schooled African Americans in lighting, sound, and other technical parts of theater.

The FTP produced plays with all-black casts by well-known African American writers of the time. It also did classical plays. One of the most famous was William Shakespeare's *Macbeth*, directed by Orson Welles. Welles changed the setting to Haiti and added voodoo to the plot.

In 1939, the FTP shut down. African Americans kept writing good plays, but they found little support for their work. Even the best-known black actors got only stereotyped roles such as servants. And not one theater union would admit African American technicians.

Well-known black performer Hattie McDaniel, with actor John Payne

Still, there was progress. Black community theaters cropped up in the late 1930s. Here, actors like Ossie Davis and Ruby Dee got some of their first work. The Negro Playwrights' Company and the American Negro Theater, both founded in 1940, gave black writers, actors, directors, and crew a place to develop their talents.

Then came Lorraine Hansberry's play. *A Raisin in the Sun* is the story of a black family living in a small, rundown apartment in Chicago. When they get a $10,000 life insurance payment, they must decide whether to buy a house in an all-white area. Everyone in the family has dreams about how the money should be spent.

The play moved many African Americans as no play had before. Woodie King, Jr., a founder and Producing Director of the New Federal Theatre in New York City, wrote this about it:

> There I was in Detroit's Cass Theatre, a young man who'd never seen anywhere a Black man [one of the actors] express all the things I felt but never had the courage to express. . . .The power of the play had made us all aware of our uniqueness as Black and had encouraged us to pursue our dreams. Indeed, the play had confirmed that our dreams were possible.

The play ran for a long time. It gave many African Americans who worked in theater the chance to meet. Some of these people called for blacks to have their own theaters. These theaters would be run by African Americans. They would hire African American casts and crews, and they would present plays that African Americans had written.

These people began to get together and start their own theaters. They went to churches or community halls and asked for space. They pooled their money. Often, they had to do a little bit of everything. Actors might have to help with sets and lights, for example. Some got grants of money. And some watched their theaters grow.

The Negro Ensemble Company, or NEC, is one example. The NEC was started by two African American actors, Robert Hooks and Douglas Turner Ward. These men worked together in a road tour of *Raisin.* Afterward, Hooks raised some money, and the two men put on an evening of short plays that Ward had written. The show was a great success.

Ward wrote an article for *The New York Times* saying that the city needed a black theater company. The Ford Foundation donated money, and in 1967, the Negro Ensemble Company was born. Since then, the NEC has produced more than 200 new plays and has employed more than 4,000 actors and crew. It is known around the world and has won many awards and honors.

The NEC, the New Federal Theatre, and other black theaters started in the 1960s and 1970s did several important things:

- They produced plays by African American writers. Playwrights like Amiri Baraka, Langston Hughes, and August Wilson all had plays produced in black theaters.
- They presented plays that dealt with themes from African Americans' lives.

- They offered black actors roles with depth and meaning.
- They helped actors like Sidney Poitier, James Earl Jones, Samuel L. Jackson, and Louis Gossett, Jr., develop their careers.

Today, black theater companies face the same problems that other theaters do. Government and private donors are giving less money. Money must be managed carefully to turn a profit or even survive. Yet black theaters continue to produce fine work.

Kenny Leon, a successful director, is trying to start a national black theater company. His group, True Colors, will put on classic works by African Americans and plays from today by writers of all races. His most recent play, at the time of this writing, was a $2.6 million Broadway revival of *A Raisin in the Sun.*

BLACK THEATER TIMELINE	
1823	First known play: *King Shotaway* by James Brown
1865	Slavery ends
1916	First successful play: *Rachel* by Angelina W. Grimké
1925	First play on Broadway: *Appearances* by Garland Anderson
1935	First Broadway hit: *Mulatto* by Langston Hughes
1935–1939	Federal Theater Project
1940	American Negro Theater and Negro Playwrights' Company
1954	Supreme Court rules separate public schools against the law
1955	Rosa Parks and the Montgomery bus boycott
1957	Riots in Little Rock, Arkansas, as 9 black students try to attend Central High
1959	First Broadway hit by a black woman: *A Raisin in the Sun* by Lorraine Hansberry
1967	Negro Ensemble Company
1970	New Federal Theatre

The King's Job

by Rudyard Kipling

Once on a time was a King anxious to understand 1
What was the wisest thing a man could do for his land.
Most of his population hurried to answer the question,
Each with a long oration[1], each with a new suggestion.
They interrupted his meals -- he wasn't safe in his bed from 'em -- 5
They hung round his neck and heels, and at last His Majesty fled from 'em.
He put on a leper's cloak (people leave lepers alone),

Out of the window he broke, and abdicated his throne.
All that rapturous[2] day, while his Court and his ministers mourned him,
He danced on his own highway till his own Policeman warned him. 10
Gay and cheerful he ran (lepers don't cheer as a rule)
Till he found a philosopher-man teaching an infant-school.
The windows were open wide, the King sat down on the grass,
And heard the children inside reciting "Our King is an ass."
The King popped in his head: "Some people would call this treason, 15
But I think you are right," he said; "Will you kindly give me your reason?"
Lepers in school are as rare as kings with a leper's dress on,
But the class didn't stop or stare; it calmly went on with the lesson:

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[1] **oration:** lecture
[2] **rapturous**: joyous

"*The wisest thing, we suppose, that a man can do for his land.*

Is the work that lies under his nose, with the tools that lie under his hand." 20

The King whipped off his cloak, and stood in his crown before 'em.

He said: "My dear little folk, *Ex ore parvulorum* --."

(Which is Latin for "Children know more than grown-ups would credit")

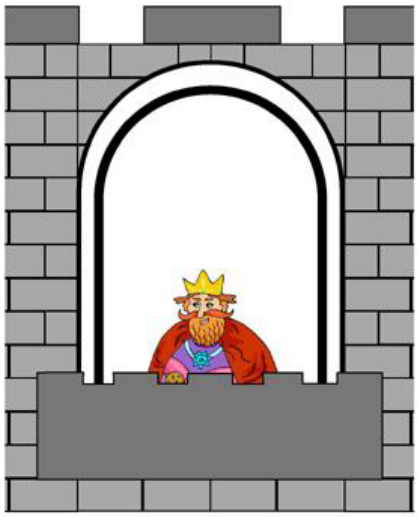
You have shown me the road to go, and I propose to tread it."

Back to his Kingdom he ran, and issued a Proclamation, 25

"Let every living man return to his occupation!"

Then he explained to the mob who cheered in his palace and round it,

"I've been to look for a job, and Heaven be praised I've found it!"



The Right to Protest in the Internet Age

by Elaine Langlois

Votes for women. An end to segregation and unfair voting practices. The end of the Vietnam War. In each case, hundreds of thousands of people, exercising their right to protest, brought about great changes. The right to protest is exercised every day. The Internet, e-mail, and cell phones are changing how people protest—and who gets involved—in important ways.

A Historical Right

The right to protest is guaranteed in the Bill of Rights:

> **Congress shall make no law . . . abridging the freedom of speech . . . or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.**

This right goes back to Magna Carta, a legal document signed by King John of England in 1215. This document gave people of noble birth certain rights that no king could take away. Among them was the right to petition, or appeal to, the king if they thought the government was treating them unfairly. This right was extended to the common people in the English Bill of Rights in 1689.

Though people in colonial America were British subjects, they were not represented in the British Parliament. When Parliament passed laws that affected them—especially tax laws—they thought they were being treated unfairly. The right of the people not to be taxed without their consent, or approval, was part of Magna Carta. The king ignored the colonists' petitions and broke up their meetings. These actions drove the colonists to revolt.

A Protest March in the Internet Age

A group is planning a protest march. It sends its members an e-mail, with a link to click to sign up. It also announces the march on its web site. Other people who visit the site get the word. So do groups with similar goals. These groups e-mail their members, urging them to take part. Now the group has a huge number of protesters—many more than they could have attracted by phone calls, letters, posters, or word of mouth—and they've gotten them much more quickly.

As the date for the march draws near, the group uses the Internet and e-mail to make final plans. It arranges for buses and provides a link for riders to register. It posts flyers that protesters can download and hand out, as well as maps and driving directions. It sends e-mails explaining where to meet and what to do.

On the day of the march, the group posts a weather forecast on the site. All day, it updates the site with traffic news, Web cam pictures, and other information. Members on bikes cruise the scene, using cell phones to relay information. This helps the leaders respond to any changes. The march is a big success.

The Internet and e-mail have changed protests in several important ways:
• A protest can be put together *quickly*, with little advance planning.
• The nuts and bolts of a protest, such as scheduling buses and places to stay, are much *easier*.
• People and groups from all over can find out about the protest and take part.

The key words here are *quickly* and *easier*. Often, new technologies change things by making them quicker and easier to do. Before the washing machine, washing clothes could take 12 hours of hard work. Before the Internet and e-mail, protests could take months to plan. And they usually involved only a small fraction of the people that take part today.

Library of Congress, LC-U9-10364-37

The Civil Rights March on Washington, D.C. in August 1963, took months to organize.

Text Messaging

Text messaging—sending short text messages on a cell phone—helps protest planners to react quickly and to bring out lots of people with little notice. In some parts of the world, such as Asia and Europe, many people use text messaging, which makes it a good tool for protests.

- In Frankfurt, Germany, officials went back and forth about whether to permit a protest against the war in Iraq, before finally deciding to allow it. Within hours, 2,000 protesters had assembled.
- In Cairo, Egypt, text messaging brought out 5,000 demonstrators.
- In countries that restrict free speech, such as China, text messaging is a way to send messages without having them censored.

The Power of Swarming

A new kind of behavior called *swarming* is changing protests in several important ways. Swarming refers to a group of people calling one another on cell phones and showing up where something is happening. A man might hear of a concert, for example, and call 25 people he knows. Soon they're all there, none of them having planned to be.

Swarming brings out people who wouldn't ordinarily join a protest—office workers, for example, who don't want to take a day off. They get a call when the action starts, attend for a couple of hours, and then come back to work.

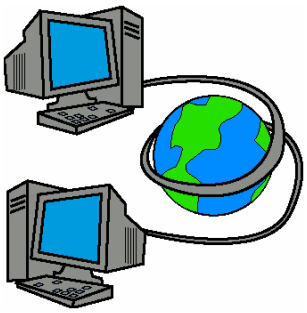
With swarming, protests can be staged almost anywhere, anytime, with no advance planning. "It's like pizza delivery," says Alex Magno, a political science professor at the University of the Philippines. "You can get a rally in 30 minutes—delivered to you."

Swarming is in fact a powerful new type of protest. Traditionally, protests have been planned from the top down by one leader. With swarming, they arise practically out of nowhere, without a leader. A leader may set the big goal, but it's swarms that take action, when and as they see fit, in all kinds of ways.

The power of swarming was demonstrated in the Philippines. "Smart mobs" of angry citizens, alerted by cell phone to huge protest rallies, are credited with driving former president Joseph Estrada from office. Estrada was accused of being corrupt.

On the busy streets of the nation's capital, a group of about 200 bike riders called Critical Mass gets together for a ride. It's fun, but it's also a protest against the effects of cars and the rules of the road that favor them. At the front and back of the group, riders communicate with cell phones, hand signals, and walkie-talkies. This way, they can control the group's movements and change its route almost instantly. Swarms also take part in protests against the World Bank and International Monetary Fund, because of their practices in lending money to developing countries.

Conclusion



The Internet, e-mail, and cell phones are tools that make it easier to find out about issues that are important to you and to have your say. At a time when technology is viewed by many people as limiting rights, the Internet, e-mail, and cell phones give us new ways to exercise our basic right to protest.

From Chapter II
Tom Sawyer

by Mark Twain

Tom went on whitewashing -- paid no attention to the steamboat. Ben stared a moment and then said: "Hi-YI! YOU'RE up a stump, ain't you!"

No answer. Tom surveyed his last touch with the eye of an artist, then he gave his brush another gentle sweep and surveyed the result, as before. Ben ranged up alongside of him. Tom's mouth watered for the apple, but he stuck to his work. Ben said:

"Hello, old chap, you got to work, hey?"

Tom wheeled suddenly and said:

"Why, it's you, Ben! I warn't noticing."

"Say -- I'm going in a-swimming, I am. Don't you wish you could? But of course you'd druther WORK -- wouldn't you? Course you would!"

Tom contemplated the boy a bit, and said:

"What do you call work?"

"Why, ain't THAT work?"

Tom resumed his whitewashing, and answered carelessly:

"Well, maybe it is, and maybe it ain't. All I know, is, it suits Tom Sawyer."

"Oh come, now, you don't mean to let on that you LIKE it?"

The brush continued to move.

"Like it? Well, I don't see why I oughtn't to like it. Does a boy get a chance to whitewash a fence every day?"

That put the thing in a new light. Ben stopped nibbling his apple. Tom swept his brush daintily back and forth -- stepped back to note the effect -- added a touch here and there -- criticised the effect again -- Ben watching every move and getting more and more interested, more and more absorbed. Presently he said:

"Say, Tom, let ME whitewash a little."

Tom considered, was about to consent; but he altered his mind:

"No -- no -- I reckon it wouldn't hardly do, Ben. You see, Aunt Polly's awful particular about this fence -- right here on the street, you know -- but if it was the back fence I wouldn't mind and SHE wouldn't. Yes, she's awful particular about this fence; it's got to be done very careful; I reckon there ain't one boy in a thousand, maybe two thousand, that can do it the way it's got to be done."

"No -- is that so? Oh come, now -- lemme just try. Only just a little -- I'd let YOU, if you was me, Tom."

"Ben, I'd like to, honest injun; but Aunt Polly -- well, Jim wanted to do it, but she wouldn't let him; Sid wanted to do it, and she wouldn't let Sid. Now don't you see how I'm fixed? If you was to tackle this fence and anything was to happen to it --"

"Oh, shucks, I'll be just as careful. Now lemme try. Say -- I'll give you the core of my apple."

"Well, here -- No, Ben, now don't. I'm afeard --"

"I'll give you ALL of it!"

Tom gave up the brush with reluctance in his face, but alacrity in his heart. And while the late steamer Big Missouri worked and sweated in the sun, the retired artist sat on a barrel in the shade close by, dangled his legs, munched his apple, and planned the slaughter of more innocents. There was no lack of material; boys happened along every little while; they came to jeer, but remained to whitewash. By the time Ben was fagged out, Tom had traded the next chance to Billy Fisher for a kite, in good repair; and when he played out, Johnny Miller bought in for a dead rat and a string to swing it with -- and so on, and so on, hour after hour. And when the middle of the afternoon came, from being a poor poverty-stricken boy in the morning, Tom was literally rolling in wealth. He had besides the things before mentioned, twelve marbles, part of a jews-harp, a piece of blue bottle-glass to look through, a spool cannon, a key that wouldn't unlock anything, a fragment of chalk, a glass stopper of a decanter, a tin soldier, a couple of tadpoles, six fire-crackers, a kitten with only one eye, a brass door-knob, a dog-collar -- but no dog -- the handle of a knife, four pieces of orange-peel, and a dilapidated old window sash.

He had had a nice, good, idle time all the while -- plenty of company -- and the fence had three coats of whitewash on it! If he hadn't run out of whitewash he would have bankrupted every boy in the village.

Tom said to himself that it was not such a hollow world, after all. He had discovered a great law of human action, without knowing it -- namely, that in order to make a man or a boy covet a thing, it is only necessary to make the thing difficult to attain. If he had been a great and wise philosopher, like the writer of this book, he would now have comprehended that Work consists of whatever a body is OBLIGED to do, and that Play consists of whatever a body is not obliged to do. And this would help him to understand why constructing artificial flowers or performing on a tread-mill is work, while rolling ten-pins or climbing Mont Blanc is only amusement. There are wealthy gentlemen in England who drive four-horse passenger-coaches twenty or thirty miles on a daily line, in the summer, because the privilege costs them considerable money; but if they were offered wages for the service, that would turn it into work and then they would resign.

The boy mused awhile over the substantial change which had taken place in his worldly circumstances, and then wended toward headquarters to report.

What's a Planet, Anyway?

by Elaine Langlois

Not so many years ago, everyone knew what a planet was. A planet was a big globe that orbited the sun and reflected its light. There were nine, and the smallest was Pluto.

But in the early 1990s, powerful new telescopes on Earth and the Hubble Space Telescope began detecting objects in the far reaches of the solar system that challenged this definition. These objects orbited the sun and were nearly as big as Pluto. Were these planets too? And what should we call planet-like objects that orbit *other* stars and others that don't orbit stars but look like planets? People began asking the question: What's a planet, anyway?

The Nine Planets

The word *planet* comes from the Greek word *planetes,* which means "wanderers." In ancient times, people used this word to describe seven bright lights that moved in the sky. They were the sun, the moon, Mercury, Venus, Mars, Jupiter, and Saturn. Over time, the sun and moon were struck from the list, and Earth was added. As telescopes improved, and astronomers were able to calculate that other planets should exist and where to look for them, Uranus (1781), Neptune (1846), and Pluto (1930) were discovered and added to the list of planets.

Astronomers sometimes wondered whether Pluto really was a planet. It is much smaller than the other planets—smaller than the moon, in fact. It is made of ice and rock, while the others are rock or gas. And Pluto travels well above and below the plane in which the other planets orbit.

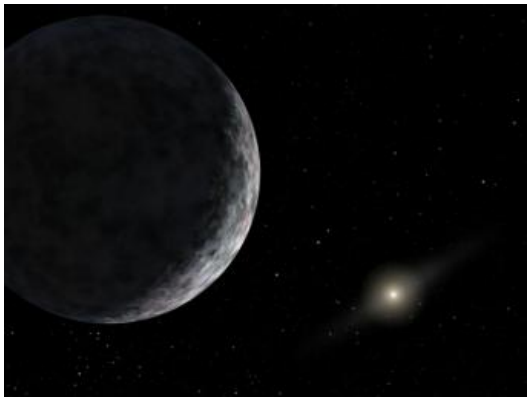
KBOs

In the early 1990s, astronomers found a band of icy rocks beyond Neptune, orbiting the sun. They named it the Kuiper belt, and the rocks were called Kuiper belt objects, or KBOs. They are cosmic debris, left over from when the planets were formed.

As astronomers learned more about KBOs, many began to think that Pluto was one of them. They are made of ice and rock. They are also much smaller than the other eight planets. Pluto is close in size to the biggest KBOs. And some KBOs travel in the same tilted orbit that Pluto does.

A New Definition

In 2005, the discovery of Eris, a KBO bigger than Pluto, brought the problem to a head. Was Eris the tenth planet? A hot debate broke out. The International Astronomical Union (IAU), which defines objects in space, formed a working group to define a planet. The group couldn't agree on a definition, so a second group was formed.



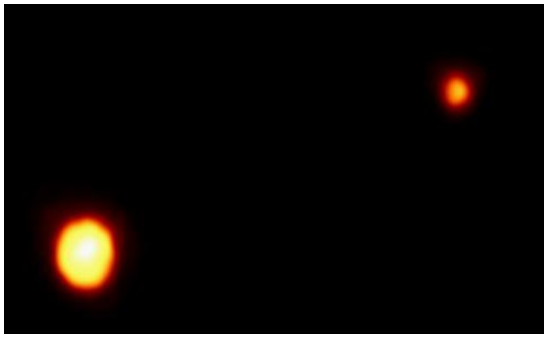
NASA Jet Propulsion Laboratory (NASA-JPL)

This group started with the idea that a planet had to be round. That is, it had to be big enough—to have enough mass—that its gravity pulled it into a round shape. A planet, the group decided, also had to orbit a star. Finally, it could not be a star itself or the moon of a planet.

Under the plan, Pluto would have stayed a planet, and there would have been three new planets: the giant asteroid Ceres, Eris, and one of Pluto's moons, Charon.

But wait a moment. How could a moon be a planet? The group's definition had said it could not.

The answer has to do with the gravitational tug of war between planets and their moons. All the other planets are so big that the center of that war—the point around which the moon revolves—is within the planet. The planet also makes a small movement around that point. But for tiny Pluto, the center is outside the planet. Charon isn't orbiting Pluto but a point between them. And Pluto is orbiting that point, too. This arrangement, sometimes called a *double planet*, made Charon a planet by the definition.



NASA Jet Propulsion Laboratory (NASA-JPL); Dr. R. Albrecht, ESA/ESO Space Telescope European Coordinating Facility; NASA

In August 2006, the group presented its definition to the IAU General Assembly. Some people liked it, but many did not. Some said it had too many exceptions, like the one for double planets. Too many objects could be planets. Others thought that more than roundness had to be considered. The members argued and talked and finally agreed on this definition:

- A planet must orbit the sun.
- It must be large enough to have taken on a round shape.
- It must have "cleared the neighborhood around its orbit."

This last point is the "something more than roundness" that some astronomers wanted. As it forms, a planet swallows up or flings off the cosmic debris around it. Objects that get too near a planet are pushed away or pulled in by gravity and smashed. A planet holds some objects like moons in orbits around it. Except for these objects, and things like comets and asteroids that are passing through, a planet's neighborhood is pretty empty.

This is the standard Pluto doesn't meet. Both Pluto and Eris share their orbit with other KBOs. Ceres, in the asteroid belt, shares its orbit with other asteroids. None of them runs its neighborhood. None of them has cleared its orbit of the material surrounding it.

Pluto, Ceres, and Eris became the first three *dwarf planets*. A dwarf planet is the same as a planet, except that it has not "cleared the neighborhood around its orbit."

Finally, the IAU created a third class of objects, called *small solar-system bodies*, which is everything else that orbits the sun except moons. Most asteroids, KBOs, and comets are in this group.

These definitions set objects apart by their role in the life of a solar system. Our system, like others, began as a flat disk of dust and gas revolving around a star. It developed by *accretion,* the pulling together of this dust and gas into larger bodies. Planets were the winners in this process. They grew larger than anything else and carved out their orbits. The many leftovers, like asteroids and KBOs, did not.

Eight Planets…and Counting

In Greek mythology, Eris is the goddess who causes anger and fighting. The discoverers of Eris proposed that name to the IAU because of the conflict their new find stirred up among astronomers. Some astronomers don't like the new definition. Even those who support it see faults in it. One problem, for example, is that it applies just to objects that orbit the sun, not objects that orbit other stars. Even the best understanding of things can be shaken up when fresh facts arise to challenge it. That's science.

NASA Jet Propulsion Laboratory (NASA-JPL)

"The White Horse Girl and the Blue Wind Boy"

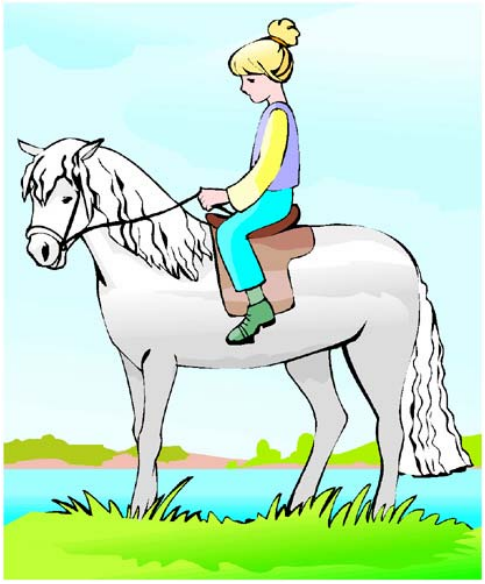
by Carl Sandburg

When the dishes are washed at night time and the cool of the evening has come in summer or the lamps and fires are lit for the night in winter, then the fathers and mothers in the Rootabaga Country sometimes tell young people the story of the White Horse Girl and the Blue Wind Boy.

The White Horse Girl grew up far in the west of the Rootabaga Country. All the years she grew up as a girl she liked to ride horses. Best of all things for her was to be straddle of a white horse loping with a loose bridle among the hills and along the rivers of the west Rootabaga Country.

She rode one horse white as snow, another horse white as new washed sheep wool, and another white as silver. And she could not tell because she did not know which of these three white horses she liked best.

"Snow is beautiful enough for me any time," she said, "new washed sheep wool, or silver out of a ribbon of the new moon, any or either is white enough for me. I like the white manes, the white flanks, the white noses, the white feet of all my ponies. I like the forelocks hanging down between the white ears of all three—my ponies."



And living neighbor to the White Horse Girl in the same prairie country, with the same black crows flying over their places, was the Blue Wind Boy. All the years he grew up as a boy he liked to walk with his feet in the dirt and the grass listening to the winds. Best of all things for him was to put on strong shoes and go hiking among the hills and along the rivers of the west Rootabaga Country, listening to the winds.

There was a blue wind of day time, starting sometimes at six o'clock on a summer morning or eight o'clock on a winter morning. And there was a night wind with blue of summer stars in summer and blue of winter stars in winter. And there was yet another, a blue wind of the times between night and day, a blue dawn and evening wind. All three of these winds he liked so well he could not say which he liked best.

"The early morning wind is strong as the prairie and whatever I tell it I know it believes and remembers," he said, "and the night wind with the big dark curves of the night sky in it, the night wind gets inside of me and understands all my secrets. And the blue wind of the times between, in the dusk when it is neither night nor day, this is the wind that asks me questions and tells me to wait and it will bring me whatever I want."

Of course, it happened as it had to happen, the White Horse Girl and the Blue Wind Boy met. She, straddling one of her white horses, and he, wearing his strong hiking shoes in the dirt and the grass, it had to happen they should meet among the hills and along the rivers of the west Rootabaga Country where they lived neighbors.

And of course, she told him all about the snow white horse and the horse white as new washed sheep wool and the horse white as a silver ribbon of the new moon. And he told her all about the blue winds he liked listening to, the early morning wind, the night sky wind, and the wind of the dusk between, the wind that asked him questions and told him to wait.

One day the two of them were gone. On the same day of the week the White Horse Girl and the Blue Wind Boy went away. And their fathers and mothers and sisters and brothers and uncles and aunts wondered about them and talked about them, because they didn't tell anybody beforehand they were going. Nobody at all knew beforehand or afterward why they were going away, the real honest why of it.

They left a short letter. It read:

> *To All Our Sweethearts, Old Folks and Young Folks,*
>
> *We have started to go where the white horses come from and where the blue winds begin. Keep a corner in your hearts for us while we are gone.*
>
> *The White Horse Girl.*
>
> *The Blue Wind Boy.*

That was all they had to guess by in the west Rootabaga Country, to guess and guess where two darlings had gone.

Many years passed. One day there came riding across the Rootabaga Country a Gray Man on Horseback. He looked like he had come a long ways. So they asked him the question they always asked of any rider who looked like he had come a long ways, "Did you ever see the White Horse Girl and the Blue Wind Boy?"

"Yes," he answered, "I saw them.

"It was a long, long ways from here I saw them," he went on, "it would take years and years to ride to where they are. They were sitting together and talking to each other, sometimes singing, in a place where the land runs high and tough rocks reach up. And they were looking out across water, blue water as far as the eye could see. And away far off the blue waters met the blue sky.

" 'Look!' said the Boy, 'that's where the blue winds begin.'

"and far out on the blue waters, just a little this side of where the blue winds begin, there were white manes, white flanks, white noses, white galloping feet.

" 'Look!' said the Girl, 'that's where the white horses come from.'

"And then nearer to the land came thousands in an hour, millions in a day, white horses, some white as snow, some like new washed sheep wool, some white as silver ribbons of the new moon.

"I asked them, 'Whose place is this?' They answered, 'It belongs to us; this is what we started for; this is where the white horses come from; this is where the blue winds begin.' "

And that was all the Gray Man on Horseback would tell the people of the west Rootabaga Country. That was all he knew, he said, and if there was any more he would tell it.

And the fathers and mothers and sisters and brothers and uncles and aunts of the White Horse Girl and the Blue Wind Boy wondered and talked often about whether the Gray Man on Horseback made up the story out of his head or whether it happened just like he told it.

Anyhow this is the story they tell sometimes to the young people of the west Rootabaga Country when the dishes are washed at night and the cool of the evening has come in summer or the lamps and fires are lit for the night in winter.

HOW TO PRINT A READING PASSAGE

1. To display the reading passage that you wish to print, click the title of the reading passage in the navigation pane at the left.
2. As you view the pages of the reading passage, note the page numbers associated with the passage in the status bar below the passage.
3. Click the Print button on the toolbar above the passage. The Print dialog box appears.
4. In the Print dialog box, specify the printer, the print range, and the number of copies you wish to print. Then click OK.

   Note: If you wish to print all the passages, select the *All* option in the Print Range section of the Print dialog box.