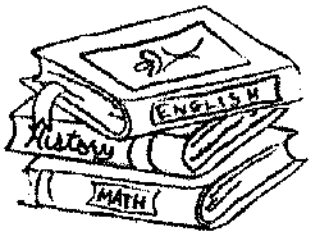
# AMI Packet

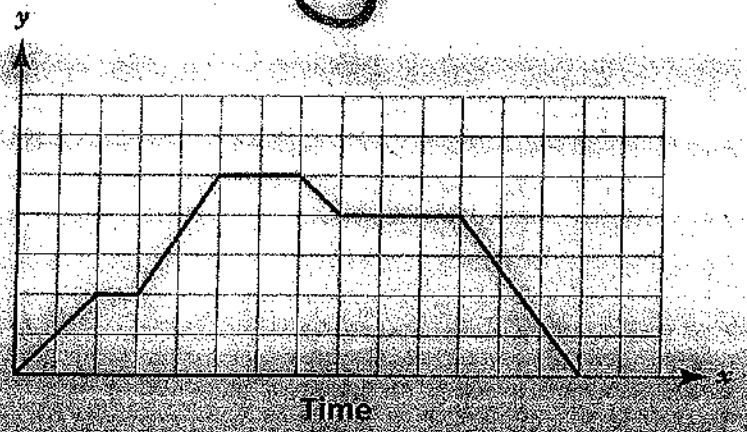
# #5

# 8th Grade



Day 5

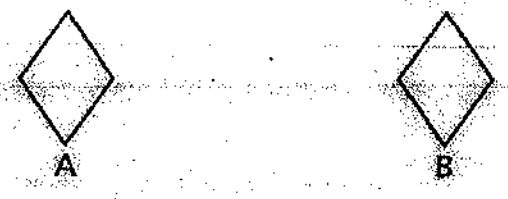
**14** Consider this graph.




Which correctly identifies and explains a label that could be correct for the y-axis on the graph? Mark all that apply.

- **A** Distance from Home; The graph shows periods of decrease, and a distance from a location can decrease.
- **B** Vehicle's Speed; The graph shows flat parts that would indicate a constant speed, which is acceptable.
- **C** Total Distance Traveled; The graph shows periods of decrease, and a change in total distance traveled can be negative.
- **D** Temperature; The graph shows flat parts that would indicate a constant temperature, which is acceptable.

**15** Grant translated figure *A* two inches to the right to create figure *B*.




Which comparision is true of figure *A* and figure *B*?

- **A** The side lengths of figure *A* are two inches less than the side lengths of figure *B*.
- **B** The side lengths of figure *B* are two times the side lengths of figure *A*.
- **C** The angles of figure *B* are congruent to the corresponding angles in figure *A*.
- **D** The angle measures of figure *A* are two times the angle measures of figure *B*.

**Go On**

**16** A cell phone company offers its customers two monthly plans. Plan A costs $20 per month plus $0.15 for each minute used. Plan B costs $15 per month plus $0.20 for each minute used.

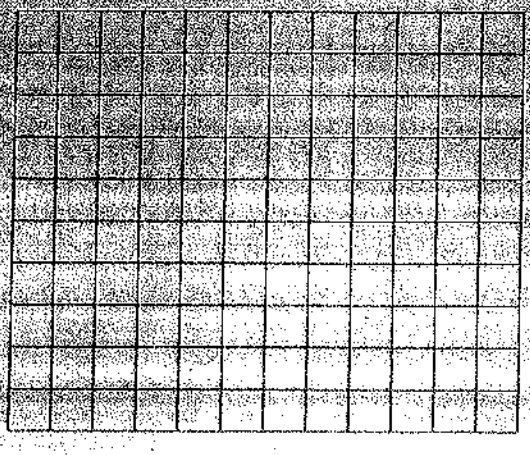
***Part A***

Write equations to represent the cost of each plan.

***Plan A*** _____ ***Plan B*** _____

***Part B***

Graph the equations.



***Part C***

For how many minutes is the cost the same?

***Show your work.***

***Answer*** _____ minutes

**17** In the equations $6x - 12y = a$ and $3x - 6y = b$, $a$ and $b$ are constants. The two equations have infinitely many solutions. Which statements are true? Mark all that apply.

**A** If $a = 5, b = 10$.

**B** If $a = 18, b = 9$.

**C** If $a = 8, b = 4$.

**D** If $a = 14, b = 28$.

**18** Consider the equations $y = 3x + 5$ and $y = \frac{8}{x} - 2$.

***Part A***

Which statement correctly describes $y = 3x + 5$?

**A** It is not a function.

**B** Its graph is not a straight line.

**C** It is a nonlinear function.

**D** It is a linear function.

***Part B***

Which statement correctly describes $y = \frac{8}{x} - 2$?

**A** It is a linear function.

**B** It is a nonlinear function.

**C** Its graph is a straight line.

**D** It is not a function.

**19** Fiona compares the numbers $2 \times 10^8$ and $8 \times 10^6$ using these steps:

**Step 1:** 8 is 4 times as large as 2.

**Step 2:** $10^8$ is 100 times as large as $10^6$.

Which could be Fiona's last step in correctly comparing the numbers?

**A** $100 \times 4 = 400$;
$2 \times 10^8$ is 400 times $8 \times 10^6$

**B** $100 \div 4 = 25$;
$2 \times 10^8$ is 25 times $8 \times 10^6$

**C** $100 + 4 = 104$;
$2 \times 10^8$ is 104 times $8 \times 10^6$

**D** $100 - 4 = 96$;
$2 \times 10^8$ is 96 times $8 \times 10^6$

**Go On**

NAME Day 5 CLASS DATE

for CHAPTER 12: PARTS OF SPEECH OVERVIEW pages 386–87

# The Preposition

**12c.** A *preposition* is a word that shows the relationship of a noun or pronoun, called the *object of the preposition,* to another word.

A preposition that consists of more than one word is called a *compound preposition.*

EXAMPLES The leader **of** the scout troop led the scouts **out of** the woods. [*Troop* is the object of the preposition *of,* and *woods* is the object of the compound preposition *out of.*]

**EXERCISE A** Underline the prepositions in the following sentences.

**Example** 1. Before the hike, the scouts checked the supplies in their backpacks.

1. The scout troop went on a hike.
2. They climbed to the top of Mount Milligan.
3. The climb up the mountain was long and difficult.
4. They crossed over a stream and under fallen trees.
5. During the hike a few scouts went off the trail.
6. Boulders had fallen on the trail from a cliff.
7. They went either around the fallen rocks or between them.
8. There is a great deal of wildlife on the ground and under the brush.
9. On account of snakes, hikers should stay on the trail at all times.
10. The climb down the mountain took them in front of the lodge.

**EXERCISE B** Underline the compound preposition in each of the following sentences. Then, circle the object of the preposition.

**Example** 1. Lars and I decided to go to the library instead of the (bookstore.)

11. We found the biographies next to the mysteries.
12. The seasonal books were in front of them.
13. According to Mr. Wu, some books were not seasonal.
14. They were there because of a space problem.
15. I borrowed the Sue Grafton mystery in spite of its torn cover.
16. A bird book was the only book I liked aside from that.
17. I did not check out the World Series history on account of Lars.
18. Lars checked out that sports book along with a poetry collection.
19. As of last Friday, I had read ten books this month alone.
20. I read Richard Peck's latest novel in addition to Barbara Kingsolver's first book.

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for CHAPTER 12: PARTS OF SPEECH OVERVIEW page 388

# Prepositional Phrases

**12c.** A ***preposition*** is a word that shows the relationship of a noun or pronoun, called the ***object of the preposition***, to another word.

All together, the preposition, its object, and any modifiers of the object are called a *prepositional phrase*.

EXAMPLE Which flowers grow best **in this sandy soil?** [The prepositional phrase consists of the preposition *in*, the object *soil*, and the adjectives *this* and *sandy*.]

Do not confuse a prepositional phrase that begins with *to (to the game, to me)* with an infinitive that begins with *to (to read, to be heard)*.

**EXERCISE A** For each of the following sentences, underline the prepositional phrase.

**Example** 1. Maya Angelou was born in St. Louis, Missouri.

1. Maya Angelou grew up in rural Arkansas.
2. Her career began with dance and drama.
3. Dr. Angelou is fluent in several languages.
4. Audiences throughout the United States have enjoyed Dr. Angelou's lectures.
5. Maya Angelou has also lectured in several foreign countries.
6. Dr. Angelou lived in Cairo, Egypt.
7. Dr. Angelou has also lived and taught in Ghana.
8. In 1969, Maya Angelou wrote an autobiographical novel.
9. She has made several appearances on television.
10. Dr. Maya Angelou's great works are respected around the world.

**EXERCISE B** For each of the following sentences, circle the preposition and underline the object of the preposition.

**Example** 1. Please don't run (in) the hallway.

11. This film takes place during the Depression.
12. I found my baseball glove underneath the bed.
13. In spite of the rain the band continued playing.
14. Everybody ran five laps around the track.
15. Is Santa Monica near the beach?

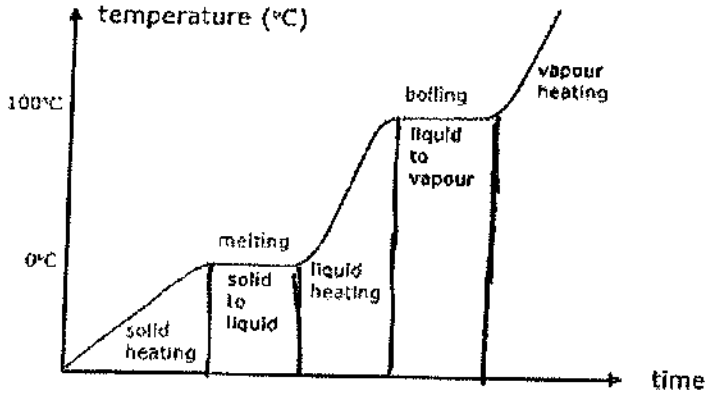
Day 5

Name _____

## Matter

All matter exists as solids, liquids, or gases. These are called the states of matter. Matter can change from one state to another if heated or cooled. If ice (a solid) is heated it changes to water (a liquid). This occurs just above 0 degrees celsius (32 degrees fahrenheit). This change is called MELTING. This occurs at 0 degrees celsius (32 degrees fahrenheit). If water is heated, it changes to steam (a gas). This change is called [illegible]. This occurs at 100 degrees celsius (212 degrees fahrenheit). The particles of ice, water, and steam are identical, but arranged differently. They also have the exact same amount of particles whether they are in solid, liquid, or gas form.

**Increasing Temperature (Graph 1)**




1. According to the text and graph 1, at what temperature celsius does liquid begin to boil? _____
2. What happens to liquid when it is taken to 0 degrees celsius? _____
3. What is missing from the graph that would make it better? _____
4. What conclusion can you draw from the graph? Include two pieces of data to support your claim.

_____

_____

5. According to the text, if there were a block of ice out on the school playground and the temperature outside reached 33 degrees fahrenheit, would the block of ice begin melting? Provide evidence to support your claim.

_____

_____

6. Which temperature range would you expect a glass of water could be?
   a. -10°C - 31°C
   b. 0°C - 101°C
   c. 1°C - 99°C
   d. 100°C - 105°C

Da 1

day 5

Kaleb was interested about what he read about there being the same amount of mass in something no matter which state of matter it changed into so he decided to test a few different substances. He chose several objects to represent each state of matter. He wanted to see if the weight was the same to the object after he changed the state of matter.

**Conservation of Matter (Chart 1)**

| Object | What was done to object | State Change | Starting Weight in oz. | Ending Weight in oz. |
|---|---|---|---|---|
| Graham cracker | crushed | solid to smaller solid | 0.6 oz. | 0.6 oz. |
| Ice Cube | melted | solid to liquid | 8 oz. | 8 oz. |
| Orange Juice | frozen | liquid to solid | 4 oz. | 4 oz. |
| Sugar & Water | mixture | solid to liquid | water 4 oz.<br>sugar 2 oz. | 6 oz. |

7. Based on Chart 1, what was the difference in weight between the graham cracker before and after the crushing? _____

8. How much more did the ice cube weigh than the orange juice? _____

9. What conclusion can you draw from the chart of Kaleb's experient? Include two pieces of data to support your claim. _____

_____

10. What tool would Kaleb need to be able to measure the difference in his matter?
    a. thermometer
    b. beaker
    c. spring scale
    d. weight scale

11. According to Chart 1, what state of matter change is adding sugar to water?
    a. solid to liquid
    b. gas to solid
    c. liquid to solid
    d. gas to liquid

12. Make a list of items Kaleb needed to complete his experiment. Include everything he needed.

_____

_____

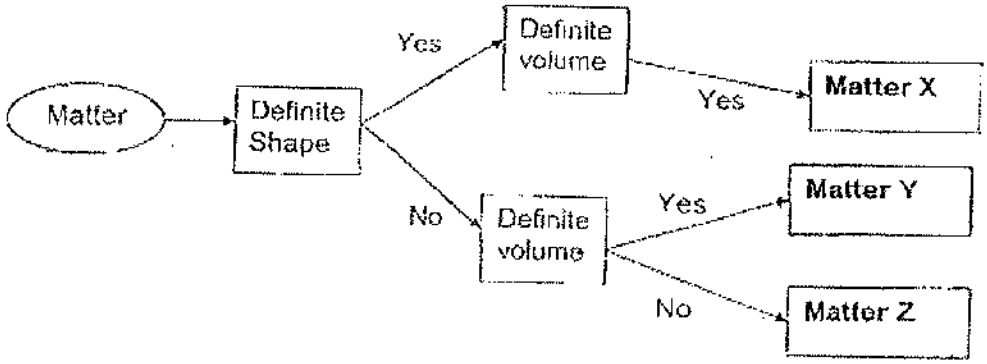
_____

Da 2

day 5

**Matter Characteristics (Chart 2)**

| State of Matter | Has definite volume (same amount no matter what container it's in.) | How much do the molecules move? | Has definite shape | What happens if I add heat to it? | What happens if I take heat away or cool it? |
|---|---|---|---|---|---|
| Solid | yes | vibrating but barely moving | yes | can turn into liquid | nothing |
| liquid | yes | medium speed moving and sliding past each other | no | can turn into gas | can turn into solid |
| gas | no | moving fast around and past each other | no | molecules move faster... with enough energy, you can make a plasma. | can turn into liquid |
| plasma | no | moving extremely fast around and past each other | no | molecules move even faster | needs more research |




Look at **Matter Characteristics (Chart 2)** and use that data to read and solve the flow chart above.

13. Matter X _____ 14. Matter Y _____ 15. Matter Z _____

16. Which of these best describe a gas?
   a. doesn't hold it's own shape, moves extremely fast, does not have definite volume.
   b. does hold it's own shape, only moves enough to vibrate against other molecules, does have definite volume.
   c. doesn't hold it's own shape, moves medium fast beside and around other molecules, does have definite volume.

Da 3

# 8th Grade Writing Alternative Instruction: Day 5

Directions:

Read the article "Should parents support the new school meal standards?" Use the information in the article to fill out the information on the rest of this page.

7. List three arguments from the article that are FOR the new school meal standards.
   1. _____
   2. _____
   3. _____

8. List three arguments from the article that are AGAINST the new school meal standards.
   1. _____
   2. _____
   3. _____

9. Choose whether you are FOR or AGAINST the new school meal standards. On the back of this page, write a 3 PARAGRAPH essay with an introduction, a body, and a conclusion on which side you support. Use arguments from the article as well as your own arguments to support your opinion.

# PRO/CON: Should parents support the new school meal standards?

By McClatchy-Tribune News Service, adapted by Newsela staff on 09.29.14
Word Count **1,411**

First lady Michelle Obama tends the White House garden at Washington [illegible] as part of the Let's Move! campaign. AP Photo/Evan Vucci, File

## PRO: Fight efforts to water them down

WASHINGTON — As a new school year begins, American parents should enthusiastically join first lady Michelle Obama's campaign for healthier school lunches. Her drive is based on sound nutritional science with the goal of healthier, happier kids.

The first lady has made improving childhood health through better eating and more exercise her signature issue.

That's a wise choice, since childhood obesity reached epidemic proportions: In 2012, 1 in 3 American children were overweight or obese. Overweight children are at higher risk of developing a variety of ailments, including cardiovascular disease and diabetes that diminish their lives and cost our economy hundreds of billions of dollars a year.

One part of Obama's overall program is the Healthy, Hunger-Free Kids Act. It's an update to the national school lunch program, which has helped pay for school meals since 1946. More than 30 million students now participate, but the program hadn't had a major overhaul in 15 years.

## Making School Meals Healthier

Following recommendations of the Institute of Medicine, school meals are now supposed to contain fewer calories, less fat and salt, and more fruit, vegetables and whole grains. Most parents would agree these are admirable goals.

Less noticed than the menu changes are other parts of the new law that improve access to school meals for low-income and foster kids.

It's important to note that the federal government only sets guidelines — local school systems create their own menus. And contrary to ridiculous rumors, nothing in the law prohibits bake sales or birthday cakes in the classroom.

Still, as should be expected when making big changes to a national program, there have been glitches. For instance, it turned out many high school athletes needed more protein than the guidelines allowed. The government responded by amending the regulations.

The vast majority of school systems are working with Washington to implement the changes — more than 90 percent are going along with the new guidelines. Studies show most kids have grown to like the new, healthier options.

But, just as with health care reform, there are those who, because of their beliefs or politics, prefer attacking the law to improving it. There have been efforts in Congress to waive the new nutritional standards for a year. Some nutrition advocates see the influence of junk-food sellers in the legislative efforts to stall or roll back the new standards.

## Getting Kids To Go Along

It should be no surprise to any parent that kids resist healthy food. But, just as is true around the family dining room table, with sufficient time and encouragement, children can be persuaded to try new foods. Eventually, they come to enjoy them. School systems that phased the changes in slowly found greater student acceptance.

Organizations that work most intensively to promote good nutrition, such as the Food Research and Action Center, wholeheartedly support the new meal standards and are fighting efforts to water them down.

A congressional study from earlier this year found that the new standards were achieving the goal of better nutrition for kids. It blamed the problems of implementation on the speed and size of the changes.

The federal government has been contributing food and money to our schools to improve student nutrition for decades. Such aid is good for the kids, good for education and good for our country. Over the years, assistance has been extended to cover breakfast as well as lunch — and improved, such as in the mid-90s, the last time school meals were updated.

Obama's campaign is just the latest effort to make sure our kids eat right at school. It deserves every parent's support.

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*ABOUT THE WRITER: William Rice is a policy specialist with Americans for Democratic Action (www.adaction.org), the nation's oldest liberal advocacy organization. Readers may write him at ADA, 1629 K Street NW, Washington, DC 20006.*

*This essay is available to McClatchy-Tribune News Service subscribers. McClatchy-Tribune did not subsidize the writing of this column; the opinions are those of the writer and do not necessarily represent the views of McClatchy-Tribune or Newsela.*

## CON: They aren't fit for public consumption

WASHINGTON — The main focus of the national school meal programs should be meeting students' needs. But for that to happen, there must be recognition that parents — not the first lady or Congress — know what's best for their children.

Unfortunately, the school meal standards that started to go into effect two years ago under the Healthy, Hunger-Free Kids Act of 2010 ignore parents. Instead, the standards favor a federal government that thinks it knows everything.

Those who dare to speak against these standards have quickly felt the wrath of Michelle Obama and her fans in the administration.

It's not just policymakers who have felt the anger of the first lady. The School Nutrition Association, representing more than 55,000 school nutrition experts, sent a letter to the first lady expressing "disappointment regarding your July 22nd comments disparaging school nutrition professionals."

### Program Has Excessive Restrictions

The new meal standards try to control every aspect of what's served to children. They place severe restrictions on calories, nutritional content and portion sizes. Some schools have left the program, willing to sacrifice the massive amounts of money it offers in exchange for freedom from its excessive restrictions.

The assumption underlying these new standards is that the federal government must control nutritional policy in the schools. Our government seems to believe parents can't be trusted to teach their children how to make dietary choices that meet their unique needs.

Proponents claim that parents need help because they can't ensure their kids are eating properly at school. Of course, parents can't know every single thing that their children eat at school, but this doesn't mean parents haven't provided their children with the necessary knowledge to make informed choices. But even assuming that schools need to limit food choices, this doesn't justify federal control.

Parents concerned about the food provided to their children at school are much better off going to local officials to address these issues. They will generally get the chance to meet with the officials and have their voices heard.

Parents aren't going to get very far trying to convince D.C. politicians about their specific concerns. Local officials who would like to help have their hands tied with these new standards because they don't have the necessary flexibility to address many concerns.

If the new standards provided greater flexibility to states and local authorities, it would help officials better meet the needs of their students. Not only that, but it would also empower parents by giving them a greater say in the food provided through meal programs.

## Government Ignores Complaints

The federal standards have encountered a lot of criticism from nutrition officials as well as students. The independent Government Accountability Office surveyed state nutrition officials. It found that local school food authorities had a slew of real-world concerns about the lunch standards, ranging from "increased plate waste" — bureaucrat speak for uneaten food — to the costs of meeting the new federal dietary code.

The School Nutrition Association has echoed these concerns. The National School Board Association cautioned, "School boards cannot ignore the higher costs and operational issues created by the rigid mandates of the Healthy, Hunger-Free Kids Act." The mandates are so excessive that some schools have reportedly raided their teaching budgets to cover the extra costs.

Worse, students are disgusted by the food provided to them. According to the GAO report, students in one district held a three-week boycott, refusing to eat school lunches. Students are posting their anger over the program using Twitter at "#ThanksMichelle."

The first lady and other proponents of the standards have turned a deaf ear to the complaints. They've even opposed giving some financially struggling schools a one-year reprieve from complying with the standards. Nothing, it seems, not even the mounting evidence of the program's failure, will be allowed to slow its implementation.

And that's a shame. Washington always hungers for power, but these federal meal standards aren't fit for public consumption. They need to be scrapped.

*Read the following passage about Major Walter Reed, go to page 47 of your answer document, and then answer multiple-choice questions 9 through 16 and open-response item B.*

# Major Walter Reed, M.D.

by Sami Robinson

Before the turn of the twentieth century, yellow fever was feared throughout the world. The disease had killed hundreds of thousands of people. A man named Walter Reed would change that.

Walter Reed was born on September 13, 1851. As a teenager he entered the University of Virginia. Reed completed a degree in medicine at the age of 17. To this day, he remains the medical school's youngest graduate.

In 1870, Reed received a second medical degree from Bellevue Hospital Medical College in Manhattan, New York. He interned at several local hospitals. Reed also served under the Brooklyn Board of Health. Each job gave Reed more hands-on experience with patients. Soon, he resolved to join the Army Medical Corps. Reed passed his exams in January 1875 and joined his first unit at Willet's Point in New York Harbor.

4 In 1893, Reed joined the faculty of the Army Medical School in Washington, D.C. He taught students there and also performed medical research. The Spanish-American War (April–August 1898) gave Reed the chance to study how certain fevers spread among U.S. troops. In 1881, a Cuban doctor named Carlos Finlay had stated that yellow fever was transmitted by mosquitoes, not directly from person [illegible] scientists still believed [illegible] people were the ones responsible for the spread of disease. In 1900, the U.S. Army formed a group to study yellow fever in Cuba. Reed was selected to head this team.

5 Despite extensive research, Reed and his team found no fever-producing germ. Reed did not have the knowledge or equipment to find the culprit. Yellow fever is caused by a virus that is many times smaller than bacteria and therefore was impossible to detect at that time.

Reed and his team of medical officers continued to wonder how the disease was spread. Many experiments followed. For example, some officers slept in clothes worn by patients with yellow fever. Others volunteered to be bitten by mosquitoes that had already visited infected patients. By the end of 1900, Reed and his team had confirmed Finlay's theory. Their studies left no doubt that mosquitoes, not people, transmitted yellow fever.

The Yellow Fever Board was dissolved in 1901. Reed returned to teaching. He remained in the Army Medical Corps for the rest of his life.

Walter Reed was a soldier, a teacher, a scientist, and a doctor. His work to combat yellow fever made him famous. In 1909, a new hospital in Washington, D.C., was named in his honor. The hospital still bears his name: the Walter [illegible] Medical Center.

9. What is the meaning of the word transmitted as used in paragraph 4?

   A. addressed
   B. broken
   C. translated
   D. spread

10. What happened after Walter Reed joined the Army Medical Corps?

   A. Reed completed his medical degree.
   B. Reed worked for the Brooklyn Board of Health.
   C. Reed joined a team to study yellow fever.
   D. Reed entered the University of Virginia.

11. To determine how yellow fever spread, volunteers

   A. injected the virus directly into their bodies.
   B. wore clothing already worn by victims of yellow fever.
   C. drank the same water as victims of yellow fever.
   D. inhaled the same air as victims of yellow fever.

12. Which of these is the **best** summary of paragraph 5?

   A. By the end of 1900, Reed's team began their struggle to determine how yellow fever was spread.
   B. Team members volunteered to be bitten by mosquitoes with yellow fever.
   C. Scientists could not figure out how yellow fever was transmitted.
   D. After several experiments, Reed and his medical team solved the mystery of yellow fever's transmission.

13. What genre is this passage?

   A. biography
   B. folktale
   C. short story
   D. essay

14. For what purpose would someone most likely read this passage?

A. to study the effects of experimentation on human subjects

B. to understand more about the sacrifices people in the military make

C. to figure out how to diagnose yellow fever

D. to learn about Walter Reed's contributions to science

15. Scan the passage to find which war gave Walter Reed the opportunity to study how fevers spread among U.S. troops. Select the correct answer.

A. Civil War

B. Spanish-American War

C. World War I

D. World War II

16. Look at this outline that includes information from the passage.

1. Reed's Early Life
   a. Born in 1851
   b. Completed degree in medicine at 17
   c. Received a second medical degree in 1870
   d. Served under Brooklyn Board of Health
2. Reed Joins the Medical Corps
   a. Passed his exams in 1875
   b. Taught at Army Medical School
   c. _____
3. Reed and His Team
   a. Could not find fever-producing germ
   b. Conducted many experiments
   c. Confirmed that mosquitoes spread yellow fever

Which of the following belongs on the empty line?

A. Walter Reed Army Medical Center

B. A soldier, a teacher, a scientist, and a doctor

C. Returned to teaching

D. Selected to head yellow fever research team