

GRADE 8<br>MATHEMATICS<br>READING<br>SCIENCE SOCIAL STUDIES

## Administered April 2006

## MATHEMATICS

Page 4

## Mathematics Chart

| LENGTH |  |
| :---: | :---: |
| Metric | Customary |
| 1 kilometer = 1000 meters | 1 mile $=1760$ yards |
| 1 meter = 100 centimeters | 1 mile $=5280$ feet |
| 1 centimeter $=10$ millimeters | 1 yard $=3$ feet |
|  | 1 foot = 12 inches |
| CAPACITY AND VOLUME |  |
| Metric | Customary |
| 1 liter $=1000$ milliliters | 1 gallon $=4$ quarts |
|  | 1 gallon $=128$ ounces |
|  | 1 quart $=2$ pints |
|  | 1 pint $=2$ cups |
|  | 1 cup $=8$ ounces |
| MASS AND WEIGHT |  |
| Metric | Customary |
| 1 kilogram = 1000 grams | 1 ton = 2000 pounds |
| 1 gram $=1000$ milligrams | 1 pound = 16 ounces |
| TIME |  |
| 1 year = 365 days |  |
| 1 year = 12 months |  |
| 1 year = 52 weeks |  |
| 1 week = 7 days |  |
| 1 day = 24 hours |  |
| 1 hour = 60 minutes |  |
| 1 minute $=60$ seconds |  |

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

## Mathematics Chart

| Perimeter | square | $P=4 s$ |
| :---: | :---: | :---: |
|  | rectangle | $P=2 l+2 w \quad$ or $\quad P=2(l+w)$ |
| Circumference | circle | $C=2 \pi r \quad$ or $\quad C=\pi d$ |
| Area | square | $A=s^{2}$ |
|  | rectangle | $A=l w \quad$ or $\quad A=b h$ |
|  | triangle | $A=\frac{1}{2} b h \quad$ or $\quad A=\frac{b h}{2}$ |
|  | trapezoid | $A=\frac{1}{2}\left(b_{1}+b_{2}\right) h \quad$ or $\quad A=\frac{\left(b_{1}+b_{2}\right) h}{2}$ |
|  | circle | $A=\pi r^{2}$ |
| Surface Area | cube | $S=6 s^{2}$ |
|  | cylinder (lateral) | $S=2 \pi r h$ |
|  | cylinder (total) | $S=2 \pi r h+2 \pi r^{2}$ or $S=2 \pi r(h+r)$ |
|  | cone (lateral) | $S=\pi r l$ |
|  | cone (total) | $S=\pi r l+\pi r^{2}$ or $\quad S=\pi r(l+r)$ |
|  | sphere | $S=4 \pi r^{2}$ |
| Volume | prism | $V=B h^{*}$ |
|  | cylinder | $V=B h^{*}$ |
|  | pyramid | $V=\frac{1}{3} B h^{*}$ |
|  | cone | $V=\frac{1}{3} B h^{*}$ |
|  | sphere | $V=\frac{4}{3} \pi r^{3}$ |
| *B represents the area of the Base of a solid figure. |  |  |
| Pi | $\pi$ | $\pi \approx 3.14$ or $\pi \approx \frac{22}{7}$ |
| Pythagorean Theorem |  | $a^{2}+b^{2}=c^{2}$ |
| Simple Interest Formula |  | $I=p r t$ |

## DIRECTIONS

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

## SAMPLE A

Find the greatest common factor of 12 and 18.
A 3
B 6
C 9
D Not here

## SAMPLE B

Find the perimeter of this square rug in meters.


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

1 The table below shows the number of students in each grade at Madison Junior High who are enrolled in various musical groups.

Madison Junior High
Musical Groups

| Musical Group | 7th <br> Grade | 8th <br> Grade | 9th <br> Grade |
| :--- | :---: | :---: | :---: |
| Jazz choir | 12 | 12 | 10 |
| Concert choir | 32 | 46 | 20 |
| Orchestra | 16 | 20 | 24 |
| Marching band | 60 | 62 | 86 |

Which graph best represents the data in the table?


2 Deb has a rectangular storage box with a height of 18 inches, as shown below.


If Deb cuts off a 2 -inch strip around the top of the box, what will be the new volume of the box in cubic inches?

F $1,600 \mathrm{in}^{3}{ }^{3}$
G 1,440 in. $^{3}$
H 1,024 in. $^{3}$
J 1,800 in. ${ }^{3}$

3 The students in Mr. Lee's science class are ordering the materials they will need for a science experiment. Each student will need a bag of plant seeds that costs $\$ 1.00$ and a 6 -plant tray that costs $\$ 2.50$. If $x$ represents the number of students in Mr. Lee's science class, which equation can be used to find $y$, the amount in dollars spent by Mr. Lee's students?

A $y=2.5 x+1$
B $y=3.5 x$
C $y=x+3.5$
D $y=x+2.5$

4 The table shows the population of Texas from 1900 to 2000.
Texas Population

| Year | Population <br> (thousands) |
| :---: | :---: |
| 1900 | 3,049 |
| 1910 | 3,897 |
| 1920 | 4,663 |
| 1930 | 5,825 |
| 1940 | 6,415 |
| 1950 | 7,711 |
| 1960 | 9,580 |
| 1970 | 11,197 |
| 1980 | 14,229 |
| 1990 | 16,987 |
| 2000 | 20,852 |

Which of the following is true, based on the data above?
F The population of Texas doubled from 1980 to 2000.
G The population of Texas in 1990 was 4 times the population in 1920.
H The population of Texas more than tripled from 1900 to 1960.
J The population of Texas in 1980 was 2 times the population in 1950.

5 Mrs. Weathersbee drew a line and shaded part of the coordinate plane.


Which list is made up of coordinate pairs representing points in the shaded part of the coordinate plane?

A $(3,-4),(-2,5)$, and $(6,-3)$
B $(-3,4),(3,8)$, and $(-9,-2)$
C $(-6,3),(1,6)$, and $(-2,1)$
D $(-3,5),(3,1)$, and $(-9,2)$

6 Zeb used the rule listed below to rewrite the expression $10^{2} \times 10^{5}$.

$$
10^{m} \times 10^{n}=10^{m+n}
$$

Based on this rule, which of these is equivalent to the expression $8^{-4} \times 8^{6}$ ?

F $8^{-10}$, because $8^{-4} \times 8^{6}=8^{-4-6}$
G $8^{10}$, because $8^{-4} \times 8^{6}=8^{4+6}$
H $8^{-2}$, because $8^{-4} \times 8^{6}=8^{4-6}$
J $8^{2}$, because $8^{-4} \times 8^{6}=8^{-4+6}$
$7 \triangle P R Y$ is reflected across the $y$-axis. Which of the following shows this transformation?
A

C

B

D


8 A set of parentheses is missing from the expression below.

$$
15-5+7 \cdot 2+4
$$

Which of the following expressions has the parentheses in the correct place for the expression to equal 52 ?

F $\quad 15-(5+7 \cdot 2)+4$
G $(15-5+7) \cdot 2+4$
H $15-(5+7 \cdot 2+4)$
J $15-5+7 \cdot(2+4)$

9 The table shows $n$, the number of sides of a polygon, and $S$, the sum of the measures of the interior angles of that polygon.

Polygon

| Number of <br> Sides, $n$ | Sum of <br> Interior Angle <br> Measures, $S$ |
| :---: | :---: |
| 3 | $180^{\circ}$ |
| 4 | $360^{\circ}$ |
| 5 | $540^{\circ}$ |
| 6 | $720^{\circ}$ |
| 7 | $900^{\circ}$ |

Based on the table, which statement is true?
A The sum of the interior angle measures decreases by $\frac{1}{2}$ for each side increase of 1.
B The sum of the interior angle measures increases by $180^{\circ}$ for each side increase of 1 .
C The sum of the interior angle measures doubles for each side increase of 1.

D The sum of the interior angle measures is a whole-number multiple of $360^{\circ}$.

10 Look at the sequence in the table below.

| Position | Value of Term |
| :---: | :---: |
| 1 | 0.5 |
| 2 | 0.75 |
| 3 | 1.0 |
| 4 | 1.25 |
| 5 | 1.5 |
| $n$ |  |

Which expression can be used to find the value of the term in the $n$th position?

F $\quad \frac{n}{2}$
G $\frac{3 n}{2}$
H $\frac{n+1}{4}$
J $\frac{3 n}{4}$

11 A recipe for 12 waffles calls for $1 \frac{1}{2}$ cups of milk, $2 \frac{1}{4}$ cups of flour, and $1 \frac{1}{3}$ cups of other ingredients. How many cups of milk, flour, and other ingredients are needed to make 36 waffles?

A $20 \frac{1}{3}$ cups
B $15 \frac{1}{4} \operatorname{cups}$

C $\quad 12 \frac{1}{4}$ cups
D $5 \frac{1}{12}$ cups

12 Raymond packs boxes for an appliance company. He can pack a large box in 10 minutes and a small box in 4 minutes. He needs to pack 10 large boxes and 20 small boxes. If 2.5 hours remain before closing time, will Raymond have time to finish the work before closing time if he works without stopping?

F Yes, Raymond will finish the work in 1.8 hours.

G No, it will take him 4 hours to finish.
$\mathbf{H}$ Yes, Raymond will finish the work in 0.5 hour.

J No, it will take him 3 hours to finish.

13 Mr. Loya stated that the circumference of Earth at the equator is $24,902.4$ miles. Which expression represents this number in scientific notation?

A $2.49024 \times 10^{4}$
B $24.9024 \times 10^{4}$
C $249.024 \times 10^{4}$
D $2.49024 \times 10^{5}$

14 Mrs. Guzman bought 3 table lamps for $\$ 129.90$. If each lamp cost $\$ 40.00$ before tax was added, what tax rate did she pay on the 3 lamps?

F $7.5 \%$
G $43.3 \%$
H $30.79 \%$
J 8.25\%

15 Ivan's car uses gasoline at an average rate of 20 miles per gallon. He must drive from City 1 to City 2 . Use the ruler on the Mathematics Chart to measure the distance from City 1 to City 2 on the map below in inches.


How many gallons of gasoline will Ivan's car use at this rate when he drives from City 1 to City 2?
A 10 gal
B 40 gal
C 200 gal
D 800 gal

16 A water tank contains 2,500 gallons. A faucet attached to the tank releases water at a constant rate of 5 gallons per minute. If the faucet is left open for 1 hour and no other water is released, which equation can be used to find $r$, the number of gallons of water remaining in the tank?

F $\quad r=2,500 \div 5$
G $\quad r=2,500-60$
H $r=2,500-60(5)$
J $r=2,500 \div 60(5)$

17 The picture below is Larry's favorite picture.


Larry had a reduced copy of the picture made as a gift for his father. If the reduced picture was similar to the original and the height of the reduced picture was 7 inches, what was its width?

A 13 in.
B 5.60 in .
C 8.75 in .
D 10 in .

18 The area of a square is 83 square meters. Which of these is closest to the length of each side of the square?

F 9.1 m
G 9 m
H 8.9 m
J 8 m

19 The scatterplot below shows the cost of 9 large countertop microwave ovens and their capacity in cubic feet.

## Countertop Microwave Ovens



Which best describes the trend shown in the scatterplot?
A Positive trend
B Negative trend
C Mean trend
D No trend

20 Sean is planning a trip of 1,450 miles. He plans to drive between 250 and 300 miles each day. At this rate, which is a reasonable number of days it will take Sean to complete his trip?

F Less than 4 days
G Between 4 and 6 days
H Between 6 and 8 days
J More than 8 days

21 A fast train, known as a bullet train, travels at an average speed of 163 miles per hour. The equation below shows the relationship between $d$, the number of miles the train travels, and $t$, the number of hours it travels.

$$
d=163 t
$$

What is the distance in miles the train will travel in $1 \frac{1}{2}$ hours?

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

22 Moffett's Candy Factory makes candy in the shape of cylinders. The net of a cylindrical piece of candy is shown below.


Which is closest to the total surface area of this piece of candy?
F $\quad 31 \mathrm{~cm}^{2}$
G $19 \mathrm{~cm}^{2}$
H $44 \mathrm{~cm}^{2}$
J $75 \mathrm{~cm}^{2}$

23 Julie is going to conduct a school survey for a research paper. Which sampling method is NOT a good representation of her school's student population?

A Survey every fifth student as all students exit the main door at school

B Survey all students at a shopping mall
C Survey $\frac{1}{4}$ of all the students at school randomly

D Survey all the students whose names have been randomly drawn by the school's computer

24 Let $n$ represent the position of a term in the sequence below.

$$
8,11,14,17,20,23, \ldots
$$

Which algebraic expression can be used to find the $n$th term of the sequence?

F $\quad 2 n+6$
G $6 n+2$
H $5 n+3$
J $3 n+5$

25 Nikki paid Dalton $\$ 15.50$ for a combination of 15 baseball and football cards. The baseball cards were $\$ 1.50$ each, and the football cards were $\$ 0.50$ each. How much did Nikki spend on the baseball cards?

A $\$ 3.50$
B $\$ 12.00$
C $\$ 4.00$
D $\$ 10.50$

26 A rancher sold 100 calves. He recorded the following data about these animals.

Calves

| Measure of <br> Data | Weight <br> (pounds) |
| :---: | :---: |
| Range | 250 |
| Median | 475 |
| Mean | 505 |
| Mode | 480 |

Which measure of data could be used to calculate the total weight of the calves sold?

F Mean
G Median
H Mode
J Range

27 The Texas state flag is rectangular and has a width-to-length ratio of $2: 3$. Which of the following can be used to find $l$, the length of a Texas state flag with a width of 28 inches?

A $2+28=3+l$

B $\quad \frac{2}{28}=\frac{l}{3}$
C $\frac{2}{3}=\frac{28}{l}$

D $2 \cdot 28=3 \cdot l$

28 Mai earns a salary of $\$ 200$ per week plus an additional $5 \%$ commission on her sales. If Mai's weekly salary increases by $\$ 25$ and her commission increases to $6 \%$, how much will she earn if her weekly sales are $\$ 2,500$ ?

F $\$ 325.00$
G $\quad \$ 375.00$
H $\$ 525.00$
J $\$ 700.00$

29 The Sundown Parking Garage charges \$5.00 to park a car for the first hour and $\$ 0.75$ for each additional hour or part of an hour after the first hour. What is the total charge for parking a car for 4 hours 42 minutes in this garage?

A $\$ 5.75$
B $\$ 6.50$
C $\$ 7.25$
D $\$ 8.00$

30 Mr. Jones wants to install new countertops on his 2 kitchen counters. The drawing below shows the dimensions of the counters.


What is the least amount of material needed to cover the tops of both kitchen counters?

F $\quad 54 \mathrm{ft}^{2}$
G $45 \mathrm{ft}^{2}$
H $39 \mathrm{ft}^{2}$
J $6 \mathrm{ft}^{2}$

31 Several stores are having sales. The prices are reduced by $62.5 \%, \frac{2}{3}, 75 \%, \frac{1}{2}$, and $\frac{7}{10}$. Which list shows the price reductions from greatest to least?

A $75 \%, 62.5 \%, \frac{1}{2}, \frac{2}{3}, \frac{7}{10}$
B $75 \%, \frac{7}{10}, \frac{2}{3}, 62.5 \%, \frac{1}{2}$
C $75 \%, \frac{7}{10}, 62.5 \%, \frac{1}{2}, \frac{2}{3}$
D $75 \%, \frac{7}{10}, 62.5 \%, \frac{2}{3}, \frac{1}{2}$

32 The table below shows a relationship between $x$ and $y$.

| $x$ | $y$ |
| :---: | :---: |
| 0 | 3 |
| 1 | 8 |
| 3 | 18 |
| 4 | 23 |
| 6 | 33 |

Which equation best represents this relationship?

F $y=x+3$
G $y=3 x$
H $y=5 x-3$
J $y=5 x+3$

33 Mrs. Gonzáles wants to string lights along both diagonals of a rectangular window, as shown below.


What is the minimum length of lights Mrs. Gonzáles will need?

A 5 ft
B 7 ft
C 10 ft
D 14 ft

34 On Monday Mandy bought a CD for $40 \%$ off the regular price of $\$ 16.00$, not including tax. The next day the CD that Mandy had bought was marked down to $65 \%$ off its regular price. How much more money would Mandy have saved, not including tax, if she had waited until Tuesday to buy the CD?

F $\quad \$ 4.00$
G $\quad \$ 6.40$
H $\$ 9.60$
J $\$ 10.40$

35 Which ordered pair is located in Quadrant IV?


A $(-2.5,4.5)$

B $\quad\left(0,-2 \frac{3}{4}\right)$

C $(-1.65,-1.55)$

D $\left(2 \frac{1}{2},-1 \frac{1}{2}\right)$

36 Mrs. Micelli placed a picture of an equilateral triangle on an overhead projector in her math class. The overhead projector dilated the triangle's image on the screen by a scale factor of 3.5. If the length of each side of the actual triangle is 5 centimeters, what is the length of each side of the dilated triangle on the screen?

F $\quad 175 \mathrm{~cm}$
G $\quad 17.5 \mathrm{~cm}$
H 8.5 cm
J 3 cm

37 Fiona has a bag containing 6 red, 8 blue, 5 green, 9 yellow, and 2 white marbles that are all the same size and shape. What is the probability of randomly choosing a white marble on the first pick, replacing it, and then randomly choosing a green marble on the second pick?

A $\frac{1}{6}$
B $\frac{1}{15}$
C $\frac{1}{87}$
D $\frac{1}{90}$

38 The table shows the relationship between the weight of a package and the cost of mailing it.

Mailing a Package

| Weight <br> (ounces) | Cost |
| :---: | :---: |
| 1 or less | $\$ 0.37$ |
| 2 | $\$ 0.60$ |
| 3 | $\$ 0.83$ |
| 4 | $\$ 1.06$ |
| 8 | $\$ 1.98$ |

Based on the pattern in the table, what will it cost to mail a 13 -ounce package?

F $\quad \$ 3.04$
G $\quad \$ 2.99$
H $\$ 3.13$
J $\$ 4.81$

39 This Venn diagram is used to classify counting numbers according to a set of rules.


Which one of the following numbers belongs in the region of the diagram marked by the question mark?
A 45
B 50
C 60
D 65

40 Which equation can be used to find $m$, the number of minutes in $h$ hours?

F $m=60-h$
G $\quad m=h+60$
H $m=h \div 60$
J $m=60 h$

41 Sharon played an electronic game. There were 15 questions, of which she answered 3 incorrectly. At this rate, how many questions should Sharon expect to answer incorrectly if she answers a total of 135 questions?

A 45
B 27
C 9
D 5

42 Mrs. Díaz told her math class that a particular rectangle has a perimeter of 36 units and an area of 65 square units. Which of the following could be the dimensions of the rectangle?

F 2.5 units by 26 units
G 4 units by 9 units
H 5 units by 13 units
J 6.5 units by 11.5 units

43 Anthony helps his father with his lawn-mowing service. His father charges from $\$ 25.00$ to $\$ 50.00$ per lawn depending on the size of the lawn to be mowed. Last Saturday, Anthony and his father spent $6 \frac{1}{2}$ hours mowing 3 lawns. If Anthony's father actually charged $\$ 25.00$ for the smallest lawn and $\$ 50.00$ for the largest lawn, about how much could Anthony's father have charged for all 3 lawns?

A $\$ 75$
B $\$ 95$
C $\$ 110$
D $\$ 150$

44 The scatterplot below shows the amount of time a piano student spends practicing a song and the number of incorrect notes he plays while performing that song.

## Piano Practice



Which statement best describes the relationship shown in the scatterplot?
F As the time spent practicing increases, the number of incorrect notes played remains constant.
G The greater the time spent practicing, the fewer the number of incorrect notes played.
$\mathbf{H}$ There is no relationship between the time spent practicing and the number of incorrect notes played.

J The greater the time spent practicing, the greater the number of incorrect notes played.

45 A ladder that is 13 feet long leans against a building. The bottom of the ladder is 5 feet away from the base of the building. How far up the side of the building does the ladder reach?

A 18 ft
B 16 ft
C 12 ft
D 8 ft

46 The graph below shows the growth rate of a human fingernail.

Fingernail Growth


Based on the information in the graph, which best represents the number of millimeters a fingernail grows in 25 days?
$\begin{array}{ll}\text { F } & 3.1 \mathrm{~mm} \\ \text { G } & 3.6 \mathrm{~mm} \\ \text { H } & 4.1 \mathrm{~mm} \\ \text { J } & 4.6 \mathrm{~mm}\end{array}$

47 To cover his bulletin board, Mr. Adams needs $1 \frac{1}{2}$ yards of fabric and $6 \frac{1}{4}$ yards of trim. If the fabric costs $\$ 2.79$ per yard and the trim costs $\$ 1.19$ per yard, which equation can be used to find $c$, the total cost of covering the bulletin board?

A $\quad c=(2.79+1.5)+(1.19+6.25)$
B $\quad c=(2.79 \cdot 1.5)+(1.19 \cdot 6.25)$
C $\quad c=(2.79+1.5)-(1.19+6.25)$
D $\quad c=(2.79 \cdot 1.5)-(1.19 \cdot 6.25)$

48 Mr. and Mrs. Lee brought their 2 children, Cooper and Erin, to a museum. Only Mr. Lee received a discount on his ticket. The table below shows the admission prices at the museum.


Which person's admission price can be found without any other information?
F Mrs. Lee
G Mr. Lee
H Cooper
J Erin

49 A store sells potatoes in 5-pound bags for $\$ 2.29$. Which of the following bags of potatoes would be the same price per pound?

A A 20-pound bag for $\$ 8.80$
B A 2-pound bag for $\$ 1.02$
C A 10-pound bag for $\$ 4.58$
D A 7-pound bag for $\$ 3.01$

Melody made a solid figure by stacking cubes. The solid figure is shown below.


Which drawing best represents a front view of this solid figure?
F

Front

G

Front
H


Front


Front

Page 30

## READING

Page 31

At 804 feet long (the length of nearly three football fields), the Hindenburg was the largest airship ever built. It was a rigid airship, meaning that its frame was solid, not inflatable like a balloon or a blimp. On May 6, 1937, the Hindenburg was scheduled to land in Lakehurst, New Jersey. Hundreds of people eagerly awaited their first glimpse of the passenger-carrying airship.

## The Hindenburg

 window at green fields that had been recently washed by rainstorms. She and her father were traveling much too slowly to satisfy her. Why wouldn't this car move? The Hindenburg, which she was on her way to see, could travel over 80 miles an hour. She doubted this car had ever gone over 40, and she was impatient to make it to Lakehurst Naval Air Station, where the Hindenburg would land. at the Trenton (N.J.) Register, where he was the senior reporter. But Leanna had no such position. She had won the right to cover the docking of the airship Hindenburg by entering a contest at her high school. The school newspaper had offered to pay the expenses for the student who made the most credible case for attending the Hindenburg landing. In her essay Leanna had explained that her two loves were science and journalism, and reporting on the airship would be a great way for her to combine the two."Why should the Germans be the only ones with a magnificent craft like the Hindenburg?" she had written. "We have scientists here in the United States who could create something even more wonderful if we committed ourselves to the task. American scientists are as smart as German scientists!"

6
Finally Leanna's father pulled up to the gate at Lakehurst. Out of habit he started to reach for his press badge, but Leanna cleared her throat loudly and handed him hers with a smile. Her father winked at her as he handed the special pass to the guard. credentials, which he handed back to Leanna's father.

They drove through the base, and when they neared the landing area, Leanna was taken aback by the huge number of cars already parked and the crowd of people waiting for the ship. She didn't think she had seen this many people even at the state fair. She jotted down a note about the size of the crowd.
"I think our best bet is to sit right here," her father suggested as he parked the car. "You can climb up on top of the car if you want."

Leanna thought they should try to get closer, but she decided to trust her father's instincts. If he thought this was the best place to get the story, it probably was.

For the next few minutes, Leanna scribbled ideas and chewed her pencil. When she heard the noise of the crowd rise suddenly, she looked in the direction of the Atlantic Ocean, which the Hindenburg had crossed many times.


The Hindenburg was the largest airship ever built.
From far away the ship was only a dark spot in a twilight sky, but as it neared, it began to take shape. At first Leanna thought that it looked rather like a cigar, but then she could see that the nose was not blunt but narrowed slightly. She knew the pointed nose helped the craft move through the air with less resistance. Eventually Leanna saw its entire length. It was grand. "Sleek" and "powerful" she wrote down on her pad. She wrote "like a
fish" as she noticed the four giant fins rising around the ship's rear section. The ship was impressive but not beautiful, she thought. Where the ship's lights illuminated its body, Leanna could see rough seams.
"I guess those fins are used to steer the ship," her father said, pointing.

Suddenly a ball of light erupted exactly where her father was pointing. Leanna thought at first that people aboard the craft must be taking photographs with large cameras and flashbulbs. But in an instant she realized she was wrong. She was not seeing light but fire. The Hindenburg was burning!

She looked at her father in horror. Always the newsman, he had grabbed his camera from the backseat of the car and was busy adjusting the lens. He paused for a second to reassure her. "We're safe back here," he promised. "Don't think about it. Just write. I'm getting the pictures." She felt sick about reporting a tragic event, but she knew his instincts were right. She started to write down everything she saw and heard.

For the next several moments, chaos reigned. Engulfed in flames, the back end of the ship fell first, and then the front end collapsed toward it. Crumpling to the ground, the ship looked as if it had suddenly become tired of flying. The people on the ground closest to the inferno ran to escape the heat and falling debris. Though the evening breeze blew from behind Leanna and kept most of the heat away, she could still feel the air temperature rising. Several times a charred piece of metal or fabric landed near the car. The smell sickened her.
"It will burn forever," Leanna thought. She knew the hydrogen gas that kept the airship aloft was highly flammable. She heard sirens wailing as fire trucks began to arrive, but she didn't expect the firefighters to be able to do anything until all the fuel was burned. To Leanna it seemed like putting out a forest fire with a garden hose.

After several hours Leanna and her father climbed numbly into their car. Images of the tragedy haunted Leanna's thoughts. It all seemed too immense to comprehend. She wanted to go home and sleep forever, but she knew she would not rest for a long time. She had a story to write.

1 By telling this story from Leanna's point of view, the author helps the reader understand -

A how the Hindenburg disaster affected American children

B why Leanna's father was a respected newspaper reporter

C what it feels like to witness a tragic event
D why Leanna is so interested in science and journalism

2 The reader can conclude that Leanna -
F will design her own airship someday
G admires her father's skill as a reporter
$\mathbf{H}$ hopes to be a scientist when she is older
J wishes she had not won the essay contest

4 Which is the best summary of this story?
F Leanna and her father admire the Hindenburg as it prepares to land. As it Hindenburg as it prepares to land. As it
gets closer, she thinks she sees passengers taking pictures with flashbulbs. To her surprise, she soon realizes that the airship is on fire. The fire begins to spread, and after a few seconds the Hindenburg crashes to the ground.
G Leanna writes an essay about why she
should attend the landing of the famous airship Hindenburg. In her essay she writes that American scientists are as intelligent as German scientists, and she wonders why America does not have its own large flying machine. She thinks the United States should commit itself to building something even more wonderful.

H After winning a school contest to write a story about the Hindenburg, Leanna travels with her father to the town of Lakehurst to see the landing of the airship. Upon its arrival, however, the airship catches on fire. While her father captures the terrifying scene with a camera, Leanna records her impressions on paper.
J Leanna wins an essay contest to cover the Hindenburg's landing. As she and her father drive to Lakehurst, Leanna worries that she won't arrive in time and wishes that her father would drive faster. When that her father would drive faster. When
they finally arrive, Leanna takes notes about the size of the crowd gathered to
welcome the huge airship and about the about the size of the crowd gathered to
welcome the huge airship and about the Hindenburg's sleek appearance.
r

3 What is paragraph 12 mainly about?
A How the lights on the Hindenburg worked
B The Hindenburg's four giant fins
C How the Hindenburg operated
D The Hindenburg's appearance

5 In paragraph 1, the author establishes a mood of -

A appreciation
B anticipation
C uncertainty
D confidence

6 Paragraph 4 is important to the story because
it -

F explains why the Hindenburg is such an important news story
G gives details about what Leanna expects to see at the Hindenburg's landing

H explains why Leanna is writing a story about the Hindenburg
J describes what Leanna plans to write in her story about the Hindenburg

7 Which sentence from the story supports the idea that Leanna has learned that being a journalist can be challenging?

A They drove through the base, and when they neared the landing area, Leanna was taken aback by the huge number of cars already parked and the crowd of people waiting for the ship.
B For the next few minutes, Leanna scribbled ideas and chewed her pencil.
C In her essay Leanna had explained that her two loves were science and journalism, and reporting on the airship would be a great way for her to combine the two.
D It all seemed too immense to comprehend.

8 Look at this chart of information from the story.

| Cause | Effects |
| :---: | :---: |
| The Hindenburg <br> catches fire. | - People race frantically <br> to escape from the <br> burning debris. |
|  | • - Fire trucks begin to |
|  |  |
|  |  |

Which detail belongs on the empty line?
F The airship arrives at Lakehurst Naval Air Station.
G Leanna's father points at a fin on the airship.
H The airship crumples to the ground and collapses.
J Leanna and her father park far from the airfield.

9 Which sentence supports the idea that Leanna trusts her father's judgment?

A Out of habit he started to reach for his press badge, but Leanna cleared her throat loudly and handed him hers with a smile.

B If he thought this was the best place to get the story, it probably was.

C Always the newsman, he had grabbed his camera from the backseat of the car and was busy adjusting the lens.
D Leanna thought that it must be wonderful to be a respected reporter like her father.

10 At the start of the story, Leanna wants the car to go faster because she -

F becomes bored when her father drives slowly
G is apprehensive about visiting Lakehurst Naval Air Station

H wants to reach the naval base in time to see the fire

J does not want to miss her chance to report on the event

11 Read this line from paragraph 17.

## To Leanna it seemed like putting out a forest fire with a garden hose.

What does the author mean by this line?
A The firefighters are not trained to handle such a big fire.
B Leanna feels that the efforts of the firefighters are hopeless.

C The fire has caused the whole area to start burning.

D Leanna has never seen such a large fire.

## The Black Blizzards

During most of the 1930s, the Great Plains region was devastated by drought and high winds. Howling across the Great Plains, these winds whipped up the soil of the over-farmed land and created blizzards of dust. These "black blizzards" were so thick and blinding that daylight seemed more like dusk. Year after year passed without rain, the winds continued to blow, and the dust swirled endlessly. During this terrible period the region came to be called the Dust Bowl.

My notes about what I am reading

But the cause of the dust blizzards wasn't just drought and wind. In a strange way patriotism was partly to blame. During World War I, the U.S. government encouraged farmers to support the war effort by planting more wheat. Farmers were eager to do their part to help feed the soldiers overseas. As farmers increased their production, their own profits increased. Following the invention of the farm tractor, farmers plowed up thousands of acres of grassland and planted wheat. Wheat production skyrocketed, but nature soon turned success into disaster.

When the drought began, farmers didn't realize that by plowing up the grasslands, they had destroyed the land's natural protection against soil erosion. The deep roots of the prairie grasses, which had always held the soil in place, were now gone. As the drought continued, one powerful windstorm after another blew across the prairie. Crops dried up and blew away. The dry topsoil rose in towering clouds and rolled across the land, blotting out the sun.


The dust storms made life miserable for the families of the Great Plains. Drifts of dust blanketed fences, porches, and farm equipment. Even people's homes offered little protection against the thick dust. Inside the houses everything was coated with layers of dirt.

Nothing grew for years. Eventually most of the rich topsoil blew away. As the years passed, all the moisture in the ground evaporated, leaving even the deep roots of trees in powdery dust. Trees and animals died, and unproductive farms left families in poverty and despair.

The Great Plains became a desolate place as thousands of people fled to California to escape the dust and look for work. Most found only low-paying agricultural jobs. But there were those who refused to leave. For these farmers, a reprieve was on its way. A federal program encouraged farmers to utilize new methods that would protect the
precious topsoil from eroding. But revitalizing the soil took time, and the farmers still needed rain. It wasn't until the fall of 1939 that the farmers began to experience the rain they had been so desperate for. After that, rain began to come regularly again. Rain meant more to the farmers than it ever had before. It meant a future.

Photograph courtesy of © Bettmann/CORBIS.

## Dust Bowl Days

I was only nine or ten when the dust began to blow. Living during that time made me grow up quickly. The first time I got caught in a dust storm, I just fell to the ground and started to cry. "Grab my hand, Maggie!" my older sister Leah hollered. She dragged me to a fence and, blinded by the dust, we used it to guide our slow and agonizing steps to the back of the house and then around to the front porch. Without that fence, we never could have found the house.

After each dust storm my family and I spent two or three days cleaning up. Daddy shoveled dirt out of the animal pens and troughs, while Mama, Leah, and I cleaned the house. Well, the house wasn't ever really clean, just less dusty. The dust found its way into every drawer and cupboard, so we spent hours washing all the dishes. We cleaned the walls and ceilings, wiped all the furniture, and swept up buckets of dust. After we cleaned the curtains and bedding, the wash water looked like mud. This process was never ending.

After three years the storms became a worry no one could ignore. With nothing to harvest or sell, Daddy had to take out a loan just to buy food and necessities. All our neighbors were in the same predicament. We didn't think things could get any more desperate. But then came the worst storm of all.

I remember Mama was cooking Sunday dinner when she called out to tell us that dust was on the way. When Leah and I ran outside to pull the clean clothes off the line, we looked up in trepidation. A huge black cloud stretched across the horizon and towered high into the sky. As it swirled toward us, we quickly grabbed the clothes and ran for cover. The dust-filled air turned pitch-black, even inside the house. We covered our mouths with rags, but nothing could keep the dust from filling our lungs. We sat motionless and silent. I think I could have died in that moment. When the storm finally ended, we went outside. Here the silence was even more overwhelming. Our fences, farm equipment, and shrubs had been replaced by a barren gray landscape. Except for the barn and a few tumbleweeds, everything was buried under great drifts of dust. I was too shocked and angry to cry.

My notes about what I am reading


Some people developed dust pneumonia and died. Others didn't think they could survive another great storm. They sold what little they could and left for California, hoping that life would be better there. There were, however, many of us who stayed. Some called us foolish and stubborn. Mama preferred the word hopeful. But Daddy's face never looked very hopeful during those days. Although he was by nature a quiet man, at that time we rarely heard him say a word. His face was always hard and stern. But though he may not have felt too hopeful, he was not one to be defeated.

6 Those awful dust days are over now. But for many years afterward, two recurring dreams took me back to that time. In one dream it is the fall of 1939, and I feel the first trickle of rain on my back. Within minutes I am dancing with joy as the ground beneath me turns from flaky dirt to thick mud. That's the good dream. In the other dream I'm watching my family cough up thick clouds of dust. Suddenly I jerk awake, gasping for air.

[^0]
## Use "The Black Blizzards" (pp. 39-41) to answer questions 12-15.

12 In paragraph 6, the word revitalizing means -

F not disturbing
G making effective again
H not improving
J occurring later

14 In this selection, one of the causes of the dust storms is linked to -

F the planting of prairie grasses
G support for the war
H unproductive farms
J low-paying agricultural jobs

15 Which sentence best shows that farmers at first benefited from plowing up grassland and planting wheat?

A A federal program encouraged farmers to utilize new methods that would protect the precious topsoil from eroding.

B Farmers were eager to do their part to help feed the soldiers overseas.

C As farmers increased their production, their own profits increased.

D During World War I, the U.S. government encouraged farmers to support the war effort by planting more wheat.

## Use "Dust Bowl Days" (pp. 42-43) to answer questions 16-21.

16 What is the most likely reason the author has chosen to tell about something that took place long ago?

F She has vivid memories of a difficult time in her life.

G She has spent her life regretting the past.
$\mathbf{H}$ She has fond memories of the close relationship she had with her family.
J She fears that another catastrophe will happen during her lifetime.

17 Many Dust Bowl farmers borrowed money because -

A they needed equipment to try new farming methods
B they needed extra funds to make the move to California

C they could not afford even basic necessities

D the government was providing loans so farmers could plant more wheat

18 Maggie's older sister is portrayed as being -
F stubborn
G daring
H insincere
J protective

19 Paragraph 2 is mainly about -
A the parts of the house that are the dirtiest
B how the family cleans after a dust storm
C why the family members spend hours washing the dishes
D how long it takes to clean the house

20 Read the dictionary entry below for the word cover.
cover \'kə-vər\n 1. something that is placed or spread over someone 2. a binding for a book
3. something that provides shelter
4. something that screens or disguises

Which definition represents the meaning of cover as it is used in paragraph 4 ?

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

21 The reader can conclude that a life-threatening problem during the Dust Bowl days was -

A applying for loans
B deciding whether to move to California
C trying to keep the house clean
D developing dust pneumonia

## Use "The Black Blizzards" and "Dust Bowl Days" to answer questions 22-24.

22 Which conclusion about the Dust Bowl era is supported by information in both selections?

F People thought moving to California would offer them a brighter future.
G Farmers blamed their difficulties on the invention of the tractor.
H The accumulation of dust caused damage to farm equipment that was not repairable.
J Farmers in the Great Plains region were less skilled than farmers in other areas.

23 What is a major idea found in both selections?
A Ignoring good advice
B Showing one's patriotism
C Giving up easily
D Coping with hardship

24 How is the author's approach to writing "The Black Blizzards" different from the author's approach in "Dust Bowl Days"?

F "The Black Blizzards" presents factual information in a general way, while "Dust Bowl Days" focuses mainly on one person's experience.
G "The Black Blizzards" aims to educate readers about the period, while "Dust Bowl Days" tries to gain the reader's sympathy for people who lived during the period.

H "The Black Blizzards" was probably written for a magazine, while "Dust Bowl Days" was probably written for a history textbook.

J "The Black Blizzards" is meant to warn people about upsetting the balance of nature, while "Dust Bowl Days" is meant to emphasize what has been learned about farming as a result of past experiences.

# Read this selection. Then answer the questions that follow it. 

Marshall "Major" Taylor (1878-1932) was the first African American world-champion cyclist. Turning professional at the age of 18, he set many records throughout the United States, Europe, and Australia.

## Major Taylor

 I'd seen before. He thought he was going to knock me off my course, make me crash, and ultimately, make me fail. When he looked at me, all he saw was an old black face. The manuscript for the book I had written was in his hands. He just didn't know yet that he was dealing with a man who was accustomed to facing many obstacles.2 "Yes, Mr....," the publisher began.
"Just call me Major," I said. "Everyone else does."
"Excuse me, were you in the military?" he asked. When I smiled at him, the man looked down at his hands. He knew I'd realized he hadn't read my book. If he had, he would have known about my name.
"One of my first jobs was performing bicycle tricks outside a bike shop in Indianapolis," I said. "The owner, Mr. Tom Hay, had me dress up in a military uniform to attract more attention to the store. The people who used to come by and watch me gave me the
 nickname Major. It just stuck. After I started racing professionally, people had a bunch of other names for me. Some of the nicknames, like the 'colored cyclone,' referred to my race. I never much cared for those names. I always wanted to win because I was the best, not because of my color."

6 I knew I had his attention when the man leaned back and scratched his chin while he looked at me. He was sizing me up, trying to decide whether I was worth his time. Men I raced used to do that at the starting line. They'd stare at me and then at my bike. They'd be thinking about the races I had won, trying to think of ways to defeat
me. I never paid much attention. My job was to race against them and win.

The publisher leaned forward and placed his elbows on the desk that separated us. "I don't imagine that winning was so easy, even if you were the best."

When I shook my head, it was partly to clear the bad memories, the kicks to me or my bike, the groups of riders who had surrounded me and not allowed me to move ahead. I tried to forget the taunts and the nasty remarks of the crowds. I didn't want to think of the officials who took away my victories even after I had clearly crossed the finish line first, or the competitor who knocked me off my bike and nearly choked me to death during a race.
"No, it wasn't always easy," I said, "but I'm not the kind of man to complain."
"No, you're just the kind of man who likes to win." At last the man chanced a smile, and I knew that the likelihood of his publishing my book had just increased. The finish line was still a long way off, but at least I knew the possibility of reaching it was there. That possibility was what always kept me going in a race.
"I understand that the racing association wouldn't allow you to join and that membership was required to even enter a race."
"Why, yes," I said, trying to cover the surprise in my voice. I now realized that he must have at least glanced through my manuscript when I dropped it off last week. "The racing association, the League of American Wheelmen, did have a problem with a person of my color racing at first. It caused quite a few misunderstandings. You see, the race promoters wanted me to race because they knew I would draw a big crowd."
"Most of the time for all the wrong reasons, right?"
I had to pause before I answered. Those bad memories were still hard to swallow.
"It's true there were some people who came just to see me lose. There were others who just came to call me names and tell me I could never win."

The man scratched his chin before pointing at me. "But you didn't listen to them?" you're right; I didn't really listen. Some of them were just jealous."
"Wait a minute-they were jealous of you?" the publisher asked, almost too quickly. "Why in the world would they be jealous?"
"Well, at the time a brand-new house cost a few thousand dollars. Because I raced so much in Europe, Australia, and the United States, I made up to $\$ 35,000$ a year."

The man whistled and ran a hand through his dark slick hair. "That's a lot of money, even for now."

21 "Yes, that's true," I said. "More than I have made in a long time. You see, when I climbed off that bike, I became just another black man."


The man shook his head. "And that means defeat. Like today."

Suddenly, the finish line vanished.
"Major, your book is good, and your stories are compelling."
"But . . .," I said it for him.
He had the decency to look a little embarrassed as he replied, "I'm sorry, but it's as simple as making money or not making money. You're a black writer, writing about black concerns. The problem is that the people who buy the books I publish are not black."

27 I could only nod. For him it was as simple as that. For me nothing was ever that straightforward. I took my manuscript and thanked him before I left. I had another appointment with a different publisher that I needed to get to. After all, losing one race didn't mean the season was over.

Major Taylor was unable to find a publisher for his book, The Fastest Bicycle Rider in the World: The Story of a Colored Boy's Indomitable Courage and Success Against Great Odds. In 1929 he paid to have the book published, and he spent the rest of his life trying to sell it.

25 What are paragraphs 6 through 8 mainly about?

A Why officials sometimes took away Taylor's victories

B The poor treatment Taylor experienced as a racer

C How other racers defeated Taylor in competitions
D The reasons the crowds would yell at Taylor

26 Which word best describes the tone in paragraph 27 ?

F Relieved
G Determined
H Angry
J Nervous

27 Why did the race promoters want Taylor to participate in races?

A They knew that they would earn more money from the large crowds.

B They didn't want to pay him for bringing in so many spectators.

C They were afraid that the large crowds would interfere with the race.
D They didn't want the crowds to encourage Taylor's racing career.

28 Which sentence from the selection supports the idea that Taylor was not completely discouraged by the publisher's decision?

F I knew I had his attention when the man leaned back and scratched his chin while he looked at me.

G "No, it wasn't always easy," I said, "but I'm not the kind of man to complain."

H "Because I raced so much in Europe, Australia, and the United States, I made up to \$35,000 a year."
$\mathbf{J}$ After all, losing one race didn't mean the season was over.

29 Look at the web of information from the selection.


Which idea belongs in the empty circle?
A Circumstances That Caused Taylor to Lose Most of His Races
B Reasons Taylor Was Not Allowed in the Racing Association
C Memories Taylor Had of Cycling Competitions
D Reasons the Publisher Wouldn't Buy Taylor's Book

30 Because the story is told from Taylor's point of view, the reader can -

F understand the personal challenges Taylor faced

G realize what it was like to live in the early 1900s

H tell that having a manuscript published is hard work

J recognize the personality of the publisher

31 The reader can conclude that the publisher believed -

A Taylor was not as good a racer as he claimed to be
B people would not enjoy reading about a professional cyclist
C Taylor had not been honest about everything in his book
D white people would not be interested in Taylor's story

32 Read this sentence from paragraph 10 of the selection.

> The finish line was still a long way off, but at least I knew the possibility of reaching it was there.

What did Taylor mean by these words?
F He planned to continue racing until his retirement.
G The meeting was running a lot longer than he had expected.
H There was a slim chance that his book would be published.
J The two men had not yet talked about the book's ending.

33 Taylor thought the publisher had not read his book because the publisher -

A refused to answer any of Taylor's questions

B was not very interested in his story
C did not know why Taylor's nickname was Major
D was unwilling to publish Taylor's book

34 Look at the time line of Taylor's life.

| Worked for a bike shop in Indianapolis | $7$ | Became the first African American professional cyclist |  | $\rightarrow$ | Retired from bike racing and wrote a book |
| :---: | :---: | :---: | :---: | :---: | :---: |

What belongs in the empty box?
F Adopted the name Major Taylor
G Met with publishers about his book
H Published his book and worked to sell it
J Became one of the top cyclists in the world

35 The reader can conclude that Taylor's victories were taken away from him by officials because -

A he did not follow the competition's official rules
B the officials didn't want an African American to win

C other cyclists were threatening to withdraw from races

D the officials thought he was cheating during the races

36 Read the dictionary entry for draw.
draw \'dró $\backslash v$ 1. to mark or lay out; trace 2. to inhale or suck in 3 . to come out even in a contest; tie 4. to bring toward oneself; attract

Which definition best describes the way draw is used in paragraph 12 ?

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

## Race the Sun

 pain. Cassidy could see her father's leg was already starting to swell. "I can't put any weight on it at all." day of their weekend camping trip. They had been hiking up a narrow trail high in the mountains when part of the rocky path had suddenly collapsed, sending her father about 20 feet down the mountainside before he was able to grab hold of a small tree and drag himself back to the trail."I'm not sure," he said wearily. "The cell phone was in my backpack." The backpack had come off during the fall and was now somewhere down the mountain. Because of their remote location, the cell phone was not likely to work, anyway.
"Can you make it back to the truck?" Cassidy asked. The area they were in was inaccessible to vehicles. Their truck was parked at the start of the trail, which was a good two hours away on foot.
"I'm afraid not," he said, wincing. Cassidy could see that her father was in excruciating pain. "Besides, my keys were in the backpack, too."
"Mom might get worried if we don't call later," Cassidy pointed out.
"Maybe," her father said. "But we called this morning, so she probably isn't expecting another call today." Cassidy's mother normally would have been with them, but she ended up having to work over the weekend. For a while Cassidy and her father were silent. "Cassidy," her father said at last, his voice failing to disguise his worry, "you'll have to get help. Do you remember how to get down to the road?"
"I don't know, Dad," she said hesitantly.
"We've hiked these mountains ever since you were able to walk," her father said, looking her in the eyes. "The park ranger station is just a few miles down the road. Somebody should be there. Since there are so many trails in this area, you're going to have to show the rangers where I am." bottle and refilled her canteen. The backpack also contained a light jacket and some sandwiches. said, her face hard as stone.


Cassidy carefully worked her way down the narrow, twisting path. After about an hour she glanced up at the sun high overhead. She and her father had taken all morning to hike up from the main road. She knew she would have to quicken her pace. Cassidy kept her mind on
reaching the road; she knew that once she was there, she could make it to the ranger station. Getting to the station while it was still light was crucial. If she didn't reach the ranger station before dark, she knew that it would be nearly impossible to rescue her father at night. She begged the sun to stop moving.

But the sun continued to sink toward the edge of the mountains as Cassidy made her way down the trail. After an hour she was within sight of the road. The trail became smoother, and she decided to try to run. Her legs quickly grew tired, but stopping to rest, even for a few moments, was out of the question. Before long she reached the road.

The road was a welcome sight for two reasons: the ranger station was nearby, and the path leading there was flat. Cassidy ran even harder. When she reached the ranger station, she was breathless and exhausted.
"Are you O.K.?" the ranger asked when he saw Cassidy.
She stopped to catch her breath. Although the sky still glowed pink, the sun was behind the mountains now, and the day was fading. Cassidy felt a slight chill in the air.

Finally she managed to say, "My dad is on a trail up in McArthur Pass." Cassidy gasped for more air. "He's hurt badly," she sputtered.

The ranger didn't hesitate. "We might still have time for a helicopter lift," he said. "There are a lot of trails up there, though. Can you show me where he is?"

Still trying to catch her breath, Cassidy nodded.

37 In paragraph 5, the word excruciating means the pain was -

A spreading
B fading quickly
C intense
D coming and going

38 What can the reader conclude about Cassidy?
F She doesn't really enjoy hiking in the mountains.

G She is afraid of being alone in the dark.
H She is worried that her mother won't call.
J She is determined to reach her goal.

39 Cassidy's mother will probably not be worried about Cassidy and her father because she -

A doesn't think that hiking is dangerous
B knows that Cassidy and her father are experienced climbers
C won't be expecting them to call again that day
D knows there is a park ranger station located nearby

40 Read the first sentence from a summary of this story.

## Summary of "Race the Sun"

Cassidy's father is injured when the trail he and Cassidy are hiking on collapses in a rock slide.

Which of the following sets of sentences best completes the summary?

F He falls 20 feet down the mountain and struggles to bring himself back up to the trail. He tells Cassidy that he may have a broken leg and other injuries.
G Cassidy leaves her backpack with her father and starts down the trail. She knows she needs to hurry and tries to quicken her pace as she watches the sun slowly go down.

H During the fall her father loses his backpack. His truck keys and cell phone are in the backpack. Her father knows he can't make it back to their truck since his leg might be broken.

J Cassidy must go find help at the ranger station. With the sun beginning to sink, Cassidy knows she must hurry. Though she is tired, Cassidy makes it to the station before dark.

41 What is the tone of paragraphs 15 through 17 ?
A Hopelessness
B Insecurity
C Joyfulness
D Persistence

42 Why does Cassidy give her father her jacket?
F She thinks her father can put it under his injured leg.
G She is trying to make her father comfortable.

H She hopes the jacket will be easy to see from a helicopter.
J She doesn't want the jacket to slow her down on her way for help.

43 Paragraphs 3 through 7 are important to this story because they -

A show that Cassidy is an experienced hiker
B explain why Cassidy must go for help
C describe what happened to the cell phone
D tell why Cassidy's mother remained at home

44 The reader can conclude that Cassidy's father -

F is not a very experienced hiker
G fears that Cassidy was hurt when the trail collapsed
H knows the rangers may not find him without Cassidy's help

J is careless when it comes to hiking safely

45 Cassidy's father reminds her that they have hiked the same mountains most of her life in order to -

A increase her confidence
B let her know she is behaving childishly
C convince her of the seriousness of the situation

D remind her to climb slowly

46 Which idea from the story shows that Cassidy is determined to save her father?

F Cassidy leaves her father the backpack.
G Cassidy realizes the ranger station is close when she reaches the road.

H Cassidy informs the ranger that her father was hurt badly on the trail.
J Cassidy refuses to rest even though she is tired.

47 For Cassidy, the setting sun symbolizes -
A fading hope
B problems ending
C continued pain
D help approaching

48 The most likely reason the author wrote this story is to -

F warn readers of the dangers of hiking in the mountains
G share a story about a girl who helps rescue her father

H persuade readers to go hiking only when it is daylight

J describe how rangers help rescue a girl and her father

Page 61

## SCIENCE

Page 63

Page 64

## FORMULA CHART

| Work $=$ force $\times$ distance | $W=F d$ |
| :--- | :--- |
| Speed $=\frac{\text { distance }}{\text { time }}$ | $s=\frac{d}{t}$ |
| Force $=$ mass $\times$ acceleration | $F=m a$ |
| Weight $=$ mass $\times$ acceleration due to gravity | Weight |
| Density $=\frac{\text { mass }}{\text { volume }}$ | $D=\frac{m}{v}$ |
| $\qquad$Constants $/$ Conversions  <br> speed of light $=3 \times 10^{8} \frac{\mathrm{~m}}{\mathrm{~s}}$  <br> speed of sound $=343 \frac{\mathrm{~m}}{\mathrm{~s}}$ at sea level and $20^{\circ} \mathrm{C}$  <br> $1 \mathrm{~cm}{ }^{3}=1 \mathrm{~mL}$  |  |

[^1]Page 67

## DIRECTIONS

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

## SAMPLE A

Which of the following would be best to use to measure the mass of a mineral sample?

A Meterstick
B Graduated cylinder
C Balance
D Hand lens


The graph above shows the motion of a model train. What was the average speed of the train in meters/second between points B and C? Record and bubble in your answer to the nearest tenth on the answer document.

1 A student finishes an experiment and is left with three empty beakers that held liquids during the experiment. The best lab practice is to -

A leave the beakers exactly as they are for the next student

B turn the beakers upside down to drain in the sink

C wash the beakers and air-dry them on a rack

D take the beakers directly to a rack to dry

1910



2 The photographs above show how a change in climate is affecting the size of Grinnell Glacier in Glacier National Park. Which of the following best explains the change in the glacier between 1910 and $1997 ?$

F Higher average temperatures
G Higher frequency of earthquakes
H Higher total precipitation
J Higher rates of wind erosion


3 A grassland community is pictured above. Grasses are considered -
A secondary consumers
B primary consumers
C decomposers
D producers

4 Which of the following processes helps the body maintain chemical balance?

F Tears washing away dust from the eyes
G Rib bones protecting internal organs
H Hair growing faster in winter months
J Cells using sugar in the blood

6 Which of the following best represents stored potential energy?

F Air leaking from a flat tire
G Stress built up in a rock fault
H Heat given off by a forest fire
J Water flowing through a hose

5 Heavy rains in an aquifer's recharge zone cause rivers and streams to flood. How will this most likely affect the aquifer?

A The total water volume will increase.
B The outflow from natural springs will decrease.

C The water level in the aquifer will decrease.

D The rate of water use by humans will increase.


7 The scale drawings above show two catfish collected from a river. What is the difference in the actual body lengths of these catfish?

A 3 cm
B 9 cm
C 12 cm
D 24 cm

8 Which of these is an example of a chemical reaction?

F A pot of water boiling
G An iron nail rusting
H Corn being ground
J Sugar dissolving in tea



9 Which of the following shows how the plant above would grow if the pot were knocked on its side and left for several weeks?



10 Which letter in this model of a boron atom represents a neutron?
F W
G X
H Y
J Z


11 The single-celled organisms shown above live in water. What is the main function of the structures identified by the arrows?

A Absorbing water
B Removing wastes
C Helping with motion
D Getting food

12 The transfer of carbon that results from burning fossil fuels will most likely affect Earth in the future by -

F raising the average global temperature
G reducing evaporation rates of ocean water
H decreasing the total mass of plant life
J making air transparent to ultraviolet light

13 An experiment is being done to determine how light affects the growth of three different types of pea plants. Peas of each type are planted in several cups, and the cups are labeled X, Y, or Z to show the type of pea planted in each. Some cups are set in each of three locations to receive different amounts of light. Which of the following best shows how the plants should be arranged for the experiment?


Location 1


Location 2


Location 2
Location 1
B


Location 1


Location 2


Location 3


Location 3


Location 3

Location 3

14 Which set of equipment would be used to measure the boiling point of a liquid?

F Balance, thermometer, and stopwatch
G Test tube, hot plate, and balance
H Stopwatch, test tube, and microscope
J Beaker, hot plate, and thermometer

Use the information below and your knowledge of science to answer questions 15-18.

## Cross Section of Rock Layers

A quarry is an open pit from which rock can be obtained by digging, cutting, or blasting. The quarry shown below cuts through several layers of sedimentary limestone rock, labeled W through Z. Some of the rock from the quarry is crushed to make gravel of various sizes. The rock and gravel are used in the construction of buildings and roads. Large diesel machines and trucks remove the rock and gravel and transport it to construction sites.


15 Before the quarry was dug, the land contained more vegetation. What impact has this change most likely had on the local ecosystem?

A Larger predator populations
B A lower number of producers
C A greater number of herbivores
D A smaller amount of available carbon dioxide
Mohs Scale of
Mineral Hardness

| Hardness | Mineral |
| :---: | :--- |
| 1 | Talc |
| 2 | Gypsum |
| 3 | Calcite |
| 4 | Fluorite |
| 5 | Apatite |
| 6 | Orthoclase |
| 7 | Quartz |
| 8 | Topaz |
| 9 | Corundum |
| 10 | Diamond |

16 Both gypsum and limestone are found in the quarry. Limestone has about the same hardness as calcite. A mineral's hardness can be determined from how easily it is scratched by another mineral. In a hardness test, what result will show the difference between gypsum and limestone?

F Fluorite scratches limestone and gypsum.
G Gypsum scratches talc.
H Limestone scratches talc.
J Calcite scratches gypsum.

17 At the quarry, soil was removed to get to the rock layers underneath. Which part of the environment was probably least affected by this soil being removed?

A Air
B Groundwater
C Runoff water
D Plants

18 Diesel fuel is used in the engines of the machines and trucks at the quarry. Which of these is the main energy transformation as the fuel is used by the engines?

F Electrical energy is converted to heat energy.
G Heat energy is converted to potential energy.
H Electrical energy is converted to kinetic energy.

J Chemical energy is converted to kinetic energy.

19 According to the periodic table, which of the following best represents a carbon atom?

A


B


C


D



20 What is the volume of the liquid in the graduated cylinder? Record and bubble in your answer to the nearest milliliter on the answer document.


21 Some data about the atmosphere of Mars are shown above. What conclusion can be made about the ability of humans to breathe Martian air?

A Life support will be needed because the percentage of oxygen is too low.
B It will be impossible to breathe because the percentage of nitrogen is too low.
C Oxygen and nitrogen will make it possible for photosynthesis to produce food.
D Humans will be able to breathe the air because oxygen is present.

| Lightbulb | Volleyball <br> $($ sun $)$ | Tennis ball <br> $($ Earth $)$ |
| :---: | :---: | :---: |



22 The model above is set up to show how a lunar eclipse occurs. What is the greatest limitation of this model?

F The lightbulb is standing straight up instead of tilted on an axis.
G Comparative sizes and distances are inaccurate.
H The shadow is being cast in the wrong direction.
J The heat released is much less than that released by the sun.


23 An engineer measured how much energy a new type of wind turbine generated in locations with different wind speeds. A graph of the results is shown above. What is the best inference about operating the wind turbine at a location with wind speeds ranging from 0 to $8 \mathrm{~km} / \mathrm{h}$ ?

A The turbine can reduce a household's electricity bill.
B The air is too dense to turn the rotor blades of the turbine.
C The wind moves too slowly to generate enough energy.
D Air pollution can be eliminated by using the turbine.

24 A woman running in a marathon requires a constant supply of oxygen to her muscles. Which cells carry oxygen to muscle tissue?

F Artery cells
G Red blood cells
H Nerve cells
J Lung cells


25 In the food web above, which of the following organisms feeds on the largest variety of different producers?

A


B


C


D


26 Evidence suggests that dinosaurs became extinct when a large meteorite struck in the area of the Yucatán Peninsula. Scientists hypothesize that this enormous impact killed all the dinosaurs, even those on the other side of Earth, because the -

F debris thrown into the atmosphere blocked sunlight

G heat flash from the impact immediately vaporized all life-forms
H impact blasted the atmosphere surrounding Earth into space
J intense heat completely boiled away the oceans


27 In the diagram above, at which point are the sound waves being generated?

A R
B S
C T
D V

Before


After


28 In spring 2003 a natural rock outcropping in New Hampshire called the Old Man of the Mountain collapsed. Which of the following most likely loosened the rock and caused it to fall?

F Heat turning sedimentary rock into metamorphic rock
G Water freezing and thawing inside cracks in the rock
H Volcanic activity producing pressure at the rock's base
J Oxygen reacting with iron on the surface of the rock


29 Which of the following is the most reasonable topographic map of the area shown in the picture?


30 For rabbits, having long hair is an advantage over having short hair in environments with -

F high levels of rain
G a large number of competitors
H low temperatures
J few predators


(m)

31 A foam dart is thrown toward a dartboard. The graph represents its motion. At about what speed is the dart traveling when it hits the dartboard, 7 meters from the starting point?

A $6.3 \mathrm{~m} / \mathrm{s}$
B $6.9 \mathrm{~m} / \mathrm{s}$
C $7.2 \mathrm{~m} / \mathrm{s}$
D $7.4 \mathrm{~m} / \mathrm{s}$


32 The picture shows sand used to make a model of a galaxy. In the model, each grain of sand best represents -

F a comet
G a black hole
H an asteroid
J a star

| Element | Number of <br> Protons |
| :---: | :---: |
| T | 7 |
| Q | 15 |
| X | 12 |
| Z | 17 |

33 The table above shows the number of protons in an atom of four different elements. According to the periodic table, which of these elements is a metal?

A T
B Q
C X
D Z

34 The United States consumed about 19 million barrels of petroleum per day in 2000. This rate continues to increase. It is important to develop alternative sources of energy because petroleum -

F will eventually use up all the oxygen needed for human survival

G is being spilled into the ocean faster than it is being used
H fails to store solar energy and contains limited chemical energy
J is a limited source of energy that is almost impossible to renew

## Boiling Points of Some Compounds

| Chemical <br> Formula | Boiling Point <br> $\left({ }^{\circ} \mathrm{C}\right)$ | Temperature <br> Increase <br> $\left({ }^{\circ} \mathrm{C}\right)$ |
| :---: | :---: | :---: |
| $\mathrm{CH}_{4}$ | -162 | - |
| $\mathrm{C}_{2} \mathrm{H}_{6}$ | -89 | 73 |
| $\mathrm{C}_{3} \mathrm{H}_{8}$ | -42 | 47 |
| $\mathrm{C}_{4} \mathrm{H}_{10}$ | -1 | 41 |
| $\mathrm{C}_{5} \mathrm{H}_{12}$ | 36 | 37 |
| $\mathrm{C}_{6} \mathrm{H}_{14}$ | 69 | 33 |

35 The table above shows that the more carbon atoms a compound has, the higher the compound's boiling point. Based on the data in the table, a reasonable estimate of the boiling point of the next compound, $\mathrm{C}_{7} \mathrm{H}_{16}$, is -

A $70^{\circ} \mathrm{C}$
B $99^{\circ} \mathrm{C}$
C $120^{\circ} \mathrm{C}$
D $142^{\circ} \mathrm{C}$

36 Which of the following is least affected by seasonal environmental conditions?

F The pattern in a tiger's fur
G The dropping of tree leaves
H The sprouting of acorns
J The migration of gray whales


37 The diagram shows the orbit of the moon around Earth. Between which two points will the moon appear to change from a new moon to a quarter moon?

A $\quad \mathrm{Q}$ and R
B R and S
C S and T
D T and Q


38 In the picture above, the rocks at the bases of the trees were separated from the cliff face by water freezing and thawing. Which process best describes the breaking of the rock?

F Soil erosion
G Mountain building
H Chemical weathering
J Physical weathering

$$
\begin{aligned}
& \mathrm{CO}_{2}+\mathrm{H}_{2} \mathrm{O}+\text { sunlight energy } \rightarrow \underset{\text { carbon water }}{\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}}+\underset{\text { glucose } \mathrm{O}_{2}}{\text { dioxide }}
\end{aligned}
$$

39 Which molecule in the equation represents food energy made by plants?
A Carbon dioxide
B Water
C Glucose
D Oxygen

(h)

40 The graph shows the movement of a car over time. What is the car's average speed?

F 10 kilometers per hour
G 15 kilometers per hour
H 30 kilometers per hour
J 60 kilometers per hour


41 The picture above shows four varieties of the same species of grass that grow in a prairie ecosystem. Which variety has the best chance of surviving a long period of dry weather?

A Variety 1
B Variety 2
C Variety 3
D Variety 4

42 One of the reactions involved in obtaining pure copper $(\mathrm{Cu})$ from copper-containing rock is

$$
\mathrm{Cu}_{2} \mathrm{~S}+\mathrm{O}_{2} \rightarrow 2 \mathrm{Cu}+\mathrm{SO}_{2}
$$

Which of the following best describes the reaction?

F Copper atoms are used to produce more copper atoms.
G Elements are rearranged into new substances.
H Atoms of other elements are turned into copper atoms.
J Compounds change phase from liquid to gas.

43 Which of the following most promotes chemical weathering in limestone?

A Freezing water
B Blowing wind
C Running water
D Growing roots


44 At which point on the roller coaster will the car have the greatest amount of kinetic energy?
$\begin{array}{cc}\text { F } & \mathrm{W} \\ \mathbf{G} & \mathrm{X} \\ \mathbf{H} & \mathrm{Y} \\ \text { J } & \mathrm{Z}\end{array}$

$\mathrm{G}=$ glossy leaves (dominant trait)
$\mathrm{g}=$ nonglossy leaves (recessive trait)

45 Glossy leaves are smooth and shiny. What percent of offspring from the cross shown above will have glossy leaves?

A $0 \%$
B $25 \%$
C $50 \%$
D $100 \%$

## Guaranteed effective <br> 100\% pure Acetone

Professional-strength nail polish remover

- Removes artificial nails
- Removes polish from natural nails FAST!
- Great for hard-to-remove glitter and glue

INGREDIENTS: Acetone, denatonium benzoate, fragrance

WARNING: Flammable liquid

47 A cosmetics company markets bottles of nail polish remover with the label shown above. A consumer group concluded that the claim that the acetone is $100 \%$ pure is false. What is the most likely reason the consumer group reached this conclusion?

A The acetone has probably dissolved some of the bottle.

B The group has found that other claims by the company are false.

C There are ingredients other than acetone in the nail polish remover.

D Pure acetone is a flammable liquid, as stated on the label.

48 During primary ecological succession, the initial formation of soil helps establish -

$$
\begin{array}{ll}
\mathbf{F} & \text { grasses } \\
\mathbf{G} & \text { mushrooms } \\
\mathbf{H} & \text { shrubs } \\
\mathbf{J} & \text { trees }
\end{array}
$$

Which diagram best represents the type of plate movement that results in mountain building?

B

D



Conclusion: This species of plant grows straight toward light.

50 The picture shows the results of an experiment to investigate the effect of light on plant growth. The conclusion is weakened by the -

F slope of the soil
G color of the light source
H flow of air into and out of the room
J length of time for the experiment

Page 102

## SOCIAL STUDIES

Page 104

## DIRECTIONS

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

## SAMPLE A

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

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

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

So you're the little woman who wrote the book that made this great war!

- Abraham Lincoln to Harriet Beecher Stowe, 1862

1 To which book is President Lincoln referring in the excerpt above?

A Uncle Tom's Cabin
B The Wealth of Nations
C Democracy in America
D McGuffey's Eclectic Reader

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

I have as much muscle as any man and can do as much work as any man. I have plowed and reaped and husked and chopped and mowed, and can any man do more than that?

- Sojourner Truth, speech at Akron, Ohio, 1851

3 According to the excerpt above, with which of the following statements would the speaker most likely agree?

A Prisons should be reformed.
B Women should have equal rights.
C Men should work in agricultural jobs.
D Women should pursue traditional occupations.

2 Among the rights guaranteed by the First Amendment is the right to -

F the free exercise of religion
G keep and bear arms
H due process of law
J a speedy and public trial

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


4 Which of these is the best title for the time line above?
F The Common Man in Jacksonian America
G Events Leading to the Rise of an Industrial United States
H The Creation of Middle-Class America
J Events Leading to the Territorial Growth of the United States

5 The 13 original colonies were primarily located along the -

A Atlantic Ocean
B Gulf of Mexico
C Mississippi River
D Great Lakes

Use the graph and your knowledge of social studies to answer the following question.
U.S. Immigration, 1840-1860


Source: U.S. Census Bureau

6 Which of the following best explains one of the changes in immigration shown on this graph?
F Free housing was offered to immigrants arriving after 1855.
G A famine plagued Ireland between 1845 and 1850.
H The German National Assembly passed a constitution in 1850.
J Labor strikes occurred in Great Britain between 1840 and 1845.

The Louisiana Purchase


7 Which conclusion can best be made by examining the map above?
A The Louisiana Purchase almost doubled the size of the United States.
B France gained control of much of the North American continent.
C The Louisiana Purchase was designated for Native American ownership.
D Both Spain and the United States would share control of the Louisiana Purchase.

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

Civil War Casualties


8 Which of these is a correct interpretation of the information shown above?
F Total Confederate casualties were greater than total Union casualties.
G More Confederate soldiers died of wounds than of disease.
H More than twice as many Union soldiers died of disease than of wounds.
J Fewer soldiers fought for the Union than for the Confederacy.

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

## Excerpt from the Declaration of Independence

[King George III] has obstructed the administration of justice, by refusing his assent [approval] to laws for establishing judiciary powers.

9 Which of the following was included in the U.S. Constitution in order to deal with the grievance expressed above?

A The process for amendment
B The establishment of a chief executive
C The process for territorial statehood
D The establishment of the Supreme Court

10 Belief in the idea of Manifest Destiny was one reason that -

F the United States went to war with Mexico

G transcendentalists established utopian societies

H the Bank of the United States was established

J women organized the Seneca Falls Convention

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

## Cause

Effect


11 Which of the following best completes the diagram above?
A Increase in agricultural production
B Decrease in the slave population
C Enactment of protective tariffs
D Growth of immigration

12 The Nullification Crisis concerned South
Carolina's dissatisfaction with federal policy on -

F transportation
G tariffs
H banking
J immigration

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

## Francis Cabot Lowell's Textile Mills

- Machine production
- Large facilities
- Effective management
- Hired many workers

13 The factors listed above most directly contributed to the increase of -

A industrialization
B subsistence farming
C public education
D homesteading

14 From 1607 to 1609 , only 60 of more than 900 Jamestown colonists survived. One reason for the low survival rate was that -

F the colonists were frequently attacked by Spanish explorers
G the swampy location caused disease to spread
H the colonists endured unexpected flooding
J the punishment for all criminal offenses was execution

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

## Provisions of the Northwest Ordinance of 1787

1. Congress will appoint a resident governor, a secretary, and three judges to rule the territory.
2. When the territory has 5,000 free adult males, it may elect a legislature and send a nonvoting delegate to Congress.
3. When the territory has a total free population of 60,000, it may write a constitution and submit it to Congress for approval.


15 Which step best completes the process above?
A The territory may decide to legalize slavery within its borders.

B The territory may be admitted as a state.
C The territory must allow women the right to vote.

D The territory will be required to pay export tariffs.

16 One reason that the Mayflower Compact was written was to establish -

F principles of government for the new colony

G a charter for a joint-stock company
H strict military control over the colonists
J a system of trade with other colonies

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

We think they [people of African ancestry] are . . . not included, and were not intended to be included, under the word "citizens" in the Constitution, and can therefore claim none of the rights and privileges which that instrument provides for and secures to citizens of the United States.

17 This excerpt is taken from the landmark U.S. Supreme Court case -

A Dartmouth College v. Woodward
B Charles River Bridge v. Warren Bridge
C Marbury v. Madison
D Dred Scott v. Sandford

18 Which of these was a factor that led to the development of plantation agriculture in the South?

F The climate allowed planters to raise profitable cash crops.
G Tariffs permitted planters to make a greater profit.
H The federal government paid a bonus to cotton producers.
J Canals carried crops to western markets.

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

## Events of the American Revolution

- 1776-Washington and his troops flee New York.
- 1777-Americans win the battle at Saratoga.
- 1780—The British capture Charleston.
- 1781-???
- 1783-Americans and the British sign the Treaty of Paris.

19 Which of the following events completes the time line?

A British surrender at Yorktown.
B Americans hold Stamp Act Congress.
C British occupy Fort Ticonderoga.
D Americans issue the Declaration of Independence.

20 Why did Elizabeth Cady Stanton oppose the 15th Amendment to the U.S. Constitution?

F Public education was not addressed.
G Women were still excluded from voting.
H Slavery was still allowed in the territories.

J Native Americans gained citizenship.

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

Without freedom of thought, there can be no such thing as wisdom; and no such thing as public liberty without freedom of speech.
-Benjamin Franklin, 1722

21 Which statement best summarizes the ideas expressed above by Franklin?

A The government must inform the people of its laws.

B The government can make treaties with other nations.

C Citizens can impeach government officials.

D Citizens must be allowed to discuss ideas with one another.

22 Which 1620 document was signed by male members of the community to establish a government for settlers at Plymouth?

F The Articles of Confederation
G The Mayflower Compact
H The Fundamental Orders of Connecticut
J The Albany Plan

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

| The people will <br> elect officeholders. <br> Officeholders will <br> make laws. |
| :--- | :--- |$\quad$| Officeholders will |
| :--- |
| conduct government |
| on behalf of the |
| people. |

23 What would be the best title for the diagram above?
A The Policy of Mercantilism
B The Importance of the Divine Right of Kings
C Constitutional Monarchy in the United States
D A Plan for Representative Government

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

- Purchase of the Louisiana Territory
- Rapid population growth in the West
- Advances in transportation
- Strong sense of nationalism

24 Which of the following does this list best describe?

F The temperance movement
G Manifest Destiny
H The plantation system
J Monroe Doctrine

25 During the mid-1800s the expanding U.S. economy required better methods of communication. Communications were improved significantly by Samuel Morse's invention of the -

A typewriter
B telephone
C telegraph
D phonograph

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


26 How did the delegates to the Constitutional Convention settle the issue described above?
F Three-Fifths Compromise
G New Jersey Plan
H Virginia Plan
J Mason-Dixon Line

27 President Andrew Jackson's policy toward Native Americans primarily consisted of -

A reaching agreement with the courts concerning Native American territory

B removing and relocating Native Americans

C paying fair market value for Native American lands

D building schools and creating employment opportunities for Native Americans

28 The Battle of Vicksburg was important in the Civil War because it -

F allowed the Confederate army to seize Washington, D.C.

G broke the Union blockade along the Gulf of Mexico

H enabled the Confederate army to seek French assistance

J gave the Union army control of the Mississippi River

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


29 The diagram above shows the compromise that helped guarantee the ratification of the U.S. Constitution by -

A providing a plan for representation of both large and small states
B taking power away from the national government
C creating new boundaries for both large and small states
D allowing local governments to determine matters of representation

30 Patrick Henry, an Anti-Federalist, opposed ratification of the U.S. Constitution mainly because he thought it did not sufficiently -

F support freedom for slaves
G criticize abuses of the monarchy
H encourage trade with foreign powers
J guarantee individual rights

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


31 Which of the following best completes the diagram?
A Amendment of the U.S. Constitution
B Jurisdiction of the U.S. Supreme Court
C Regulation of interstate commerce
D Election of the president

32 The most important result of the Battle of Saratoga was that -

F American leaders were forced to surrender and were arrested for treason

G Spain entered the war and provided supplies to Great Britain

H Britain released captured American sailors and returned American merchant ships

J France officially recognized and formed an alliance with the U.S. government

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

- Graduated from the U.S. Military Academy at West Point
- Fought in the Mexican War
- Served as leader of Confederate troops
- Defeated Union troops at the battles of Chancellorsville and Fredericksburg
- Surrendered at Appomattox Court House

33 Which Civil War leader is described in the box above?

A Robert E. Lee
B Ulysses S. Grant
C Abraham Lincoln
D Jefferson Davis

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

## Excerpt from Washington's Farewell Address

The great rule of conduct for us in regard to foreign nations is in extending our commercial relations, to have with them as little political connection as possible. . . . It is our true policy to steer clear of permanent alliances with any portion of the foreign world. . . .

34 Which of the following best reflects the point of view expressed by President George
Washington in the excerpt above?
F Foreign nations are a military threat.
G Permanent alliances are part of a nation's foreign policy.
H Foreign nations profit from importing goods.

J Permanent alliances with foreign nations should be avoided.

The Tariff of 1832


35 In the cartoon above, which regional group is represented by the man with the tattered clothes on the left?

A Eastern bankers
B Southern planters
C Northern merchants
D Western miners

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

Speaker 1: The government must give accused persons the right to a quick and public trial.

Speaker 2: The government should not force citizens to house soldiers in their homes.

Speaker 3: People should be allowed to peacefully protest actions of the government.

Speaker 4: People should not be deprived of their property without fair payment.

36 Which speaker is voicing a right guaranteed by the First Amendment to the U.S.
Constitution?
F Speaker 1
G $\quad$ Speaker 2
H Speaker 3
J Speaker 4

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

Spanish and English Exploration in the Americas


37 Which statement is best supported by this map of 16th-century European exploration?
A England was the first European power to navigate the Great Lakes.
B Spain financed numerous journeys to Canada.
C England sent the first European settlers to the Southwest.
D Spain sent more expeditions than England to the interior regions of the Americas.

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

A national debt if it is not excessive will be to us a national blessing: it will be a powerful cement of our union.

- Alexander Hamilton, 1781

38 How does the excerpt above show Hamilton's bias in favor of a national debt?

F By calling on states to assume the debt
G By supporting taxation without representation

H By describing the debt as a strengthening force

J By promoting western land sales

39 The 13th, 14th, and 15th Amendments to the U.S. Constitution -

A brought immediate equality to Native Americans

B established a process for the admission of western states into the Union

C created new congressional districts
D granted civil rights primarily to African Americans

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


40 Which of these is the best title for the diagram above?

F The Development of Triangular Trade
G The Development of the Plantation System
H The Development of Protective Tariffs
J The Development of Steel Mills

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

## Excerpt from Abraham Lincoln's Second Inaugural Address

With malice [hatred] toward none, with charity for all, . . . let us strive on to . . . bind up the nation's wounds, to care for him who shall have borne the battle and . . . to do all which may achieve and cherish a just and lasting peace among ourselves. . . .

41 The speech above shows that Lincoln believed that the South should -

A be allowed to continue the practice of slavery

B pay for the damages suffered by the Union
C receive fair treatment after the war
D be punished for seceding from the Union

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

## Economic Products of the Colonies



42 Which of these statements is best supported by the map?
F Rice was a more profitable crop for the New England colonies than wheat.
G The economy of the middle colonies was based on rice farming.
H The economy of the New England colonies was based on indigo production.
$\mathbf{J}$ Indigo production was more important to the economy of the southern colonies than lumber.

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

## Quakers

- Religious tolerance
- Pacifism
- Abolitionism
- Temperance
- Women's rights

43 Based on the information in the list above, which statement can be made about the Quakers?

A Most Quakers were southern slaveholders.

B Many Quakers made significant contributions to reform movements.

C Many Quakers supported the U.S. entry into the Mexican War.

D Most Quakers supported the use of alcohol.

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

- Immigrated to North America
- Became a Revolutionary writer and philosopher
- Wrote the influential pamphlet "Common Sense"
- Wrote a series of essays titled Crisis
- Supported the French Revolution

44 Which prominent Revolutionary figure is described above?

F Samuel Adams
G Thomas Paine
H Patrick Henry
J Benjamin Franklin

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

Education, then, beyond all other devices of human origin, is the great equalizer of the conditions of men, -the balance-wheel of the social machinery.

- Horace Mann, Twelfth Annual Report of the Massachusetts State Board of Education, 1848

45 In the excerpt above, Mann shows his support for -

A women's suffrage
B prison reform
C public schools
D improved sanitation

Use the excerpt and your knowledge of social studies to answer the following question.
[My work in the mills] is very hard indeed and sometimes I think I shall not be able to endure it. I never worked so hard in my life but perhaps I shall get used to it. I shall try hard to do so for there is no other work that I can do unless I spin and that I shall not undertake on any account.

- Mary Paul, Lowell, Massachusetts, November 5, 1848

46 This portrayal of factory life is considered a primary source because it is from -

F a description in a textbook
G an account by a mill worker
H a description of a mill town
J an article in a newspaper

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

Important Events, 1804-1828
1804- Size of minimum land
purchase reduced to 160
acres by Land Act
1816-Second Bank of the United
States chartered by Congress
1819—Beginning of Panic of 1819
1824 -American System developed
by Henry Clay
1828 - Congress passes the "Tariff
of Abominations"

47 The information above shows that during the years 1804-1828, the United States faced many issues related to -

A conflicts over religion
B presidential elections
C problems in foreign relations
D economic development

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


Courtesy of the Charleston Museum, Charleston, S.C. All Rights Reserved.

48 The artifact above is an example of a badge most likely worn by a -

F plantation owner
G former slave
H colonial governor
J recent immigrant

TARS GRADE 8 APRIL 2006


[^0]:    Photograph courtesy of © Bettmann/CORBIS.

[^1]:    Metric ruler can be found on the separate formula chart.

