

# ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

## Released Item Booklet

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Arkansas Augmented  
Benchmark Examination

**APRIL 2010  
ADMINISTRATION**

**GRADE**

**7**

**Arkansas Department of Education**

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## PART I Overview—2010 Augmented Benchmark Grade 7

The criterion-referenced tests implemented as part of the **Arkansas Comprehensive Testing, Assessment, and Accountability Program** (ACTAAP) are being developed in response to Arkansas Legislative Act 35, which requires the State Board of Education to develop a comprehensive testing program that includes assessment of the challenging academic content standards defined by the Arkansas Curriculum Frameworks.

As part of this program, all Grade 7 students in Arkansas public schools participated in the *Grade 7 Augmented Benchmark Examination* in April 2010.

This *Released Item Booklet* for the *Grade 7 Augmented Benchmark Examination* contains test questions or items that were asked of students during the April 2010 operational administration. The test items included in Part II of this booklet are those items that contributed to the student performance results for that administration. **Please make note that only 50% of the 2010 criterion-referenced test items are released in this booklet.**

Students were given approximately two and a half hours each day to complete assigned test sessions during the five days of testing in April 2010. Students were permitted to use a calculator for the Mathematics items (both multiple choice and open response), with the exception of questions 1–4 in this *Released Item Booklet*. Students were also supplied with a reference sheet to be used during the Mathematics sessions so that all students would have equal access to this information during testing. (See the reference sheet on page 13 of this booklet.) All of the Mathematics, Reading, Writing, and Science multiple-choice items within this booklet have the correct response marked with an asterisk. The open-response questions for Mathematics, Reading, Science, and the prompt for Writing are listed with scoring guides (rubrics) immediately following. These rubrics provide information on the scoring model used for each subject, with the scoring model for Writing defining the overall curricular and instructional link for that subject with the Arkansas *English Language Arts Curriculum Framework*. The domain scoring model, implemented within Arkansas for a number of years, illustrates the appropriate instructional approaches for Writing within the state.

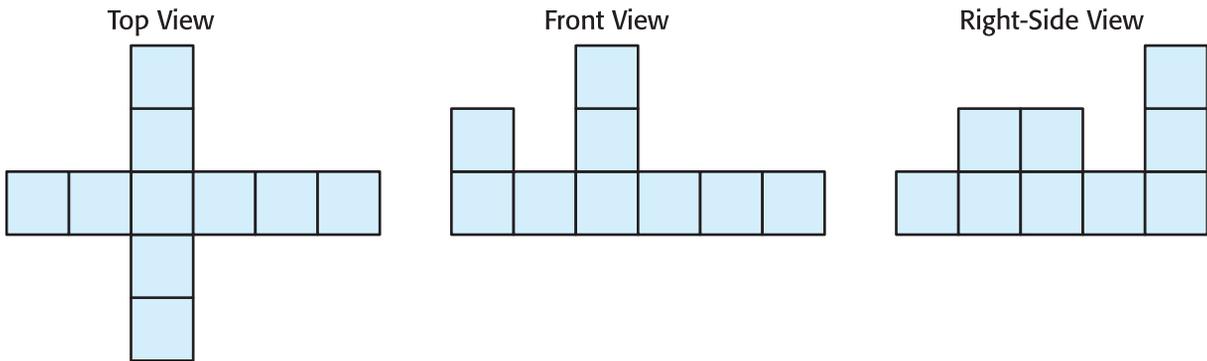
The development of the *Grade 7 Augmented Benchmark Examination* was based on the Arkansas Curriculum Frameworks. These frameworks have common, distinct levels: *Strands*, which are broad concepts, *Content Standards* within each Strand, and *Student Learning Expectations* within each Content Standard. Abridged versions of the *Arkansas Mathematics Curriculum Framework*, *Arkansas English Language Arts Curriculum Framework—Reading Strand*, *Arkansas English Language Arts Curriculum Framework—Writing Strand*, and *Arkansas Science Curriculum Framework* can be found in Part III of this booklet. It is important to note that these abridged versions list only the predominant Strand, Content Standard, and Student Learning Expectation associated with each item. However, since many key concepts within the Arkansas Curriculum Frameworks are interrelated, in many cases there are other item correlations or associations across Strands, Content Standards, and Student Learning Expectations.

Part III of the *Released Item Booklet* also contains a tabular listing of both released and non-released items, aligned to the Strand, Content Standard, and Student Learning Expectation that each question was designed to assess. The multiple-choice and open-response items found on the *Grade 7 Augmented Benchmark Examination* were developed in close association with the Arkansas educational community. Arkansas teachers participated as members of Content Advisory Committees for each subject area, providing routine feedback and recommendations for all items. Part III of the *Released Item Booklet* provides Arkansas educators with specific information on how the *Grade 7 Augmented Benchmark Examination* items align or correlate with the Arkansas Curriculum Frameworks to provide models for classroom instruction.

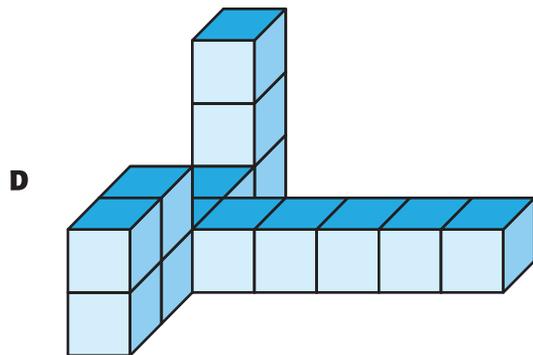
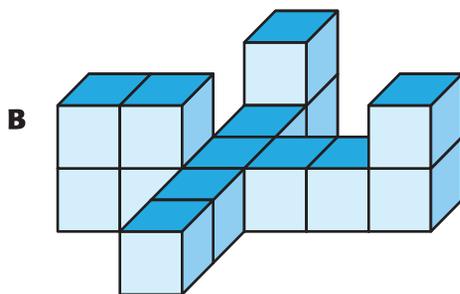
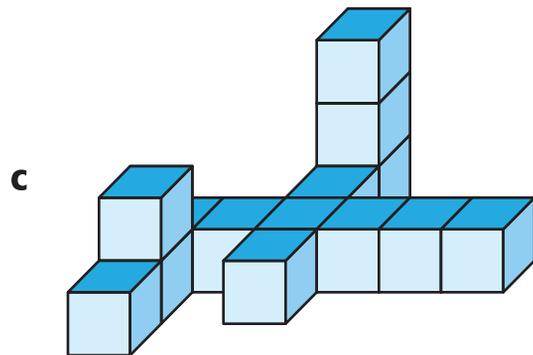
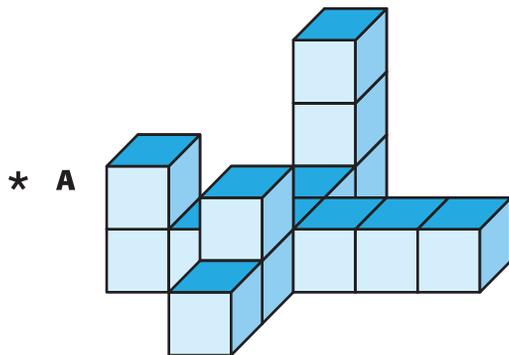
CALCULATOR NOT PERMITTED—ITEMS 1–4

1

All the following are views of the same stack of 14 cubes.

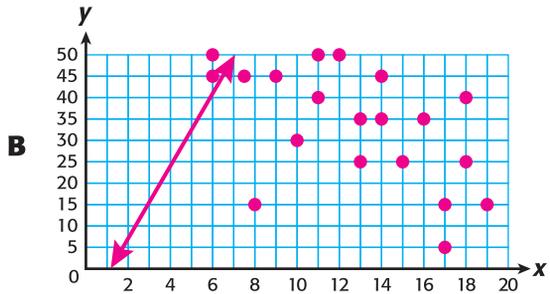
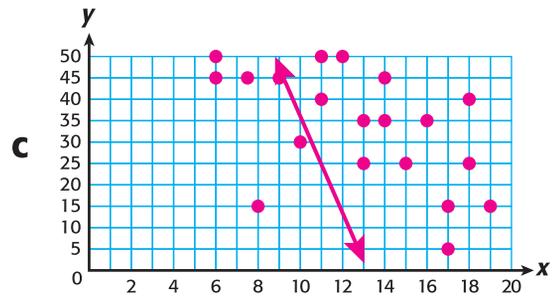
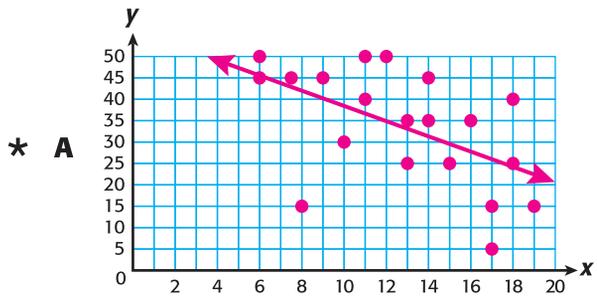


Which diagram best represents this stack of cubes?



2

Which best represents a scatter plot with its approximate line of best fit?



3

The surface area of the state of Arkansas is approximately 53,000 square miles. What is this number written in scientific notation?

- A**  $5.3 \times 10^2$
- B**  $5.3 \times 10^3$
- \* **C**  $5.3 \times 10^4$
- D**  $5.3 \times 10^5$

4

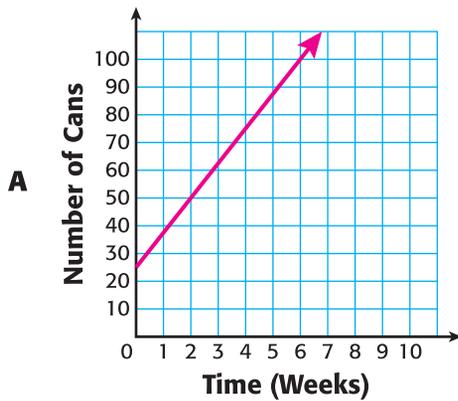
Bill is collecting aluminum cans to recycle. He plans on collecting 25 cans every 2 weeks. The table shows Bill's prediction.

**Bill's Aluminum Can Collection**

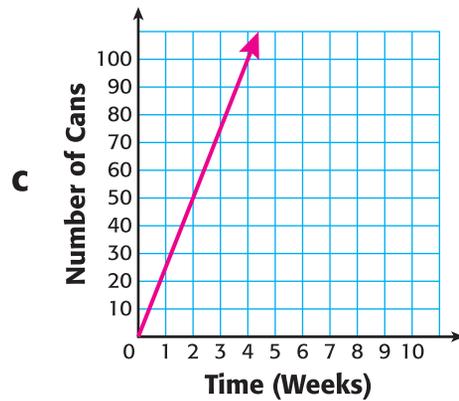
Time (weeks)	Number of Cans
0	0
2	25
4	50
6	75

Which graph best represents this situation?

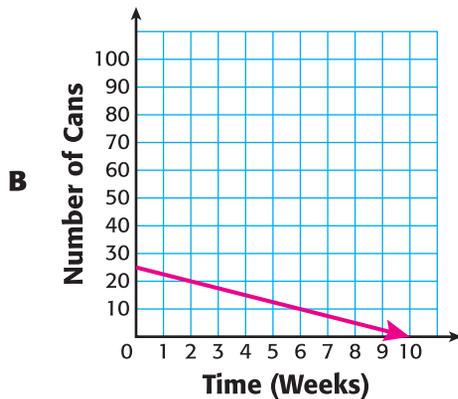
**Bill's Aluminum Can Collection**



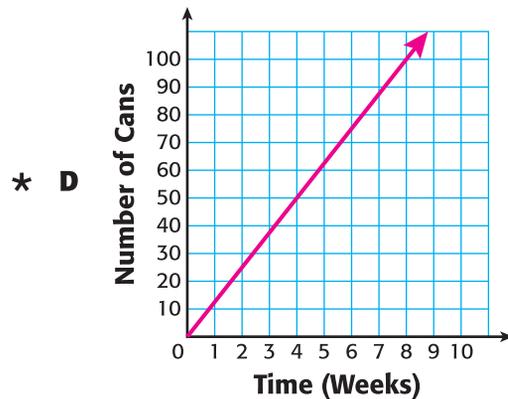
**Bill's Aluminum Can Collection**



**Bill's Aluminum Can Collection**



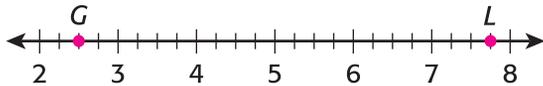
**Bill's Aluminum Can Collection**



CALCULATOR PERMITTED—ITEMS 5–10 and A–B

5

On the number line below, point  $G$  is located at  $2\frac{1}{2}$  and point  $L$  is located at  $7\frac{3}{4}$ .

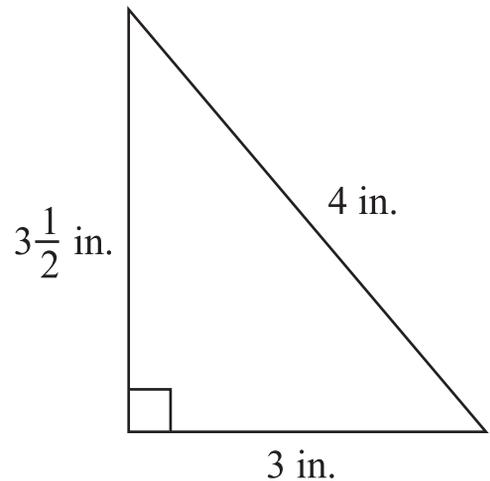


What is the midpoint between these two points?

- A  $5\frac{1}{2}$
- B  $5\frac{1}{4}$
- \* C  $5\frac{1}{8}$
- D  $4\frac{3}{4}$

6

Richard is building a small triangular desk for the corner of his room. A scale drawing is below.



If the longest side of the actual desk is going to be 28 inches, what is the length of the shortest side?

- \* A 21 inches
- B 24.5 inches
- C 32 inches
- D 37.3 inches

**7**

Which table shows a constant rate of change in  $y$ ?

**A**

$(x)$	$(y)$
-2.00	0.50
-1.00	0.00
0.00	-1.00
1.00	-2.50
2.00	-4.50

**C**

$(x)$	$(y)$
-2.00	0.00
-1.00	0.00
0.00	0.50
1.00	0.50
2.00	0.50

\* **B**

$(x)$	$(y)$
-2.00	0.50
-1.00	0.00
0.00	-0.50
1.00	-1.00
2.00	-1.50

**D**

$(x)$	$(y)$
-2.00	0.50
-1.00	1.00
0.00	0.50
1.00	1.00
2.00	0.50

8

Theoretically, each time any coin is tossed the probability it will land with the heads side up is 50%. Jim wanted to test this theory.

Which of the following describes the **least** appropriate test?

- A** Jim has 5 people each toss different coins 100 times and records the number of times each coin lands heads side up.
- B** Jim tosses a penny, a dime, a nickel, and a quarter 50 times each and records the number of times each coin lands heads side up.
- C** Jim has 5 people each toss the same coin 30 times and records the number of times each coin lands heads side up.
- \* **D** Jim tosses a coin until it lands heads side up.

9

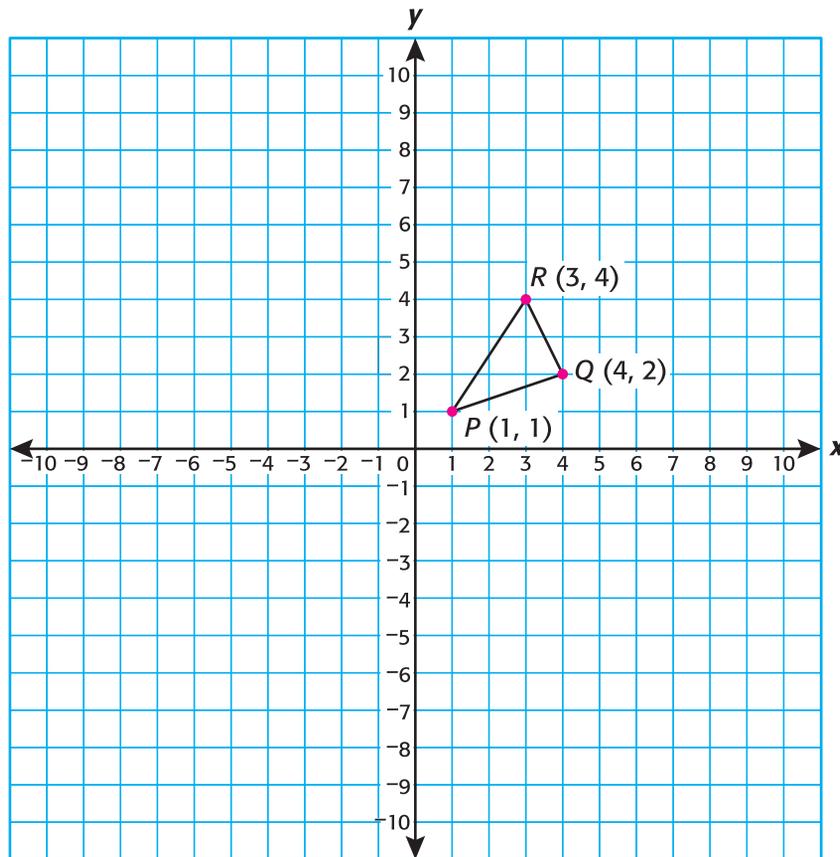
Janice is trying to save money for a used car. She has saved \$1,550. She needs to have a total of \$4,000 for her car.

If Janice saves \$200 a month, how many months will it take her to save money for her car?

- A** 8 months
- \* **B** 13 months
- C** 20 months
- D** 28 months

10

Triangle  $PQR$  was drawn on a coordinate plane, as shown below.



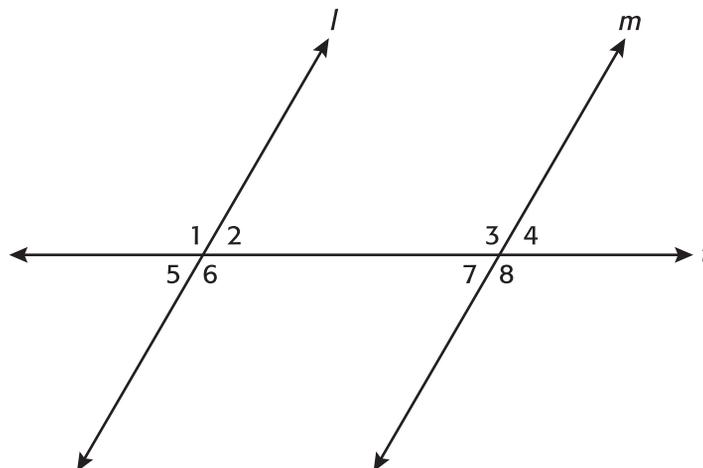
If triangle  $PQR$  is translated 2 units right and 1 unit up and then reflected across the  $x$ -axis, what are the coordinates of the image of point  $Q$ ?

- A (6, 3)
- B (4, -2)
- \* C (6, -3)
- D (-4, 2)

## MATHEMATICS OPEN-RESPONSE ITEM A

A

Angles 1 through 8 in the diagram below are made by parallel lines  $l$  and  $m$  cut by transversal  $t$ .



1. List each pair of vertical angles in the diagram above.
2. List each pair of alternate interior angles in the diagram above.
3. What is one pair of supplementary angles in the diagram above? Explain why the pair of angles you chose are supplementary.

BE SURE TO LABEL YOUR RESPONSES 1, 2, AND 3.

## RUBRIC FOR MATHEMATICS OPEN-RESPONSE ITEM A

SCORE	DESCRIPTION
4	The student earns 6 points. The response contains no incorrect work.
3	The student earns 4–5 points.
2	The student earns 3 points, or the student earns 2 points if points are earned in different parts.
1	The student earns 2 points if points are earned in the same part, or the student earns 1 point, or some minimal understanding shown.
0	The student earns 0 points. No understanding is shown.
B	Blank—No Response. A score of “B” will be reported as “NA.” (No attempt to answer the item.) Score of “0” assigned for the item.

**Solution and Scoring**

<b>Part</b>	<b>Points</b>
<b>1</b>	<p><b>2 Points Possible</b></p> <p>2 points: All 4 pairs of vertical angles are given:  <math>\angle 1</math> and <math>\angle 6</math>; <math>\angle 2</math> and <math>\angle 5</math>; <math>\angle 3</math> and <math>\angle 8</math>; <math>\angle 4</math> and <math>\angle 7</math>  <b>OR</b>            1, 6 and 2, 5 and 3, 8 and 4, 7, or equivalent.</p> <p>1 point: 1 or 2 pairs are incorrect or missing.  <b>OR</b>            More than the 4 correct pairs are given.</p>
<b>2</b>	<p><b>2 Points Possible</b></p> <p>2 points: Both pairs of alternate interior angles are given:  <math>\angle 2</math> and <math>\angle 7</math>; <math>\angle 3</math> and <math>\angle 6</math>  <b>OR</b>            2, 7 and 3, 6, or equivalent.</p> <p>1 point: 1 pair is incorrect or missing.  <b>OR</b>            More than the 2 correct pairs are given.</p>
<b>3</b>	<p><b>2 Points Possible</b></p> <p>2 points: One pair of supplementary angles is given with a complete and correct explanation of why they are supplementary; any of the following pairs of angles:  <math>\angle 1</math> and <math>\angle 2</math>; <math>\angle 1</math> and <math>\angle 5</math>; <math>\angle 1</math> and <math>\angle 7</math>; <math>\angle 1</math> and <math>\angle 4</math>; <math>\angle 6</math> and <math>\angle 2</math>;  <math>\angle 6</math> and <math>\angle 5</math>; <math>\angle 6</math> and <math>\angle 7</math>; <math>\angle 6</math> and <math>\angle 4</math>; <math>\angle 3</math> and <math>\angle 2</math>; <math>\angle 3</math> and  <math>\angle 5</math>; <math>\angle 3</math> and <math>\angle 7</math>; <math>\angle 3</math> and <math>\angle 4</math>; <math>\angle 8</math> and <math>\angle 2</math>; <math>\angle 8</math> and <math>\angle 5</math>; <math>\angle 8</math>            and <math>\angle 7</math>; <math>\angle 8</math> and <math>\angle 4</math>.  <b>OR</b>            1 and 2; 1 and 5; 1 and 7; 1 and 4; 6 and 2; 6 and 5; 6 and 7; 6            and 4; 3 and 2; 3 and 5; 3 and 7; 3 and 4; 8 and 2; 8 and 5; 8 and            7; 8 and 4; or equivalent.  <b>AND</b>  <math>t</math> (<math>l</math> or <math>m</math>) a line which is a straight line and <math>180^\circ</math>. Combining the            angles given makes that line, and then combining the angles is  <math>180^\circ</math>, which makes the supplementary angles, or equivalent.</p> <p>1 point: One pair of supplementary angles is given but minimal, no, or            incorrect explanation is given.  <b>OR</b>            Correct explanation is given, but no or incorrect pair of            supplementary angles are given.</p>

**MATHEMATICS OPEN-RESPONSE ITEM B**

**B**

1. Sketch a rectangle that has a width of 61 millimeters and a length of  $1\frac{5}{16}$  inches.  
Be sure to label the width and length of your rectangle.
2. Sketch a square that has side lengths of 3.2 centimeters.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

**RUBRIC FOR MATHEMATICS OPEN-RESPONSE ITEM B**

SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point, or some minimal understanding shown.
0	The student earns 0 points. No understanding is shown.
B	Blank—No Response. A score of “B” will be reported as “NA.” (No attempt to answer the item.) Score of “0” assigned for the item.

**Solution and Scoring**

<b>Part</b>	<b>Points</b>
<p><b>1</b></p>	<p><b>2 Points Possible</b></p> <p>2 points: A correct drawing of a rectangle with the long side labeled 61 mm (or width) and the short side labeled <math>1\frac{5}{16}</math> in. (or length), or equivalent.</p> <p><b>OR</b></p> <p>1 point: A correct drawing of a rectangle with a missing or incorrect label(s). This includes correct conversions of inch to millimeter or millimeter to inch labels</p> <p><b>OR</b></p> <p>1 point: An incorrect drawing of a rectangle and either the length or the width is correctly measured and labeled.</p>
<p><b>2</b></p>	<p><b>2 Points Possible</b></p> <p>2 points: A correct drawing of a 3.2 cm square; labels are not required.</p>

**Note:** All measurement tolerances are  $\pm 2$  mm or  $\frac{1}{16}$  inch.

# Mathematics Reference Sheet

## Grade 7

*Use the information below, as needed, to answer questions on the Mathematics test.*

<b>Square</b> Area = $s^2$ Perimeter = $4s$	<b>Rectangle</b> Area = $lw$ Perimeter = $2(l + w)$	<b>Triangle</b> Area = $\frac{1}{2}bh$ Perimeter = $a + b + c$
<b>Circle</b> Area = $\pi r^2$ Circumference = $2\pi r$	<b>Parallelogram</b> Area = $bh$ Perimeter = $2a + 2b$	<b>Equilateral Triangle</b> Perimeter = $3s$
<b>Cube</b> Volume = $s^3$	<b>Cone</b> Volume = $\frac{1}{3}\pi r^2 h$	<b>Rectangular Prism</b> Volume = $lwh$
<b>Pyramid</b> Volume = $\frac{1}{3}(\text{area of base})h$	<b>Sphere</b> Volume = $\frac{4}{3}\pi r^3$	<b>Cylinder</b> Volume = $\pi r^2 h$
		<b>Trapezoid</b> Area = $\frac{1}{2}h(b_1 + b_2)$

### Miscellaneous Formulas and Conversions

$$\pi \approx 3.14$$

$$\text{distance} = \text{rate} \times \text{time}$$

$$1 \text{ foot} = 12 \text{ inches}$$

$$1 \text{ cup} = 8 \text{ ounces (oz)}$$

$$1 \text{ yard} = 3 \text{ feet}$$

$$1 \text{ pint} = 2 \text{ cups}$$

$$1 \text{ mile} = 5,280 \text{ feet}$$

$$1 \text{ quart} = 2 \text{ pints}$$

$$1 \text{ gallon} = 4 \text{ quarts}$$

$$1 \text{ kilogram} = 1000 \text{ grams}$$

$$1 \text{ meter} = 100 \text{ centimeters}$$

$$1 \text{ decimeter} = 10 \text{ centimeters}$$

$$1 \text{ centimeter} = 10 \text{ millimeters}$$

$$1 \text{ kilometer} = 1000 \text{ meters}$$

$$1 \text{ liter} = 1000 \text{ milliliters}$$

Read the following passage about a man who works with gorillas. Then answer multiple-choice questions 1 through 8 and open-response question A.

## **Nina the Gorilla**

by John V. Eickhoff

Nina the gorilla was seven years old when I met her and her companions, Kiki and one other male. When I began working with them, I was doing a research project. My main job was to write down what each gorilla did at a particular time.

Nina seemed to like me. When I stood outside the cage window, she ambled over to sit beside me. She looked over my shoulder as I wrote. She followed me around.

<sup>3</sup> The research I did helped me understand the kinds of behavior that are acceptable in a gorilla troop. Gorillas behave differently toward one another, depending on whether the other animal is higher or lower in rank. The troop is led by the highest-ranking male, who is respected by the other gorillas. In the wild, he is responsible for the safety and well-being of the troop.

### **Leader**

Kiki was leader of the gorilla troop that lived at the Woodland Park Zoo in Seattle, Washington. Almost from the beginning, he resented my presence.

When he noticed me, he stiffened his arms and legs to make himself taller. He lifted his head and pressed his lips tightly together. He then strutted back and forth, his hair standing up. All of these behaviors are signals of aggression in gorillas.

If this didn't drive me away, he charged and hit the heavy glass that separated us. That is about as aggressive as a gorilla ever gets. This behavior is the same as that of a wild gorilla who is challenged by the actions of another male. Kiki seemed to think I was challenging his position, probably because I am a big man and because of the way Nina reacted to me.

I tried to ease the tension between us by saying, in gorilla body language, "I recognize your dominance over me." I did this by avoiding eye contact, turning my face away when he looked at me, and trying to make myself smaller when he approached.

### **Gorilla Language**

Gorillas communicate using body posture, facial expressions, and gestures. They can't

speak as we do, partly because their lips, tongues, and vocal cords cannot make many of the sounds of human speech.

They can make some sounds, about twenty, each of which has a different meaning. For example, a short grunt means, “I am content.” But most of their communication is not by sounds.

By watching the gorillas closely and spending a lot of time “talking” to them, I found we could communicate on a simple level. I could give them the idea of what I wanted them to do, such as take their vitamin pills or move from one cage to another.

I learned to tell when they were feeling irritable, content, happy, sad or playful. The gorillas learned that by gesturing they could ask to go outside or tell me that they wanted a certain food.

It was a crude way to communicate, but it was all we needed.

### **Big News**

After working at the zoo for about six years, I moved to another city but continued to visit. One day, I read in the newspaper that Nina had given birth to her fourth baby. This was exciting news because gorilla births in zoos are fairly rare.

I was anxious to see Nina and her baby, but it was several months before I got the chance. It had been nearly a year since I had visited the gorillas. I wondered if they would remember me after such a long time.

As I entered the viewing area, I saw the gorillas foraging for food in their large, brushy yard. Nina was eating about a hundred feet away. As I approached the glass that separated us, she glanced in my direction and immediately froze in mid-chew.

She tilted her head as if she wanted to confirm that I was really there. She then made the gesture that we had used as our greeting signal—a jerk of her head while pursing her lips, as though throwing a kiss.

She was showing me she recognized me. I was surprised she still remembered me, but a bigger surprise was yet to come.

### **Nina’s Baby**

I returned her greeting, and she immediately began searching through the tall grass nearby. She soon found what she was looking for.

Reaching behind a log, she picked up a small bundle of black fur. Placing it on her back, where it clung tightly, she began walking toward me. She glanced up occasionally to make sure I was still there. She smacked her lips in excitement.

She stopped next to me and sat down. Reaching behind her, she removed her baby from her back and held it toward me. Then she cradled it in her arms, patting it gently on the head.

She looked at me questioningly and I clapped my hands in approval. The questioning look disappeared, and she

seemed content. Through the glass I could hear a grunt of satisfaction.

She then began to play with the baby, holding up its hands and feet and pointing to its fingers and toes. It was as if she were proudly showing me that it had the right parts.

Now, each time I see any kind of ape portrayed as a monster, I remember Nina gently showing me her baby's fingers and toes.



**Nina munches on spinach while Zuri sleeps.**

"Nina the Gorilla" by John V. Eickhoff. Images by Carol Beach, Woodland Park Zoo Educational Department. Copyright © 1998 by Highlights for Children, Inc., Columbus, Ohio.

1

What is the definition of the word rank as it is used in paragraph 3?

- A An offensive smell or odor
- B A value given to a number
- C Soldiers who are not officers
- \* D Position within a group

2

The section titled “Leader” is mostly about —

- A the way wild gorillas show submission toward others
- B why Kiki was protective of Nina
- \* C the interactions between Kiki and the author
- D how wild gorillas show aggression toward humans

3

Which sentence from the passage **best** shows that Nina is a caring creature?

- A “She tilted her head as if she wanted to confirm that I was really there.”
- B “Reaching behind a log, she picked up a small bundle of black fur.”
- \* C “Then she cradled it in her arms, patting it gently on the head.”
- D “The questioning look disappeared, and she seemed content.”

4

Which section of the passage would **most** benefit from a graph showing the number of gorillas born in captivity?

- A Introduction
- B “Leader”
- C “Gorilla Language”
- \* D “Big News”

5

What evidence from the passage **best** supports the idea that the author enjoyed working with gorillas?

- \* **A** He continued to visit the gorillas after moving to a new city.
- B** He made himself appear smaller when Kiki approached.
- C** He started his research project when Nina was seven.
- D** He learned to tell what emotions the gorillas were feeling.

6

The author organizes the passage by —

- A** comparing the behaviors of captive and wild gorillas
- B** presenting solutions to the problem of protecting wild gorillas
- C** listing methods he used to communicate with gorillas
- \* **D** sharing personal experiences he had with gorillas

7

What activity would **best** help readers better understand how gorillas communicate?

- A** Looking at pictures of gorillas
- B** Learning sign language
- \* **C** Watching a video about gorillas
- D** Visiting a local pet store

8

Which sentence from the passage is **most** important to include in an oral presentation about how gorillas communicate?

- A** “The research I did helped me understand the kinds of behavior that are acceptable in a gorilla troop.”
- \* **B** “They can make some sounds, about twenty, each of which has a different meaning.”
- C** “She was showing me she recognized me.”
- D** “Placing it on her back, where it clung tightly, she began walking toward me.”

Read the passage. Then answer multiple-choice questions 9 through 16 and open-response question B.

## **Wild Things**

by Polly Sparling

*Planning a hike? Pack these important tips along with your trail mix.*

Hiking in parks, forests, and wilderness areas is a favorite activity in the United States. More than 81 million people, or more than one-third of the country's population, hit the trail in 2004, according to the National Survey on Recreation and the Environment.

Spending a day in the woods is fun, but it can also be dangerous. Here are some tips to keep you safe on your next outdoor adventure.

### **Make a Plan**

Safety on the trail starts before you walk out the door. *Current Health* asked the sixth-grade members of Girl Scout Junior Troop 132 in Dutchess County, N.Y., to explain how they get ready for a day hike. Their most important tip? "Take a partner, probably an adult, with you," advises Stephanie. Hiking with others is safer than venturing into the woods alone, and kids should always have a buddy along for the adventure.

Even if you have a partner, "Tell someone where you're going, when you're leaving, and when you think you'll be back," adds Nicole.

If you haven't hiked in the area before, take a compass (be sure you know how to use it), a map and a guidebook.

### **Dress for Success**

Be sure to check the forecast so you'll know what type of weather to expect. Wearing the right clothing can make the difference between an enjoyable day and a miserable one. "Dress for the environment and the weather that you might have to deal with if you don't make it home at night," says Doug Ritter, the publisher and editor of *Equipped to Survive* ([www.equipped.org](http://www.equipped.org)), a Web site that evaluates hiking gear. It's best to "dress like an onion": Wear several layers of clothing that you can peel off or put on depending on how warm or cold you feel.

"I wear long socks, with my pants tucked inside, so I don't get tick bites," says Nicole. (Ticks can carry the bacteria that cause Lyme disease and other illnesses.)

### **Your Crucial Camping Checklist**

Be prepared for an emergency. Carrying a back pack with essential supplies could help save your life. "Everybody expects to go out for a short hike of one or two hours," says Ritter. "But if something unexpected

happens, you should be prepared for the worst.” Here’s a list of things no hiker should be without.

- Adequate food, sunscreen and bug spray, and enough water to prevent dehydration.
- A large plastic trash bag. You can use it as a shelter against rain and cold.
- A poncho. You never know when the weather might change.
- A whistle. You can use this to signal others if you are lost or hurt or to scare away dangerous animals.
- Medical information. Wear an ID bracelet or carry a card that explains any health problems you have.
- A flashlight with extra batteries. Darkness can confuse even seasoned hikers.

Try to take only the items you really need. First-time hikers often pack extra creature comforts, such as CD players, but carrying a heavy pack for several hours turns a fun outing into hard work.

Hatti Langsford, a park interpreter at Minnewaska State Park Preserve in New Paltz, N.Y., also recommends taking a first-aid kit. “If the first-aid kit is packed in a ziplock bag, you can use the bag to hold water if you need to.” Be sure to put “something bright” in it, such as a bandanna. If you get lost, you can tie the bandanna to a tree branch before taking shelter under a nearby tree or rock ledge. The marker will help searchers locate you more easily.

### **A Little Too Close to Nature?**

Seeing animals in the wild is one of the most exciting things about hiking. But what

should you do if you spot a bear, a wolf, or another dangerous creature? “Never run,” Ritter cautions. “Most animals are color-blind. They see only motion and contrast. If you don’t move, they won’t see you. If an animal approaches you, blow your whistle for all you’re worth. I can’t think of an animal that will stick around for that!”

### **If You Get Lost**

What should you do if you get lost in the woods? Stay where you are. “The biggest mistake people make when they are lost is that they continue moving,” Ritter says. “This makes the searchers’ job more difficult.”

Think of the word *stop* if you get lost.

**S—Stop:** Stay put, and don’t panic.

**T—Think:** “Your most important asset is your brain,” says Ritter.

**O—Observe:** “Look around and figure out what you can use to improve your situation,” Ritter continues. Maybe you can use leaves and branches to make a bed, or you can find shelter under a tree or a rock ledge.

**P—Plan:** Keeping yourself warm and dry is important. How can you do that? Is there some way you can let others know where you are? Make a plan, and stick to it.

Of course, the best way to deal with getting lost is to “stay out of trouble in the first place,” says Langsford. “Stay on the trail, and never separate from your buddy.”

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9

What is the **most** important tip from the Girl Scout Junior Troop 132 about how to prepare for a hike?

- A Learn to use a compass
- \* B Never hike by yourself
- C Know how to read a map
- D Tell others about your plans

11

What does the word dehydration mean as used in the first bullet under “Your Crucial Camping Checklist”?

- A Severe headaches
- \* B Loss of water
- C Overheating
- D Sunburn

10

Read the following partial outline of the information from the passage.

**I. Plan Ahead**

- A. Hike with a partner
- B. \_\_\_\_\_

**II. Dress Properly**

- A. Check the weather
- B. Wear appropriate clothing

**III. Bring Supplies**

- A. Pack enough water and food
- B. Carry a first-aid kit

What belongs on the blank line?

- A Stay put and don't panic
- B Take sunscreen and bug spray
- \* C Tell someone where you are going
- D Wear long socks and layers of clothes

12

The **most** helpful item for a lost hiker to use for signaling his location to searchers is a —

- A map
- \* B whistle
- C compass
- D CD player

13

According to the passage, what should a person do if lost in the woods?

- A Use a map to identify which trail to take
- \* B Stay in one place and wait for rescuers
- C Use a compass to decide the direction to hike
- D Hike to a location where searchers will probably be

15

According to the passage, the purpose of the acronym STOP is to —

- A highlight ways to improve hiking skills
- B list the four mistakes many hikers make
- \* C help hikers remember what to do if lost
- D give lost hikers directions to get home

14

What would be the **most** useful information to add to this passage?

- A Instructions on how to replace batteries in a flashlight
- B Statistics about bear attacks in the wilderness
- \* C Instructions on how to use a map and a compass
- D Directions from the girl scout camp to the nearest trail

16

Which idea about hiking is **most** important to include in a summary of this passage?

- \* A Preparation for emergencies is essential.
- B Darkness is confusing to hikers.
- C CD players make backpacks heavy.
- D Most animals are colorblind.

READING OPEN-RESPONSE ITEM A, FOR PASSAGE “NINA THE GORILLA”

**A**

Use at least **four** examples from the passage to show how the author’s word choice portrays Kiki as an aggressive male gorilla.

RUBRIC FOR READING OPEN-RESPONSE ITEM A, FOR PASSAGE “NINA THE GORILLA”

SCORE	DESCRIPTION
4	The response <i>shows</i> how the author’s word choice portrays Kiki as an aggressive gorilla by providing <i>at least four</i> accurate and relevant examples from the passage.
3	The response <i>shows</i> how the author’s word choice portrays Kiki as an aggressive gorilla by providing <b>three</b> accurate and relevant examples from the passage.
2	The response <i>shows</i> how the author’s word choice portrays Kiki as an aggressive gorilla by providing <b>two</b> accurate and relevant examples from the passage.
1	The response <i>shows</i> how the author’s word choice portrays Kiki as an aggressive gorilla by providing <b>one</b> accurate and relevant example from the passage.  <b>OR</b> The response demonstrates minimal understanding of the question.
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of “B” will be reported as “NA.” (No attempt to answer the item.) Score of “0” assigned for the item.

READING OPEN-RESPONSE ITEM B, FOR PASSAGE "WILD THINGS"

**B**

Explain why Hatti Langsford’s suggestions about a first-aid kit are helpful to hikers.

Use at least **two** details from the passage to support your answer.

RUBRIC FOR READING OPEN-RESPONSE ITEM B, FOR PASSAGE "WILD THINGS"

SCORE	DESCRIPTION
4	The response explains why Hatti Langsford’s suggestions about a first-aid kit are helpful to hikers, <b>and</b> provides <b>two accurate and relevant</b> details from the passage for support.
3	The response explains why Hatti Langsford’s suggestions about a first-aid kit are helpful to hikers, <b>and</b> provides <b>one accurate and relevant</b> detail from the passage for support. <b>OR</b> The response provides <b>two accurate and relevant</b> details from the passage but does not explain why Hatti Langsford’s suggestions are helpful to hikers.
2	The response explains why Hatti Langsford’s suggestions about a first-aid kit are helpful to hikers. <b>OR</b> The response provides <b>one accurate and relevant</b> detail from the passage but does not explain why Hatti Langsford’s suggestions are helpful to hikers.
1	The response demonstrates minimal understanding of the question.
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of "B" will be reported as "NA." (No attempt to answer the item.) Score of "0" assigned for the item.

Scoring Note: Minimal understanding can be given when a student provides an explanation, but shows through their response that this is explaining something other than Hatti Langsford’s suggestions.

17

Read the sentence.

The summer days were so hot that year\_\_\_\_\_ we went swimming almost every day.

Which punctuation mark **best** completes the sentence above?

- A Colon
- \* B Semicolon
- C Question mark
- D Exclamation mark

18

Read the paragraph.

<sup>1</sup>A director must have a clear idea of what he wants before rehearsals even begin. <sup>2</sup>It is important to find the best actors possible, especially for the leading roles. <sup>3</sup>To see the director and playwright's vision truly come to life, costumers, set designers, and lighting designers need to work together and have a strong understanding of the play. <sup>4</sup>The cast and crew spend months working together, perfecting the play. <sup>5</sup>The audience will feel transported to another time and place!

Which transition should be used at the beginning of sentence 5?

- \* A As a result,
- B In addition,
- C However,
- D After all,

**Writing Prompt C**

**C**

Your teacher has asked you to write an essay about a time you helped someone younger.

Before you begin to write, think about a time you helped someone younger. It could be a time you taught a younger person how to do something or a time you offered a young person advice. It can be anytime you helped a person younger than you.

Now write an essay telling about the time you helped someone younger. Give enough detail so that your teacher will understand.

**Writer's Checklist**

1. Look at the ideas in your response.
  - Have you focused on one main idea?
  - Have you used enough details to explain yourself?
  - Have you put your thoughts in order?
  - Can others understand what you are saying?
  
2. Think about what you want others to know and feel after reading your paper.
  - Will others understand how you think or feel about an idea?
  - Will others feel angry, sad, happy, surprised, or some other way about your response? (Hint: Make your reader feel like you do about your paper's subject.)
  - Do you have sentences of different lengths? (Hint: Be sure you have variety in sentence lengths.)
  - Are your sentences alike? (Hint: Use different kinds of sentences.)
  
3. Look at the words you have used.
  - Have you described things, places, and people the way they are? (Hint: Use enough detail.)
  - Are you the same person all the way through your paper? (Hint: Check your verbs and pronouns.)
  - Have you used the right words in the right places?
  
4. Look at your handwriting.
  - Can others read your handwriting with no trouble?

### **Domain Scoring Rubric**

#### **Content (C)**

The Content domain includes the focusing, structuring, and elaborating that a writer does to construct an effective message for a reader. It is the creation of a product, the building of a composition intended to be read. The writer crafts his/her message for the reader by focusing on a central idea, providing elaboration of the central idea, and delivering the central idea and its elaboration in an organized text. Features are:

- Central idea
- Elaboration
- Unity
- Organization

#### **Style (S)**

The Style domain comprises those features that show the writer purposefully shaping and controlling language to affect readers. This domain focuses on the vividness, specificity, and rhythm of the piece and the writer's attitude and presence. Features are:

- Selected vocabulary
- Selected information
- Sentence variety
- Tone
- Voice

#### **Sentence Formation (F)**

The Sentence Formation domain reflects the writer's ability to form competent, appropriately mature sentences to express his/her thoughts. Features are:

- Completeness
- Standard word order
- Absence of fused sentences
- Expansion through standard coordination and modifiers
- Embedding through standard subordination and modifiers

#### **Usage (U)**

The Usage domain comprises the writer's use of word-level features that cause written language to be acceptable and effective for standard discourse. Features are:

- Standard inflections
- Agreement
- Word meaning
- Conventions

#### **Mechanics (M)**

The Mechanics domain includes the system of symbols and cueing devices a writer uses to help readers make meaning. Features are:

- Capitalization
- Punctuation
- Formatting
- Spelling

#### **Scoring Scale**

Each domain is scored independently using the following scale:

4 = The writer demonstrates **consistent**, though not necessarily perfect, control\* of almost all of the domain's features.

3 = The writer demonstrates **reasonable**, but not consistent, control\* of most of the domain's features, indicating some weakness in the domain.

2 = The writer demonstrates **inconsistent** control\* of several of the domain's features, indicating significant weakness in the domain.

1 = The writer demonstrates **little** or **no** control\* of most of the domain's features.

\*Control: The ability to use a given feature of written language effectively at the appropriate grade level. A response receives a higher score to the extent that it demonstrates control of the features in each domain.

The application of the scale, using actual student writing, is done with the assistance of a committee of Arkansas teachers, language arts supervisors, and representatives of the Arkansas Department of Education.

#### **Non-scoreable and Blank Papers**

Compositions are scored, unless they are off-topic, illegible, incoherent, refusals to respond, written in a language other than English, or too brief to assess. A score of "NA" indicates that the student's writing entry was non-scoreable and that entry will receive a score of "0."

1

What makes solar energy different from most other energy that people use?

- A Solar energy involves the most dangerous equipment.
- B Solar energy requires the most complicated technology.
- \* C The supply of solar energy will not change for billions of years.
- D The supply of solar energy causes it to be the cheapest kind of energy.

2

Many houses located near beaches look like the house shown in the drawing.



What does this type of house indicate about the area?

- \* A Floods occur in the area.
- B Earthquakes occur in the area.
- C The soil is unstable in the area.
- D The soil stays frozen in the area.

3

A town in northern Arkansas experienced colder than normal temperatures during part of the winter. Which change was **most likely** responsible for this?

- \* A A southward dip in the jet stream
- B A northward movement of the jet stream
- C The Coriolis effect creating a low pressure area
- D The Coriolis effect creating a high pressure area

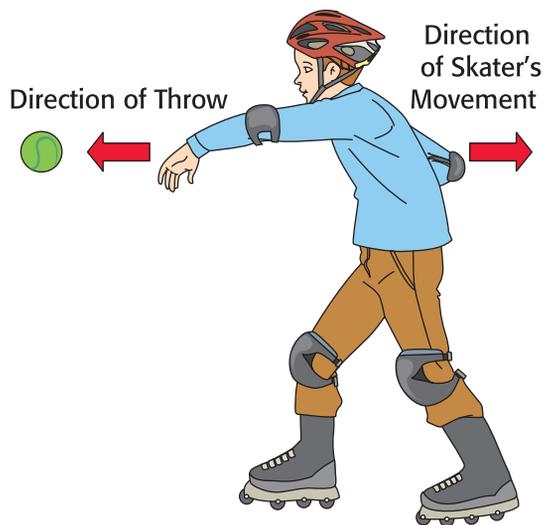
4

A large cold front is moving past the school on a hot, humid summer day. Which **best** describes the type of weather as the cold front passes by?

- A A drought
- B A monsoon
- C A hurricane
- \* D A thunderstorm

5

Students performed an investigation using a set of in-line skates and several identical balls. One student wore the skates and stood on a level surface. Each time this student threw a ball, the other students measured his motion.

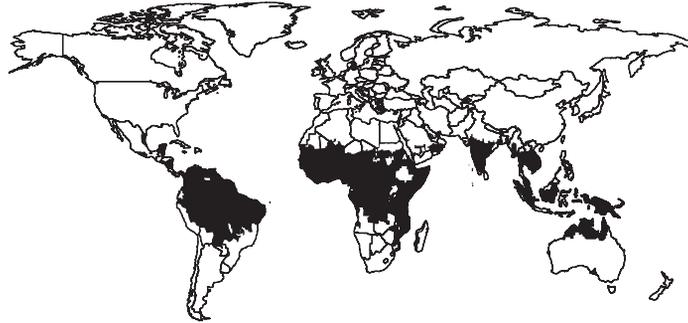


Which of the following would the students' investigation **best** demonstrate?

- A Newton's first law of motion
- ★ B Newton's third law of motion
- C Gravitational energy overcoming friction
- D Kinetic energy changing to potential energy

6

The map below highlights one of the major climatic regions of Earth.



Which of these statements **best** describes the climate of this region of Earth?

- A It has extremely cold winters and hot summers.
- B It has extremely cold winters and cold summers.
- C It is hot all year with low amounts of precipitation.
- \* D It is warm all year with high amounts of precipitation.

7

Which is the **best** evidence that cell division is occurring constantly in our bodies?

- A The body has to keep breathing around the clock.
- B Active people often require more food than inactive ones.
- C There are many different types of tissues in the human body.
- \* D Human beings shed millions of dead skin cells each and every day.

8

The list below gives some symptoms of people with the common cold.

**Symptoms of the Common Cold**

- stuffy nose
- low fever
- sore throat
- cough

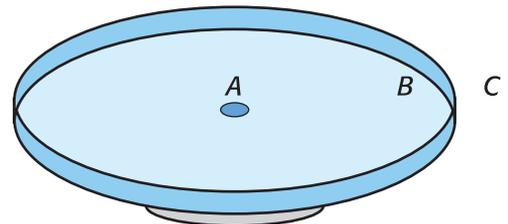
Which body system is **most** affected by the common cold?

- A Nervous
- B Digestive
- C Circulatory
- \* D Respiratory

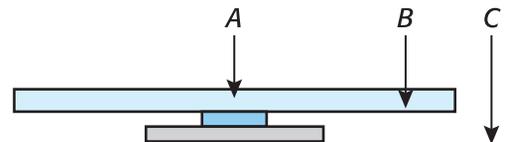
9

Students are trying to model the cause of planetary years. They have a rotating tray, a light source, and a ball to represent the planet. Position A is the center of the tray, Position B is at the edge of the tray, and Position C is on the table next to the tray.

**Rotating Tray**



**Side View**



Where should the students place the light and the ball so that the rotating tray will model the cause of planetary years?

- A Ball at Position A, light at Position B
- B Ball at Position C, light at Position A
- C Light at Position B, ball at Position C
- \* D Light at Position A, ball at Position B

10

Air is composed of many different substances. Which of the following components of air is a compound rather than an element?

- A Argon, Ar
- B Oxygen, O<sub>2</sub>
- ★ C Water, H<sub>2</sub>O
- D Nitrogen, N<sub>2</sub>

11

The major organ systems in the human body interact in many ways. Which of the following statements describes one way that the skeletal system interacts with the circulatory system?

- A The skull protects the brain from injury.
- ★ B Red blood cells carry oxygen to the bones.
- C The skull supports the eyes in their sockets.
- D Red blood cells carry oxygen to the muscles.

12

Each student in Ms. Jordan's science class was given a beaker containing several substances that had been stirred thoroughly. Maxwell must classify the contents of his beaker as either a **compound** or a **mixture**. Which of the following would indicate that the beaker contains a mixture?

- A The original substances had different densities.
- B The contents of the beaker reacted to form a new substance.
- C The original substances had a greater mass than the contents of the beaker.
- ★ D The contents of the beaker can be easily separated into the original substances.

13

Which **best** describes two organ systems working together to help maintain homeostasis?

- A The reproductive organs produce sex cells.
- B The nerves carry signals from the eye to the brain.
- C The bones and muscles of the hand work together to grip a pencil.
- ★ D The muscles of the chest tighten to push carbon dioxide out of the lungs.

14

Fish breathe oxygen that is in the water where they swim. Which **best** describes the oxygen that fish breathe?

- A The oxygen is a solution that dissolves the water.
- B The oxygen is a substance that dissolves the water.
- \* C The oxygen is a solute that is dissolved in the water.
- D The oxygen is a solvent that is dissolved in the water.

15

Alisha's teacher glued a needle to a piece of cork so that the needle would float. Then he used a magnet to magnetize the needle. When the needle was placed in a bowl of water, it turned to point north. Which **best** describes the reason that the needle pointed north?

- A The cork must also have been magnetized.
- \* B The magnetic field of Earth affected the needle.
- C The magnetic current in the bowl of water affected the needle.
- D The teacher must have placed the magnet to the south of the bowl.

16

If a species of bird stopped reproducing, which of these would happen?

- A The bird's prey species would decrease in number.
- B The food web that the bird belongs to would collapse.
- C Trees where these birds build nests would grow taller.
- \* D This bird species would eventually disappear from nature.

17

Which is an effect that cities have on the weather?

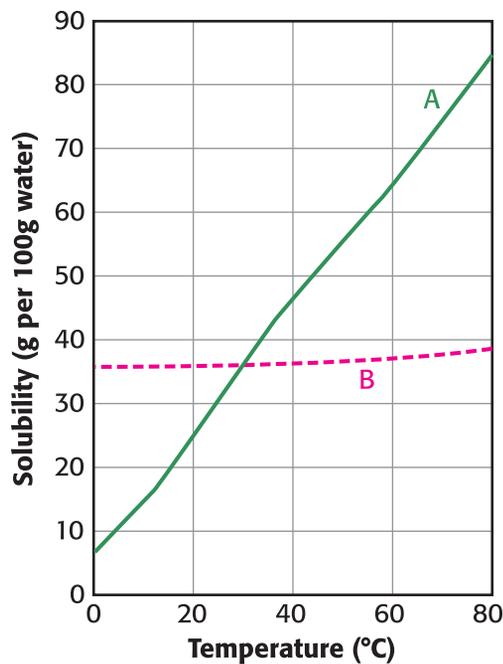
- A Small numbers of plants cause rain to fall more often.
- B Large numbers of houses cause the wind to be stronger.
- C Small areas of open water cause fog to be more common.
- \* D Large areas of pavement cause the temperature to be hotter.

## SCIENCE OPEN-RESPONSE ITEM A

A

The graph shows how two substances dissolve in water.

**Solubility for Two Substances in Water**



1. Which substance or substances show an increase in solubility as temperature rises? Explain how the graph shows this.
2. A student attempted to dissolve 10 grams of each substance in 100 grams of water at 20 °C. Based on the graph, explain why both substances dissolved completely.
3. If 48 grams of substance A will dissolve at 40 °C, how many grams of substance A will dissolve at 60 °C?

BE SURE TO LABEL YOUR RESPONSES 1, 2, AND 3.

**RUBRIC FOR SCIENCE OPEN-RESPONSE ITEM A**

<b>SCORE</b>	<b>DESCRIPTION</b>
4	Response shows a <i>complete understanding</i> of the problem’s essential scientific concepts. The student presents all procedures correctly and responds to all parts of the task.
3	Response shows a <i>nearly complete understanding</i> of the problem’s essential scientific concepts. The student presents nearly all procedures correctly and responds to all parts of the task. The response may contain minor errors.
2	Response shows a <i>limited understanding</i> of the problem’s essential scientific concepts. The student presents some procedures correctly and responds correctly to most parts of the task. The response may contain a major error.
1	Response shows a <i>minimum understanding</i> of the problem’s essential scientific concepts. The student presents some correct work that contributes to a correct solution. The response contains incomplete procedures and major errors.
0	Response shows <i>insufficient understanding</i> of the problem’s essential scientific concepts. The procedures, if any, contain major errors. There may be no explanation of the solution, or the reader may not be able to understand the explanation. The reader may not be able to understand how and why decisions were made.

**Solution and Scoring**

<b>Part</b>	<b>Points</b>
<b>1</b>	<b>2 Points Possible</b>  1 point: Both substances increase.  1 point: The curves rise from left to right.
<b>2</b>	<b>1 Point Possible</b>  1 point: 10 grams was less than the maximum for each substance at that temperature.
<b>3</b>	<b>1 Point Possible</b>  1 point: About 65 grams will dissolve. (Any number in the range of 63 to 67 should receive credit.)

**SCIENCE OPEN-RESPONSE ITEM B**

**B**

Many different devices are used to give scientists information about the weather.

List four **different** weather measurement devices that could be used during a weather investigation. Provide an accurate description of what each instrument measures.

**RUBRIC FOR SCIENCE OPEN-RESPONSE ITEM B**

SCORE	DESCRIPTION
4	Response shows a <i>complete understanding</i> of the problem’s essential scientific concepts. The student presents all procedures correctly and responds to all parts of the task.
3	Response shows a <i>nearly complete understanding</i> of the problem’s essential scientific concepts. The student presents nearly all procedures correctly and responds to all parts of the task. The response may contain minor errors.
2	Response shows a <i>limited understanding</i> of the problem’s essential scientific concepts. The student presents some procedures correctly and responds correctly to most parts of the task. The response may contain a major error.
1	Response shows a <i>minimum understanding</i> of the problem’s essential scientific concepts. The student presents some correct work that contributes to a correct solution. The response contains incomplete procedures and major errors.
0	Response shows <i>insufficient understanding</i> of the problem’s essential scientific concepts. The procedures, if any, contain major errors. There may be no explanation of the solution, or the reader may not be able to understand the explanation. The reader may not be able to understand how and why decisions were made.

**Solution and Scoring**

Part	Points
<b>1</b>	<b>4 Points Possible</b>
	1 point: Names and describes one device.
	1 point: Names and describes one device.
	1 point: Names and describes one device.
	1 point: Names and describes one device.

**PART III Item Correlation with Curriculum Frameworks—  
2010 Augmented Benchmark Grade 7**

**The Arkansas Mathematics Curriculum Framework\***

Strands	Content Standards	Student Learning Expectations
Number and Operations	1. Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.	2. Demonstrate, with and without appropriate <i>technology</i> , an understanding of place value using powers of 10 and write numbers greater than one in <i>scientific notation</i>
	3. Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.	2. Solve with and without appropriate <i>technology</i> , multi-step problems using a variety of methods and tools (i.e., objects, mental computation, paper and pencil)
Algebra	6. Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.	2. Represent, with and without appropriate <i>technology</i> , <i>linear equations</i> by plotting and graphing points in the <i>coordinate plane</i> using all four <i>quadrants</i> given data in a table from a real world situation
	7. Analysis of Change: Students shall analyze change in various contexts.	1. Use, with and without appropriate <i>technology</i> , tables and graphs to compare and identify situations with constant or varying <i>rates</i> of change
Geometry	8. Geometric Properties: Students shall analyze characteristics and properties of 2 and 3 dimensional geometric shapes and develop mathematical arguments about geometric relationships.	3. Recognize the pairs of angles formed and the relationship between the angles including two <i>intersecting lines</i> and <i>parallel lines</i> cut by a <i>transversal</i> ( <i>vertical, supplementary, complementary, corresponding, alternate interior, alternate exterior angles</i> and <i>linear pair</i> )
	9. Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.	2. Perform <i>translations</i> and <i>reflections</i> of <i>two-dimensional</i> figures using a variety of methods (paper folding, tracing, graph paper)
	11. Visualization and Geometric Models: Students shall use visualization, spatial reasoning and geometric modeling.	2. Construct a building out of <i>cubes</i> from a set of views (front, top, side)
Measurement	13. Systems of Measurement: Students shall identify and use units, systems and processes of measurement.	2. Draw and measure distance to the nearest mm and 1/16 inch accurately 5. Apply properties ( <i>scale factors, ratio, and proportion</i> ) of <i>congruent</i> or <i>similar</i> triangles to solve problems involving missing lengths and angle measures 6. Find the distance between two points on a number line and locate the midpoint
Data Analysis and Probability	16. Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.	1. Make, with and without appropriate <i>technology</i> , <i>conjectures</i> of possible relationships in a <i>scatter plot</i> and approximate the <i>line of best fit</i> ( <i>trend line</i> )
	17. Probability: Students shall understand and apply basic concepts of probability.	2. Design, with and without appropriate <i>technology</i> , an experiment to test a <i>theoretical probability</i> and explain how the results may vary Ex. suggested materials for simulations are: two-color counters, a number <i>cube</i> , and spinners

\*The Content Standards and Student Learning Expectations listed are those that specifically relate to the released test items in this booklet.

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**Released Items for Mathematics\***

Item	Strand	Content Standard	Student Learning Expectation
1	G	11	2
2	D	16	1
3	N	1	2
4	A	6	2
5	M	13	6
6	M	13	5
7	A	7	1
8	D	17	2
9	N	3	2
10	G	9	2
A	G	8	3
B	M	13	2

\*Only the predominant Strand, Content Standard, and Student Learning Expectation is listed.

**Non-Released Items for Mathematics\***

Item	Strand	Content Standard	Student Learning Expectation
1	N	2	4
2	A	5	4
3	G	8	1
4	G	8	6
5	G	8	2
6	M	13	1
7	D	14	3
8	A	5	1
9	N	1	4
10	D	17	1
11	G	10	1
12	D	14	1
13	G	11	1
14	M	12	3
15	A	4	2
A	D	14	3
B	A	6	1
C	N	3	5

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**The Arkansas English Language Arts Framework–Reading Strand\***

Content Standards	Student Learning Expectations
9. Comprehension: Students shall apply a variety of strategies to read and comprehend printed material.	1. Use previewing, activating prior knowledge, predicting content of text, formulating questions, and establishing purposes for reading 13. Use the <i>text features</i> to locate and recall information, with emphasis on graphics 14. Use knowledge of text structure(s) to enhance understanding with emphasis on problem/solution 15. Organize information, including simple outlining 16. Use skimming, scanning, note-taking, outlining, and questioning as study strategies 18. Evaluate the accuracy and appropriateness of the evidence used by the author to support claims and assertions
10. Variety of text: Students shall read, examine, and respond to a wide range of texts for a variety of purposes.	4. Understand how word choice and language structure convey an author's viewpoint 5. Use skimming, scanning, note taking, outlining, and questioning as study strategies 6. Organize and synthesize information for use in written and oral <i>presentation</i>
11. Vocabulary, Word Study, and Fluency: Students shall acquire and apply skills in vocabulary development and word analysis to be able to read fluently.	5. Use context to determine meaning of multiple meaning words 9. Use knowledge of Greek and Latin word parts and roots to determine the meaning of subject related vocabulary

\* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released test items in this booklet.

**Released Items for Reading\***

Item	Content Standard	Student Learning Expectation	Passage Type
1	11	5	Content
2	9	16	Content
3	10	4	Content
4	9	15	Content
5	9	18	Content
6	9	14	Content
7	9	1	Content
8	10	6	Content
9	10	5	Practical
10	9	15	Practical
11	11	9	Practical
12	9	18	Practical
13	9	18	Practical
14	9	1	Practical
15	9	13	Practical
16	10	6	Practical
A	10	4	Content
B	9	1	Practical

**Non-Released Items for Reading\***

Item	Content Standard	Student Learning Expectation	Passage Type
1	9	7	Literary
2	11	8	Literary
3	9	11	Literary
4	9	8	Literary
5	10	4	Literary
6	9	6	Literary
7	9	10	Literary
8	9	19	Literary
A	9	7	Literary

\*Only the predominant Strand, Content Standard, and Student Learning Expectation is listed.

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**The Arkansas English Language Arts Framework–Writing Strand\***

Content Standards	Student Learning Expectations
4. Process: Students shall employ a wide range of strategies as they write, using the writing process appropriately.	11. Edit individually or in groups for appropriate grade-level conventions, within the following features: <ul style="list-style-type: none"> <li>• <i>Sentence formation</i> <ul style="list-style-type: none"> <li>• Completeness</li> <li>• Absence of fused sentences</li> <li>• Expansion through standard coordination and modifiers</li> <li>• <i>Embedding</i> through standard subordination and modifiers</li> <li>• Standard word order</li> </ul> </li> <li>• <i>Usage</i> <ul style="list-style-type: none"> <li>• Standard inflections</li> <li>• Agreement</li> <li>• Word meaning</li> <li>• Conventions</li> </ul> </li> <li>• <i>Mechanics</i> <ul style="list-style-type: none"> <li>• Capitalization</li> <li>• Punctuation</li> <li>• Formatting</li> <li>• Spelling</li> </ul> </li> </ul>
7. Craftsmanship: Students shall develop personal style and voice as they approach the craftsmanship of writing.	4. Use transition words/phrases

\* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released test items in this booklet.

**Released Items for Writing\***

Item	Content Standard	Student Learning Expectation
17	4	11
18	7	4

**Non-Released Items for Writing\***

Item	Content Standard	Student Learning Expectation
9	4	8
10	7	5

\*Only the predominant Strand, Content Standard, and Student Learning Expectation is listed.

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**The Arkansas Science Curriculum Framework\***

<b>Strands</b>	<b>Content Standards</b>	<b>Student Learning Expectations</b>
Nature of Science	1. Characteristics and Processes of Science Students shall demonstrate and apply knowledge of the characteristics and processes of science using appropriate safety procedures, equipment, and technology.	1. Interpret <i>evidence</i> based on observations
Life Science	2. Living Systems: Characteristics, Structure, and Function Students shall demonstrate and apply knowledge of living systems using appropriate safety procedures, equipment, and technology.	8. Investigate functions of human body systems 9. Describe interactions between major <i>organ systems</i>
	3. Life Cycles, Reproduction, and Heredity Students shall demonstrate and apply knowledge of life cycles, reproduction, and heredity using appropriate safety procedures, equipment, and technology.	10. Explain the role of <i>cell division</i> 12. Summarize the interactions between <i>organ systems</i> in the maintenance of <i>homeostasis</i>
	4. Populations and Ecosystems Students shall demonstrate and apply knowledge of populations and ecosystems using appropriate safety procedures, equipment, and technology.	1. Explain the role of <i>reproduction</i> in the continuation of a <i>species</i>
Physical Science	5. Matter: Properties and Changes Students shall demonstrate and apply knowledge of matter, including properties and changes, using appropriate safety procedures, equipment, and technology.	6. Classify substances as <ul style="list-style-type: none"> <li>• <i>elements</i></li> <li>• <i>compounds</i></li> <li>• <i>mixtures</i></li> </ul> 7. Distinguish among <i>solvent</i> , <i>solute</i> , and <i>solution</i> 9. Interpret solubility graphs
	6. Motion and Forces Students shall demonstrate and apply knowledge of motion and forces using appropriate safety procedures, equipment, and technology.	4. Conduct investigations of Newton’s third law of motion
	7. Energy and Transfer of Energy Students shall demonstrate and apply knowledge of energy and transfer of energy using appropriate safety procedures, equipment, and technology.	4. Investigate alternative <i>energy sources</i>

\*The Content Standards and Student Learning Expectations listed are those that specifically relate to the released test items in this booklet.

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**The Arkansas Science Curriculum Framework\* (continued)**

<b>Strands</b>	<b>Content Standards</b>	<b>Student Learning Expectations</b>
Earth and Space Science	<p>8. Earth Systems Students shall demonstrate and apply knowledge of Earth’s structure and properties using appropriate safety procedures, equipment, and technology.</p>	<p>2. Investigate the influence of global patterns on local weather:</p> <ul style="list-style-type: none"> <li>• movement of air masses</li> <li>• <i>Coriolis effect</i></li> <li>• <i>jet stream</i></li> <li>• global wind belts</li> </ul> <p>6. Conduct investigations using weather measurement devices:</p> <ul style="list-style-type: none"> <li>• <i>anemometers</i></li> <li>• <i>barometers</i></li> <li>• <i>sling psychrometers</i></li> <li>• <i>thermometers</i></li> <li>• weather charts</li> </ul> <p>8. Identify the causes and effects of weather-related phenomena:</p> <ul style="list-style-type: none"> <li>• thunderstorms</li> <li>• tornadoes/ hurricanes/cyclones/ typhoons</li> <li>• drought</li> <li>• <i>acid precipitation</i></li> </ul> <p>11. Describe and map <i>climates</i> of major Earth regions.</p> <p>13. Identify and explain the effects that human activities have on weather and <i>atmosphere</i></p>
	<p>9. Earth’s History: Changes in Earth and Sky Students shall demonstrate and apply knowledge of Earth’s history using appropriate safety procedures, equipment, and technology.</p>	<p>2. Demonstrate that Earth has a magnetic field that is detectible at the surface with a compass</p>
	<p>10. Objects in the Universe Students shall demonstrate and apply knowledge of objects in the universe using appropriate safety procedures, equipment, and technology.</p>	<p>3. Identify and model the cause of <i>planetary years</i></p>

\*The Content Standards and Student Learning Expectations listed are those that specifically relate to the released test items in this booklet.

**PART III Item Correlation with Curriculum Frameworks–  
2010 Augmented Benchmark Grade 7**

**Released Items for Science\***

Item	Strand	Content Standard	Student Learning Expectation
1	PS	7	4
2	NS	1	1
3	ES	8	2
4	ES	8	8
5	PS	6	4
6	ES	8	11
7	LS	3	10
8	LS	2	8
9	ES	10	3
10	PS	5	6
11	LS	2	9
12	PS	5	6
13	LS	3	12
14	PS	5	7
15	ES	9	2
16	LS	4	1
17	ES	8	13
A	PS	5	9
B	ES	8	6

\*Only the predominant Strand, Content Standard, and Student Learning Expectation is listed.

**Non-Released Items for Science\***

Item	Strand	Content Standard	Student Learning Expectation
1	LS	2	4
2	PS	5	8
3	LS	2	4
4	PS	5	4
5	PS	6	3
6	PS	6	6
7	LS	2	10
8	ES	8	5
9	ES	9	5
10	NS	1	1
11	LS	2	2
12	ES	9	4
13	ES	10	5
14	PS	5	8
15	LS	2	6
16	PS	7	2
17	LS	2	6
A	NS	1	7
B	LS	3	3
C	PS	6	5

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