ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

Teacher Handbook

Arkansas Augmented Benchmark Examination

APRIL 2008 ADMINISTRATION

GRADE 7

Arkansas Department of Education

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Teacher Handbook—2008 Augmented Benchmark Grade 7

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Introduction—2008 Augmented Benchmark Grade 7

The **Arkansas Comprehensive Testing, Assessment, and Accountability Program (ACTAAP)** Augmented Benchmark Examinations are comprehensive examinations currently administered in Grades 3 through 8. They consist of multiple-choice items in Reading, Writing, Mathematics, and Science, as well as open-response questions in Reading, Mathematics, and Science and a Writing component that directly assess student writing. The Arkansas *English Language Arts Curriculum Framework, Mathematics Curriculum Framework,* and *Science Curriculum Framework* are the basis for the development of the Augmented Benchmark Examinations.

This handbook provides information about the scoring of the Grade 7 student responses to the open-response items in Reading, Mathematics, and Science and to the direct Writing prompt. It describes the scoring procedures and the scoring criteria (rubrics) used to assess student responses. Copies of actual student responses are provided, along with scores given to those responses, to illustrate how the scoring criteria were applied in each content area.

Additional information about the Augmented Benchmark Examinations is available through the Arkansas Department of Education. Questions can be addressed to Dr. Gayle Potter at 501-682-4558.

Scoring Student Responses to Reading, Mathematics, and Science Open-Response Items—2008 Augmented Benchmark Grade 7

The multiple-choice and open-response test items for the Reading, Mathematics, and Science components of the Benchmark Examinations are developed with the assistance and approval of the Content Advisory Committees. All passages and items on the Benchmark Examinations are based on the Arkansas Curriculum Frameworks and developed with the assistance and approval of Content Advisory Committees and Bias Review Committees. These committees are composed of active Arkansas educators.

While multiple-choice items are scored by machine to determine if the student chose the correct answer from four options, responses to open-response items must be scored by trained "readers" using a pre-established set of scoring criteria.

Reader Training

Readers are trained to score only one content area, but the training procedures are virtually identical for Reading, Mathematics, and Science readers. Qualified readers for the Arkansas scoring will be those with a four-year college degree in English, language arts, education, mathematics, science, or related fields.

Before readers are allowed to begin assigning scores to any student responses, they go through intensive training. The first step in that training is for the readers to read the Reading passage and its item or the Mathematics or Science open-response item as it appeared in the test booklet and to respond—just as the student test takers are required to do. This step gives the readers some insight into how the students might have responded. The next step is the readers' introduction to the scoring rubric. All of the specific requirements of the rubric are explained by the Scoring Director who has been specifically trained to lead the scoring group. Then responses (anchor papers) that illustrate the score points of the rubric are presented to the readers and discussed. The goal of this discussion is for the readers to understand why a particular response (or type of response) receives a particular score. After discussion of the rubric and anchor papers, readers practice scoring sets of responses that have been pre-scored and selected for use as training papers. Detailed discussion of the responses and the scores they receive follows.

After three or four of these practice sets, readers are given "qualifying rounds." These are additional sets of pre-scored papers, and, in order to qualify, each reader must score in exact agreement on at least 80% of the responses and have no more than 5% non-adjacent agreement on the responses. Readers who do not score within the required rate of agreement are not allowed to score the Benchmark Examinations responses.

Once scoring of the actual student responses begins, readers are monitored constantly throughout the project to ensure that they are scoring according to the criteria. Daily and cumulative statistics are posted and analyzed, and Scoring Directors or Team Leaders reread selected responses scored by the readers. These procedures promote reliable and consistent scoring. Any reader who does not maintain an acceptable level of agreement is dismissed from the project.

Scoring Student Responses to Reading, Mathematics, and Science Open-Response Items—2008 Augmented Benchmark Grade 7

Scoring Procedures

All student responses to the Benchmark Examinations open-response test items are scored independently by two readers. Those two scores are compared, and responses that receive scores that are non-adjacent (a "1" and a "3," for example) are scored a third time by a Team Leader or the Scoring Director for resolution.

This Teacher Handbook includes the Reading passages with their open-response items and the Mathematics and Science open-response items as they appeared in this year's test. The specific scoring rubric for each item and annotated response for each score point of the rubric follows. The goal is for classroom teachers and their students to understand how responses are scored. It is hoped that this understanding will help students see what kind of performance is expected of them on the Benchmark Examinations.

READING RESPONSES

Read the following passage about a young Navajo girl's love of running. Then answer multiple-choice questions 1 through 8 and open-response question 9.

Dreams on a Mesa

by Terry Anderson

The trailer door closed softly. Annalisa glanced through the window and saw her brother, Harrison, slipping out for his early morning run.

Annalisa pulled the soft covers up under her chin and thought about Harrison running on this chilly October morning. He had been a strong runner since he was a little boy, and now he was one of the top high-school runners in New Mexico. Harrison's coach was looking into scholarships for him. Annalisa knew that Harrison secretly dreamed of going on to college.

Annalisa had dreams of her own. Even though she was only ten, she believed that she, too, had the potential to be an excellent runner. Someday she dreamed of having the strength to train alongside Harrison.

Annalisa liked to run along the dirt trails near their trailer at Mariano Lake. She ran for the sheer pleasure of it—to feel her heart pound as she raced up the steep, rocky goat trails. Sometimes she'd spy a long-eared jackrabbit effortlessly darting across the ground, and she would race it. Taking long strides, she would leap over the prickly-pear cactus, dodge the ankle-twisting rocks, and dart over dried-out sandy washes—only to be left in the jackrabbit's dust.

Although Annalisa never won the race, she felt that the rabbits were challenging her to run faster, to realize her dream of running with her brother.

Annalisa kept her running a secret from her brother. She was afraid that she couldn't match his stride and that she would only be a nuisance to him. The last thing she wished to do was to interfere with Harrison's training. So Annalisa continued to sprint up and down the trails near her family's trailer, but never in Harrison's sight.

The weekend was approaching, and Annalisa looked forward to her family's trip to Shiprock, New Mexico, to visit Great-Grandmother. Father's grandmother lived in a traditional Navajo hogan with an earthen floor, even though Father and Uncle had built a small two-room house for her nearby. Great-Grandmother had tried living in the new house, but she said she felt more comfortable in her old hogan.

Annalisa always stayed in the hogan

when they visited, while Harrison and her parents slept in the new house. Annalisa liked the smell of the piñon[1] fire in the center of the hogan and the feel of the scratchy wool blankets when she curled up on the cot.

She and Great-Grandmother liked to sit up late discussing the new lambs in the corral, a rug that was on the loom, or a movie Annalisa had seen on TV. This weekend Annalisa hoped she could talk to Great-Grandmother about her dream of running as swiftly as the jackrabbits.

When Friday evening came, Annalisa and her family squeezed into their green pickup and headed out on the back roads toward Shiprock. The sun was already setting in the west, and the red rocks of the mesa glowed in the vibrant streaks of orange, red, pink, and purple stretching across the sky. It was dark by the time they arrived at Great-Grandmother's hogan.

Annalisa spent the following morning doing chores with Great-Grandmother. In the afternoon she and Harrison watched a football game on TV in the new house, but Annalisa much preferred the quiet of Great-Grandmother's hogan.

Later Great-Grandmother fixed some Navajo herb tea and mutton stew for dinner while Annalisa mixed the dough for her favorite treat—fry bread.

As the stew simmered, Great-Grandmother carefully placed large circles of dough in a pan of bubbling oil. Annalisa studied the old woman's face. To Annalisa, Great-Grandmother was beautiful. She was warm and worn and comfortable. They were at ease in their conversation and in their silence.

Slowly and quietly, Annalisa started to tell Great-Grandmother about her running. She explained how she felt with her hair flying in the wind and her strong legs pumping until her heart felt it would burst. The words rushed out, and Annalisa's face shone with excitement.

Great-Grandmother sat very still, listening. When Annalisa finally finished, there was a twinkle in Great-Grandmother's eye. Annalisa wasn't the only one with a secret to share, Great-Grandmother said. When she was a small girl, she had also found joy in dashing up and down the mesas. She had been proud to be the fastest of all the girls in the family. "Keep trying to run faster and farther," she told Annalisa. "It's a good dream."

Great-Grandmother drew a map with her finger on the dirt floor to show Annalisa an old goat trail that led to an enormous red rock on the side of the mesa. Years ago, Great-Grandmother had run to this very spot with all her cousins. Annalisa studied the map. She vowed to wake up with the sun and make the journey to this special place.

The sound of the old rooster crowing outside the door woke Annalisa. It was already daylight. Annalisa felt for her shoes and her sweat suit and sleepily left the hogan.

Her annoyance with herself for oversleeping dissolved as she discovered the worn goat trail that Great-Grandmother had described. The first leg of the trail was fairly flat, allowing Annalisa to run easily. She imagined her great-grandmother moving along the same trail years ago.

Then the trail steepened into a rocky uphill climb. Weeds choked the trail, grabbing at her sweat pants. Annalisa didn't slow her pace. She kept her eyes on the huge sandstone rock directly above her on

[1]piñon: any of various low-growing pines of western North America with edible seeds

the edge of the mesa top, shining in the morning sun. It had to be the one that Great-Grandmother had described.

Somehow, knowing that it was Great-Grandmother's own special place made this run different from any other. Annalisa pushed her straight black hair away from her face and pressed on toward the rock.

A few ravens flew off noisily as Annalisa scrambled up the side of the rock and finally rested at the top. The view was magnificent.

22 Annalisa could clearly see Great-Grandmother's hogan, with dozens of sheep grazing near it, and off in the distance, the rock formation known as Shiprock. She felt her blood racing as she took in the timeless beauty around her.

Suddenly she heard a rustling sound below her on the rugged trail. Annalisa held her breath as a black-haired young man deftly climbed the remaining steps to the special rock.

It was Harrison! She hadn't even heard him behind her. Only slightly winded, he eased himself onto a smooth section of the sandy red rock. He took a moment to survey the beauty of the scene below him, then grinned knowingly at Annalisa.

"You've been keeping a secret, little sister," he teased. "You're as surefooted as a mountain goat on that rocky trail. How did you ever find this great place?"

Harrison smiled as she told him Great-Grandmother's secret. Then he said, "Why don't we run back together?"

Annalisa sighed happily as she and Harrison started down, quickly picking their way among the slippery rock footholds. Together they leaped over the prickly bushes, pushing harder to maintain their speed in the soft, sandy spots. They ran in a rhythmic stride, each one enjoying the company of the other. Joyfully, Annalisa led the way to the hogan, feeling as free-spirited and swift as her old friend the jackrabbit.

Reading Item A–2008 Augmented Benchmark Grade 7

A

Annalisa's environment influences her development. Identify two ways the environment helps Annalisa develop athletic skills. Explain how Annalisa uses her environment to achieve her dream. Use specific details from the passage to support your answer.

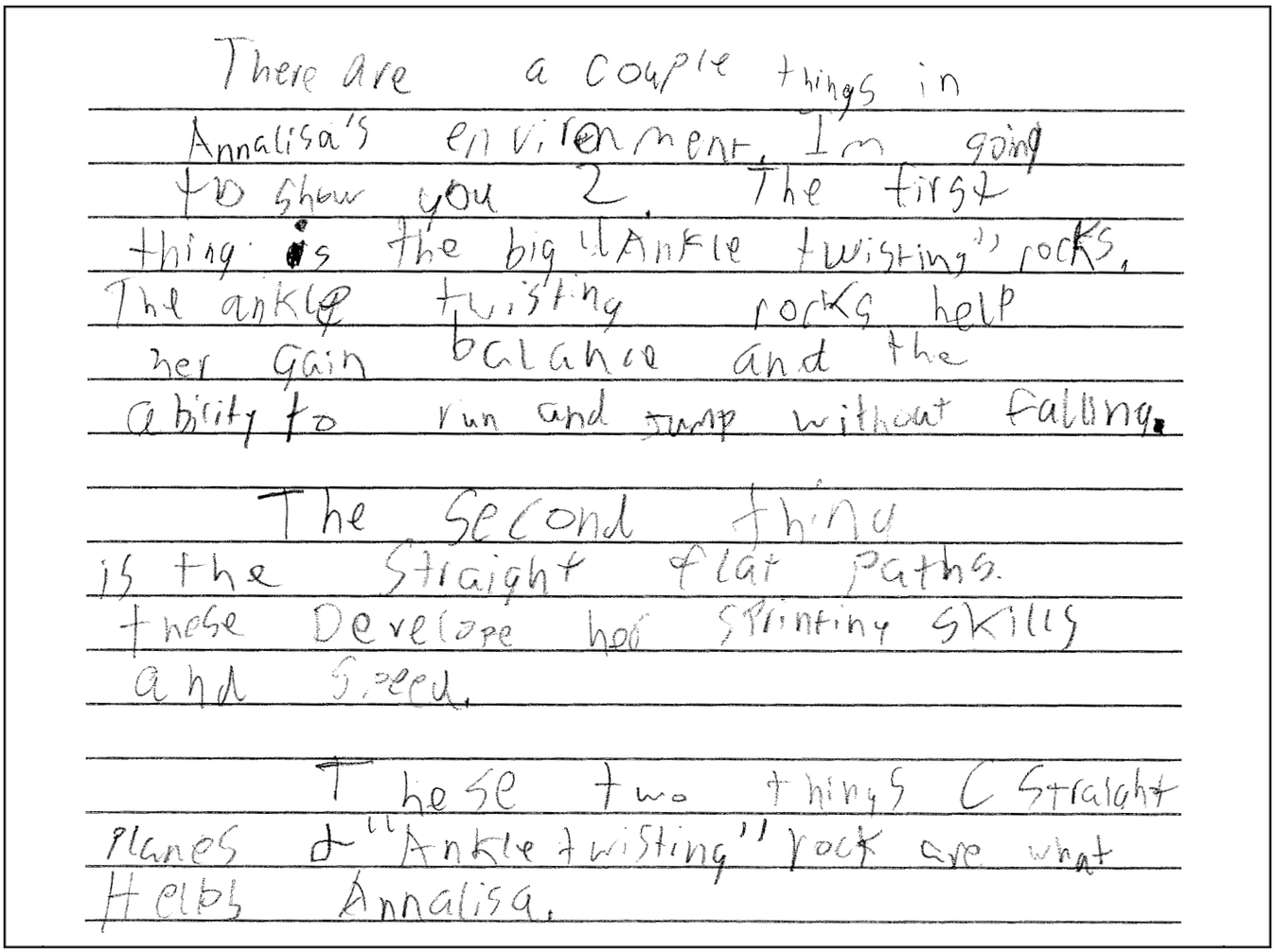
READING ITEM A SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

SCORE	DESCRIPTION
4	Response identifies two ways the environment helps Annalisa develop athletic skills and provides an explanation of how Annalisa uses each way to achieve her dream.
3	Response identifies two ways the environment helps Annalisa develop athletic skills and provides one explanation of how Annalisa uses her environment to achieve her dream, OR response identifies one way the environment helps Annalisa develop athletic skills and provides a complete explanation of how Annalisa uses her environment to achieve her dream.
2	Response identifies two ways the environment helps Annalisa develop athletic skills OR response identifies one way the environment helps Annalisa develop athletic skills and provides one explanation of how Annalisa uses her environment to achieve her dream.
1	Response identifies one way the environment helps Annalisa develop athletic skills, OR provides an explanation of how Annalisa uses her environment to achieve her dream OR demonstrates minimal understanding.
0	Response is incorrect or irrelevant.

Reading Item A Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 4

The response identifies two ways the environment helps Annalisa develop athletic skills and provides an explanation of how Annalisa uses each way to achieve her dream. 1) *The big* "*Ankle twisting*" *rocks.* **Explanation:** *help her gain balance and the ability to run and jump without falling.* 2) *The straight flat paths.* **Explanation:** *develope her sprinting skills and speed.*



There are a couple things in Annalisa's environment, I'm going to show you 2. The first thing is the big "Ankle twisting" rocks. The ankle twisting rocks help her gain balance and the abirity to run and jump without falling.

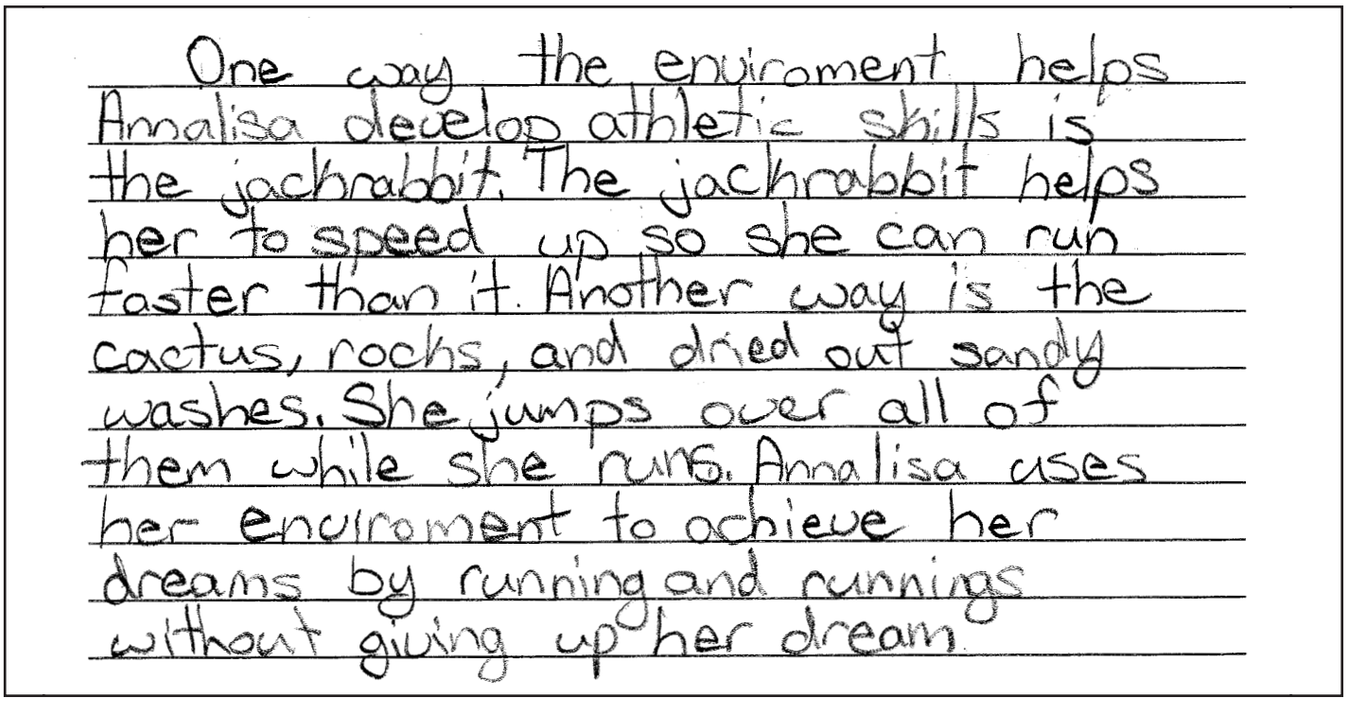
The second thing is the straight flat paths. these Develope her Sprinting skills and Speed.

These two things (Straight planes & "Ankle twisting" rock are what Helps Annalisa.

Reading Item A Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 3

The response identifies two ways the environment helps Annalisa develop athletic skills and provides one explanation of how Annalisa uses her environment to achieve her dream. 1) *The jackrabbit* **Explanation:** *helps her to speed up so she can run faster than it.* 2) *The cactus, rocks, and dried out sandy washes. She jumps over them.*

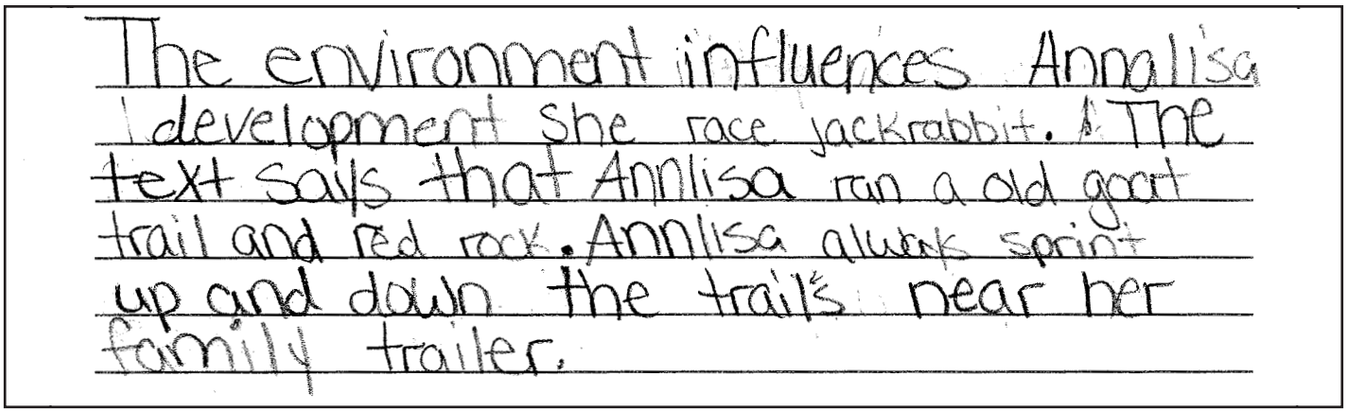


One way the enviroment helps Annalisa develop athletic skills is the jackrabbit. The jackrabbit helps her to speed up so she can run faster than it. Another way is the cactus, rocks, and dried out sandy washes. She jumps over all of them while she runs. Annalisa uses her enviroment to achieve her dreams by running and runnings without giving up her dream.

Reading Item A Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 2

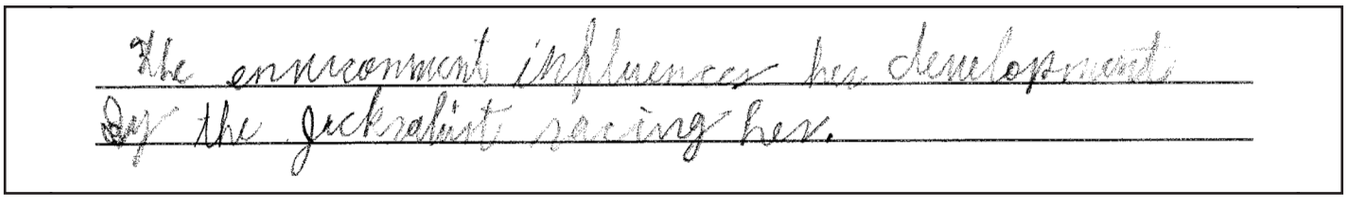
The response identifies two ways the environment helps Annalisa develop athletic skills. 1) *She race jackrabbit.* 2) *Ran a old goat trail and red rock.* The response does not explain how either example helps Annalisa develop athletic skills.


The environment influences Annalisa development She race jackrabbit. The text says that Annlisa ran a old goat trail and red rock. Annlisa always sprint up and down the trails near her family trailer.

Reading Item A Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

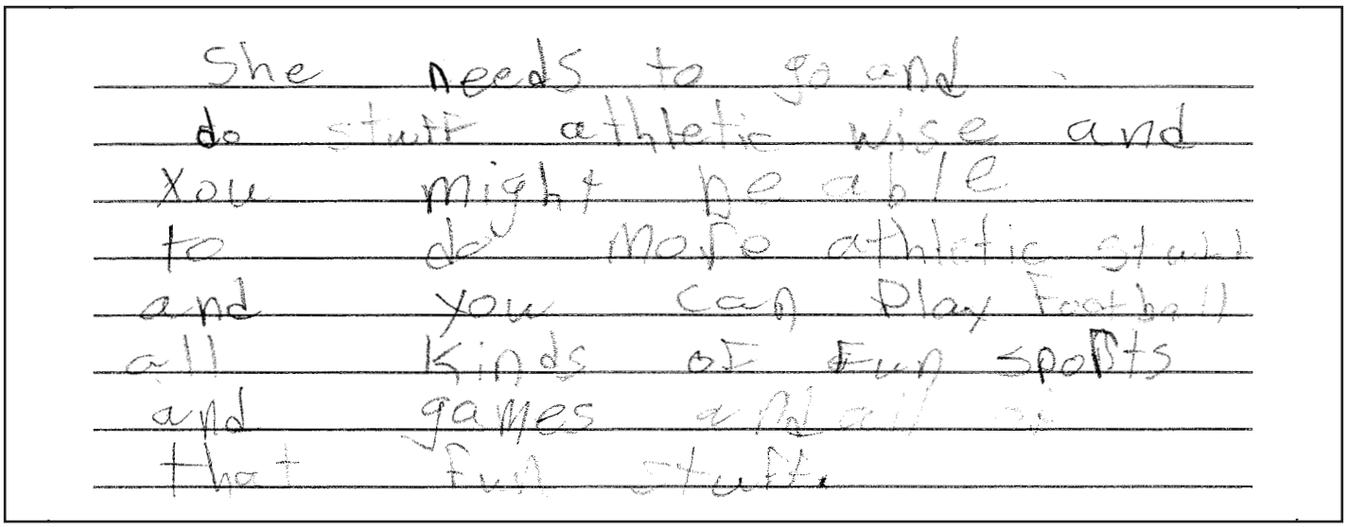
Score Point: 1

The response identifies one way the environment helps Annalisa develop athletic skills. 1) *The jackrabbit racing her.* The response does not receive credit for "*racing her*" as an explanation because it does not explain how this develops her athletic skills.



Score Point: 0

The response is irrelevant because it talks about "*go and do stuff athletic wise,*" but does not contain anything specific from the passage as an example of something in the environment that helps Annalisa develop athletic skills.



Read the following passage, which describes the job of being an ice-cream taster. Then answer multiple-choice questions 19 through 26 and open-response question 27.

One Cool Job

by Danielle S. Hammelef

What do you want to be when you grow up? A teacher? A doctor? An astronaut? How about an ice-cream taster?

Yes, there really is a job where you can get paid to taste ice cream. Just ask John Harrison, an "Official Taste Tester" at Dreyer's/Edy's Ice Cream for the past 21 years. Testing helps manufacturers to be sure of a product's quality. During his career Harrison has been responsible for approving over 200 million gallons of the sweet creamy dessert—as well as for developing over 75 flavors.

Harrison hadn't always wanted to be in the ice cream business. As a kid, he'd wanted to be a fire fighter or a police officer, among other careers.

4 But ice cream runs in his family. "It was like I fell into a batch of ice cream," he says, chuckling. Four generations of Harrisons have been "in" ice cream, including his great-grandfather, who owned two ice-cream parlors in New York City in the 1880s, his father, who owned a dairy-ingredients factory in Georgia, and his uncle, who owned an ice cream factory in Tennessee. At his uncle's factory, he "tasted and ate" his way through high school and college as he learned how to make ice cream. He likes to joke that ice cream is so much a part of his life that his blood "runs sixteen percent butterfat."

A Day in Dessert

Some people think that it would be easy to do this job; after all, you just have to like ice cream, right? Nope—there's more to the job than that, says Harrison, who has a degree in chemistry. He points out that a dairy or food-science degree would be useful to someone wanting a career in this "cool" field.

In a typical morning on the job, Harrison tastes and evaluates 60 ice-cream samples—3 each from the 20 flavor batches produced the previous day. Starting with vanilla and working up to stronger flavors like mint chocolate-chip, he slices open each container.

Then he lets the ice cream warm up to about 12 degrees Fahrenheit. The temperature in the storage freezer is –20 degrees. Most people eat ice cream at between 0 and 5 degrees. But cold ice

cream can numb taste buds, Harrison explains, so "You get more flavor from warmer ice cream, which is why some kids like to stir it, creating ice cream soup."

Tasting with Your Eyes

While the ice cream warms up, Harrison looks over the samples and grades each one on its appearance. "Tasting begins with the eyes," he explains. He checks to see if the ice cream is attractive and asks himself, "Does the product have the color expected from that flavor?" If there are added goodies in the ice cream, such as fruit, chocolate chips, nuts, or fudge ribbons, he makes sure that they are evenly spread throughout and that the sample doesn't have too much or too little of the added ingredients.

Next it's time to taste! With his gold-plated spoon, which he uses to avoid the aftertaste plastic or wood can give, Harrison skims the top of the sample, where it's warmest. Then he turns the spoon upside down and plops the spoonful onto his tongue.

Swirl, Smack, and . . .

"I've developed a way of tasting called the Three *S*'s," he says. "First, I *swirl* the ice cream very quickly around in my mouth, completely coating my taste buds. Then I *smack* my mouth several times very fast to warm up the ice cream even more and to add air, to release maximum flavor." While swirling and smacking, he tastes for balance between the cream, the natural flavors, and the sweetening ingredients, and he checks to be sure that the ice cream texture is smooth and creamy, not icy or gummy.

You might expect swallow to be the third *S* in his tasting method, but it's not. "We eat for nutrition," Harrison says. "Swallowing isn't necessary to taste ice cream." After about three to five seconds of swirling and smacking, he demonstrates the third *S*—he *spits* out the sample into a bucket. "That's the worst part of my job," he sighs, "spitting out the ice cream."

The Taste of Success

But that doesn't mean he never eats ice cream. Harrison swallows one bite of each new flavor, to test the aftertaste.

At home and "off-duty" he eats whatever flavors he chooses—and more than just one bite! Vanilla is his favorite. He enjoys making his own ice cream and swirling goodies into it. "We're all kids when it comes to ice cream," he says.

Both at work and in leisure time, Harrison is always on the lookout for new flavor ideas that might succeed commercially. The most popular flavor he has developed so far is cookies and cream.

Continuing to think up new ideas, try out new flavors, and test samples from so many batches of ice cream each day keeps Harrison busy but happy—working at one cool job.

Judging by sales, the most popular ice-cream flavor in the U.S. is vanilla, and the second is chocolate.

Taste-test a food while holding your nose. How well can you taste a food if you can't smell it? John Harrison's nose helps him do his job!

Strange but true: among the many ice-cream flavors that have been made are tuna fish, mustard, garlic, sauerkraut, mashed potatoes and bacon, jalapeño pepper, and chili con carne.

Reading Item B–2008 Augmented Benchmark Grade 7

B

One section of the passage is titled "Tasting with Your Eyes." Provide two examples from the passage where John Harrison uses his sense of sight, and describe their importance to the tasting process.

READING ITEM B SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

SCORE	DESCRIPTION
4	Response provides two examples from the passage where John Harrison uses his sense of sight and describes their importance to the tasting process.
3	Response provides two examples from the passage where John Harrison uses his sense of sight and describes the importance of one example.
2	Response provides one example from the passage where John Harrison uses his sense of sight and describes the importance of one example, OR response provides two examples from the passage where John Harrison uses his sense of sight.
1	Response provides one example from the passage where John Harrison uses his sense of sight OR describes the importance of sight to the tasting process OR demonstrates minimal understanding.
0	Response is incorrect or irrelevant.

Reading Item B Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 4

The response provides two examples from the passage where John Harrison uses his sense of sight and describes their importance to the tasting process. 1) *John checks to see if the ice cream is attractive.* **Importance:** *He makes sure the color fits the name and flavor of the ice cream . . . . no one wants to eat something that looks gross and unpleasant to their eyes.* 2) *He checks to see if the ice cream has any added goodies . . . makes sure that they are evenly spread out through the ice cream, and that the sample doesn't have too much or too little.* **Importance:** *You don't want a bunch of stuff in one place.*

John Harrison uses his sense of sight to taste the ice cream. This is important to the tasting process in many ways.

First of all, John checks to see if the ice cream is attractive. He makes sure the color fits the name and flavor of the ice cream. This is important to the tasting process because no one wants to eat something that looks gross and unpleasant to their eyes.

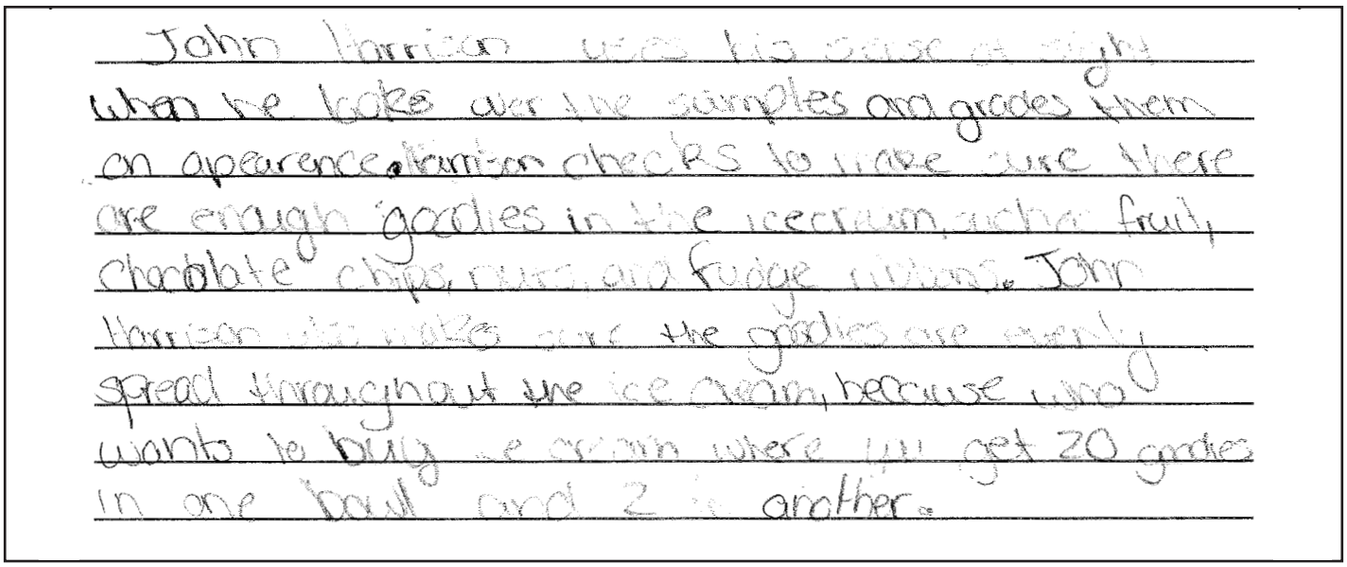
Secondly, he checks to see if the ice cream has any added goodies, such as fruit, chocolate chips, nuts, or fudge ribbons. If there are, he makes sure that they are evenly spread out through the ice cream, and that the sample doesn't have too much or too little of the added ingredient. This is important because you don't want a bunch of stuff in one place and you want your ice cream to taste good.

These are two ways John Harrison uses his sense of sight for the ice cream and why it's important to the tasting process.

Reading Item B Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 3

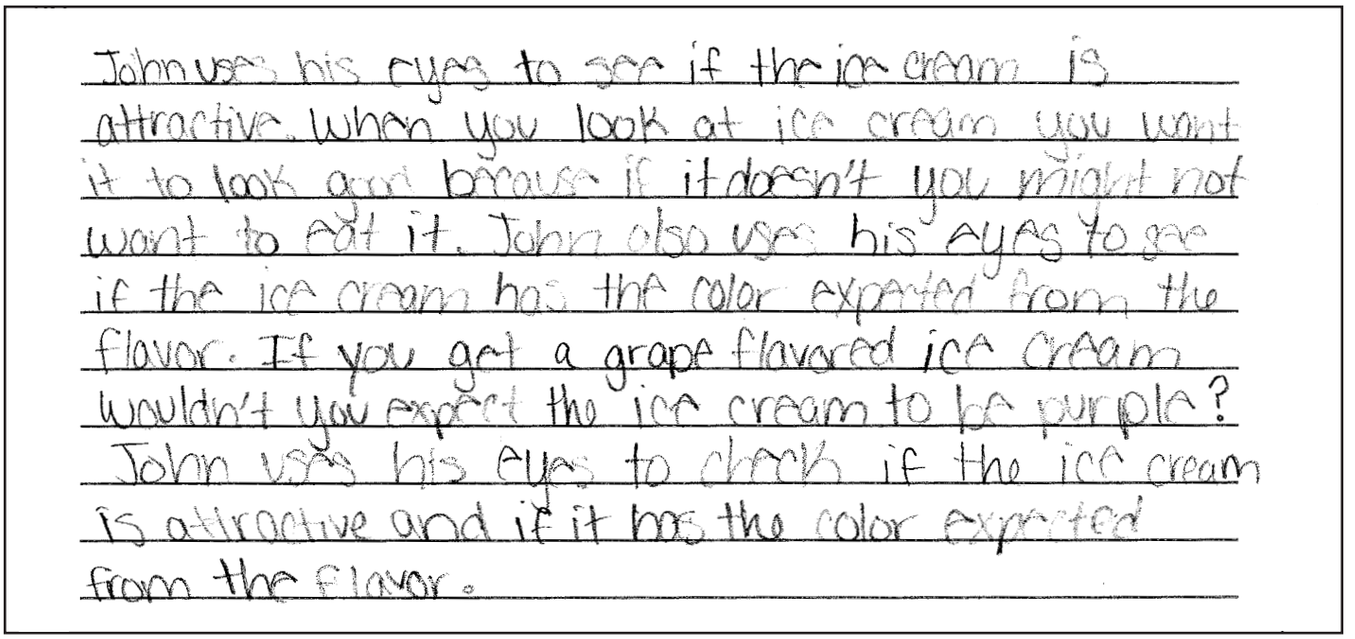
The response provides two examples from the passage where John Harrison uses his sense of sight and describes the importance of the second one. 1) *He looks over the samples and grades them on apearence.* 2) *Checks to make sure there are enough goodies in the ice cream . . . . makes sure the goodies are evenly spread throughout the ice cream*
Importance: *Who want to buy ice cream where you get 20 goodies in one bowl and 2 in another.*



Reading Item B Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

Score Point: 2

The response provides one example from the passage where John Harrison uses his sense of sight and describes the importance of one example. 1) *To see if the ice cream is attractive* **Importance:** *you want it to look good because if it doesn't you might not want to eat it . . . . to see if the ice cream has the color expected from the flavor. If you get a grape flavored ice cream wouldn't you expect the ice cream to be purple?* The statement "*to see if the ice cream has the color expected from the flavor*" can be either an example or a description of how the appearance is important to the tasting process, as it is in this response. However, it cannot be used for both an example and an explanation of the importance in the same response.

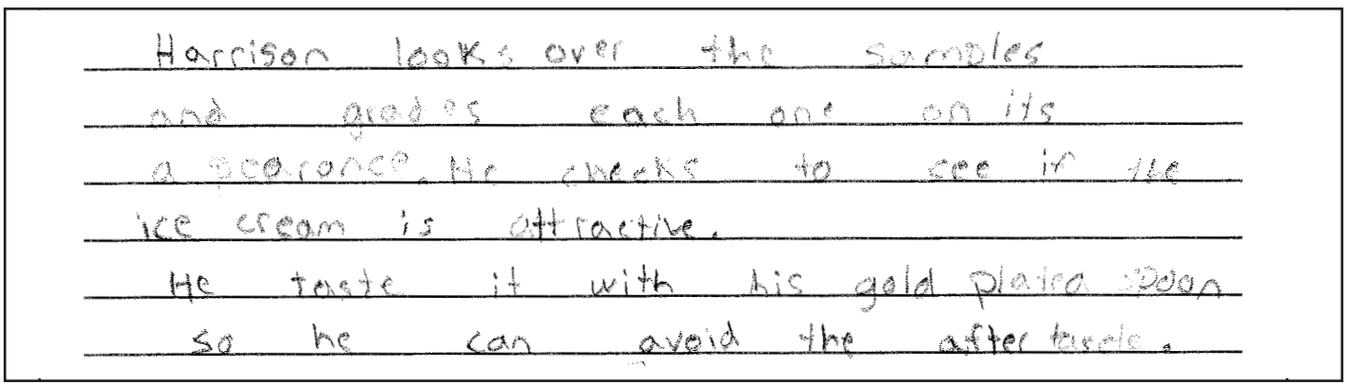


John uses his eyes to see if the ice cream is attractive. When you look at ice cream you want it to look good because if it doesn't you might not want to eat it. John also uses his eyes to see if the ice cream has the color expected from the flavor. If you get a grape flavored ice cream wouldn't you expect the ice cream to be purple? John uses his eyes to check if the ice cream is attractive and if it has the color expected from the flavor.

Reading Item B Sample Responses and Annotations–2008 Augmented Benchmark Grade 7

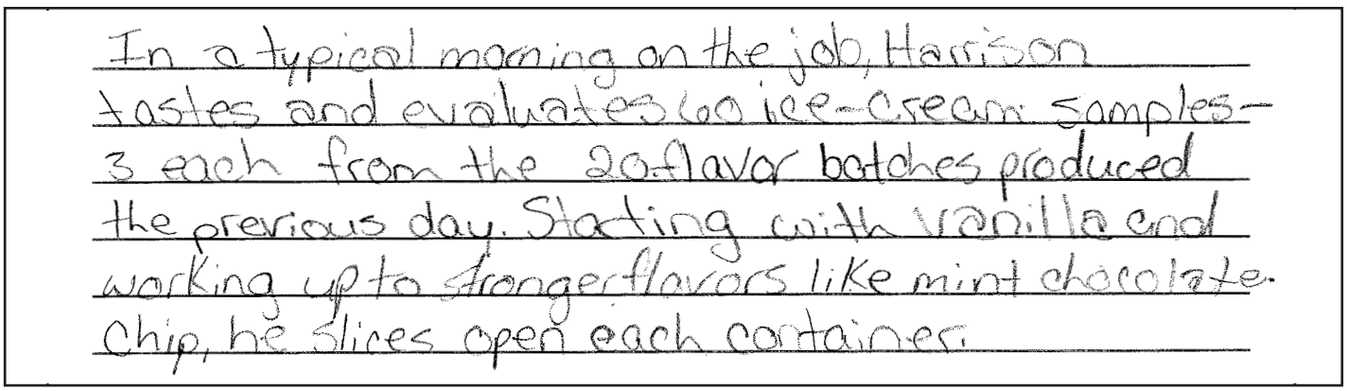
Score Point: 1

The response provides one example from the passage where John Harrison uses his sense of sight, but does not attempt to explain how this is important to the tasting process. 1) *Grades each one on it's a pearance. He checks to see if the ice cream is attractive.*


Harrison looks over the samples
and grades each one on its
a pearance. He checks to see if the
ice cream is attractive.
He taste it with his gold plated spoon
so he can avoid the after tastes.

Score Point: 0

The response is incorrect and does not answer the question. This response is a direct quote from another paragraph in the passage and does not address using the sense of sight in the tasting process.


In a typical morning on the job, Harrison
tastes and evaluates 60 ice-cream samples—
3 each from the 20 flavor batches produced
the previous day. Stating with vanilla and
working up to stronger flavors like mint chocolate
Chip, he slices open each container.

WRITING RESPONSES

Scoring Student Responses to Writing Prompts–2008 Augmented Benchmark Grade 7

Domain Scoring

In domain scoring, which was developed in conjunction with Arkansas educators, the observation of writing is divided into several domains (categories), each composed of various features. The domains scored for Arkansas compositions are Content, Style, Sentence Formation, Usage, and Mechanics. (These domains are defined on the following page.) Each domain is evaluated holistically; the domain score indicates the extent to which the features in that domain appear to be under the control of the writer. The score reflects the student's performance for the entire domain, with all features within the domain being of equal importance.

All responses are read independently by at least two readers. The two scores are averaged by domain. In cases where the two readers' scores are non-adjacent (a "1" and a "3," for example) in any domain, the response is read a third time by a Team Leader or the Scoring Director for resolution.

The domain scores, along with an awareness of the features comprising each domain, can be used to plan developmental or remedial instruction for the student.

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, was done with the assistance of a committee of Arkansas teachers 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."

Writing Domains and Definitions–2008 Augmented Benchmark Grade 7

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

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

Writing Prompt—2008 Augmented Benchmark Grade 7

Your teacher has asked you to write an essay on the following topic:

What is a goal you would like to achieve? What are you doing to achieve that goal?

Before you begin to write, think about a goal you would like to achieve. It may be to do well in school, or it may be to get a particular job when you get older. It can be any goal that you would like to reach. What steps are you taking to accomplish that goal?

Now write an essay for your teacher about a goal you would like to achieve. Be sure to name the goal and explain what you are doing to reach that goal. 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?

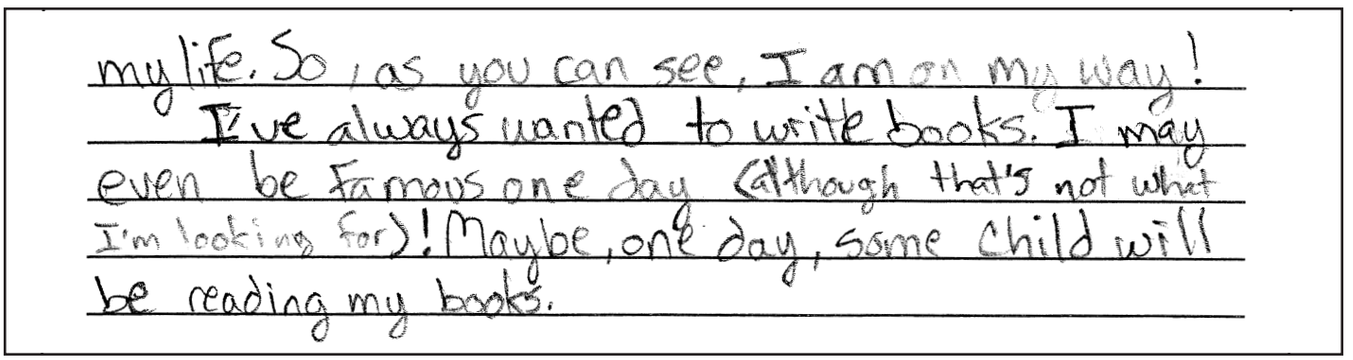
My goal in life is to be an author. I'm working to achieve that goal by studying extra in school, writing books now, and planning on taking writing and english in college. I will allways continue to work at becoming a great author.

The first and most important thing I'm doing now is working extra in school. If I continue doing that, then I will be able to go to a good college. I will also learn more English and writing that way. It makes life easier when you're getting good grades. If I always do good in school, I'm sure to get a good education.

Next, I am planning on going to college. That will help me majorly. I could learn even more than I did in school! With college, I may even get paid better for better writing skills. If I don't go to college, I will probably not get to be a published author.

Also, I have already written one book. It is not yet published, but it's in the process. This is what I love to do - write and read. Writing this book was fun, and it turned out to be something I wanted to do for the rest of

Writing Sample Response 1—2008 Augmented Benchmark Grade 7


my life. So, as you can see, I am on my way!
I've always wanted to write books. I may
even be famous one day (although that's not what
I'm looking for)! Maybe, one day, some child will
be reading my books.

Writing Annotation for Sample Response 1—2008 Augmented Benchmark Grade 7

Content: 3

This response has a central idea (*My goal in life is to be an author*), but is not fully elaborated (*working extra in school…learn more english and writing…I'm sure to get a good education…I may even get paid better for better writing skills…Writing this book was fun*). The response is organized with an introduction, a three paragraph body and a closing paragraph. Overall, there is reasonable control of the features of the Content domain demonstrated throughout the response.

Style: 3

There is some precise vocabulary (*great author…published author…Famous one day*) mixed with general information (*good college…good grades…get paid better…this book was fun*) throughout the response. Sentence structure and length is varied with simple sentences (*I will allways continue to work at becoming a great author*) and complex sentences (*If I don't go to college, I will probably not get to be a published author*). With spotty use of vivid vocabulary and information, the tone and voice are not strong, demonstrating reasonable control of the Style domain.

Sentence Formation: 4

There are many complex sentences throughout the response (*If I continue doing that, then I will be able to go to a good college*) and, with the exception of using a hyphen instead of a colon (*This is what I love to do - write and read*), all sentences are formed correctly. Overall, consistent control of the Sentence Formation domain is demonstrated.

Usage: 4

There is consistent use of correct inflections (*working…makes…grades…planning*), tenses (*I'm doing…is working… have already written…I've always wanted*) and word agreement (*…learn even more…may even get paid better… it's in the process*) throughout the response. There are two minor grammatical errors (*If I always do good*[well] *in school…it turned out to be something I wanted*[want] *to do…*). This response demonstrates consistent control of the Usage domain.

Mechanics: 4

Correct formatting and capitalization are shown throughout the response with the exception of not capitalizing a proper noun (*english*). There is one spelling error (*allways*), a misplaced apostrophe (*your'e*) and a comma omission (*although that's*). Since the errors are minor, this response, overall, demonstrates consistent control the features of the Mechanics domain.

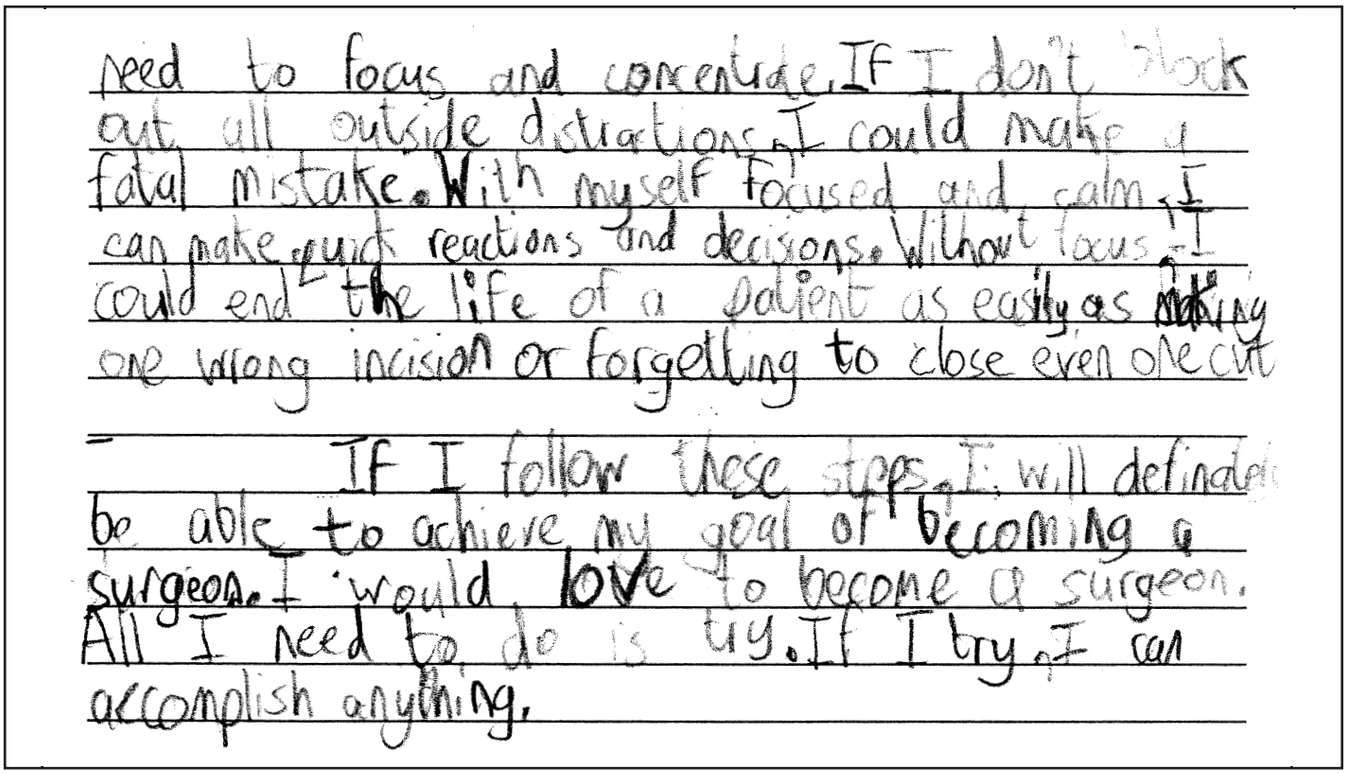
Many people say some goals are impossible, but as long as you try and try, nothing is out of reach. My goal is to become a surgeon and I would love to achieve that goal. What I would have to do is be fully educated, learn to be friendly, and learn to be calm.

Before anything else, I would have to be educated. First is the basic grade school, which is a universal necessity. After that I would have to go through college. Finally, I would go through medical school, where I would learn to wield my scapel for science. If I do not complete even just one of these my ambition can be completely shattered like glass.

Although all I need to become a surgeon is education, without being friendly I would be utterly useless. I need to learn to be friendly so I can be kind to the patient. This allows me to encourage them and reassure them of their safety. This makes the patient calm and without stress.

After calming the patient, I also need to be focused and calm. To do my job I would

Writing Sample Response 2–2008 Augmented Benchmark Grade 7



need to focus and concentrate. If I don't block out all outside distractions I could make a fatal mistake. With myself focused and calm, I can make quick reactions and decisions. Without focus I could end the life of a patient as easily as making one wrong incision or forgetting to close even one cut.

If I follow these steps, I will definately be able to achieve my goal of becoming a surgeon. I would love to become a surgeon. All I need to do is try. If I try, I can accomplish anything.

Writing Annotation for Sample Response 2—2008 Augmented Benchmark Grade 7

Content: 4

This response has a clear central idea (*My goal is to become a surgeon…*) fully elaborated with details that support the central idea (*fully educated, learn to be friendly, and learn to be calm*). Each of the details is further elaborated with a separate paragraph. There is clear organization and a presence of closure (*If I follow these steps, I will definately be able to achieve my goal of becoming a surgeon*). Overall, there is consistent control of the features of the Content domain demonstrated throughout the response.

Style: 4

There is some precise vocabulary (*universal necessity…wield my scapel…completely shattered…utterly useless… encourage them and reassure them…outside distractions…quick reactions*) and purposefully chosen information (*If I do not complete even just one of these my ambition can be completely shattered like glass…This makes the patient calm and without stress…Without focus, I could end the life of a patient as easily as making one wrong incision…*) selected to affect the reader. Sentences vary in beginnings and length which creates interest, and as a result, a strong voice emerges. This response demonstrates consistent control of the Style domain.

Sentence Formation: 4

There are complex sentences (*Although all I need to become a surgeon is education, without being friendly I would be utterly useless*) throughout this response and most sentences are correct. Overall, consistent control of the Sentence Formation domain is demonstrated.

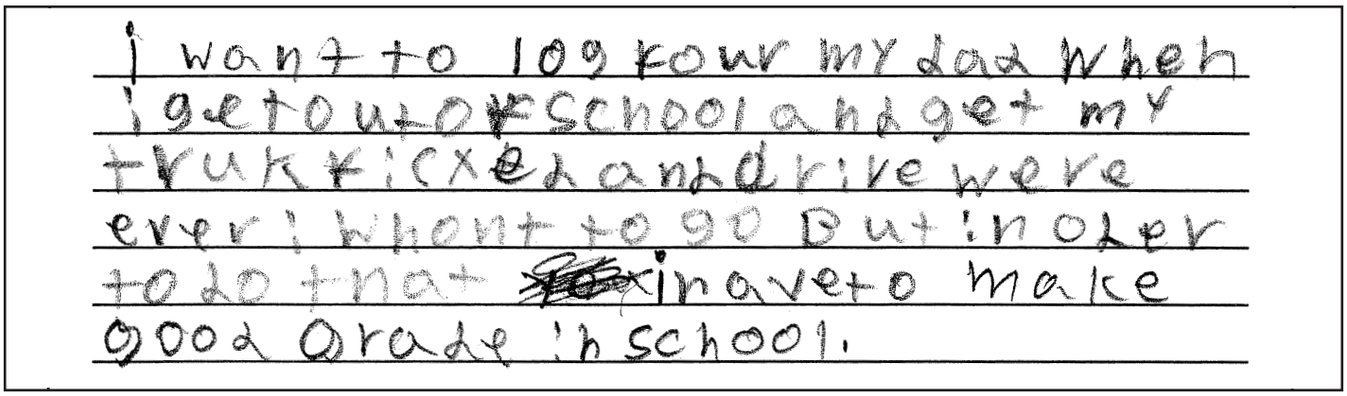
Usage: 4

There is consistent use of correct inflections (*goals…distractions…decisions), tenses (would have to be educated…I need to learn to be*), and word agreement (*them of their safety…With myself focused*) throughout the response. There are two minor verb tense errors (*This allows me…This makes…*), but, overall, the response demonstrates consistent control of the Usage domain.

Mechanics: 4

Correct formatting, capitalization (*Before…After…I…*) and punctuation are shown throughout the response. There are two minor spelling errors (*scapel… definately*) and a few commas have been omitted after introductory phrases (*After that…without being friendly…To do my job…*). However, consistent control is demonstrated in the features of the Mechanics domain.

Writing Sample Response 3–2008 Augmented Benchmark Grade 7



Writing Annotation for Sample Response 3–2008 Augmented Benchmark Grade 7

Content: 1

The central idea of this response is unclear (*log for my dad* [or] *make good grade in school*). The response is a list of things to be accomplished (*get my truk ficxed…drive were ever i whont*). There is no elaboration. Overall, there is little or no control of the features of the Content domain.

Style: 1

The vocabulary is general and basic throughout this response (*log four my dad…get my truk ficxed…make good grade in school*). The sentence problems detract from the style and the voice is flat. This response demonstrates little control of the Style domain.

Sentence Formation: 1

This response is one long sentence and there is no evidence of knowledge of sentence construction. Little or no control of the Sentence Formation domain is shown.

Usage: 3

There is reasonable control of verb tense (*want to log…i get out of school…ficxed…i have to make*), but the response has an inflection error (*grade*). Although the response is brief, reasonable control of the Usage domain is shown.

Mechanics: 2

This response has one correct end punctuation and omitted one period (*Whont to go But in…*). There is incorrect capitalization (*i…When…Whont*) and no formatting is present. With several spelling errors (*four…truk ficxed…were…Whont…oder*) this response demonstrates little or no control of the Mechanics domain.

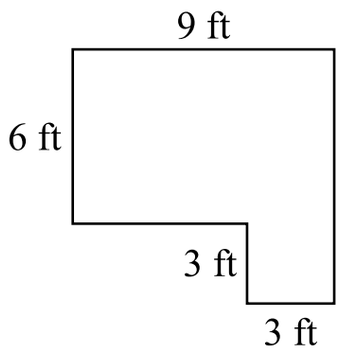
MATHEMATICS RESPONSES

Mathematics Item A–2008 Augmented Benchmark Grade 7

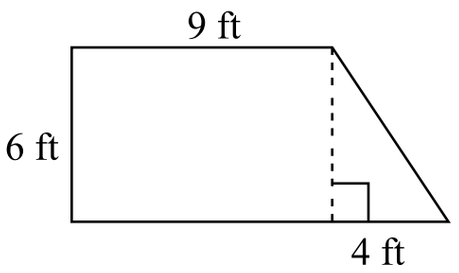
A

Melanie wants to plant a vegetable garden in two different garden plots, as shown in the figures below.

A.



B.



1. Melanie needs 65 sq ft to plant corn in her garden. Which garden plot should Melanie choose to plant corn? Show all your work and/or explain your answer.

2. Melanie plans to fertilize both garden plots 2 times during the season. One bag of fertilizer will fertilize 135 sq ft. How many bags of fertilizer will Melanie need to buy? Show all your work and/or explain your answer.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

MATHEMATICS ITEM A SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

SCORE	DESCRIPTION
4	Response contains no incorrect work.
3	The student earns 3 points.
2	The student earns 2 points.
1	1 or some minimal understanding shown.
0	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

<table>
<tr><th>Part</th><th>Points</th></tr>
<tr><td>1</td><td>2 points possible

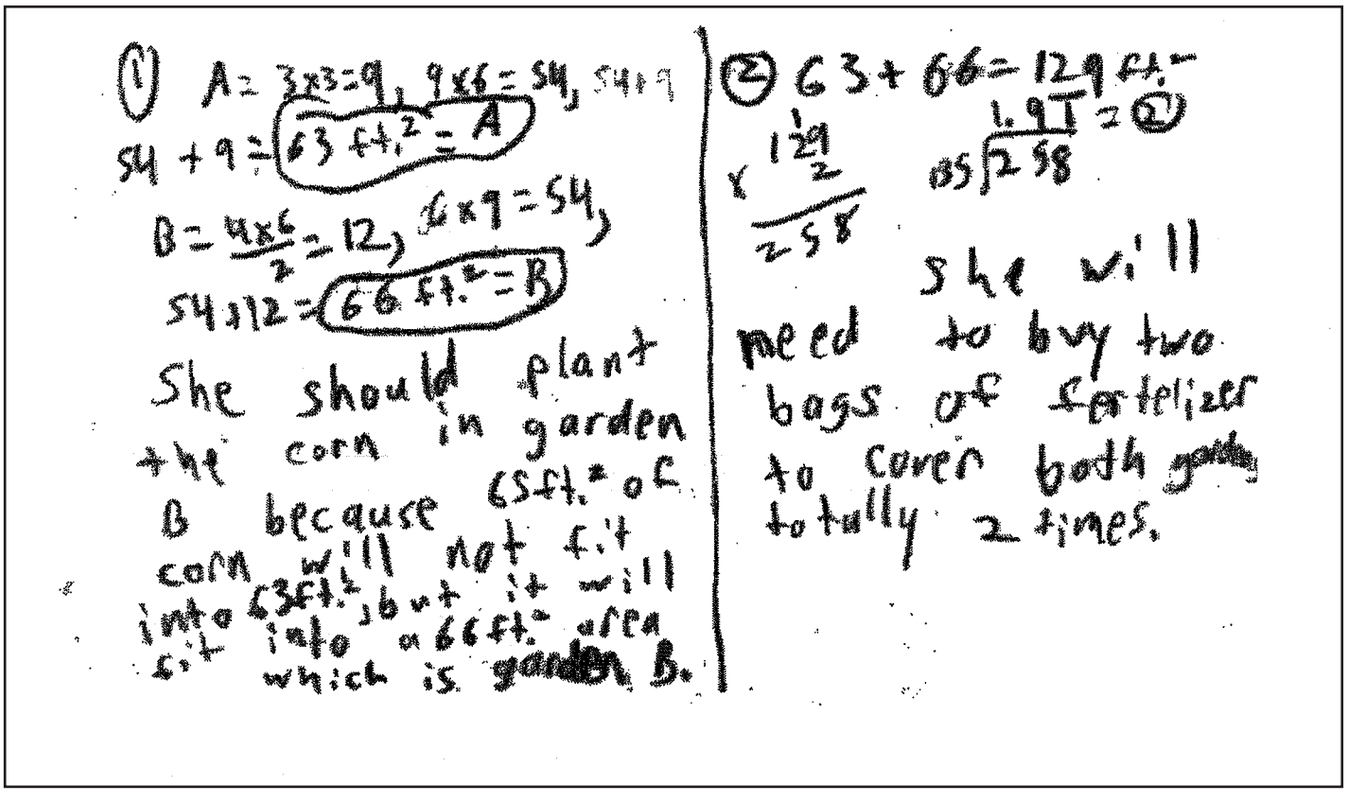
2 points: Correct answer (B) with correct and complete work shown finding
areas of Plots A and B
Give credit for the following or equivalent:
• Melanie should plant corn in plot B because it has 66 sq ft.
Area of plot A = area of rectangle plus the area of a square
$6 \times 9 = 54$
$3 \times 3 = 9$
$54 + 9 = 63 \text{ sq ft}$
Area of plot B = area of rectangle plus the area of a triangle
$6 \times 9 = 54$
$\frac{1}{2} \times 4 \times 6 = 12$
$54 + 12 = 66 \text{ sq ft}$

or

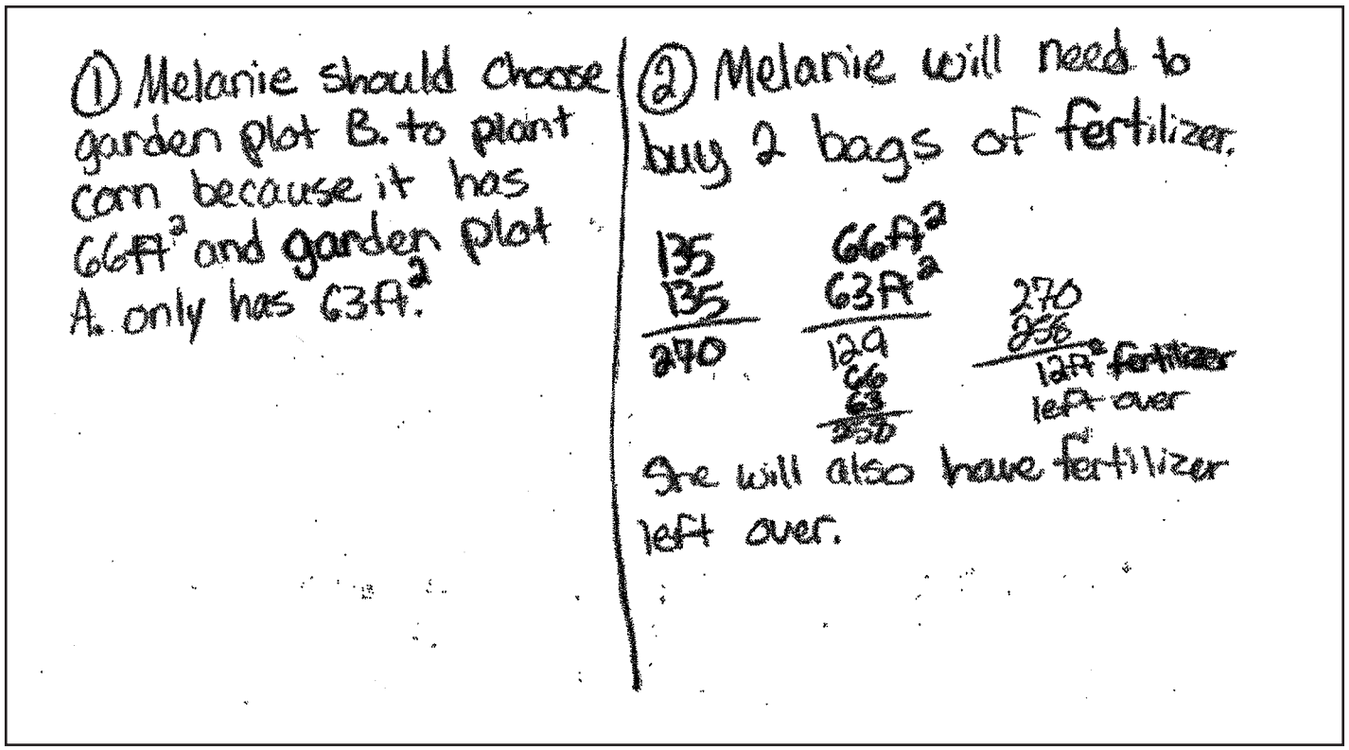
• (6 x 6) + (9 x 3) = 63
(13 x 6) – (6x4)/2 = 66
B
Or
1 point: Response is incomplete and/or contains a calculation error
Give credit for the following or equivalent:
• 2 correct areas are given
Work is correct and complete
Answer is incorrect or missing or
• 2 correct areas are given
Work is incomplete or missing
With or without correct answer or
• 1 area is correct with work shown
2nd area incorrect due to calculation error
With or without correct answer</td></tr>
<tr><td>2</td><td>2 points possible

1 point: Correct answer: 2
or correct answer based on incorrect area(s) given in Part 1
And
1 point: Correct and complete procedure shown and/or explained
May contain a calculation or copy error
Give credit for the following or equivalent:</td></tr>
</table>

	• $63 + 66 = 129, \quad 129 \times 2 = 258$ $258 \div 135 = 1.91$ bags of fertilizer

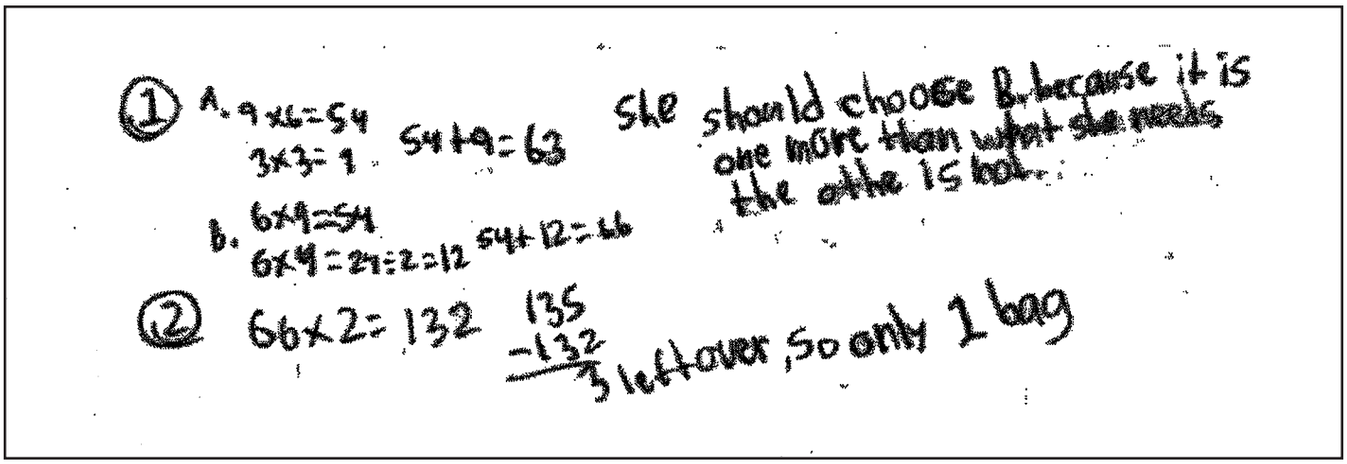


SCORE: 4		**Points**
Part 1, 2 pts:		
Correct answer (B):	*She should plant the corn in garden B because 65 ft.² of corn will not fit in 63 ft.², but it will bit into a 66 ft.² area which is garden B.*	**2**
Correct and complete procedure:	Finds both areas. $A = 3 \times 3 = 9,\ 9 \times 6 = 54 \quad 54 + 9 = 63\ ft.^2 = A$ $B = \frac{4 \times 6}{2} = 12,\ 6 \times 9 = 54 \quad 54 + 12 = 66\ ft.^2 = B$	
Part 2, 2 pts:		
Correct answer:	*She will need to buy 2 bags.*	**1**
Correct procedure:	$63 + 66 = 129\ ft.^2$ $258 \div 135 = 1.91 = 2$	
	$129 \times 2 = 258$	**1**
TOTAL POINTS		**4**
SCORE		**4**

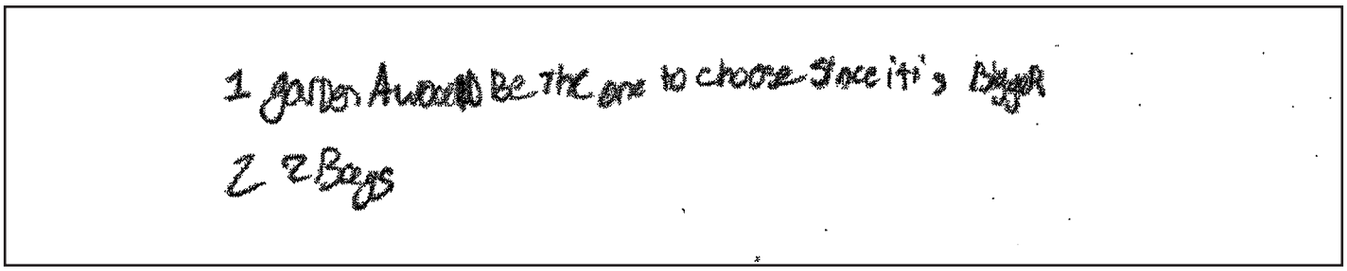


SCORE: 3		**Points**
Part 1, 2 pts:		
Correct answer (B):	*Melanie should choose garden B. to plant corn because it has 66 ft.² and garden plot A. only has 63 ft.²*	**1**
No procedure:	See Rubric Part 1 – 1 point: Two correct areas are given. Work is incomplete or missing.	
Part 2, 2 pts:		
Correct answer:	*She will need to buy 2 bags of fertilizer.*	**1**
Correct procedure:	*135 66 ft²* *135 66 ft²* *270 129 270* *66 258* *63 12 ft² fertilizer* *258 left over*	**1**
TOTAL POINTS		**3**
SCORE		**3**

Mathematics Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7

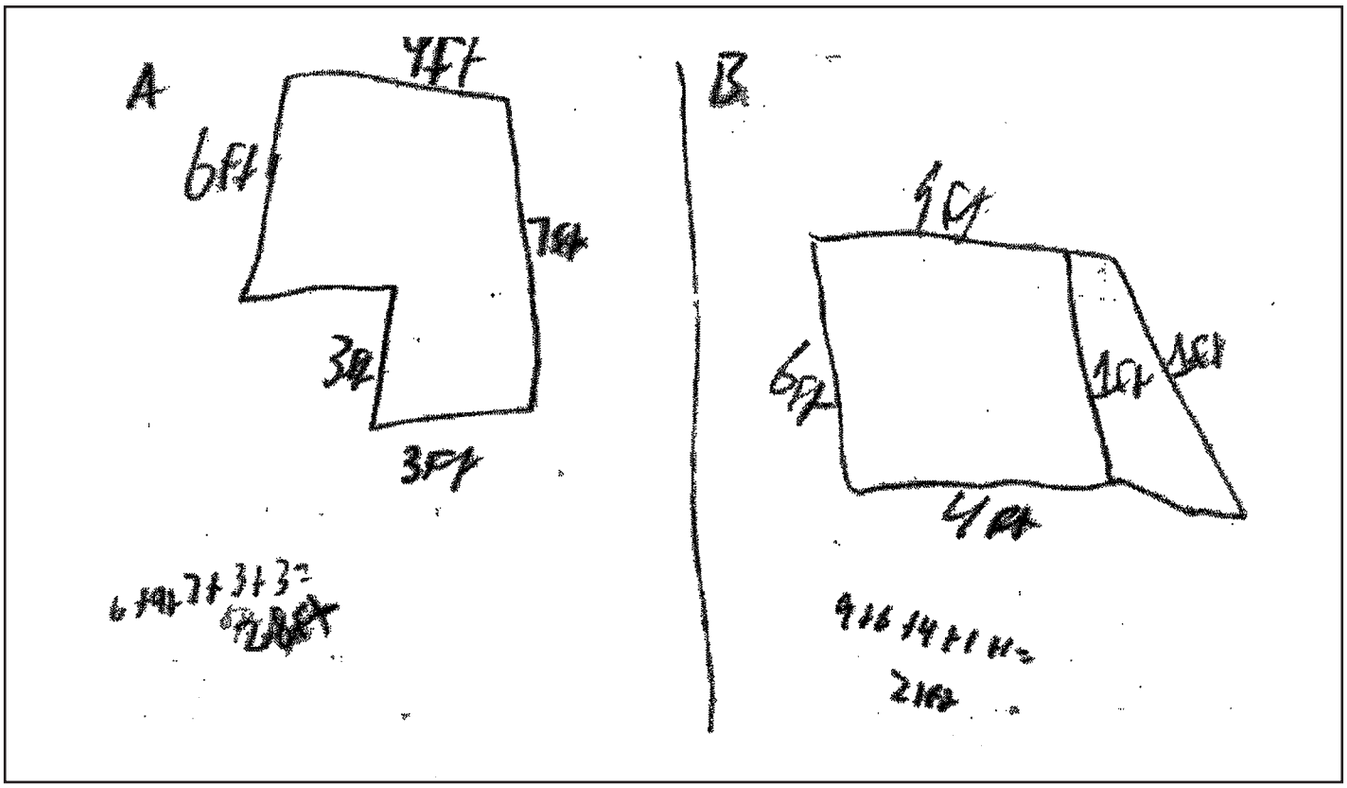


SCORE: 2		**Points**
Part 1, 2 pts:		
Correct answer (B):	*She should choose B. because it is one more than what she needs the othe is not*	**2**
Correct and complete procedure:	Find both areas. *A.* $9 \times 6 = 54$ $3 \times 3 = 9$ $\quad 54 + 9 = 63$ *B.* $6 \times 9 = 54$ $\quad 6 \times 4 = 24 \div 2 = 12$ $54 + 12 = 66$	
Part 2, 2 pts:		
Incorrect answer:	*Only 1 bag.*	**0**
Incomplete procedure:	$66 \times 2 = 132$ 135 $-\ 132$ *3 left over*	**0**
TOTAL POINTS		**2**
SCORE		**2**



SCORE: 1		Points
Part 1, 2 pts:		
Incorrect answer (A) with no procedure:	*Garden A would be the one to choose since it is bigger.*	**0**
Part 2, 2 pts:		
Correct answer:	*2 bags*	**1**
No procedure:		**0**
TOTAL POINTS		**1**
SCORE		**1**

Mathematics Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



SCORE: 0 **Points**

Part 1, 2 pts:

No answer with incorrect procedure:

A $6 + 9 + 7 + 3 + 3 = 28\ ft$

B $9 + 6 + 4 + 1 + 1 = 21\ ft$

0

Part 2, 2 pts:

No answer: **0**

No procedure: **0**

TOTAL POINTS **0**

SCORE **0**

Mathematics Item B–2008 Augmented Benchmark Grade 7

B

The table below shows how many minutes were spent studying for a test and the scores received on the test by 6 students.

Minutes Spent Studying (x)	Score Received on Test (y)
45	99
25	94
22	82
18	75
15	71
10	65

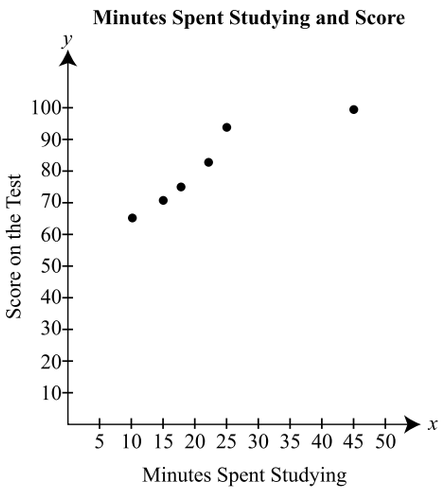
1. What is the mean test score in the table above? Show all your work and/or explain your answer.
2. On the grid in your answer document, draw a scatterplot to display the data in the table above. Use all the correct graphing techniques.
3. Based on the scatterplot, write a sentence describing the relationship between the minutes spent studying and the scores received on the test.

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

MATHEMATICS ITEM B SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

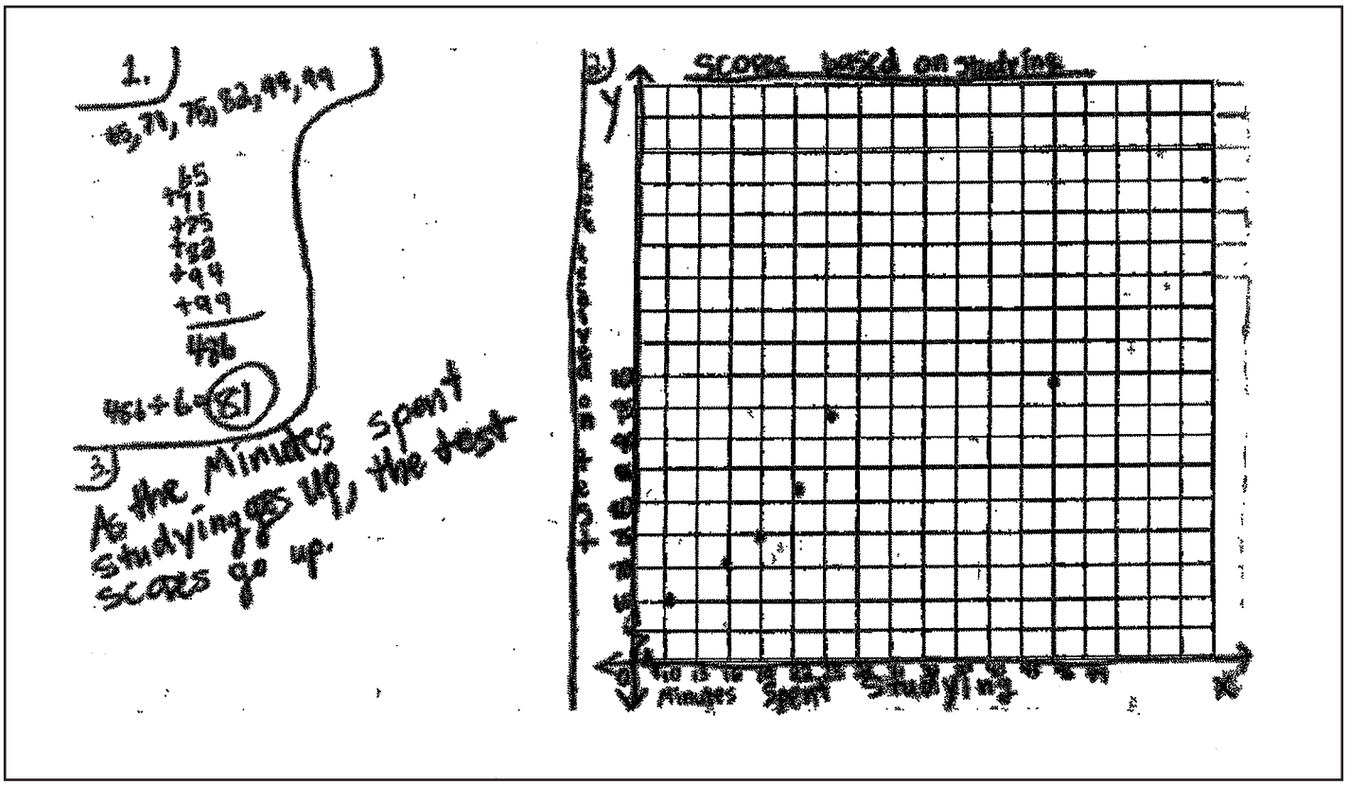
SCORE	DESCRIPTION
4	Response contains no incorrect work.
3	The student earns 3-3 $\frac{1}{2}$ points.
2	The student earns 2-2 $\frac{1}{2}$ points.
1	$\frac{1}{2}$-1 $\frac{1}{2}$ or some minimal understanding shown.
0	Blank–No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" assigned for the item.)

Solution and Scoring

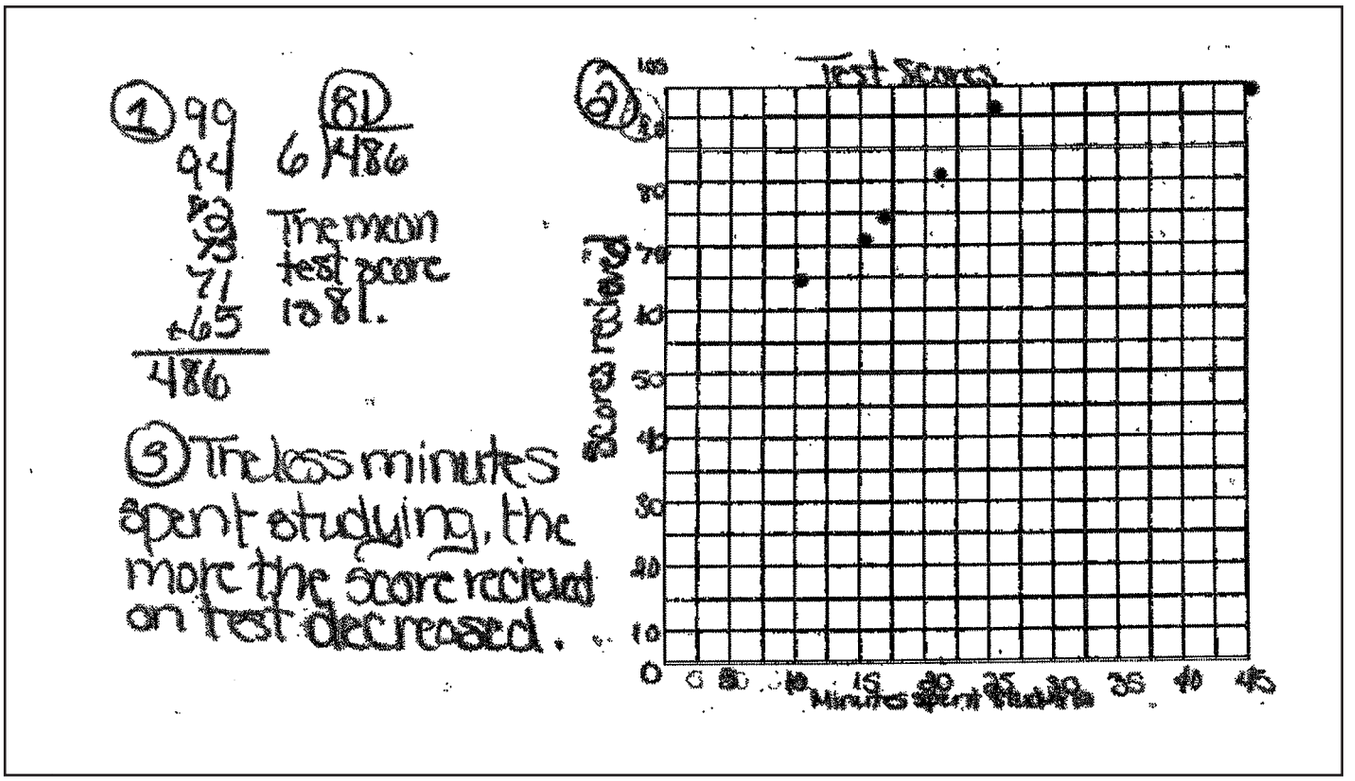
Part	Points
1	**1 point possible** ½ point: Correct answer: **81** **And** ½ point: Correct and complete procedure shown and/or explained May contain a calculation or copy error Give credit for the following or equivalent: • 99 + 94 + 82 + 75 + 71 + 65 = 486 486 ÷ 6 = # or • "I added up all the scores and got 486. Then I divided 486 by 6 to get the mean."
2	**2 points possible** 2 points: Correct and complete scatter plot (as shown below) that contains the following: • Intervals are consistent • x-axis is labeled with "Minutes…".,and y-axis is labeled with "Score…" • All points are plotted correctly • Title is required only at the "4" level  **Or** 1 point: Scatter plot contains 1-2 minor error(s) or omission(s) but is otherwise correct. Ex: Labels on x and/or y-axis are missing, points are correctly plotted Ex: Labels and intervals are correct, 1-2 points are off or missing, but the remaining points are correctly plotted **NOTE:** An attempt of a line of best fit or trend line (correct or not) cannot receive a score of "4". **NOTE:** Representations of the data other than a scatter plot

	(line graph, bar graph, etc.) receive no points for Part 2.
3	**1 point possible** 1 point: Correct description of relationship between time and scores. Give credit for the following or equivalent: • "Test scores increase in relationship to number of minutes spent studying. After studying 25 minutes, test scores increase only slightly." or • "The more minutes spent studying the better the grade on the test."

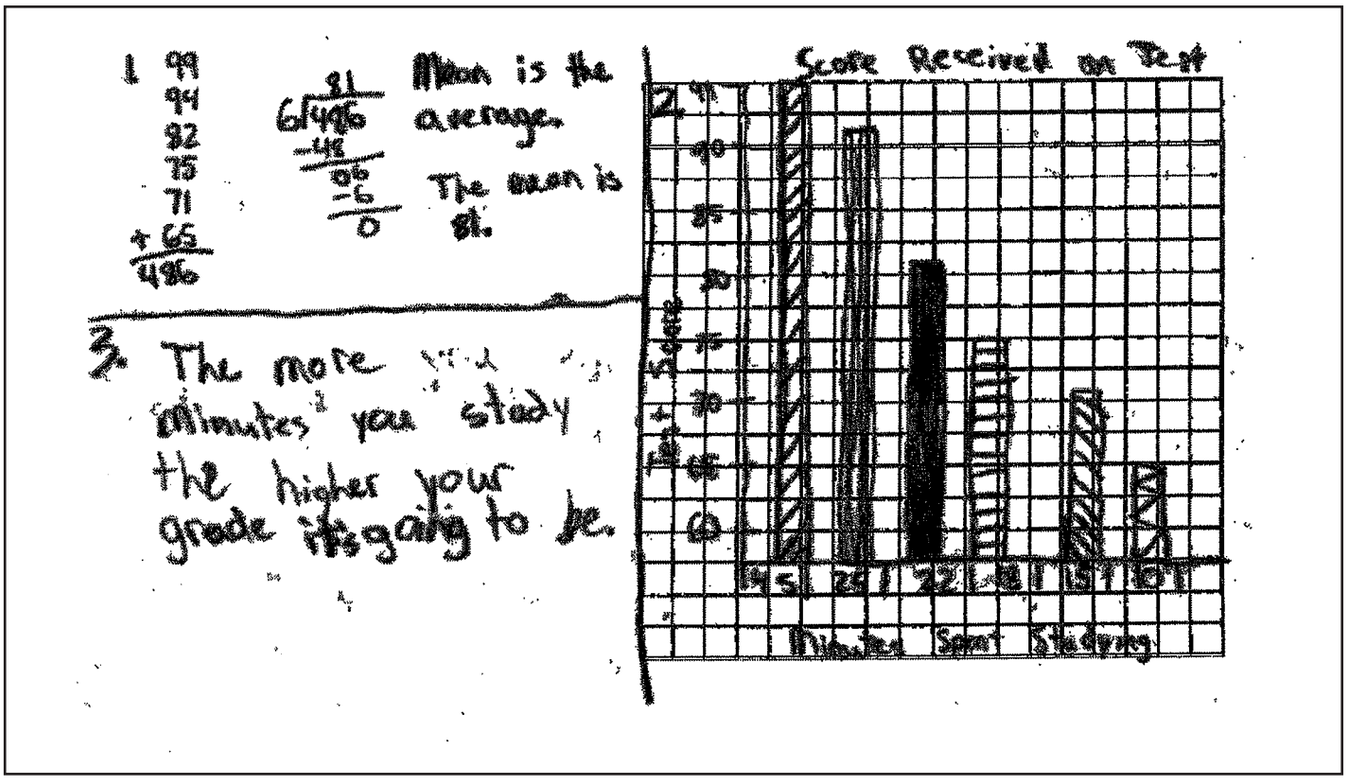
Mathematics Item B Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



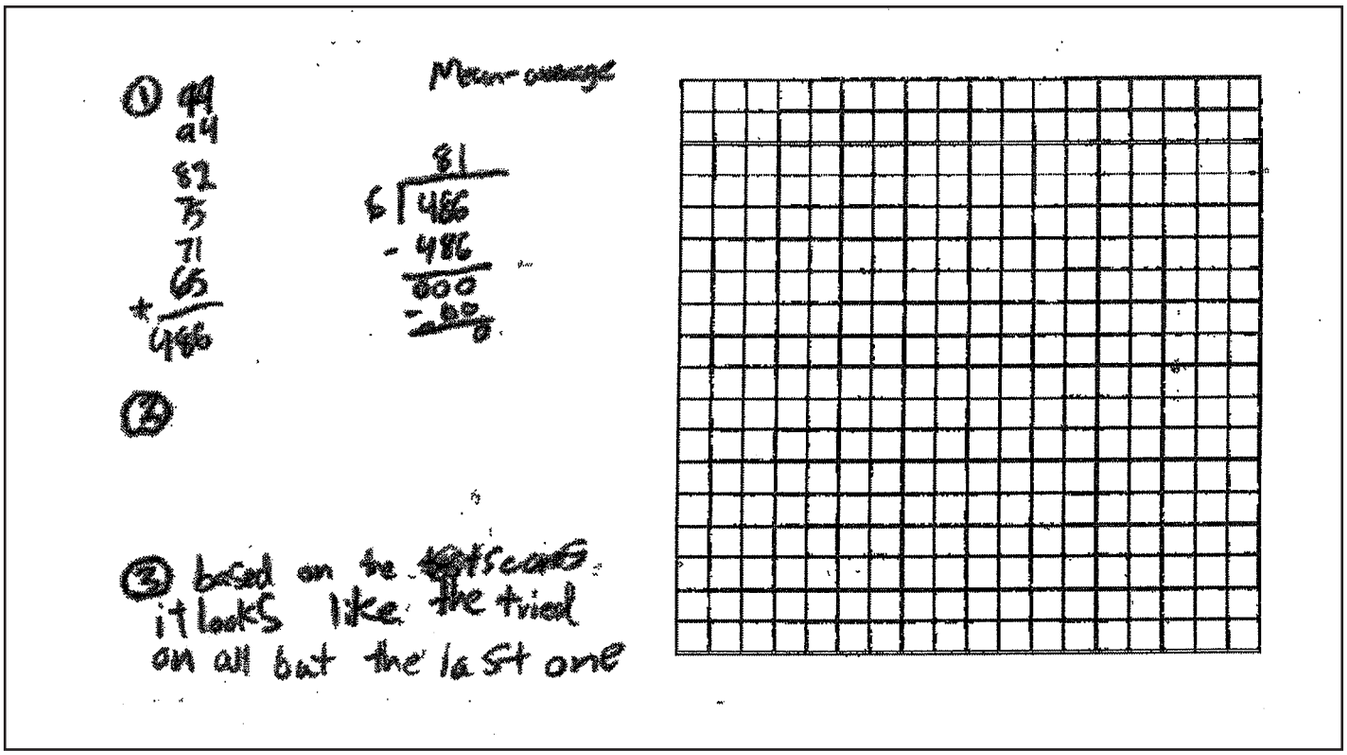
SCORE: 4		**Points**
Part 1, 1 pt:		
Correct answer:	*81*	**1/2**
Correct procedure:	Added six scores and divided by 6.	**1/2**
Part 2, 2 pts:		
Correct graph:	A correct and complete scatter plot containing the following: • Intervals are consistent • x and y axes are labeled: *minutes spent* for x and *score received on test* for y • All points are plotted correctly and the graph is titled.	**2**
Part 3, 1 pt:		
Correct answer:	Correct description of relationship between time and scores: *As the minutes spent on studying goes up, the test scores go up.*	**1**
TOTAL POINTS		**4**
SCORE		**4**



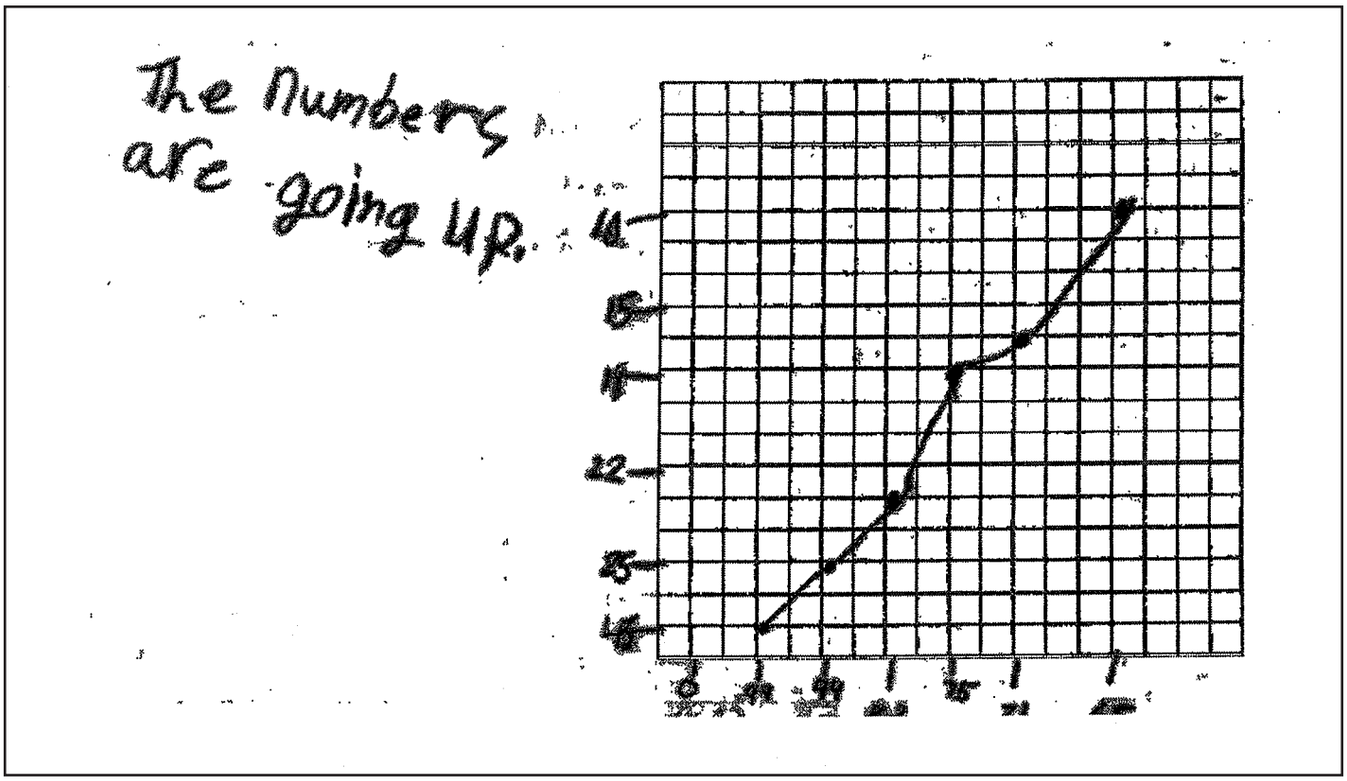
SCORE: 3		Points
Part 1, 1 pt:		
Correct answer:	*81*	**1/2**
Correct procedure:	Added six scores and divided by 6.	**1/2**
Part 2, 2 pts:		
Incomplete graph:	A scatter plot containing the following: • Intervals are inconsistent on the y-axis at the origin • The x and y axes are labeled correctly; *Minutes spent studying* for the x-axis and *Scores received* for the y-axis. • All points are plotted correctly and the graph is titled.	**1**
Part 3, 1 pt:		
Correct answer:	Correct description of relationship between time and scores: *The less minutes spent studying, the more the score received on test decreased.*	**1**
TOTAL POINTS		**3**
SCORE		**3**



SCORE: 2		**Points**
Part 1, 1 pt:		
Correct answer:	*81*	**1/2**
Correct procedure:	Added six scores and divided by 6.	**1/2**
Part 2, 2 pts:		
Incorrect graph:	An incorrect graph containing the following: • Intervals are inconsistent • x and y axes are labeled • Bar graph	**0**
Part 3, 1 pt:		
Correct answer:	Correct description of relationship between time and scores: *The more minutes you study the higher your grade it's going to be.*	**1**
TOTAL POINTS		**2**
SCORE		**2**



SCORE: 1		**Points**
Part 1, 1 pt:		
Correct answer:	*81*	**1/2**
Correct procedure:	Added six scores and divided by 6.	**1/2**
Part 2, 2 pts:		
No graph:	Not attempted	**0**
Part 3, 1 pt:		
Incorrect answer:	Incorrect description of relationship between time and scores: *based on the test scores it looks like the tried on all but the last one*	**0**
TOTAL POINTS		**1**
SCORE		**1**



SCORE: 0		Points
Part 1, 1 pt:		
No answer:	Not attempted	**0**
No procedure:	Not attempted	**0**
Part 2, 2 pts:		
Incorrect graph:	A line graph is drawn. • Data Plot connected • Intervals are inconsistent • x and y axes are not labeled See Note: Representations of the data other than a scatter plot receive no points.	**0**
Part 3, 1 pt:		
Incorrect answer:	Incorrect description of relationship between time and scores: *The numbers are going up.*	**0**
TOTAL POINTS		**0**
SCORE		**0**

SCIENCE RESPONSES

Science Item A–2008 Augmented Benchmark Grade 7

A

Answer the following.

1. Explain two ways in which sexual reproduction and asexual reproduction are **alike**.

2. Explain two ways in which sexual reproduction and asexual reproduction are **different**.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

SCIENCE ITEM A SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

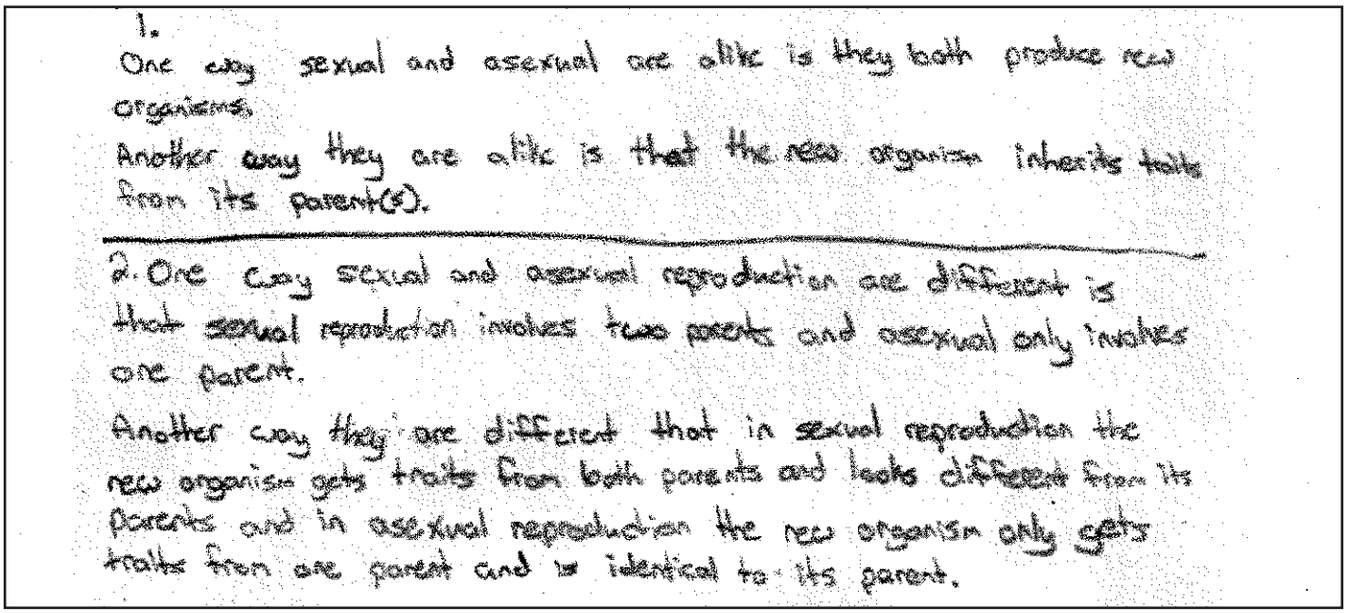
SCORE	DESCRIPTION
4	Response shows a *complete understanding* of the problem's essential scientific concepts and procedures. The student responds to all parts of the task.
3	Response shows a *nearly complete understanding* of the problem's essential scientific concepts and procedures. The student responds to all parts of the task. The response may contain minor errors.
2	Response shows a *limited understanding* of the problem's essential scientific concepts and procedures. The student responds correctly to most parts of the task. The response may contain a major error.
1	Response shows a *minimum understanding* of the problem's essential scientific concepts and procedures. The response contains incomplete procedures and major errors.
0	Response shows *insufficient understanding* of the problem's essential scientific concepts and procedures. 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.

Science Item A Solution and Scoring—2008 Augmented Benchmark Grade 7

Solution and Scoring

Parts	Points
1	**2 points possible:** 1 point: One similarity is listed. 1 point: One similarity is listed.
2	**2 points possible:** 1 point: One difference is listed. 1 point: One difference is listed.

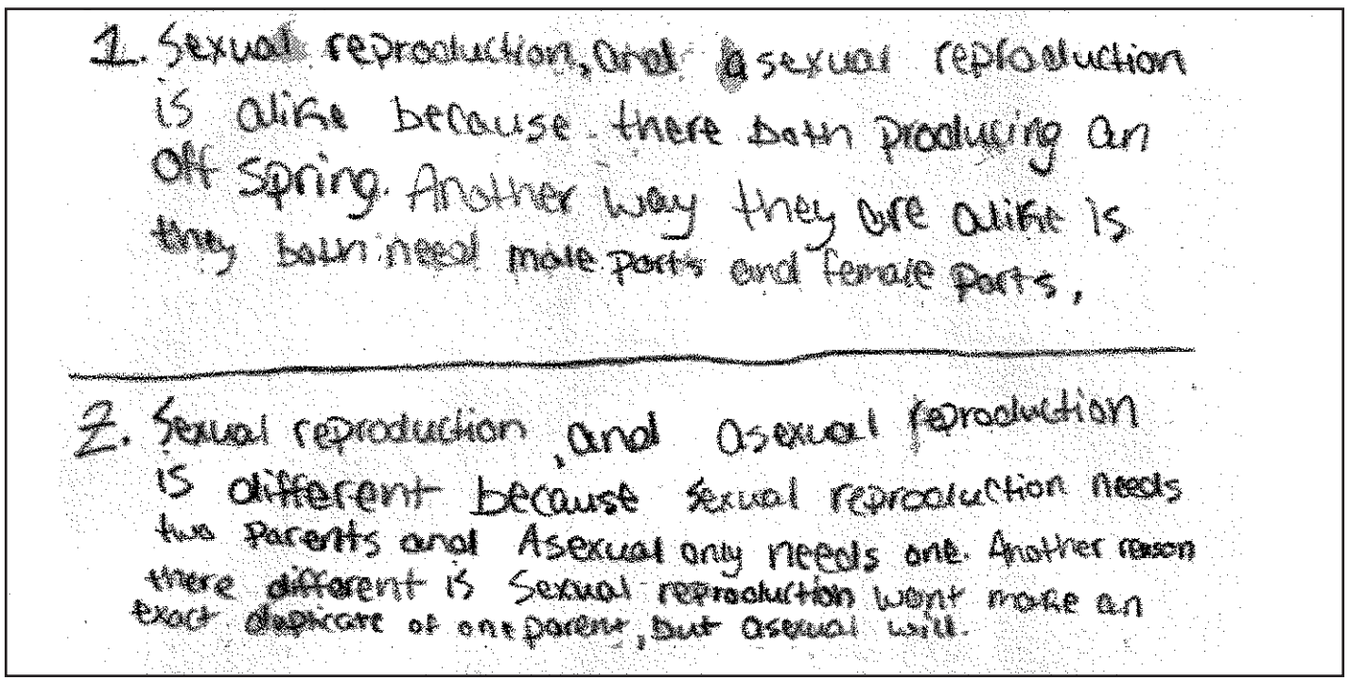
Science Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7


1.
One way sexual and asexual are alike is they both produce new organisms.
Another way they are alike is that the new organism inherits traits from its parent(s).

2. One way sexual and asexual reproduction are different is that sexual reproduction involves two parents and asexual only involves one parent.
Another way they are different that in sexual reproduction the new organism gets traits from both parents and looks different from its parents and in asexual reproduction the new organism only gets traits from one parent and is identical to its parent.

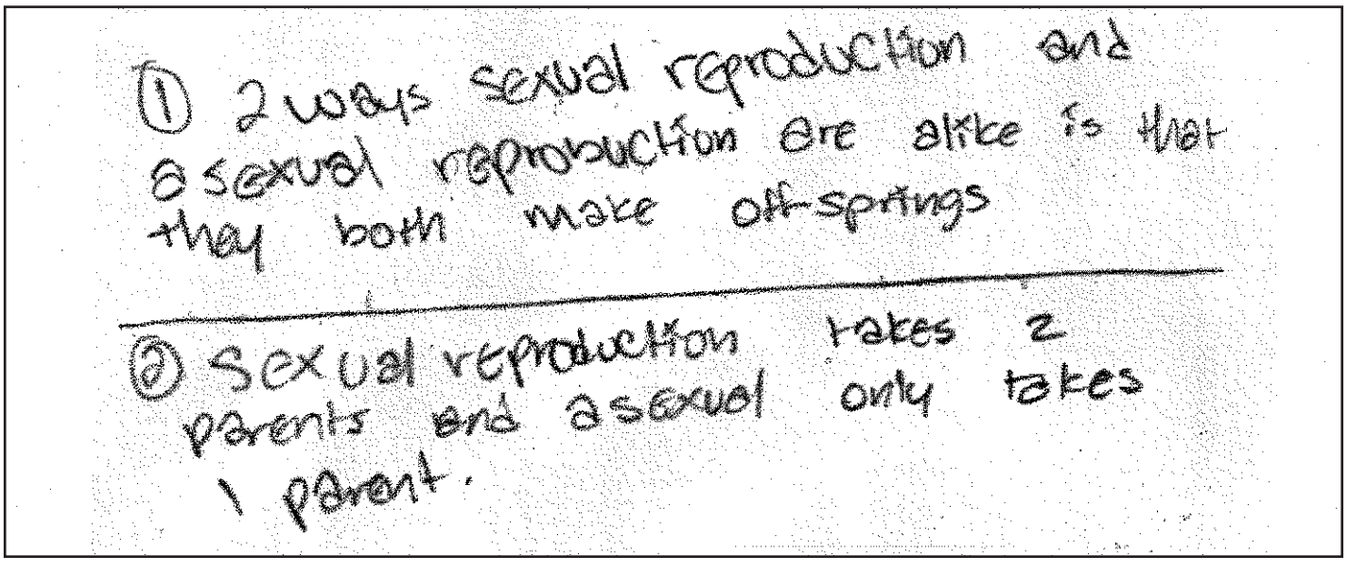
SCORE: 4		**Points**
Part 1:		
One sexual/asexual similarity:	"they both produce new organisms"	1
Another sexual/asexual similarity:	"the new organism inherits traits from its parent(s)"	1
Part 2:		
One sexual/asexual difference:	"sexual reproduction involves two parents and asexual only involves one parent"	1
Another sexual/asexual difference:	"in sexual reproduction the new organism gets traits from both parents and looks different from its parents and in asexual reproduction the new organism only gets traits from one parent and is identical to its parent"	1
TOTAL POINTS		**4**

Science Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



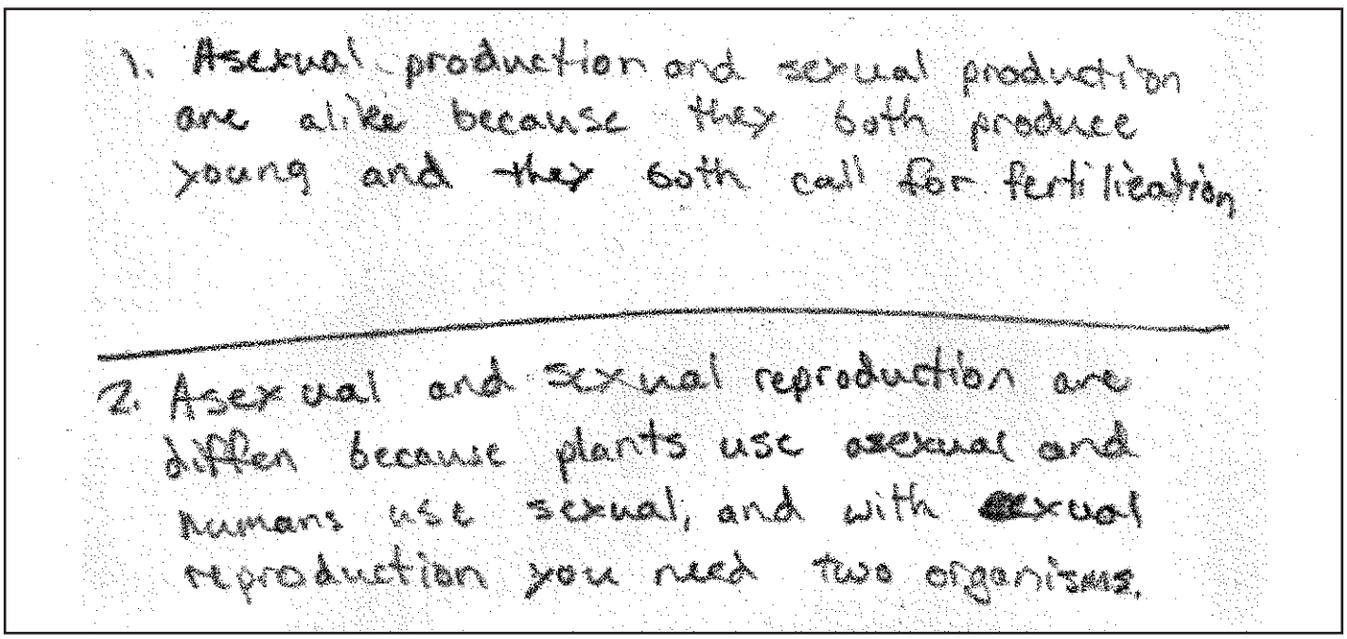
SCORE: 3		**Points**
Part 1:		
One sexual/asexual similarity:	"there both producing an offspring"	1
Incorrect sexual/asexual similarity:	"they both need male parts and female parts."	0
Part 2:		
One sexual/asexual difference:	"sexual reproduction needs two parents and asexual only needs one"	1
Another sexual/asexual difference:	"sexual reproduction wont make an exact duplicate of one parent, but asexual will."	1
TOTAL POINTS		**3**

Science Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



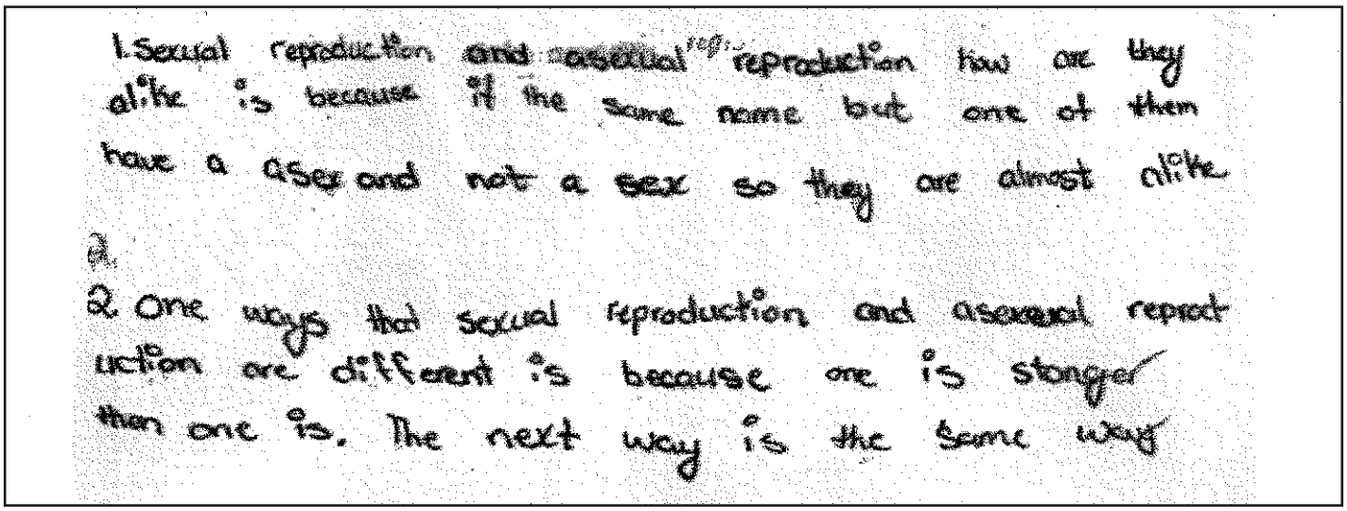
SCORE: 2		**Points**
Part 1:		
One sexual/asexual similarity:	"they both make offsprings"	1
Another sexual/asexual similarity:	no answer	0
Part 2:		
One sexual/asexual difference:	"sexual reproduction takes 2 parents and asexual only takes 1 parent"	1
Another sexual/asexual difference:	no answer	0
TOTAL POINTS		**2**

Science Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



SCORE: 1		**Points**
Part 1:		
One sexual/asexual similarity:	"they both produce young"	1
Incorrect sexual/asexual similarity:	"they both call for fertilization"	0
Part 2:		
Incorrect sexual/asexual difference:	"plants use asexual, and humans use sexual"	0
Incorrect sexual/asexual difference:	"with sexual reproduction you need two organisms."	
	No corresponding difference is given for asexual.	0
TOTAL POINTS		**1**

Science Item A Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7


1. Sexual reproduction and asexual reproduction how are they alike is because if the same name but one of them have a asex and not a sex so they are almost alike

2. One ways that sexual reproduction and asexual reproduction are different is because one is stonger than one is. The next way is the same way

SCORE: 0		**Points**
Part 1:		
Incorrect sexual/asexual similarity:	"the same name but one of them have a asex and not a sex"	0
Another sexual/asexual similarity:	no answer	0
Part 2:		
Incorrect sexual/asexual difference:	"one is stronger than one is"	0
Incorrect sexual/asexual difference:	"The next way is the same way"	0
TOTAL POINTS		**0**

Science Item B–2008 Augmented Benchmark Grade 7

B

Choose two of the following processes: evaporation, filtration, settling, and chromatography. Explain and/or draw how each of the two that you chose could be used to separate a mixture.

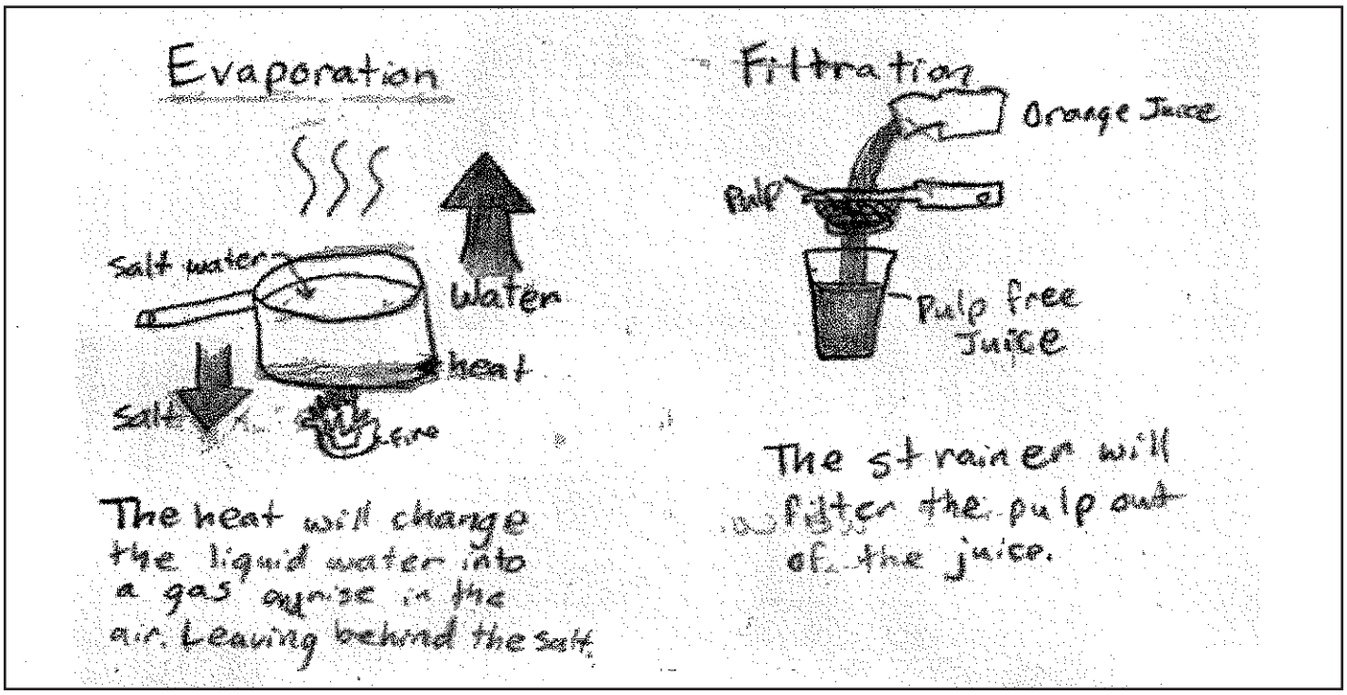
SCIENCE ITEM B SCORING RUBRIC–2008 AUGMENTED BENCHMARK GRADE 7

SCORE	DESCRIPTION
4	Response shows a *complete understanding* 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 *nearly complete understanding* 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 show a *limited understanding* 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 *minimum understanding* 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 *insufficient understanding* 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.

Science Item B Solution and Scoring—2008 Augmented Benchmark Grade 7

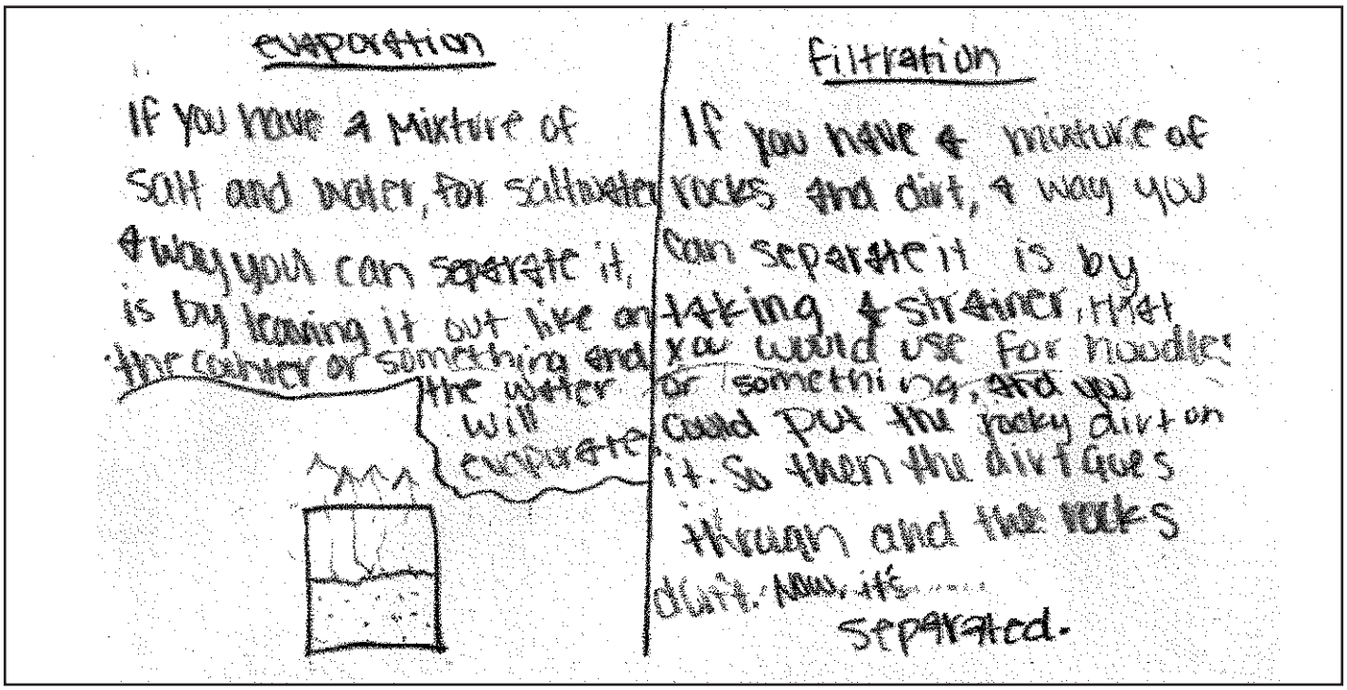
Solution and Scoring

Parts	Points
1	**4 points possible:** 4 points: Complete explanation of two processes 3 points: Complete explanation of one process and a Partially complete explanation of another process 2 points: Complete explanation of one process or Partially complete explanations of two processes 1 point: Partially complete explanation of one process or Minimally correct information in an explanation of one process

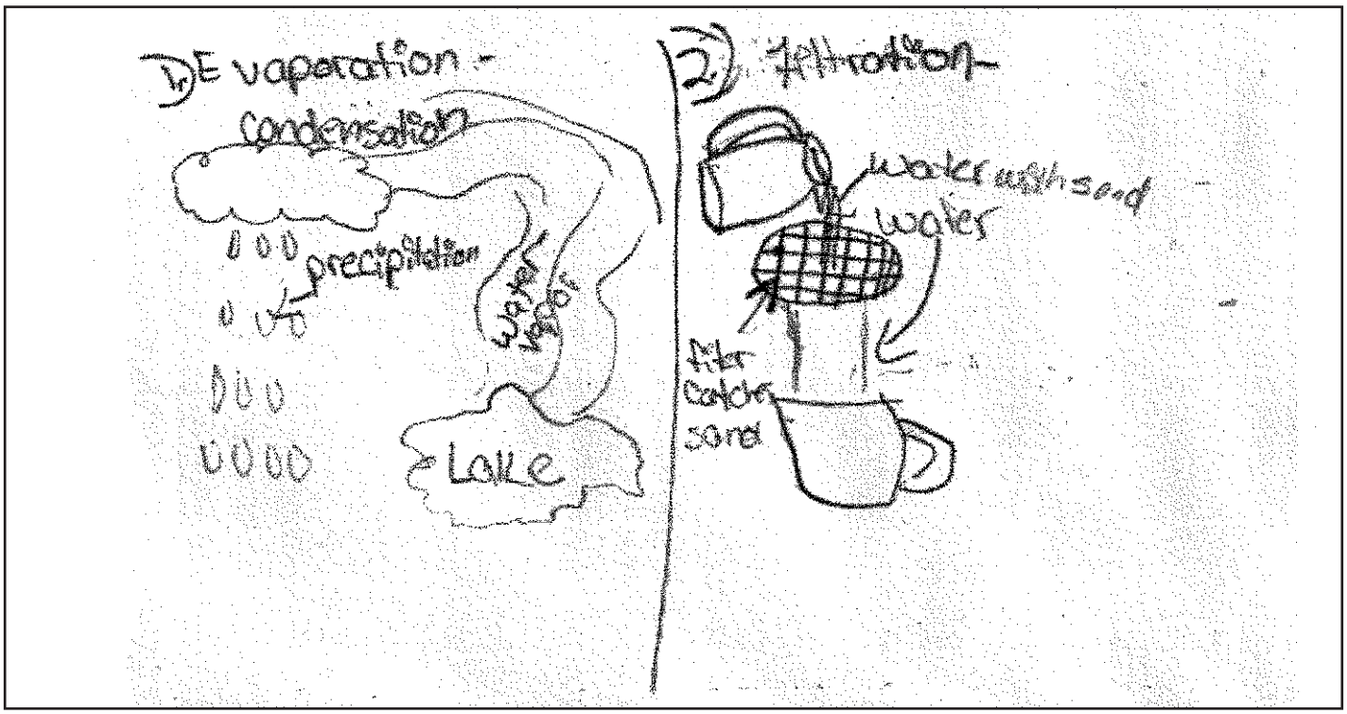


SCORE: 4	Points
Complete explanation of two processes	
Evaporation – "The heat will change the liquid into a gas and rise in the air. Leaving behind the salt." The diagram shows the water evaporating and the salt precipitating out.	2
Settling – "The strainer will filter the pulp out of the juice." The diagram shows the pulp remaining in the strainer and the juice passing through.	2
TOTAL POINTS	4

Science Item B Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7

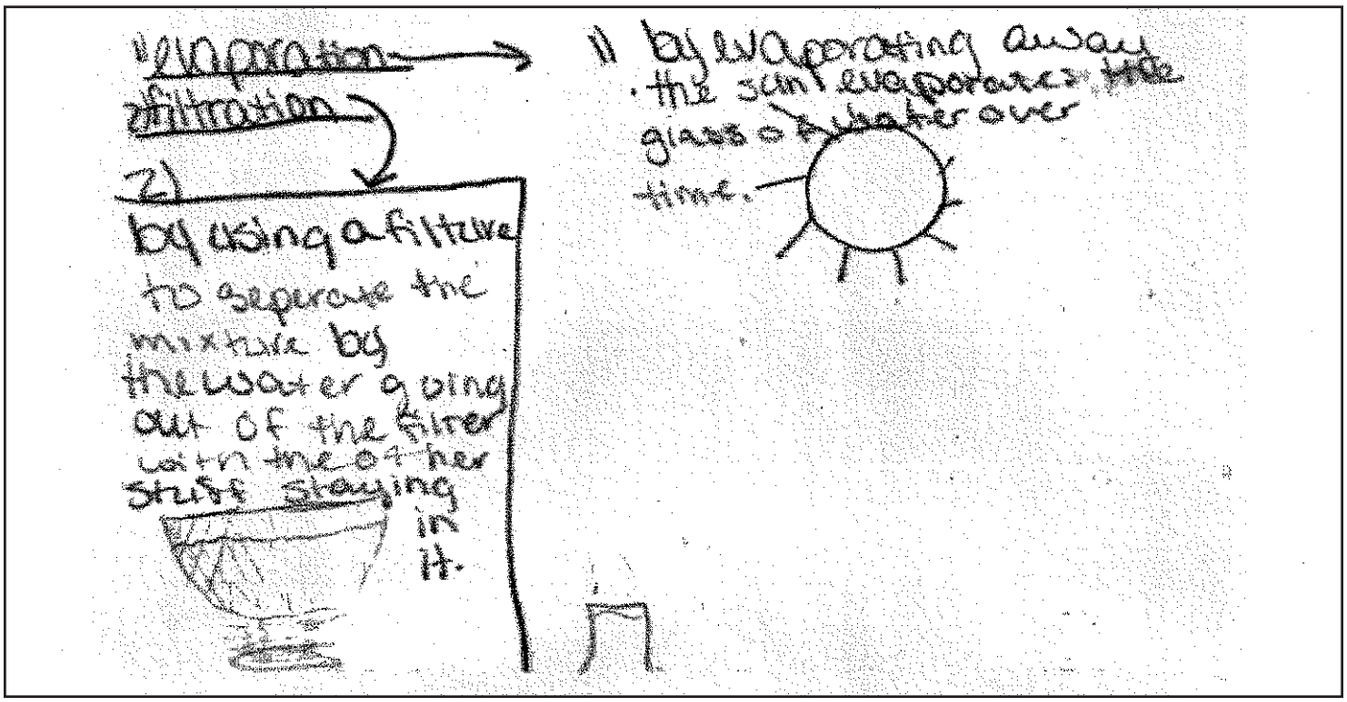


SCORE: 3	Points
Complete explanation and a Partially complete explanation	
Partially complete explanation of evaporation – "by leaving it [a mixture of salt water] out like on the counter or something and the water will evaporate." No mention is made of the salt remaining in the container.	1
Complete explanation of filtration – "taking a strainer...you could put the rocky dirt on it. So then the dirt goes through and the rocks don't. Now it's separated."	2
TOTAL POINTS	3

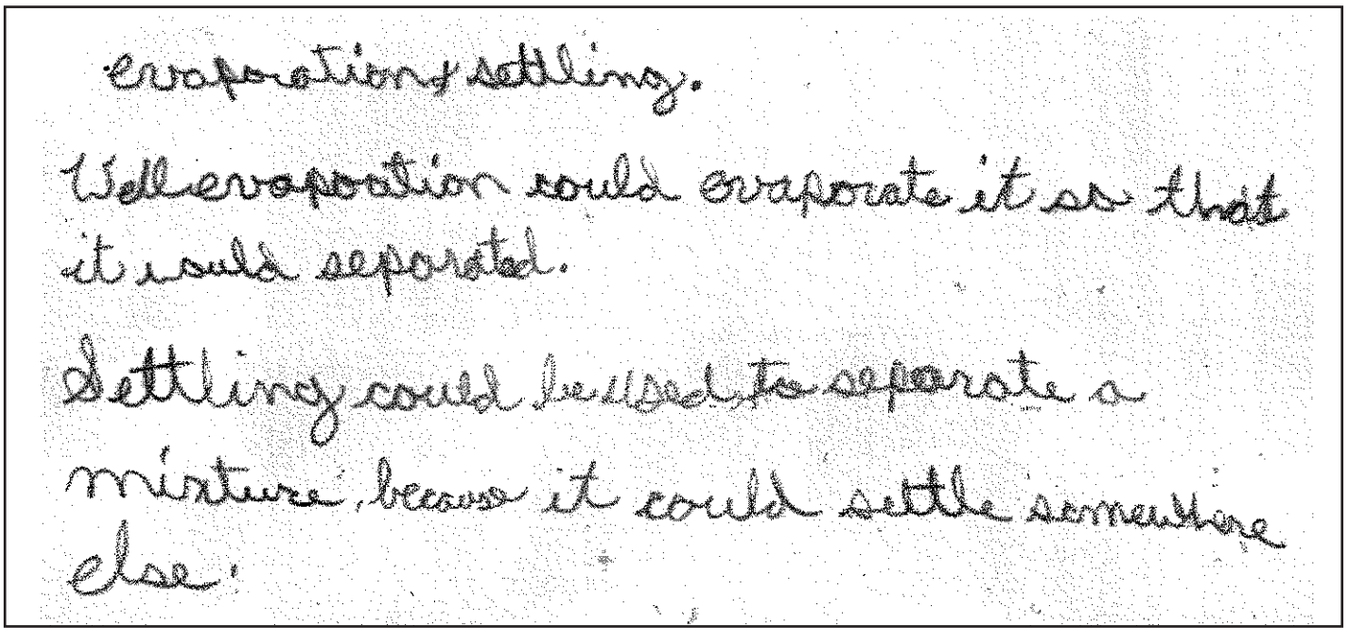


SCORE: 2	Points
Incorrect explanation of evaporation – The description is of the water cycle and does not address the separation of mixtures.	0
Complete explanation of filtration – The diagram shows a pitcher of "water and sand" being poured through a filter that "catches sand" with the water running through the filter into the cup.	2
TOTAL POINTS	**2**

Science Item B Sample Responses and Annotations–
2008 Augmented Benchmark Grade 7



SCORE: 1	Points
One Partially complete explanation	
Partially complete explanation of filtration – "the water going out of the filter with the other stuff staying in it." While the diagram does show a liquid flowing through the strainer, the mixture is not identified except as "the other stuff."	1
Inaccurate explanation of evaporation – "the sun evaporates the water" does not start with a mixture and no separation occurs.	0
TOTAL POINTS	**1**



SCORE: 0	**Points**
Insufficient understanding	
Evaporation – only states the evaporation can separate a mixture.	0
Settling – "it could settle somewhere else" does not apply to separation of a mixture.	0
TOTAL POINTS	**0**

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

1 2 3 4 5 6 7 8 9 10 11 12 A B C D E