ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

Teacher Handbook

Grade 5
Benchmark Examination

April 2007
Administration

Arkansas Department of Education

Teacher Handbook—2007 Benchmark Grade 5

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SCIENCE RESPONSES (CONTINUED)

Introduction—2007 Benchmark Grade 5

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

This handbook provides information about the scoring of the grade 5 student responses to the open-response items in Mathematics, Reading and Science and to the direct Writing prompts. 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 Benchmark Examinations is available through the Arkansas Department of Education. Questions can be addressed to Dr. Gayle Potter at 501-682-4558.

The multiple-choice and open-response test items for the Mathematics, Reading 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 both Mathematics, Reading 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 Mathematics and Science open-response item or the Reading passage and its 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 Procedures

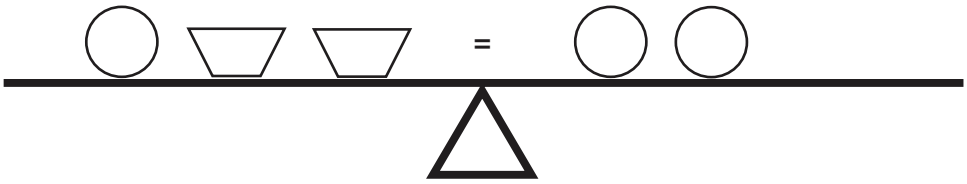
All student responses to the Benchmark Examinations open-response test items are scored independently by two readers. Those two scores are compared, and responses that receive scores that are non-adjacent (a "1" and a "3," for example) are scored a third time by a Team Leader or the Scoring Director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

MATHEMATICS RESPONSES

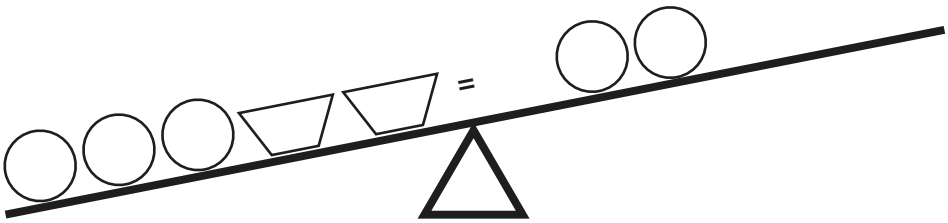
Mathematics Item A—2007 Benchmark Grade 5

The value of each trapezoid on the balance scale below is 2.



1. If the 2 trapezoids and 1 circle on the left side of the balance scale equal 8, what is the value of 1 circle? Show all your work and/or explain your answer.

2. In the figure below, two more circles were added to the left side of the balance scale causing the scale to become unbalanced.

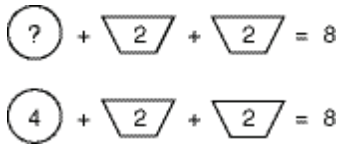


How many trapezoids should be added on the right side to balance the scale? Show all your work and/or explain your answer.

Mathematics Item A Scoring Rubric—2007 Benchmark Grade 5

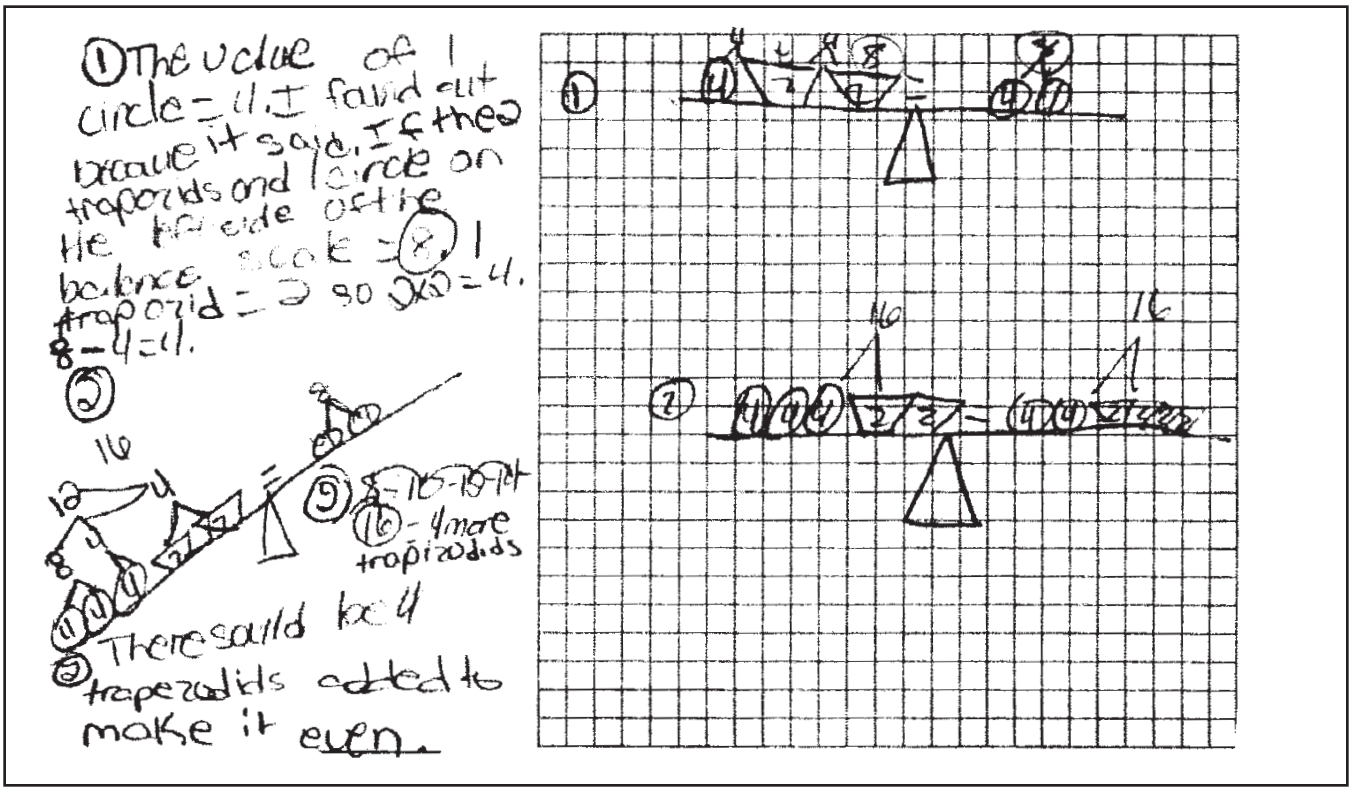
SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3–3½ points.
2	The student earns 2–2½ points.
1	The student earns ½–1½ points, or some minimal understanding is shown. Ex: Incorrect value used for trapezoid, but student work shows the left side adds to 8 in Part 1 (Trapezoid = 3, Circle = 2, and 3 + 3 + 2 = 8).
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

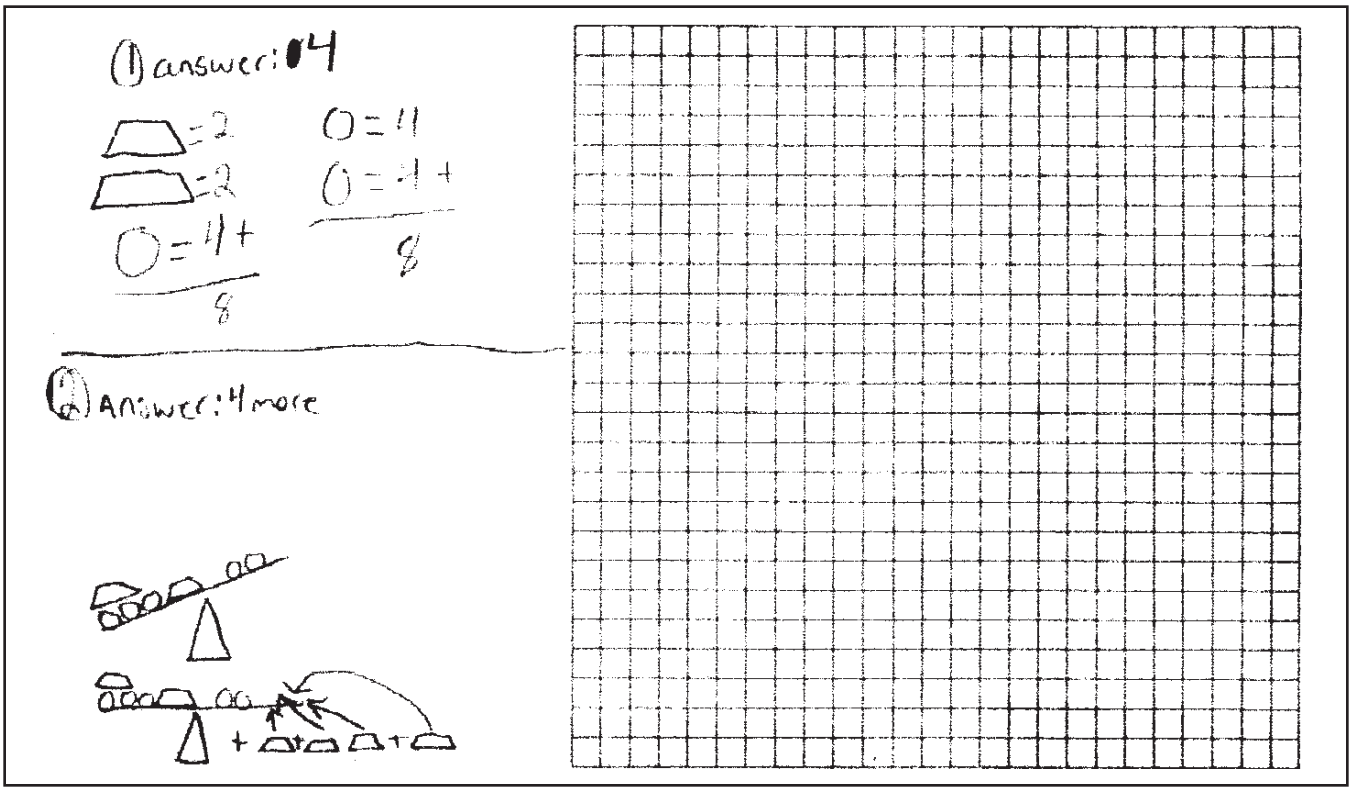
Part	Points
1	**2 points possible** 1 point: **Correct answer: 4.** AND 1 point: **Correct and complete procedure shown and/or explained.** Work may contain a calculation or copy error. Give credit for the following or equivalent: • Finds value of circle by setting left side equal to right side of scale. Ex: $x + 2 + 2 = 2x$, $x = 4$ • Finds value of circle using left side of scale. Ex: $C + 2 + 2 = 8$, $C + 4 = 8$, $C = 4$ Ex: $2 + 2 + 4 = 8$ (guess & check) Ex:  • Finds value of circle using right side of scale. Ex: "If the left side = 8, that means 2 circles on the right = 8. Half of 8 is 4, so 1 circle equals 4." Ex: $4 + 4 = 8$ Ex: $8 \div 2 = 4$ OR ½ point: **Incomplete or vague procedure shown or explained, but understanding is shown.** Give credit for the following or equivalent: • $4 + 2 + 2$ (not set = to 8), or • "The left side = 8, so 2 trapezoids = 4, 8/2 = 4" (jumps from left to right side—does not connect 8/2 = 4 to right side), or • "2 trapezoids are 4 so a circle is 4" (no calculation or explanation for c = 4).

Solution and Scoring (continued)

Part	Points
2	**2 points possible** 1 point: **Correct answer: 4, or correct answer based on incorrect value of one circle in Part 1.** AND 1 point: **Correct and complete procedure shown and/or explained.** Work may contain a calculation or copy error. Give credit for the following or equivalent: • Finds the total value of the left side to find # needed. Note: Values for like symbols may be combined. Ex: "L: 4 + 4 + 4 + 2 + 2 = 16. R: 4 + 4 = 8, 16 – 8 = 8. 8 ÷ 2 = # trapezoids needed." • Uses the value of the 2 circles added to find # needed. Ex: "2 circles have a value of 8 and were added to the left side, so we need to add 8 to the right side. 4 x 2 = 8, so we need 4 trapezoids." • Uses the comparative value of the circle and trapezoid. Ex: "Since a circle (4) weighs twice as much as a trapezoid (2) and 2 circles are added to the left side, you would double that and add 4 to the right side." OR ½ point: **Incomplete or vague procedure shown or explained, but some correct procedure is shown.** Give credit for the following or equivalent: • "Left side = 16, right side = 8, so you need 8/2=4" (no work for 16), or • "2 circles = 8, 4 trapezoids = 8, 8 + 8 = 16" (no work for left side), or • "Left = 16, Right is 8. 16 – 8 = 8 is needed. So it's 8/4 = 2 circles."

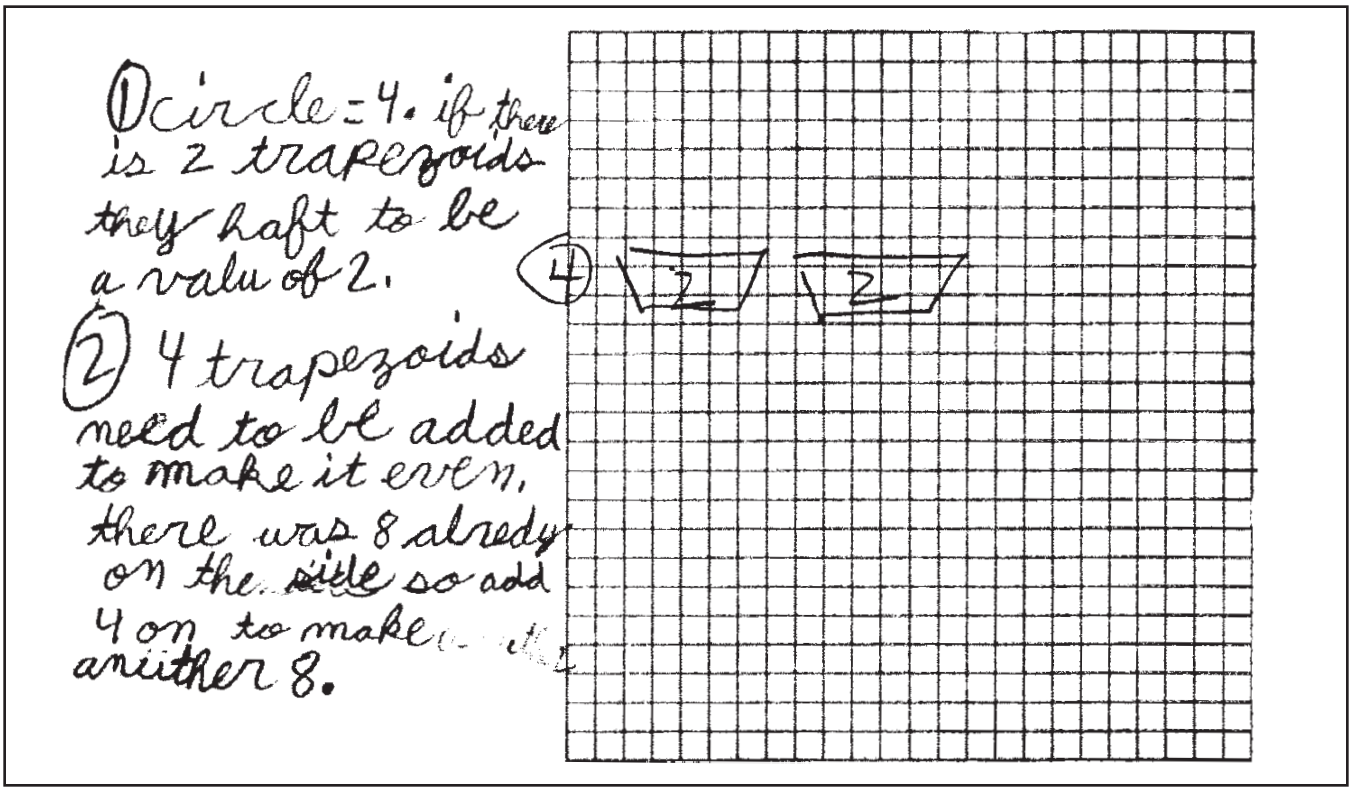


SCORE: 4		**Points**
Part 1:		
Correct answer:	4	1
Correct & complete procedure:	Left = 8, 2 x 2 = 4 (2 trapezoids) 8 – 4 = # (diagram would also be sufficient)	1
Part 2:		
Correct answer:	4	1
Correct & complete procedure:	Left: 4 + 4 + 4 + 2 + 2 = 12 + 4 = 16 Right: 4 + 4 + 8, Counts by 2s to 16 (diagram would also be sufficient)	1
TOTAL POINTS:		**4**



SCORE: 3

		Points
Part 1:		
Correct answer:	4	1
Correct & complete procedure:	2 + 2 + 4 = 8 (left side) 4 + 4 = 8 (right side)	1
Part 2:		
Correct answer:	4	1
Missing procedure:	Complete diagram, but no values or totals are included	–
TOTAL POINTS:		**3**



SCORE: 2 **Points**

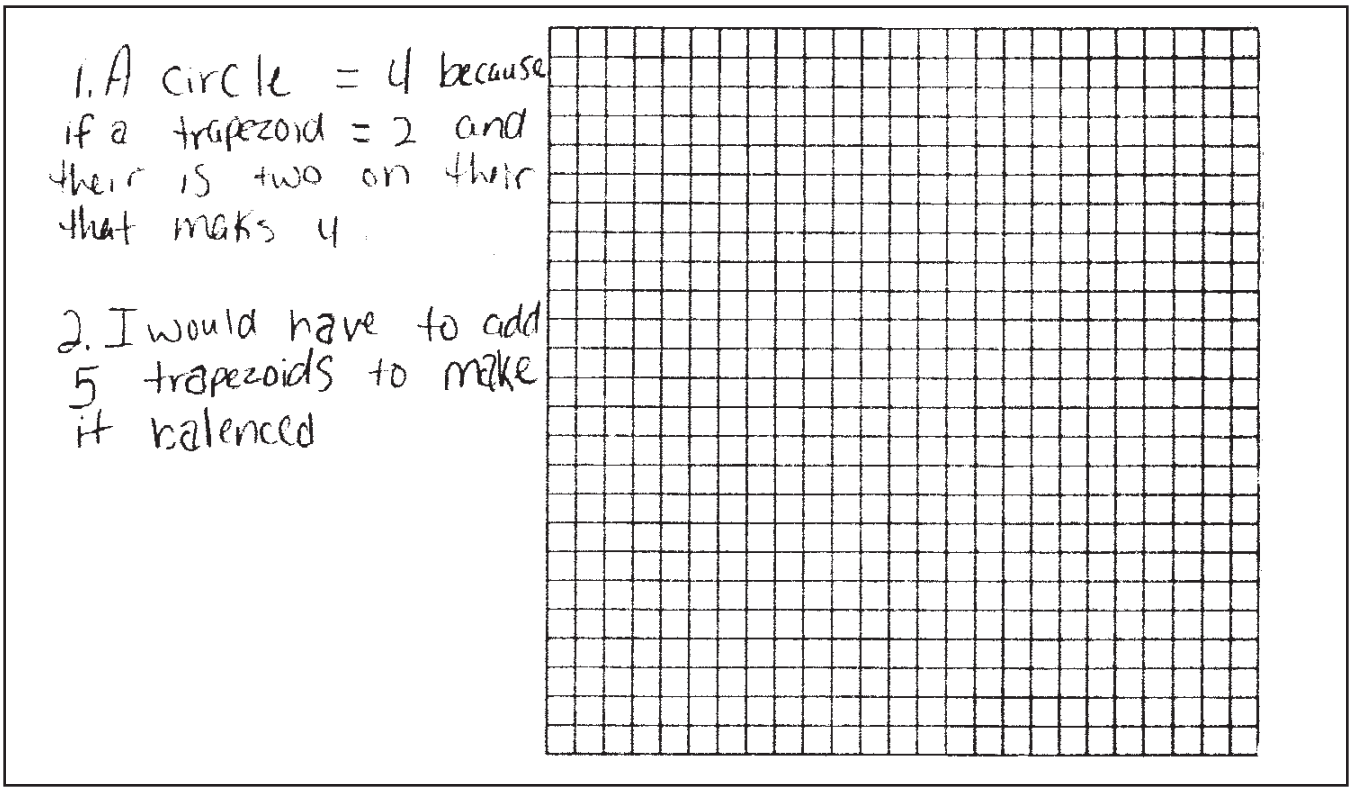
Part 1:

Correct answer:	4	1
Missing procedure:	Repeats given info. only "trapezoids they haft to be a valu of 2."	–

Part 2:

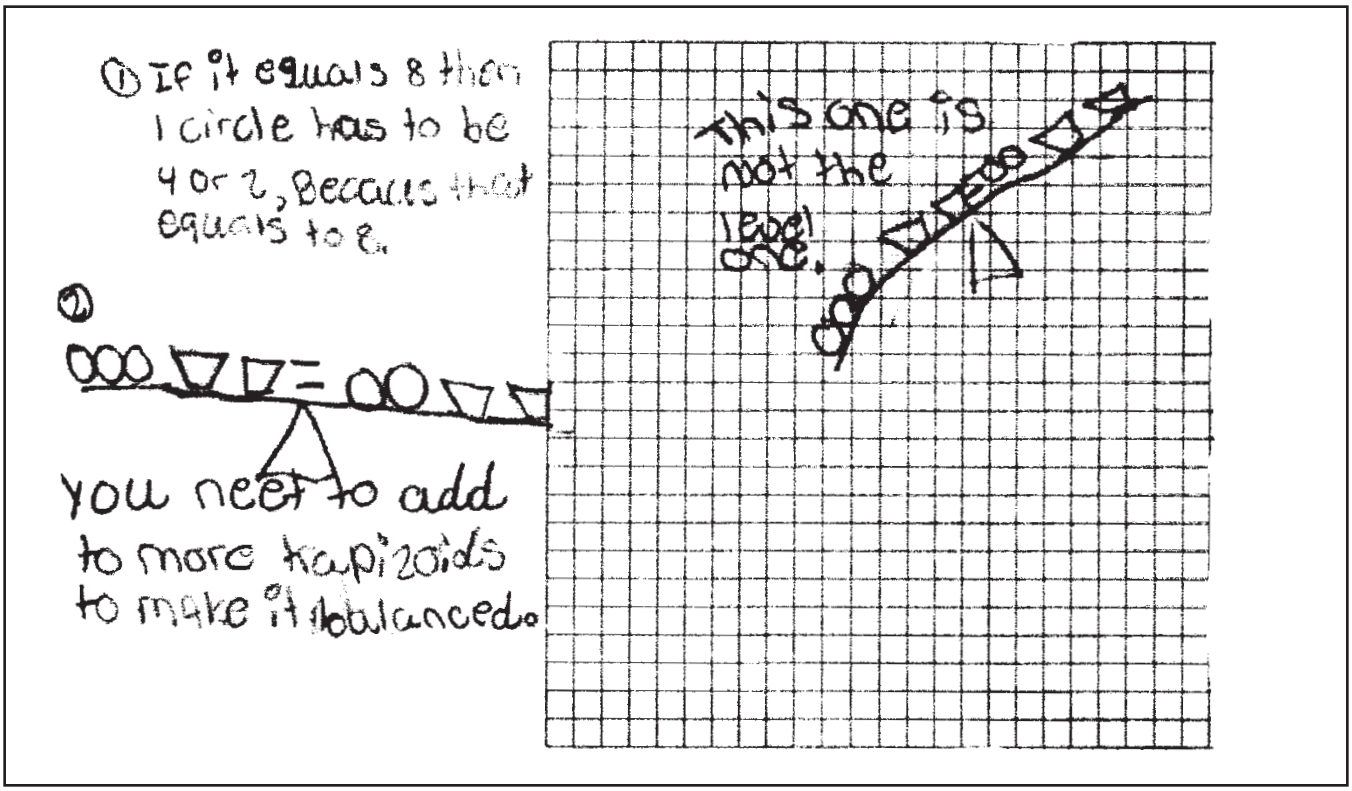
Correct answer:	4	1
Incomplete procedure:	"there was 8 alredy on the side so add 4 to make anuther 8."	½

TOTAL POINTS: **2½**



SCORE: 1

		Points
Part 1:		
Correct answer:	4	1
Incomplete procedure:	"if a trapezoid = 2 and their is two on their that maks 4"	½
Part 2:		
Incorrect answer:	5	–
Missing procedure:		–
TOTAL POINTS:		**1½**



SCORE: 0 **Points**

Part 1:

Incorrect answer:	4 or 2	–
Missing procedure:	Repeats information given	–
	"Because that equals to 8."	–

Part 2:

Incorrect answer:	2	–
Missing procedure:		–

TOTAL POINTS: **0**

Mathematics Item B—2007 Benchmark Grade 5

Lisa has a bag filled with cherry and apple lollipops.

1. There are 4 cherry lollipops out of the 12 lollipops in Lisa's bag. What is the probability of pulling a cherry lollipop out of the bag, without looking, on the first try? Show all your work and/or explain your answer.

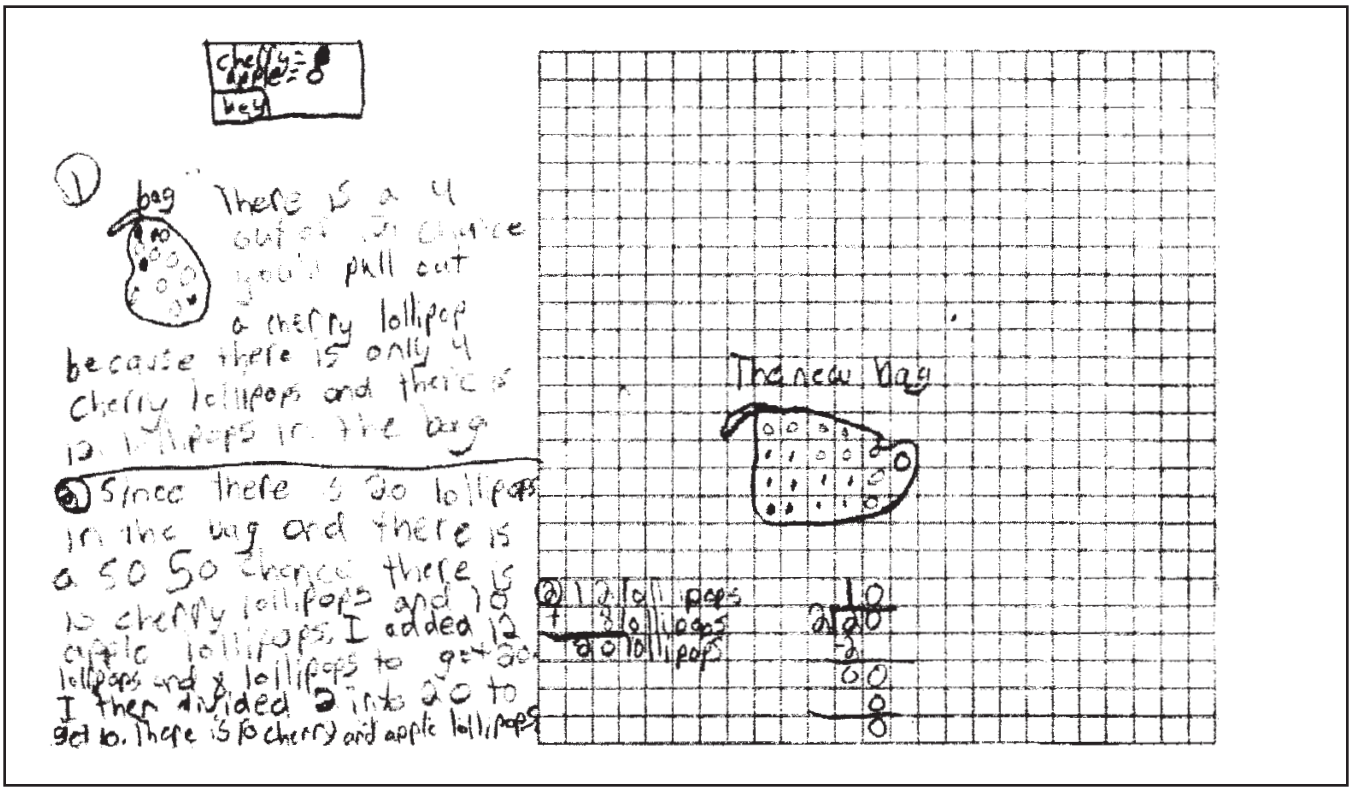
2. Lisa put 8 more lollipops in her bag. The probability of pulling out a cherry lollipop now is 1 out of 2. How many cherry lollipops are in Lisa's bag of lollipops now? Show all your work and/or explain your answer.

Mathematics Item B Scoring Rubric—2007 Benchmark Grade 5

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 is 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

Part	Points
1	**2 points possible** 2 points: **Correct probability (4/12, 1/3, 4 out of 12, 1 out of 3, or 33 1/3 %) with correct and complete procedure shown and/or explained.** Give credit for the following or equivalent: • "It's 1 out of 3 because there are 4 cherry lollipops and all together there are 12" (includes correct probability, # of cherry, and total #), or • "4/12 since 4 are cherry out of 12" (includes correct probability, # of cherry, and total #), or • "4 out of 12" (with drawing showing 4 cherry lollipops out of 12 total lollipops). OR 1 point: **Response shows understanding of probability, but response is incomplete or contains an error.** Give credit for the following or equivalent: • Correct probability with incomplete or missing work and/or explanation. Ex: "Probability is 4 out of 12 since there are only 4 cherry" (no mention of total #). Ex: "1/3 because there are 12 total" (no mention of # of cherry). Ex: "33 1/3 %" (correct probability with missing explanation). Or • Probability is incorrect due to a copy or calculation error, but procedure is correct and complete. Ex: "It's 4/13 because there are 4 cherry lollipops out of a total of 13." Ex: "Chances are 4 out of 12 which reduces to 1/4 because 4 out of 12 total lollipops are cherry." Note: Do not give credit if no understanding of probability is shown and/or response only repeats given information. Ex: "Its chances are 4 since there are 4 cherry out of 12 total."
2	**2 points possible** 1 point: **Correct answer: 10, or correct answer based on incorrect work in Part 1.** AND 1 point: **Correct and complete procedure shown and/or explained.** Work may contain a calculation or copy error. Give credit for the following or equivalent: • 12 + 8 = 20 total $\frac{1}{2} = \frac{n}{20}$, so n = 10, or • "Now there are 8 plus 12 or 20 in the bag. 1out of 2 means half of them are cherry. Half of 20 is 10, so 10 are cherry," or • Diagram shows 20 total lollipops and ½ of them are identified as cherry or grouped together. Note: Do not give procedure credit for incomplete work or explanation. Ex: "1/2 of 20 is 10" (no work or explanation to find 20). Ex: "8 + 12 = 20, so it's 10" (no work or explanation for ½ of 20).



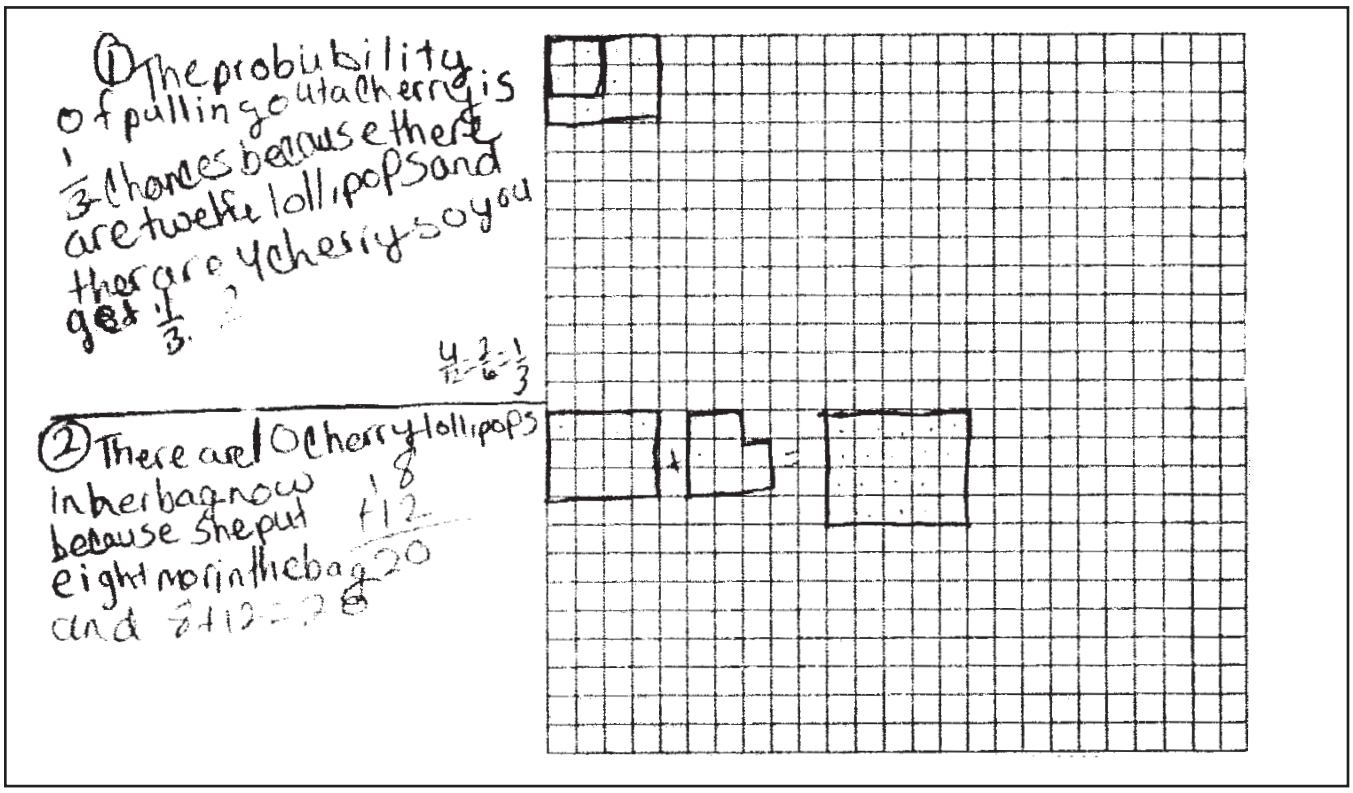
SCORE: 4 **Points**

Part 1:

Correct answer with correct & complete procedure:	4 out of 12 chance "4 cherry lollipops and there is 12 lollipops in the bag"	2

Part 2:

Correct answer:	10	1
Correct & complete procedure:	$12 + 8 = 20,\ 20 \div 2 = \#$	1
TOTAL POINTS:		**4**



SCORE: 3 **Points**

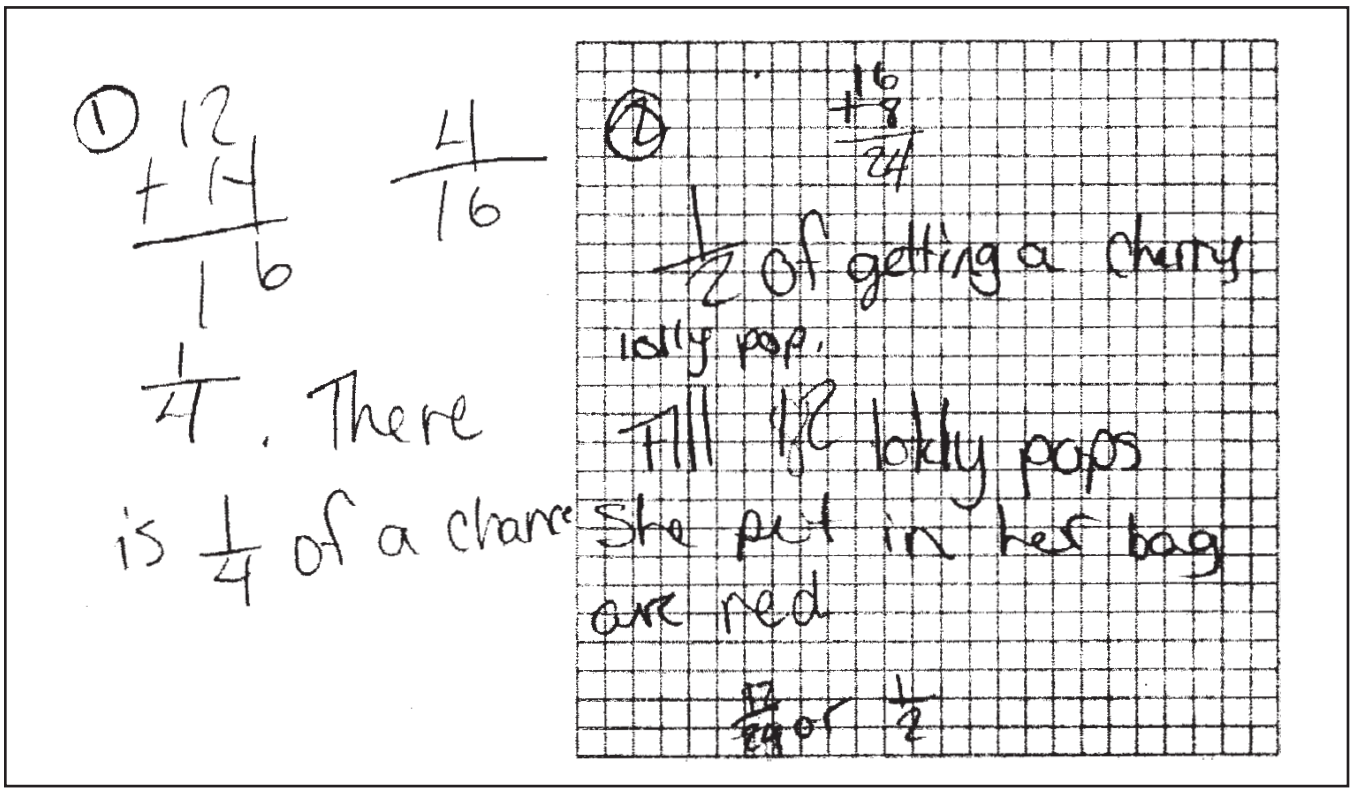
Part 1:

Correct answer with correct & complete procedure:	1/3 "Twelfe lollipops and there are 4 cherry"	2

Part 2:

Correct answer:	10	1
Incomplete procedure:	8 + 12 = 20 No work/explanation for ½ of 20	–

TOTAL POINTS: **3**



SCORE: 2 **Points**

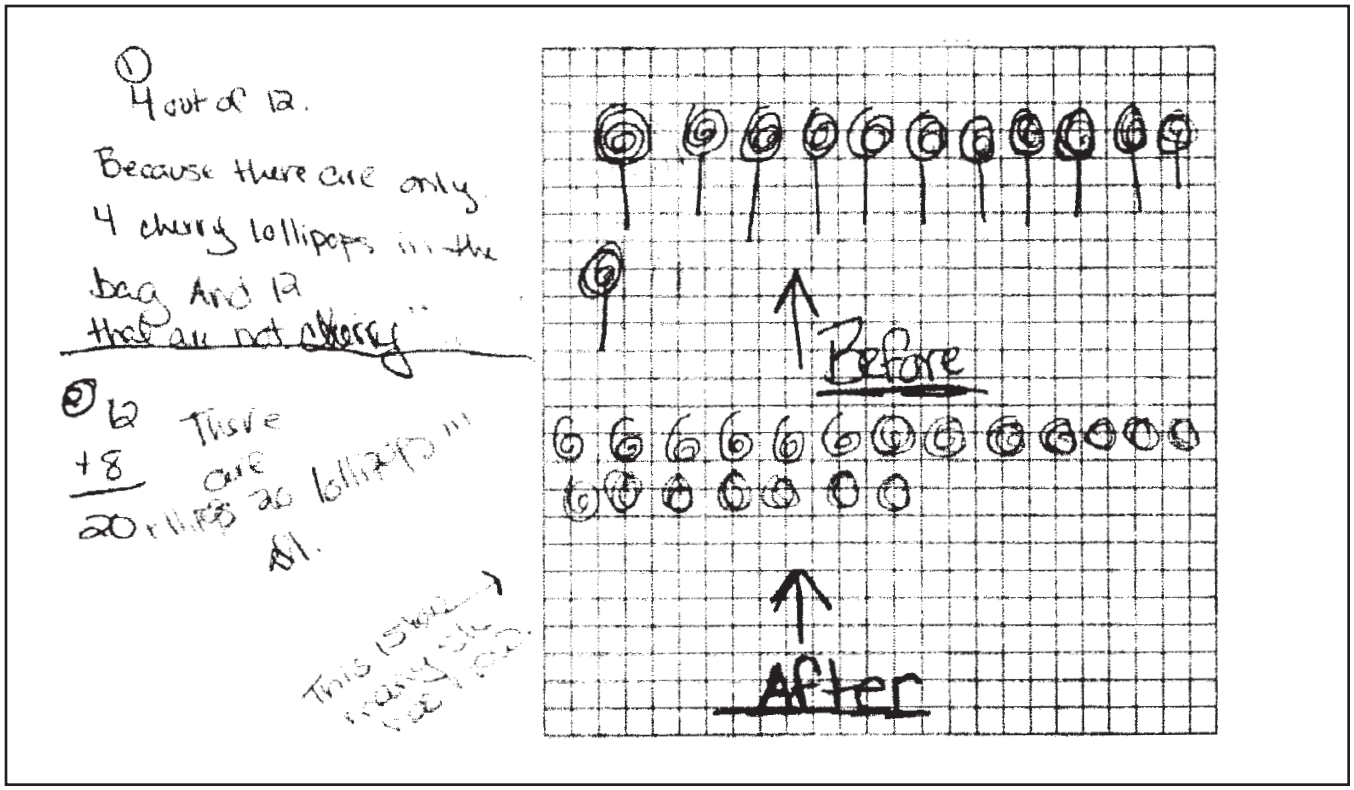
Part 1:

Incorrect answer with incorrect procedure:	1/4 12 + 4 = 16, 4/16, etc.	–

Part 2:

Correct answer (based on Part 1):	12	1
Correct & complete procedure:	16 + 8 = 24, 12/24 or ½	1

TOTAL POINTS: **2**



SCORE: 1 **Points**

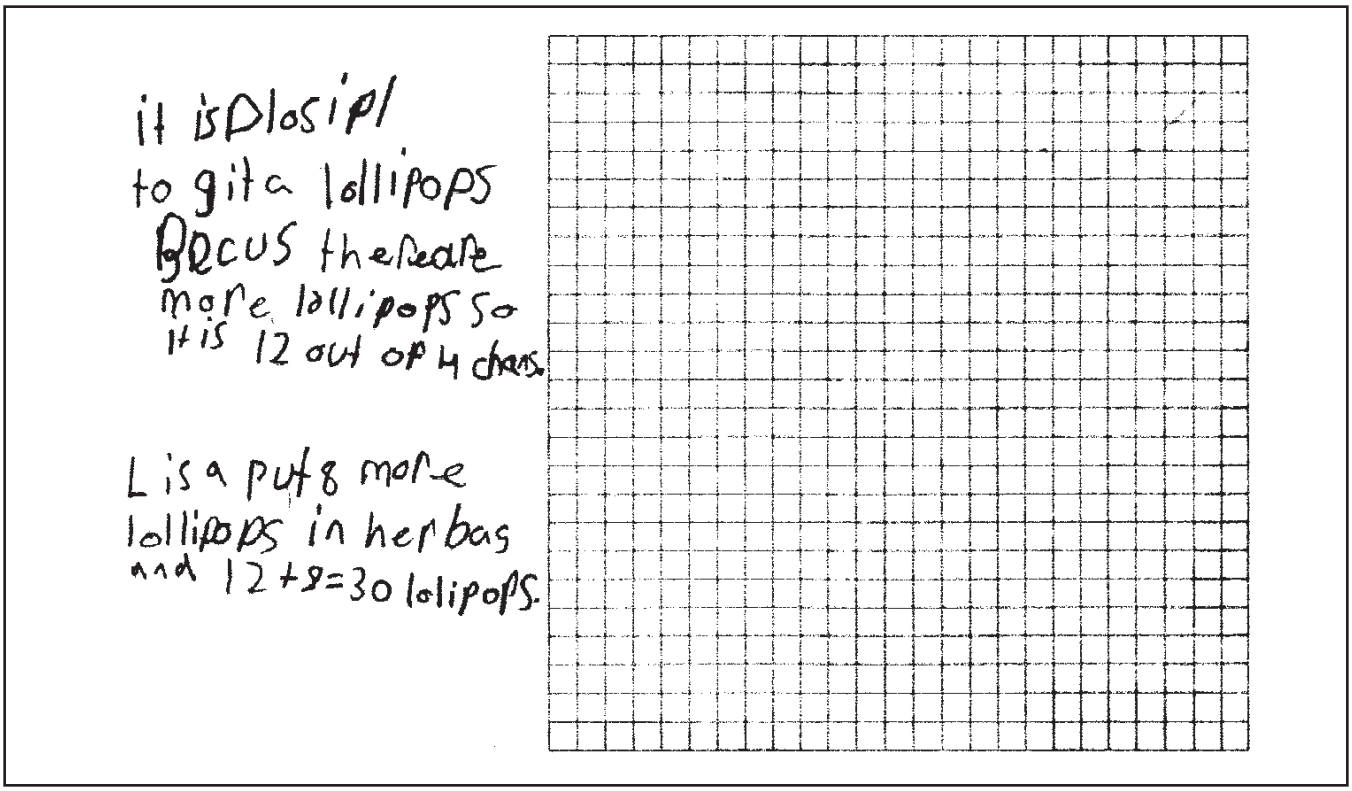
Part 1:

Correct answer with incomplete procedure:	4 out of 12 "4 cherry… 12 that are not cherry" (incorrect statement)	1

Part 2:

Incorrect answer:	20	–
Incomplete procedure:	12 + 8 = 20	–

TOTAL POINTS: **1**



SCORE: 0 **Points**

Part 1:

Incorrect answer with missing procedure:	12 out of 4	–

Part 2:

Incorrect answer:	30	–
Incomplete procedure:	12 + 8 = #	–

TOTAL POINTS: **0**

Mathematics Item C—2007 Benchmark Grade 5

A teacher gave students a sheet of graph paper and asked them to draw a mystery geometric figure.

1. On the grid provided in your answer document, draw and label the *x*-axis and the *y*-axis. Label each axis with the numbers 1 through 6.

2. The teacher asked the students to plot three points. Plot and label each of the following ordered pairs.

   - Point A (1, 5)
   - Point B (1, 1)
   - Point C (3, 1)

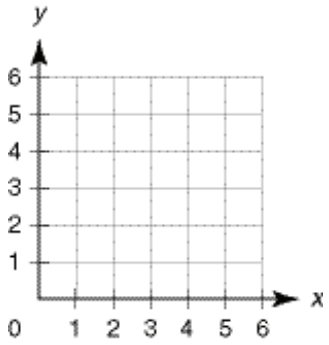
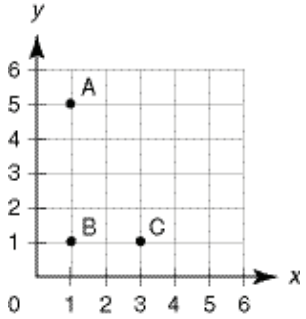
3. Next, the teacher asked the students to use line segments to connect each point to discover the mystery geometric figure. Draw these line segments in your answer document.

4. What type of geometric figure is formed by connecting the points?

Mathematics Item C Scoring Rubric—2007 Benchmark Grade 5

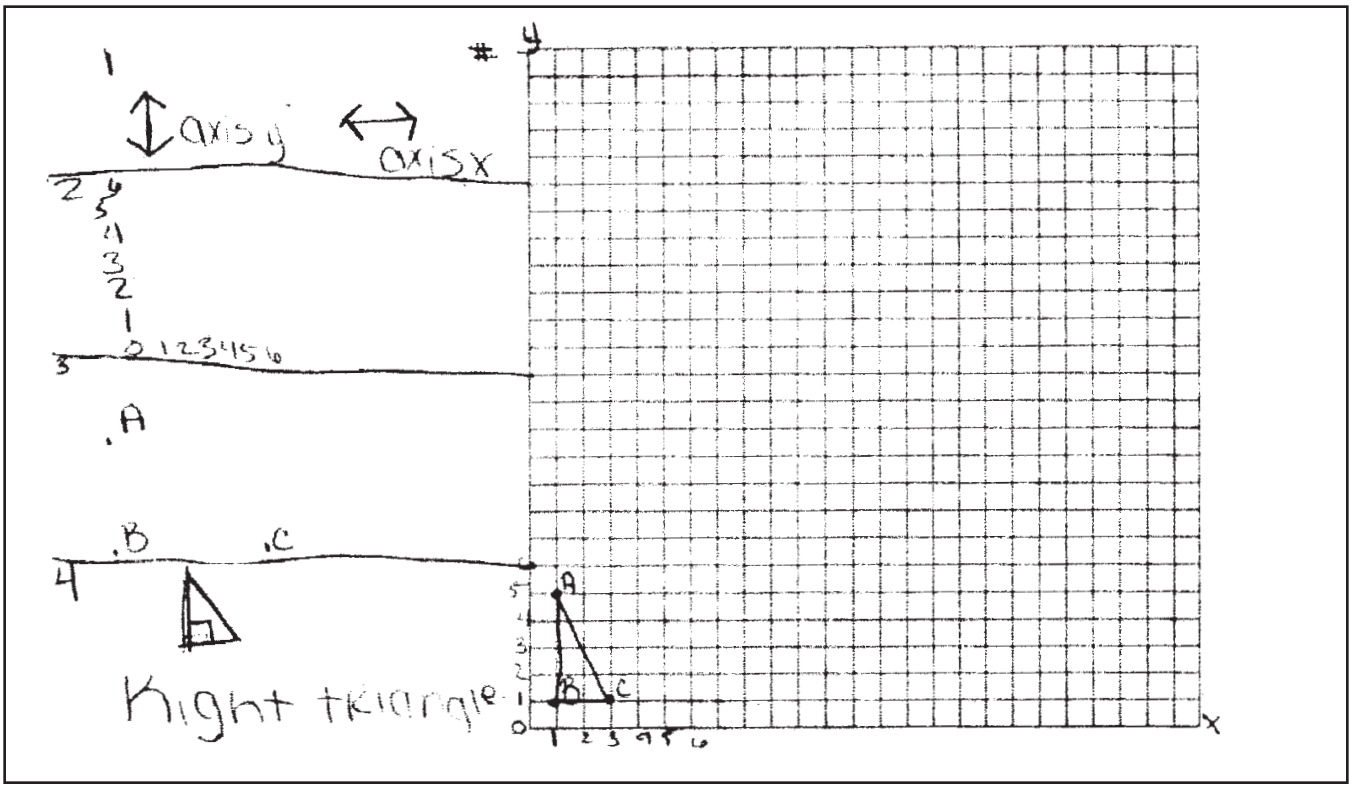
SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect work.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point, or some minimal understanding is shown. Ex: 2 points are correctly plotted without labels in Part 2. Ex: The x and y axes are reversed and the points are plotted accordingly in Part 2.
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

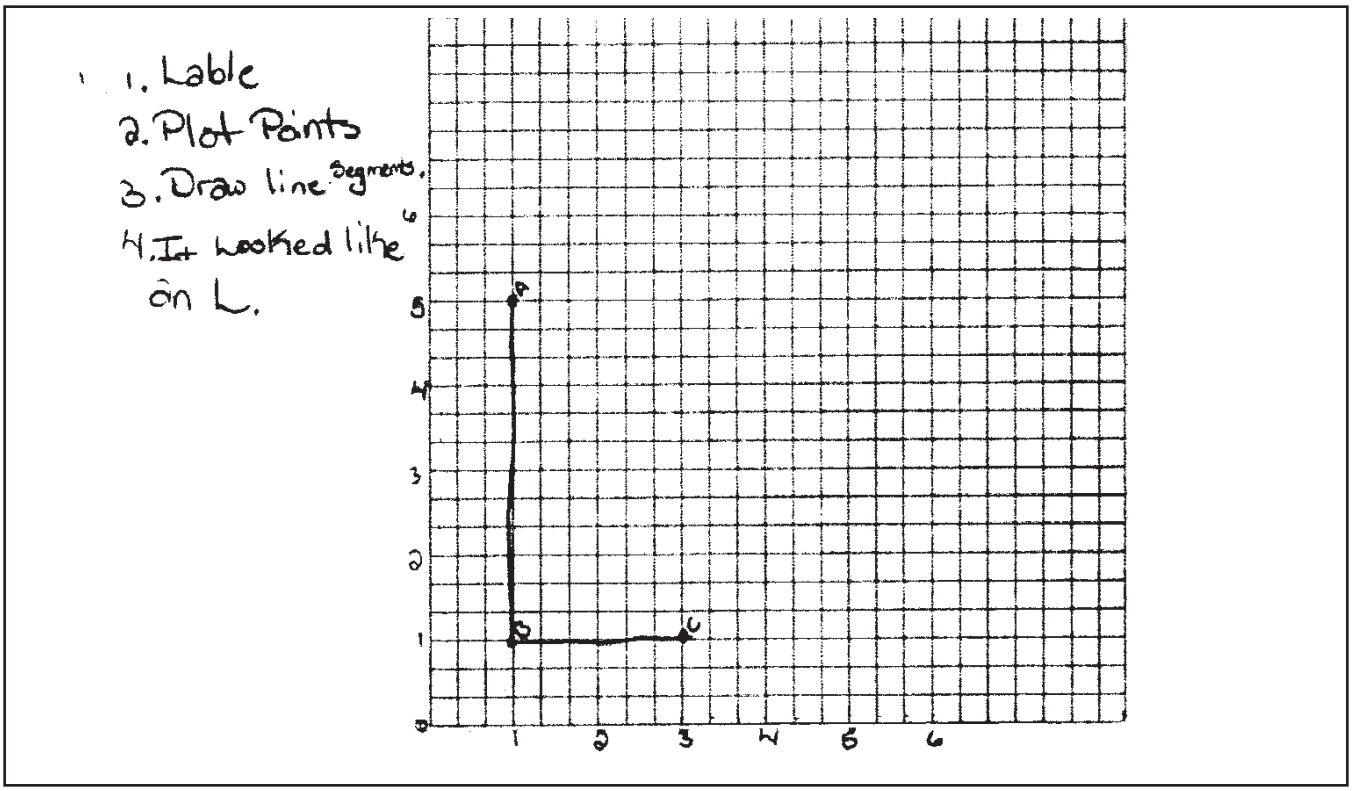
Part	Points
1	**1 point possible** 1 point: **Correct and complete coordinate system that contains all of the following:** • intervals are consistent • 1–6 identified on each axis • x and y axes are appropriately labeled Note: Arrows on the x and y axes are not required. A label of "0" for the origin is not required. Ex:  Note: Do not give credit if the graph is incomplete or contains error(s).
2	**2 points possible** 2 points: **Three points are correctly plotted and labeled.** Labels may use letters A, B, and C or ordered pairs: (1, 5), (1, 1), (3, 1). Ex:  OR 1 point: **Give credit for the following:** • A, B, and C are correctly plotted, but labels are missing, or • Two out of three points are correctly plotted and labeled.

Solution and Scoring (continued)

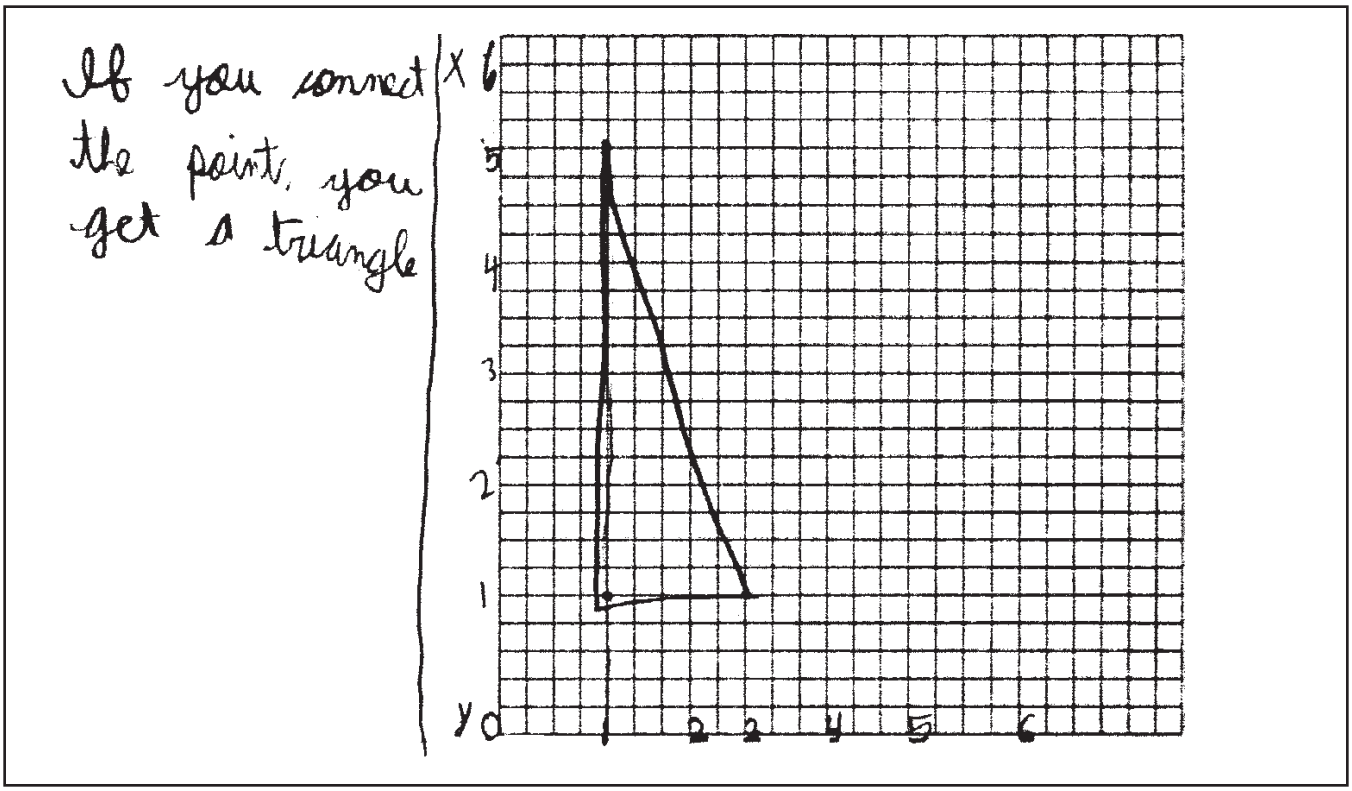
Part	Points
3–4	**1 point possible** Note: Students do not have to connect the 3 vertices of the triangle. 1 point: **Give credit for the following answers if 3 segments are drawn connecting the 3 points or if the points are not connected:** • "Triangle," "Right triangle," or "Scalene triangle." Note: Answer of "triangle" may be based on incorrectly plotted non-collinear points. Note: Do not give credit if the answer is incorrect. Ex: "Isosceles triangle." Or **Give credit for the following answers if segments AB and BC are drawn:** • "Right angle," or "Angle." Or **Give credit for the following answers if segments AB and AC or AC and BC are drawn:** • "Acute angle," or "Angle."



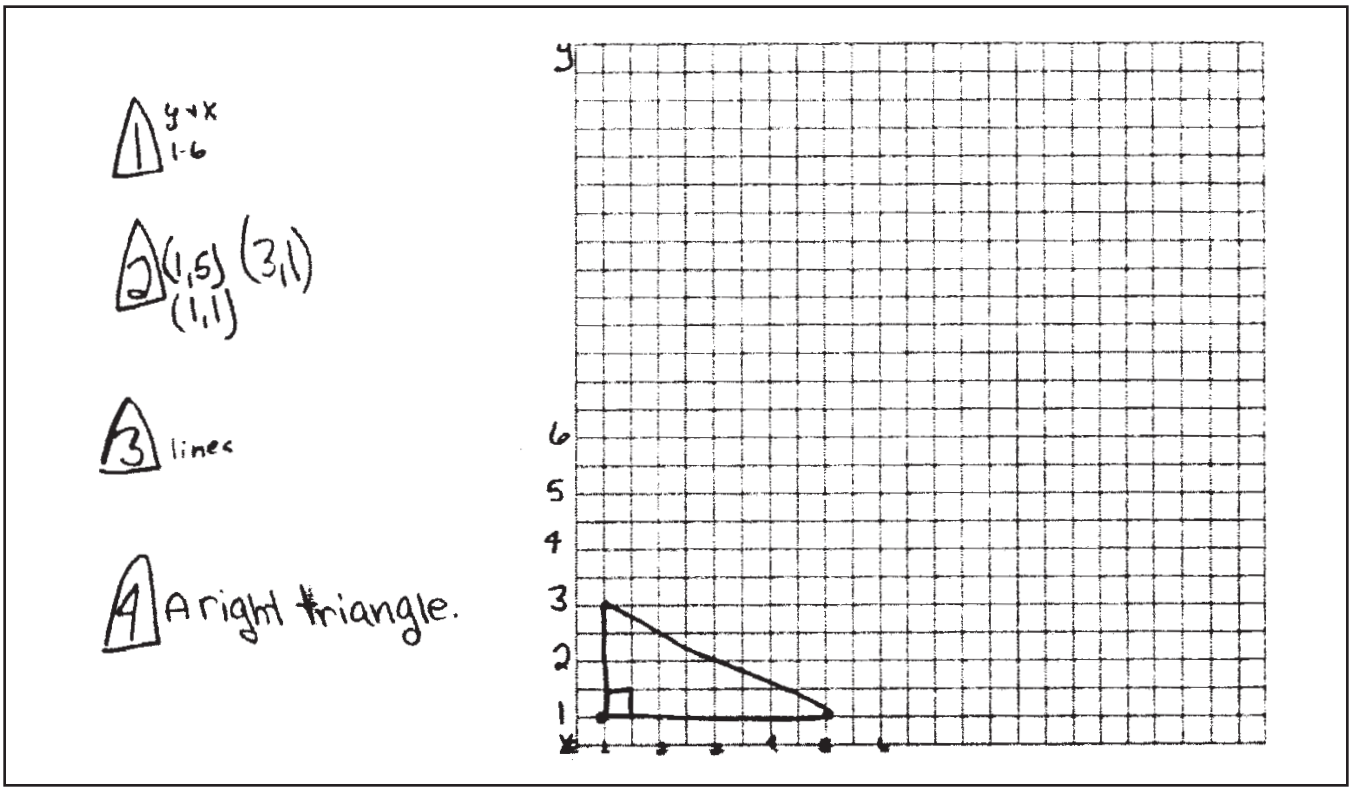
SCORE: 4		**Points**
Part 1:		
Correct & complete coordinate system:	Intervals are consistent 1–6 identified on each axis x- and y-axes are appropriately labeled	1
Part 2:		
Correct & complete answer:	3 points correctly plotted and labeled A, B, C	2
Parts 3 & 4:		
Correct answer:	Right Triangle	1
TOTAL POINTS:		**4**



SCORE: 3		**Points**
Part 1:		
Correct & complete coordinate system:	Intervals are consistent 1–6 identified on each axis x- and y- axes are appropriately labeled	1
Part 2:		
Correct & complete answer:	3 points correctly plotted and labeled A, B, C	2
Parts 3 & 4:		
Incorrect answer:	"Looked like an L."	–
TOTAL POINTS:		**3**



SCORE: 2		**Points**
Part 1:		
Incorrect coordinate system:	Intervals are inconsistent (error) x- and y-axes labels reversed (error) 1–6 identified on each axis	–
Part 2:		
Partially correct answer:	3 points correctly plotted Labels missing	1
Parts 3 & 4:		
Correct answer:	Triangle	1
TOTAL POINTS:		**2**



SCORE: 1 **Points**

Part 1:

Incorrect coordinate system:	Intervals are inconsistent Label for x-axis inappropriately placed	–

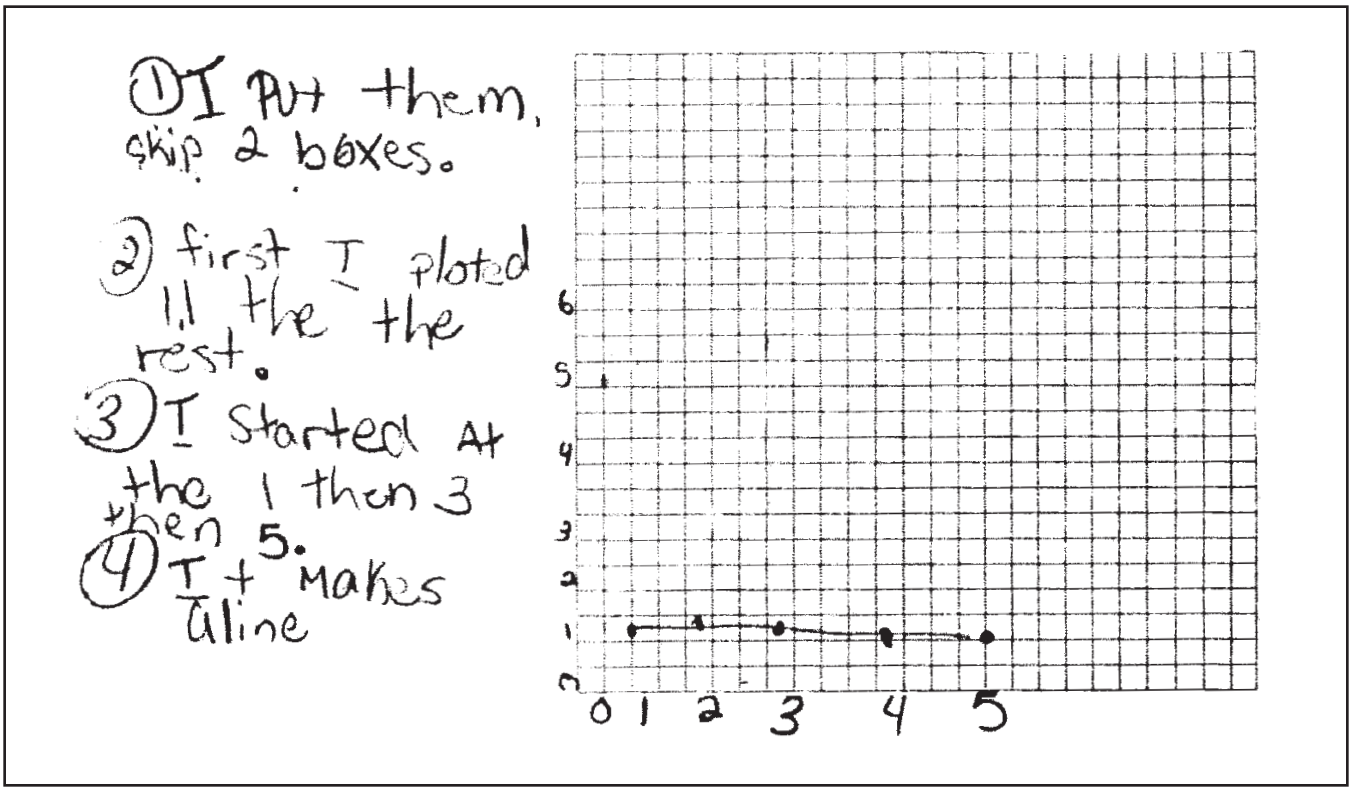
Part 2:

Incorrect answer:	3 points incorrectly plotted (x & y are reversed)	–

Parts 3 & 4:

Correct answer:	Right triangle	1

TOTAL POINTS: **1**



SCORE: 0 **Points**

Part 1:

Incorrect coordinate system:	x- and y-axes labels missing (error) Origin is shifted on x-axis (error) Intervals are inconsistent (error)	–

Part 2:

Incorrect answer:	5 points plotted Labels are missing	–

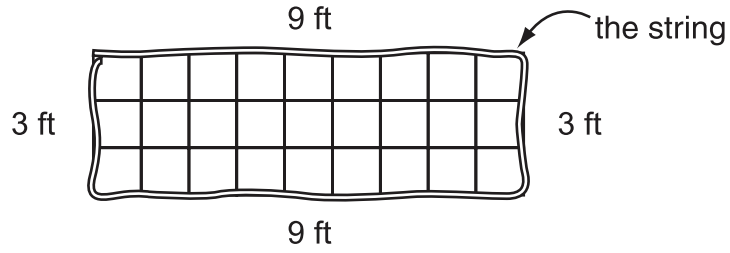
Parts 3 & 4:

Incorrect answer:	"makes a line"	–

TOTAL POINTS: **0**

Mathematics Item D—2007 Benchmark Grade 5

Mark is using 24 feet of string to plan a garden in his backyard. First, he made a plan with dimensions of 9 feet by 3 feet.



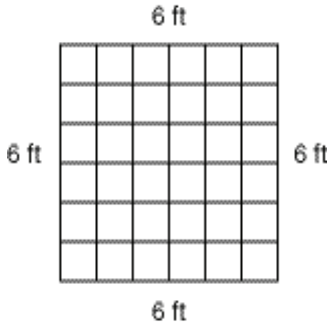
1. His mom says she wants the garden to be a perfect square. What should the dimensions of the garden plan be changed to in order to make a perfect square, using his 24 feet of string? Show all your work and/or explain your answer.

2. Which has the **greatest** area—the 9 feet by 3 feet garden or the perfect square garden? Show all your work and/or explain your answer.

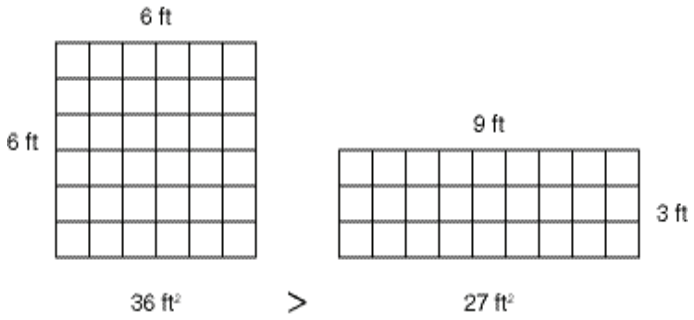
Mathematics Item D Scoring Rubric—2007 Benchmark Grade 5

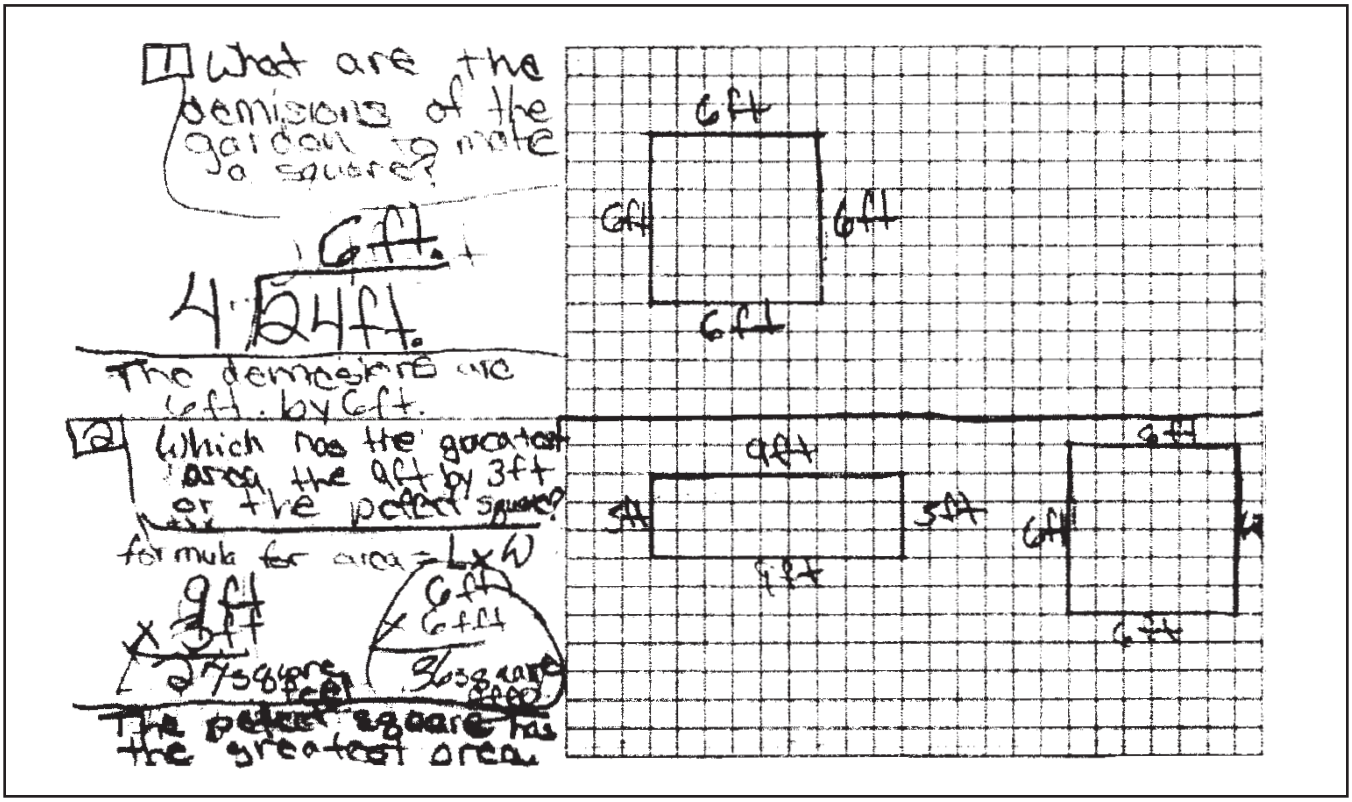
SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect work. The response contains correct labels on dimensions in Part 1 (feet x feet). If drawing(s) are included, they must be accurately drawn.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point, or some minimal understanding is 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

Part	Points
1	**2 points possible** 1 point: **Correct answer: 6 by 6, or diagram labeled with "6" as the length and "6" the as the width.** (Label of "feet × feet" is required for a score of 4.) AND 1 point: **Correct and complete procedure shown and/or explained**. Work may contain a calculation or copy error. Give credit for the following or equivalent: • 24 ÷ 4 = 6, or • 6 + 6 + 6 + 6 = 24, or • Diagram of a square labeled with "6" on all 4 sides showing the perimeter. Ex:  Note: Credit can be given for the answer and procedure for the diagram of a 6 x 6 square with "6" labeled on all 4 sides. Note: Do not give credit for incomplete procedure. Ex: "It would use all the string," or "It would go all around."

Solution and Scoring (continued)

Part	Points
2	**2 points possible** 2 points: **Correct answer: "The 6 x 6 (or square) is larger" with correct and complete work shown and/or explained, or correct answer based on incorrect dimensions given in Part 1.** Give credit for the following or equivalent: • 6 × 6 = 36 & 9 × 3 = 27, or • "For a given perimeter, area is always maximized in a square," or • Diagram of a labeled 6 × 6 square, divided into 36 sections, with area identified as "36," and diagram of a labeled 3 x 9 rectangle, divided into 27 sections, with area identified as "27." Identifies which has the larger area. Ex:  OR 1 point: **Work is incomplete or contains a calculation or copy error, but an understanding of area is shown and correct procedures are used.** Give credit for the following: • "A square garden has an area of 36 square feet, while a 9 by 3 garden has an area of 27 square feet, therefore the 6 × 6 garden has a greater area." (No work to find areas), or • Two areas are listed (may be based on Part 1)—work is incomplete or missing. Choice of the greater area may be missing but may not be incorrect, or • One incorrect area due to one calculation and/or copy error. Correct procedures are used with work shown or explained. Choice of the greater area may be missing but not incorrect (i.e. 6 × 6 = 36, 3 × 9 = 28), or • "When the perimeter is the same, it's the square"(vague explanation). Note: Do not give credit for "the square is larger" without any support. Note: Do not give credit if incorrect procedure is included. Ex: 6 x 4 = 24 (finds perimeter instead of area of square).



SCORE: 4 **Points**

Part 1:

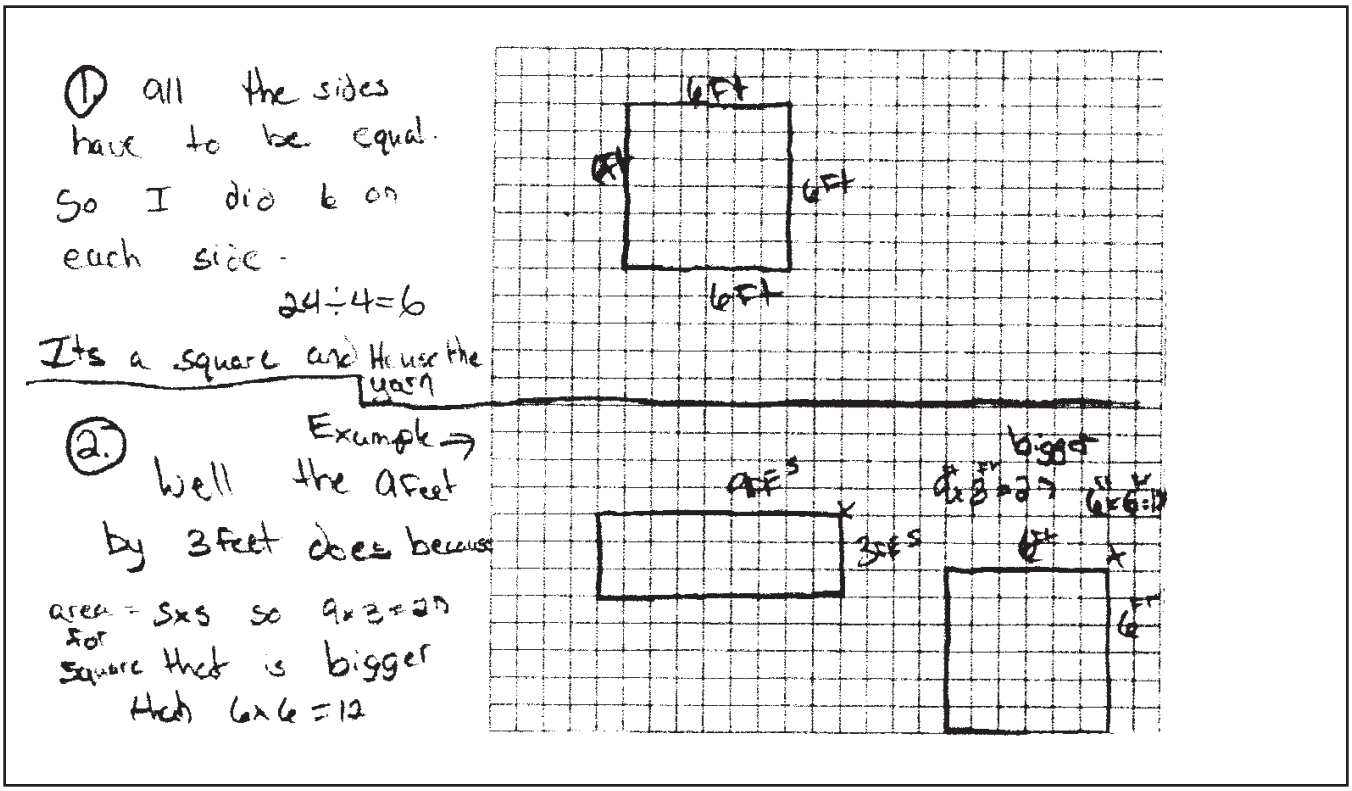
Correct answer:	6 (ft.) by 6 (ft.)	1
Correct and complete procedure:	24 ÷ 4 = #	1

Part 2:

Correct answer:	The perfect square	
Correct and complete procedure:	9 ft. x 3 ft. = 27 sq. ft.	
	6 ft. x 6 ft. = 36 sq. ft.	2

TOTAL POINTS: **4**

Correct labels (ft. x ft.) are included in Part 1. No incorrect labels are included in the response.



SCORE: 3 **Points**

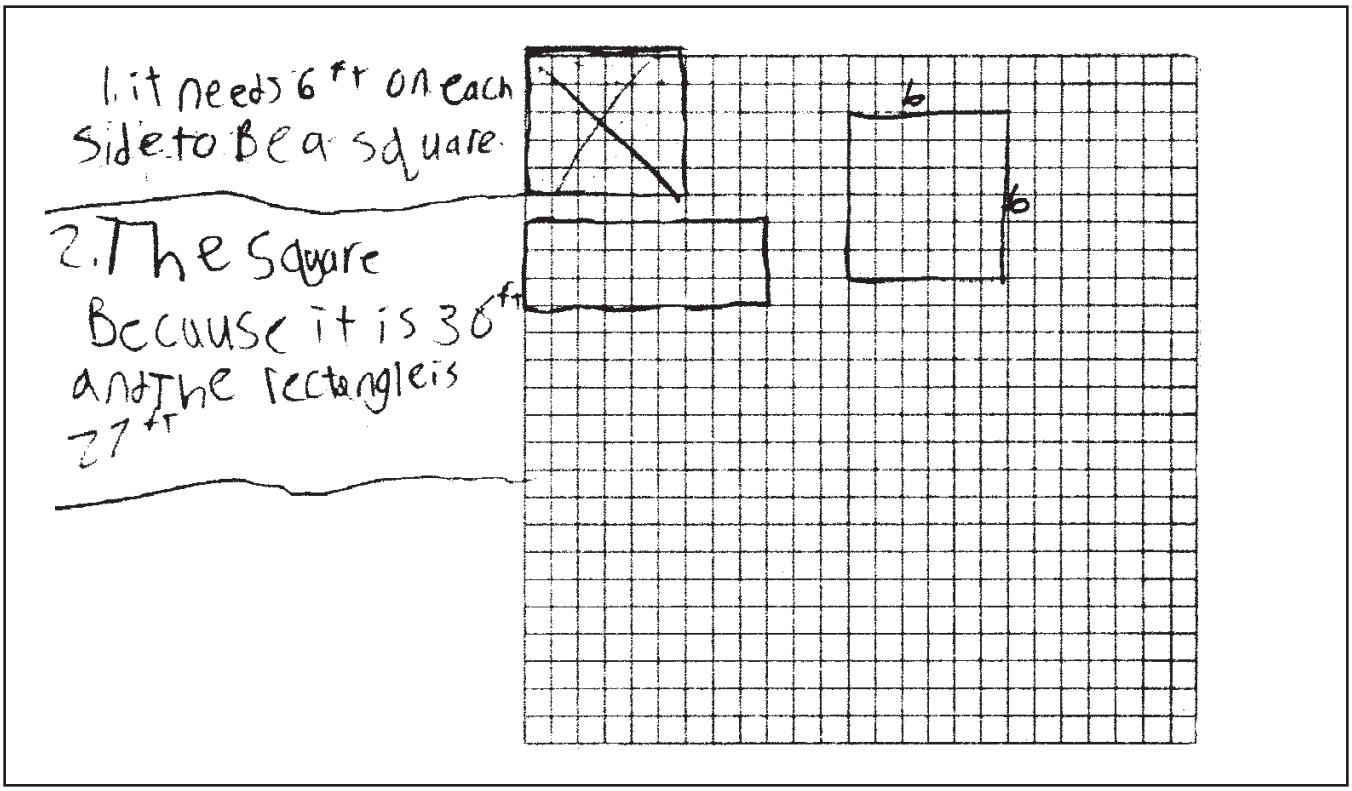
Part 1:

Correct answer:	6 x 6	1
Complete procedure:	24 ÷ 4 = 6	1

Part 2:

Correct answer:	The 9 feet by 3 feet	
Correct procedure:	9 x 3 = 27	
(includes calculation error)	6 x 6 = 12 (calculation error)	1

TOTAL POINTS: **3**



SCORE: 2 **Points**

Part 1:

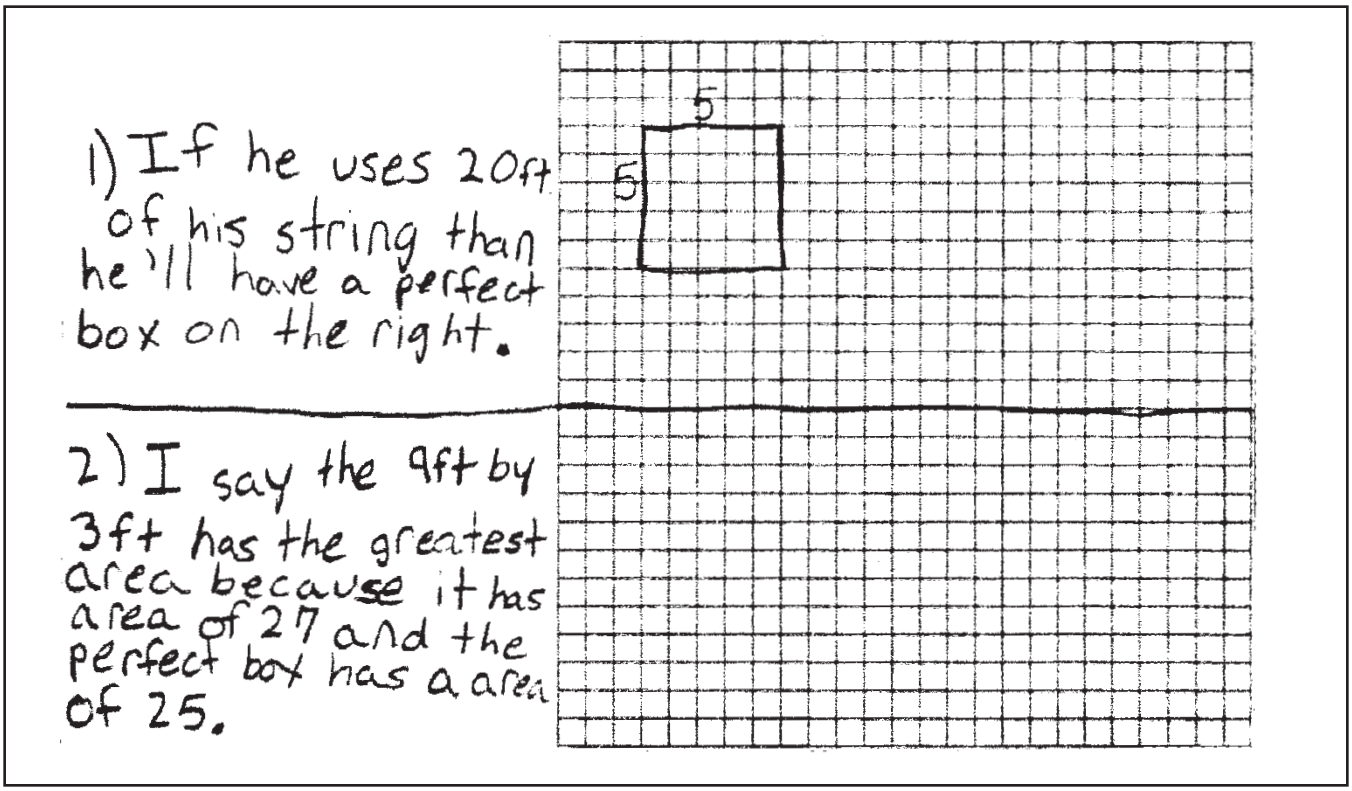
Correct answer:	"6 ft on each side"	1
Incomplete procedure:	Square is correctly drawn, but two dimensions are missing.	–

Part 2:

Correct answer:	The square	
Incomplete work:	"it is 36 ft. and the rectangle is 27 ft" (no work is shown to find areas)	1

TOTAL POINTS: **2**

Note: The incorrect labels in Part 2 (36 ft. and 27 ft.) can be ignored since the response is not a candidate for "4."



SCORE: 1 **Points**

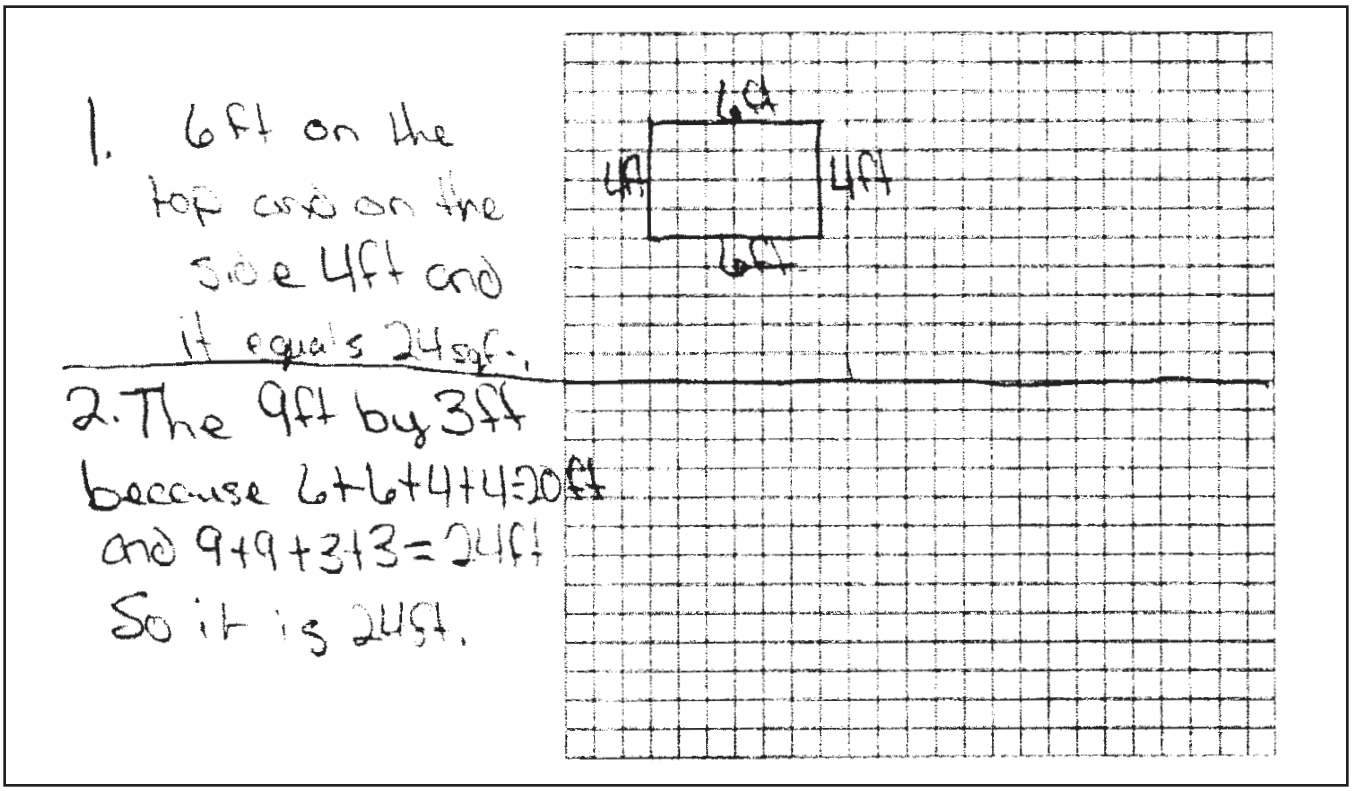
Part 1:

Incorrect answer:	5 x 5	–
Incorrect procedure:	Uses 20 ft. of string	–

Part 2:

Correct answer based on Part 1 with incomplete procedure:	9 ft. x 3 ft. “Area of 27... 25.” (no work shown)	1

TOTAL POINTS: **1**



SCORE: 0 **Points**

Part 1:

Incorrect answer:	Diagram of 6 x 4 rectangle	–
Missing procedure:	Finds incorrect perimeter	–

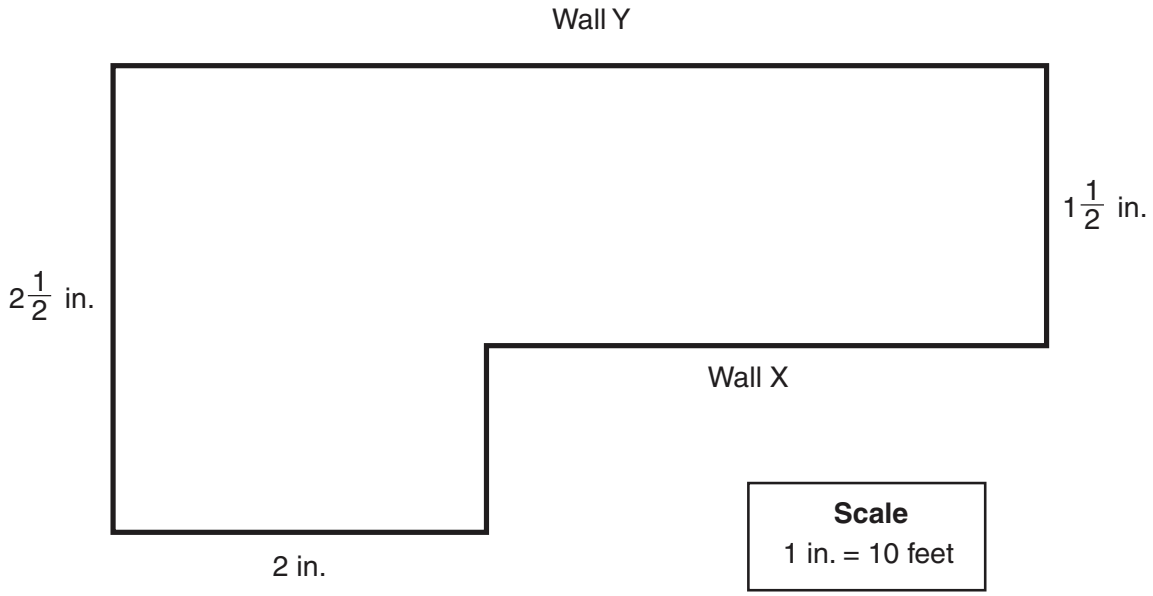
Part 2:

Correct answer based on Part 1	"The 9 ft by 3 ft"	
with incorrect procedure:	Finds perimeters, not areas	–

TOTAL POINTS: **0**

Mathematics Item E—2007 Benchmark Grade 5

Karla drew a floor plan of her classroom.



1. Using your ruler to measure, what is the length of Wall Y in the floor plan?

2. Use the scale to find the actual length of Wall Y. Show all your work and/or explain your answer.

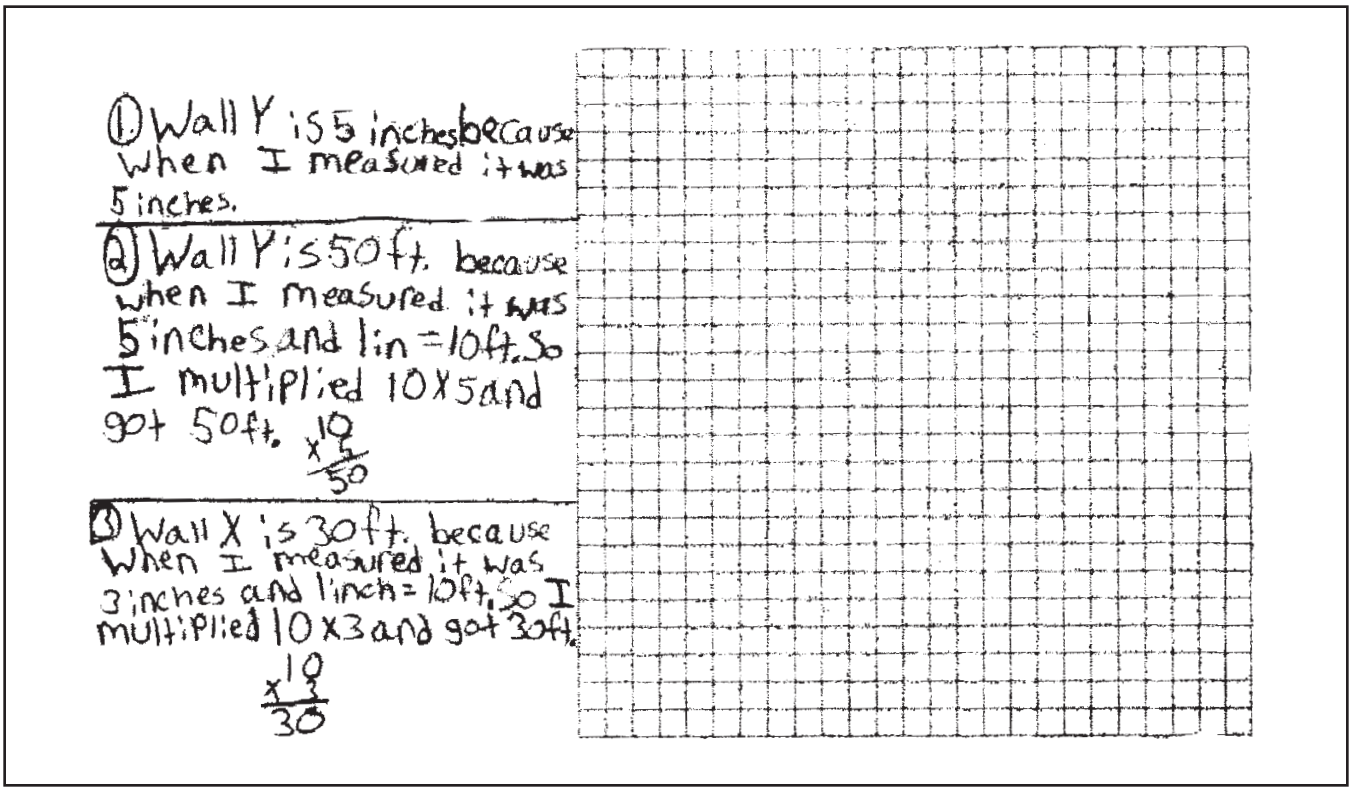
3. Using the scale, what is the actual length of Wall X? Show all your work and/or explain your answer.

Mathematics Item E Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect work. The correct label of "inches" is included in Part 1. The correct label of "feet" is included in Parts 2 and 3.
3	The student earns 3–3½ points.
2	The student earns 2–2½ points.
1	The student earns ½–1½ points, or some minimal understanding is 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

Part	Points
1	**1 point possible** 1 point: **Correct answer: 5 (inches).** Note: Label may be missing, but do not give credit if an incorrect label is used (Ex: feet, yards, centimeters).
2	**1 point possible** ½ point: **Correct answer: 50 (ft.), or correct answer based on incorrect answer in Part 1.** Note: Label may be missing, but do not give credit if an incorrect label is used (Ex: inches, yards, meters). AND ½ point: **Correct and complete procedure shown and/or explained.** Work may contain a calculation or copy error, or may be based on an incorrect answer in Part 1. Give credit for the following or equivalent: • 5 x 10 = #, or • "I multiplied the # of inches on the floor plan for Wall Y (5) by the # of feet (10) that each inch represents to get the answer...," or • Correct and complete verbal description of proportion: "If 1 inch equals 10 feet, then 5 inches equals 50 feet."
3	**2 points possible** 1 point: **Correct answer: 30 (ft.), or correct answer based on incorrect answer in Part 1.** Note: Label may be missing, but do not give credit if an incorrect label is used. (Ex: inches, yards, meters.) AND 1 point: **Correct and complete procedure shown and/or explained.** Work may contain a calculation or copy error, or may be based on an incorrect answer in Part 1. Give credit for the following or equivalent: • Uses measure of Wall Y found in Part 1 and subtracts 2 inches. (If this method is used and Part 1 is incorrect, work must be shown and/or explained.) ▪ "Subtract 2 inches from the measure of Wall Y (5 inches) to get the length of Wall X on the floor plan (3 inches). Then use the scale to find the actual length. So 3 × 10 = 30," or ▪ 5 – 2 = 3, 3 x 10 = Answer Or • Measures Wall X: ▪ Wall X is 3 inches. 3 x 10 = #, or ▪ 3 x 10 = Answer, or ▪ Correct and complete verbal description of proportion: "Since 1 inch is 10 feet, then I know that 3 inches is 30 feet."



SCORE: 4 **Points**

Part 1:

Correct answer:	5 (inches)	1

Part 2:

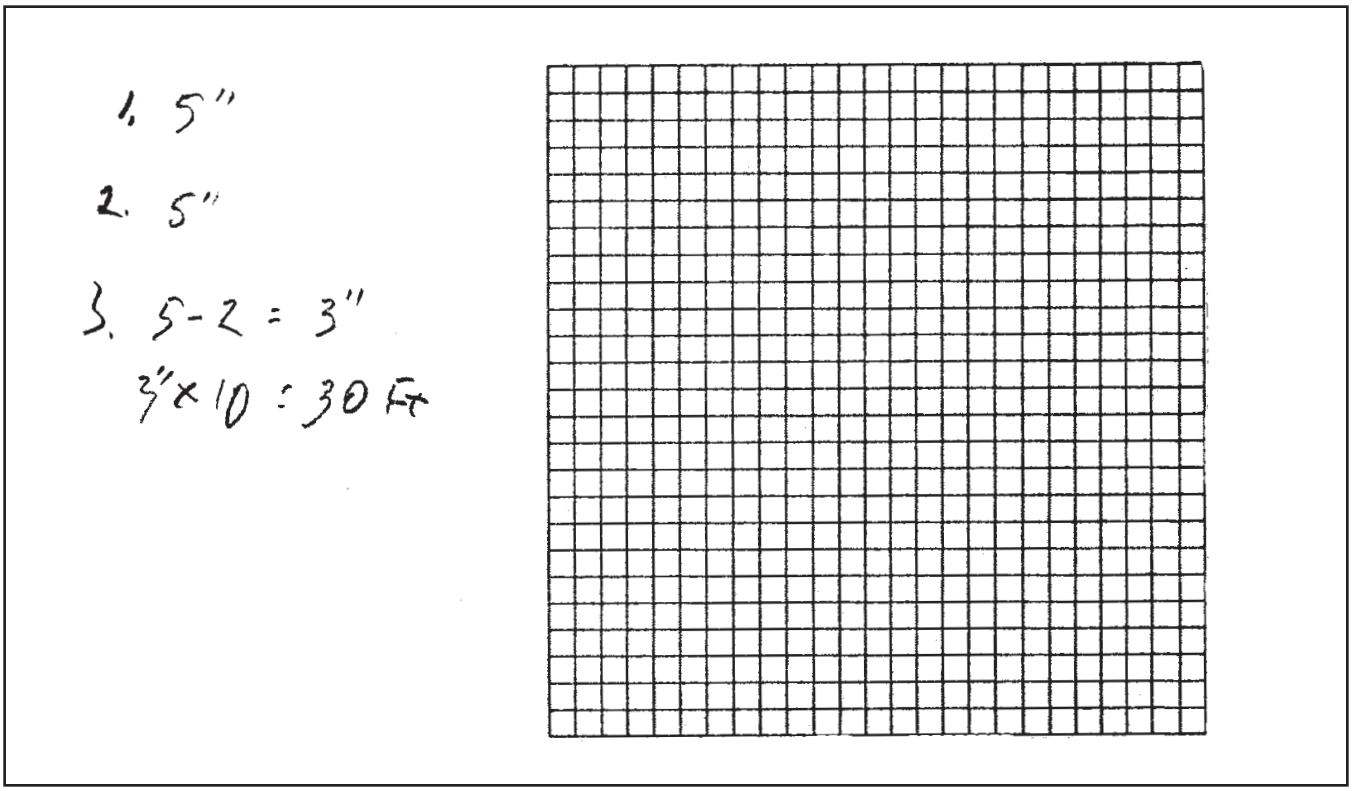
Correct answer:	50 (feet)	½
Correct procedure:	10 x 5 = #	½

Part 3:

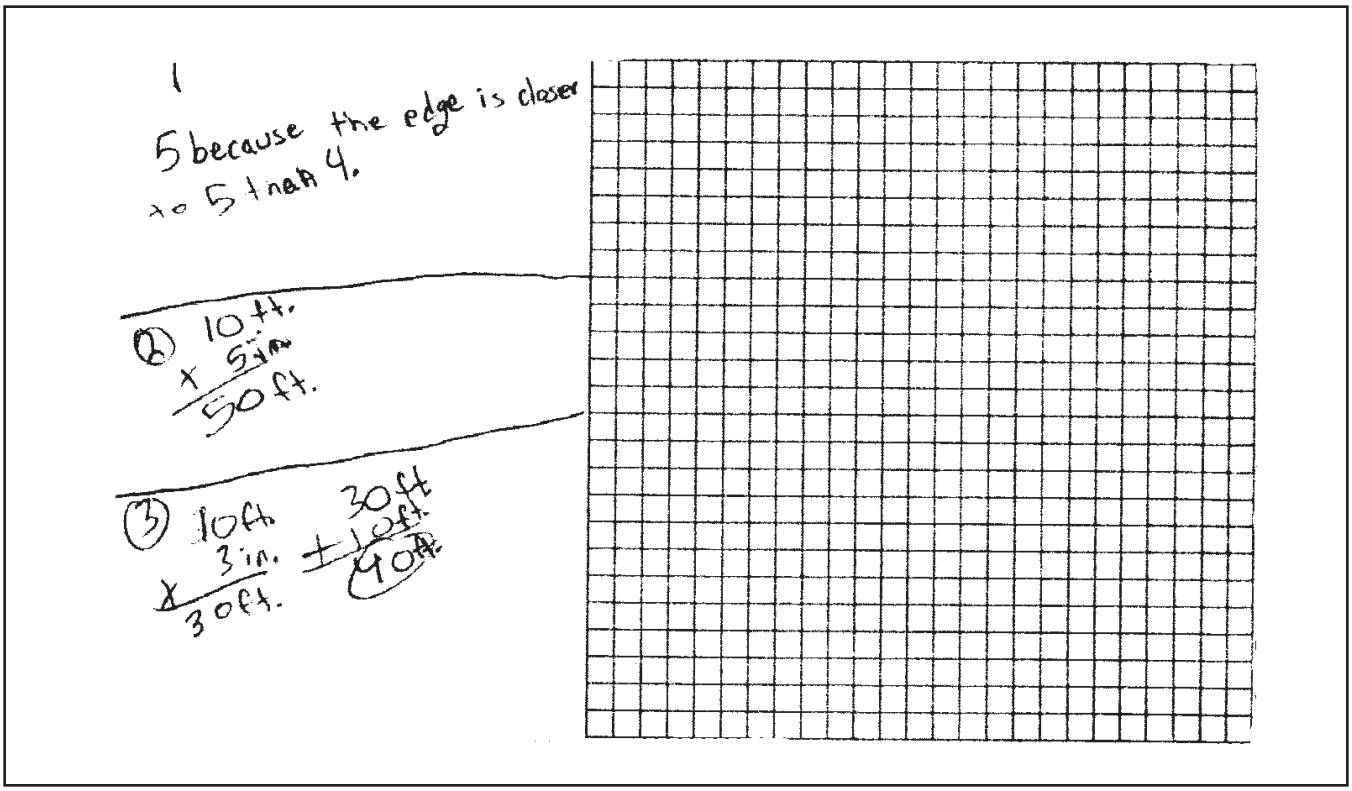
Correct answer:	30 (feet)	1
Correct procedure:	Wall X is 3 inches, 10 x 3 = #	1

TOTAL POINTS: **4**

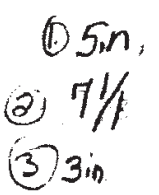
Correct labels are included: Part 1: "inches," Parts 2 & 3: "feet"

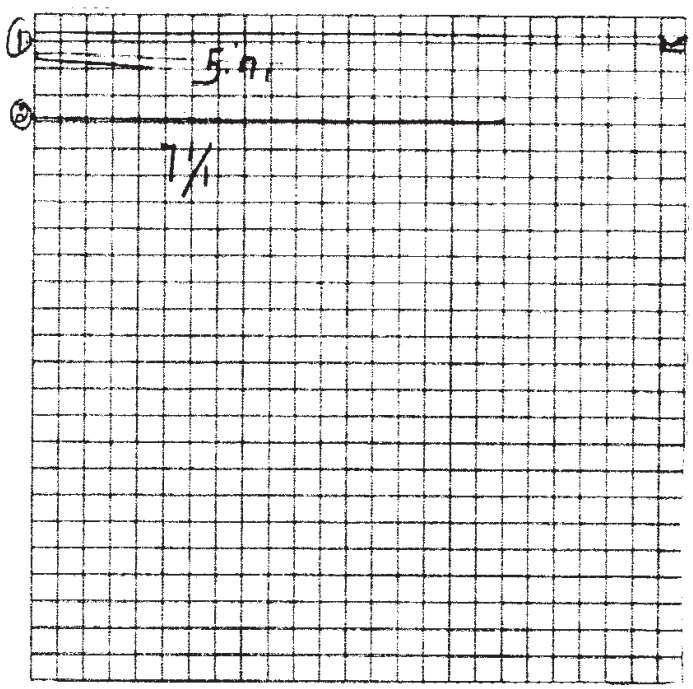


SCORE: 3		**Points**
Part 1:		
Correct answer:	5 (inches)	1
Part 2:		
Incorrect answer:	5	–
Missing procedure:		–
Part 3:		
Correct answer:	30 (feet)	1
Correct procedure:	5 – 2 = 3, 3 x 10 = #	1
TOTAL POINTS:		**3**



SCORE: 2		**Points**
Part 1:		
Correct answer:	5	1
Part 2:		
Correct answer:	50 (feet)	½
Correct procedure:	10 x 5 = #	½
Part 3:		
Incorrect answer:	40	–
Incorrect procedure:	10 x 3 = 30, 30 + 10 = 40	–
TOTAL POINTS:		**2**





SCORE: 1 **Points**

Part 1:

Correct answer:	5 (inches)	1

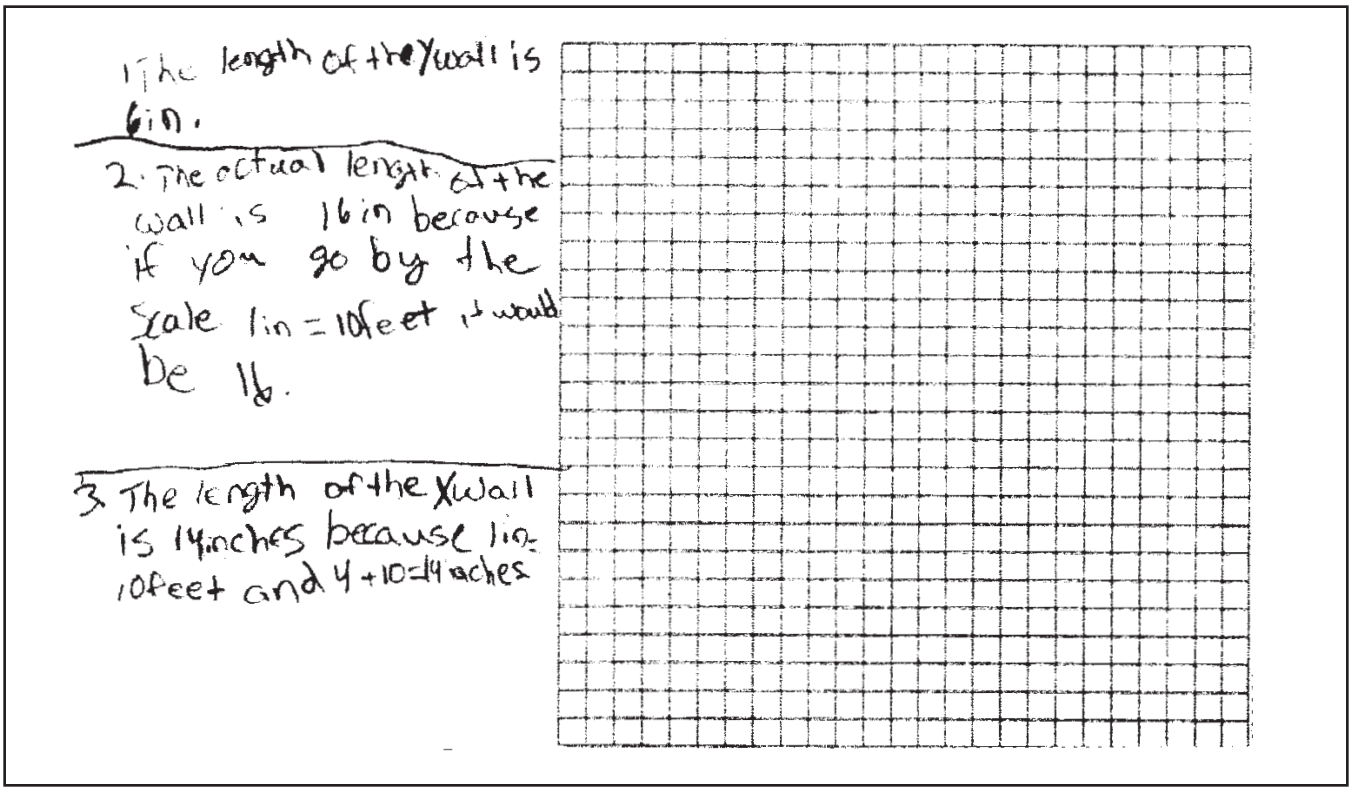
Part 2:

Incorrect answer:	7 1/1	–
Missing procedure:		–

Part 3:

Incorrect answer:	3	–
Incomplete procedure:	3 inches only	–

TOTAL POINTS: **1**



SCORE: 0		**Points**
Part 1:		
Incorrect answer:	6 in.	–
Part 2:		
Incorrect answer:	16	–
Missing procedure:		–
Parts 3:		
Incorrect answer:	14 inches	–
Incorrect procedure:	4 + 10 = 14 inches	–
TOTAL POINTS:		**0**

READING RESPONSES

My Mom Hates to Cook

by Ann Harth

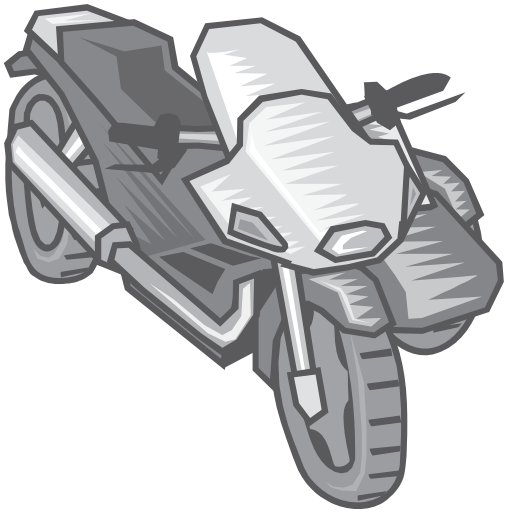
My mom hates to cook. She'd rather tinker with her motorcycle or practice knot tying for rock climbing. She also spends a lot of time with me.

2 Every morning Mom takes me to school. I put on my purple helmet and climb into The Beast. (When I was born, Mom added a sidecar to her radiant red Harley Davidson.)

I don't mind it except that I can't finish my homework on the way to school like other kids can. Also, I usually arrive looking like I just stepped off a roller coaster. Wind and purple helmets don't help the hair much.

Mom's passion, after me and her Harley, is climbing. I would say "rock climbing," but we don't have any large rocks or mountains nearby. Mom has to improvise.

5 Occasionally I'll come home to find her scaling the side of the house. "Hi, honey!" she'll yell, waving madly. My mom's voice really carries, especially when I'm with a large group of kids.



I used to feel embarrassed that my mom was so different. She'd even try to blend in for my sake. She stopped singing Beatles songs and pretending to play the bass while she waited for me after school. She practiced her cartwheels in our backyard instead of on the football field. Those were little things, but I knew that she was trying.

Now I've come to appreciate Mom for who she is—and not just because she's a hero.

It all started with a cooking project. Every student in Mrs. Maitland's home-economics class was supposed to create an original dish, then present it at school the following Tuesday morning. I begged Mom to help me. She gave in, but not until I promised to help her wax The Beast.

9 We spent hours in the kitchen. We tried jelly-filled hot dogs and noodleless lasagna, baked ham with chocolate sauce, and hard-boiled eggs rolled in coconut. We eventually agreed on chocolate cake with bright-green peppermint frosting. I was satisfied. It beat hot dogs, anyway.

The big day came. Our parents were supposed to bring our culinary delights to the classroom at eleven o'clock. As Mom dropped me off that morning, I tied strings around her fingers and made her repeat, "I will not forget the cake. I will not forget the cake." I watched her muttering it as she chugged away.

After math, we all filed up to the third floor. I looked around for Mom. She wasn't there.

Sammy Pingle's father had brought some sort of chicken dish. Pamela Bean and her aunt had a pitcher of liquid with lemons floating in it. Janet Greely and her mom proudly stood near an enormous fruit salad topped with little marshmallows. *Where are you, Mom?* I wondered.

The minutes ticked by. More grown-ups appeared, brandishing more tasty dishes. Finally I heard the distant roar of The Beast. I raced to the window. I slumped. Mom was empty-handed!

I met her at the door.

"You forgot it, didn't you?"

Mom's eyes opened wide.

"I'm sor—" She couldn't finish her apology; a clanging alarm cut her off.

Mrs. Maitland yelled, "Fire! This is not a drill! Everyone out of the building!"

We all headed for the stairs.

We found out later that Misty Branden's older brother had been heating oil for popcorn. He'd started talking to Timothy Smythe's older sister and had forgotten about the hot oil. When Misty came to put caramel on her popped corn, there were flames leaping from the pan.

Everyone piled into the parking lot. Smoke started to curl out of one of the third-floor windows. Mom held my hand tightly. I forgot about my cake.

As Mrs. Maitland was taking attendance, we heard a scream. We looked up and saw Shannon Patterson peering out the window of the room next to the fire.

"Help!" she cried out. "I'm trapped!"

Mom disappeared. She grabbed her climbing gear from The Beast and strode toward the building. She scaled the huge pine tree next to the school. At the top, she started to throw her weight back and forth. The tree swung toward the window, and she hopped onto the ledge and into the building.

Mom's ropes flew as she created a harness. She secured one end, then lowered a shaky Shannon safely to the ground.

"Release the harness!" she yelled.

I found myself at the bottom of the rope, remembering all the knotting and unknotting lessons I'd had. As soon as Shannon was free, Mom pulled the rope up quickly. She rappelled down the side of the building while everyone cheered. As she reached the ground, I heard her softly humming "Yellow Submarine." I couldn't stop grinning.

Who cares if my mom hates to cook?

Reading Item A—2007 Benchmark Grade 5

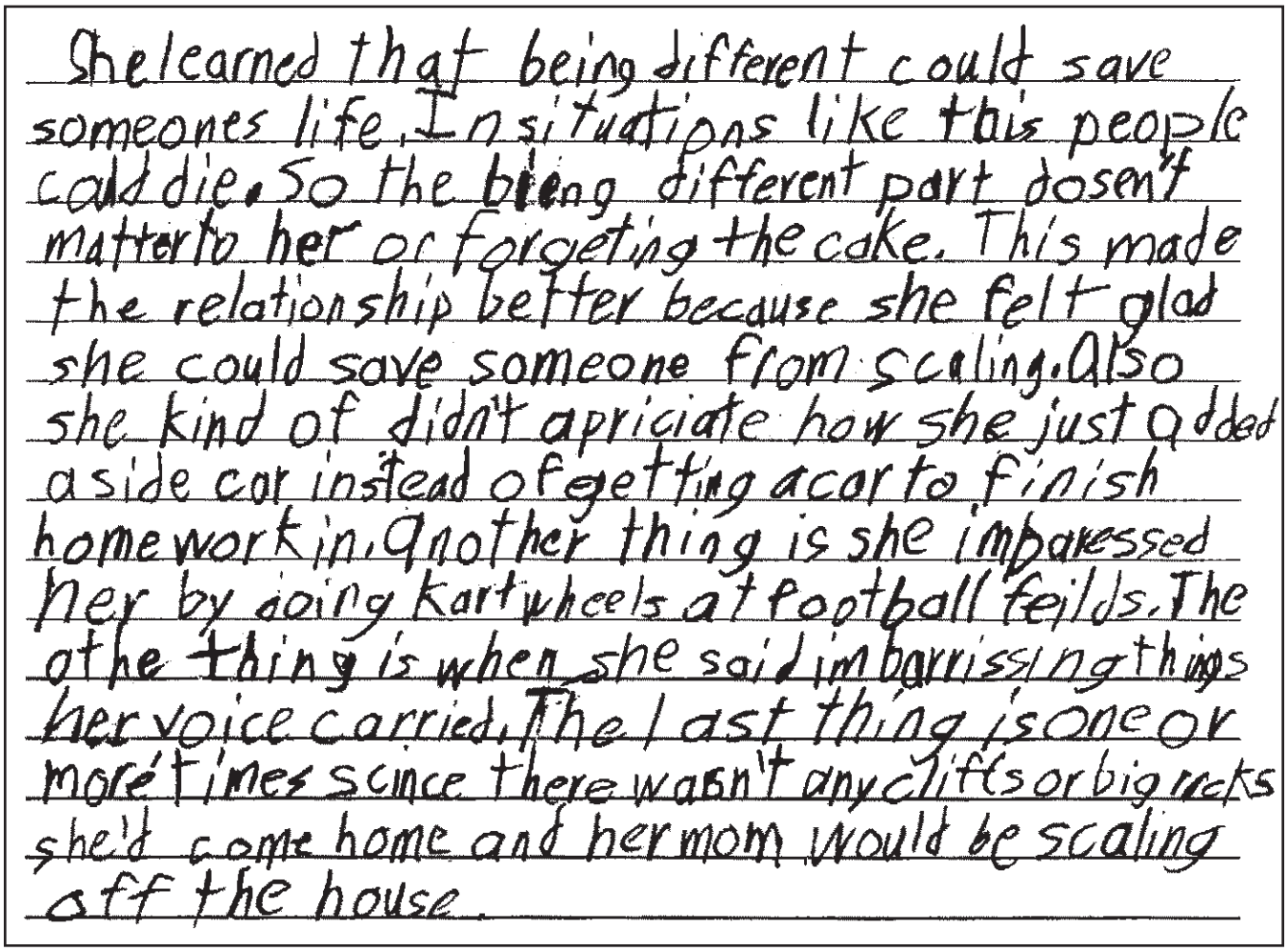
A. What did the narrator learn about being different? How will this understanding affect the narrator's relationship with her mother? Support your response with two details from the passage.

Reading Item A Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The response states what the narrator learned about being different, tells how the narrator's relationship with her mother will be affected, and provides two details from the passage for support.
3	The response states what the narrator learned about being different, tells how the narrator's relationship with her mother will be affected, and provides one detail from the passage for support. **OR** The response states what the narrator learned about being different and provides two details from the passage for support. **OR** The response tells how the narrator's relationship with her mother will be affected and provides two details from the passage for support.
2	The response states what the narrator learned about being different and tells how the narrator's relationship with her mother will be affected. **OR** The response states what the narrator learned about being different and provides one detail from the passage for support. **OR** The response tells how the narrator's relationship with her mother will be affected and provides one detail from the passage for support.
1	The response states what the narrator learned about being different. **OR** The response tells how the narrator's relationship with her mother will be affected. **OR** The response provides a detail that shows some understanding of the passage.
0	The response is totally incorrect or irrelevant. There is no evidence that the student understands the task, or the response may be off-topic.
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.)

Score Point: 4

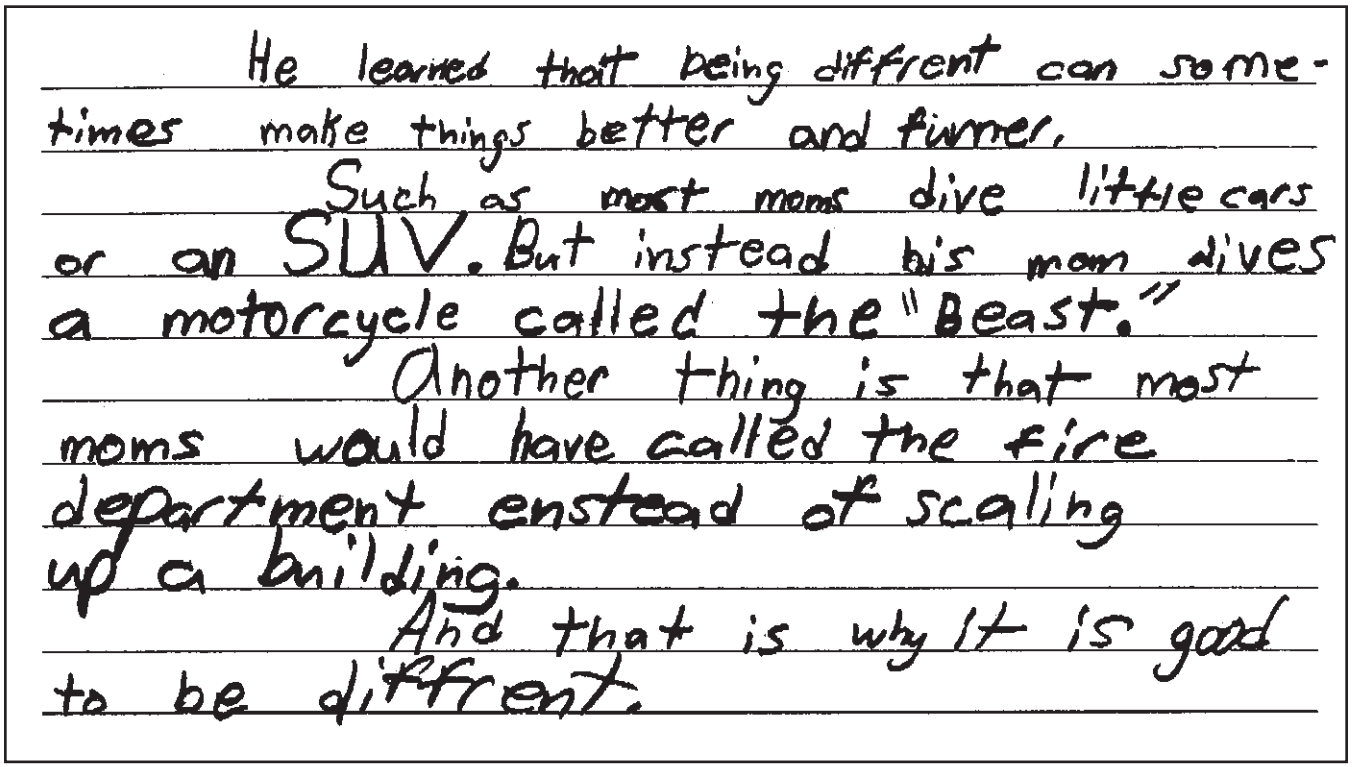
The student thoroughly describes what the narrator learned about being different using relevant information from the passage ("She learned that being different could save someone's life") and explains how this understanding affects the narrator's relationship with her mother ("This made the relationship better because she felt glad") using accurate details from the passage to support it ("she could save someone from scaling"). The response demonstrates a thorough understanding of the passage.



She learned that being different could save someones life. In situations like this people could die. So the being different part dosen't matter to her or forgeting the cake. This made the relationship better because she felt glad she could save someone from scaling. Also she kind of didn't apriciate how she just added a side car instead of getting a car to finish homework in. Another thing is she imparessed her by doing kartwheels at football feilds. The other thing is when she said im barrissing things her voice carried. The last thing is one or more times since there wasn't any cliffs or big rocks she'd come home and her mom would be scaling off the house.

Score Point: 3

The student adequately describes what the narrator learned about being different ("being different can sometimes make things better and funner") and uses relevant information from the passage to support it ("most moms dive little cars or an SUV. But instead his mom dives a motorcycle called the 'Beast'"; "most moms would have called the fire department enstead of scaling up a building"). Since there is no explanation of how this affected the narrator's relationship with her mother, the response provides evidence of general but not comprehensive understanding of the passage.



He learned that being diffrent can sometimes make things better and funner.

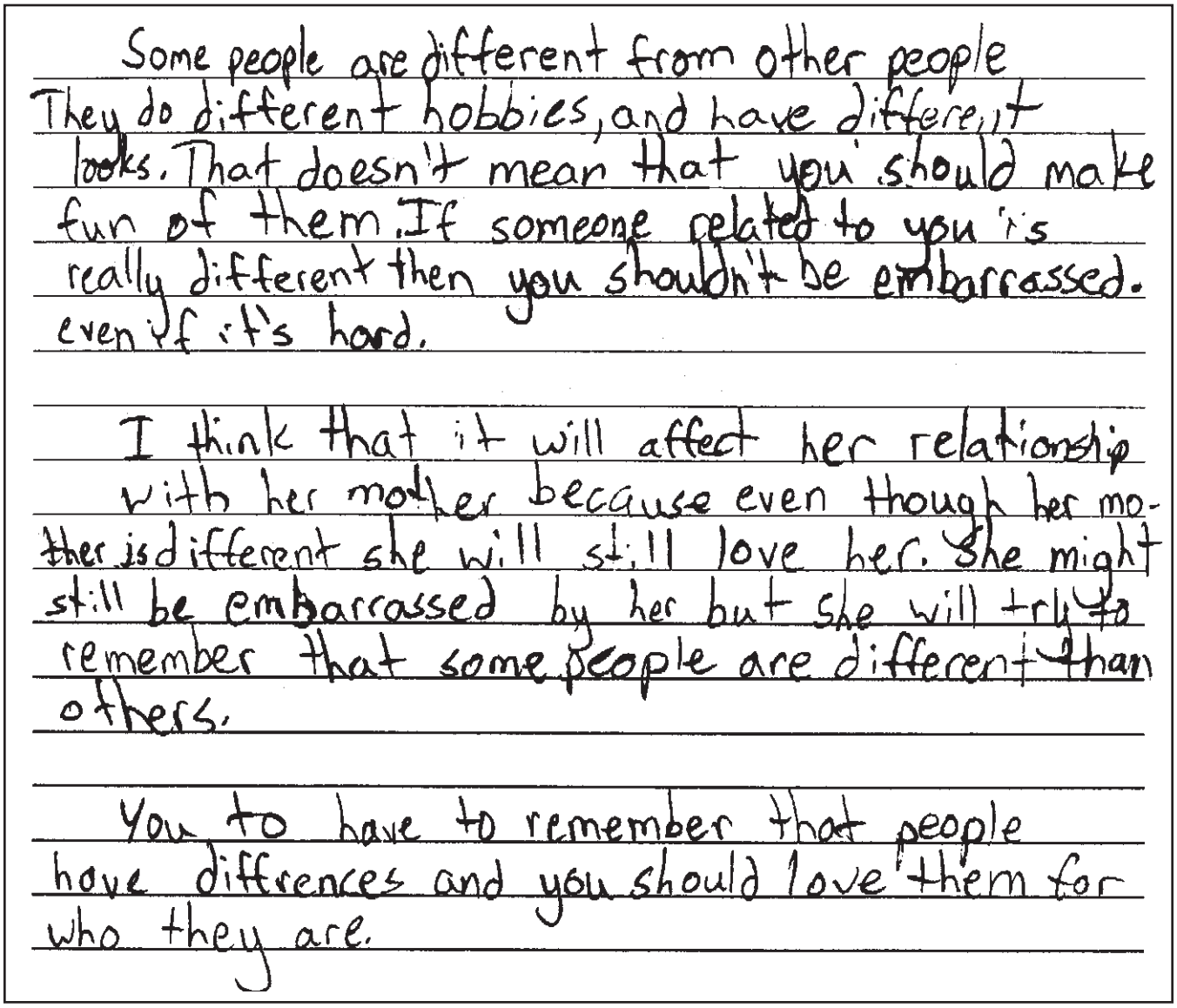
Such as most moms dive little cars or an SUV. But instead his mom dives a motorcycle called the "Beast."

Another thing is that most moms would have called the fire department enstead of scaling up a building.

And that is why it is good to be diffrent.

Score Point: 2

The student uses some information from the passage to describe what the narrator learns about being different ("If someone related to you is really different then you shouldn't be embarrassed. even if it's hard") and explains how this understanding affects the narrator's relationship with her mother ("even though her mother is different she will still love her"). This is an example of a basic understanding of the passage.



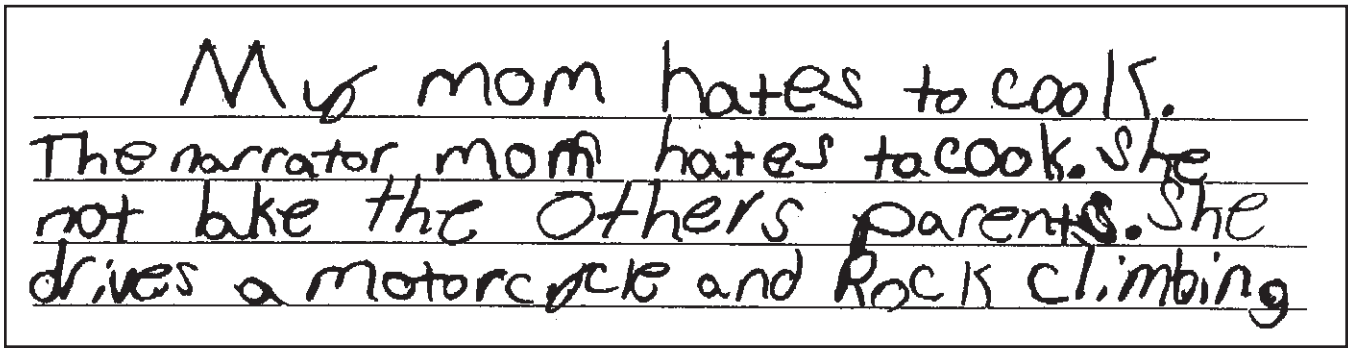
Some people are different from other people They do different hobbies, and have differe,,t looks. That doesn't mean that you should make fun of them. If someone related to you is really different then you shouldn't be embarrassed. even if it's hard.

I think that it will affect her relationship with her mother because even though her mother is different she will still love her. She might still be embarrassed by her but she will try to remember that some people are different than others.

You to have to remember that people have diffrences and you should love them for who they are.

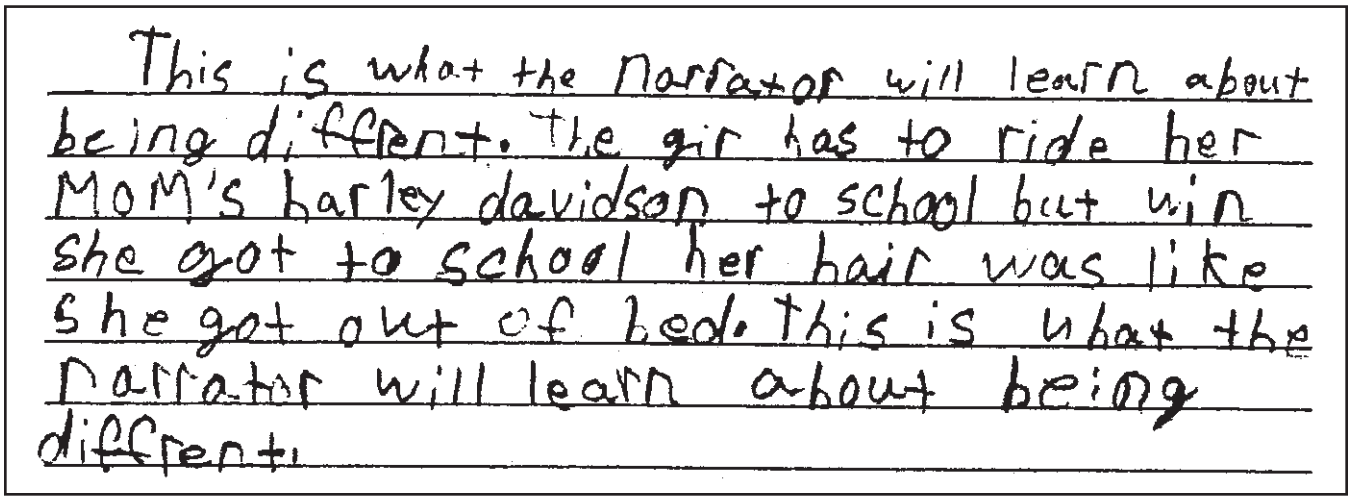
Score Point: 1

The student uses little or no information from the passage to describe what the narrator learned about being different and how this affected the narrator's relationship with her mother. The response is inadequate and provides evidence of minimal understanding.


My mom hates to cools.
The narrator mom hates to cook. She
not bake the others parents. She
drives a motorcycle and Rock climbing

Score Point: 0

There is no evidence that the student understands the task. The response is irrelevant.


This is what the narrator will learn about
being diffent. The gir has to ride her
MOM's harley davidson to school but win
she got to school her hair was like
she got out of bed. this is what the
narrator will learn about being
diffent.

Reading Passage B—2007 Benchmark Grade 5

For a copy of the reading passage, “The Invention of the Trampoline” by Steven Caney, please refer to the hard copy version of the Teacher Handbook.

For a copy of the reading passage, "The Invention of the Trampoline" by Steven Caney, please refer to the hard copy version of the Teacher Handbook.

Reading Item B—2007 Benchmark Grade 5

B. What are two reactions people may have toward someone who is trying to create something new or unusual? Provide two examples from the passage to support your answer.

Reading Item B Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The response provides two reactions to inventors and gives two examples from the passage to support the response.
3	The response provides one reaction to inventors and gives two examples from the passage to support the response. **OR** The response provides two reactions to inventors and gives one example from the passage to support the response.
2	The response provides one reaction to inventors and one example from the passage to support the response. **OR** The response provides two reactions to inventors.
1	The response provides one reaction to inventors. **OR** The response gives examples from the passage that show some understanding of the passage.
0	The response is totally incorrect or irrelevant. There is no evidence that the student understands the task, or the response may be off-topic.
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.)

Score Point: 4

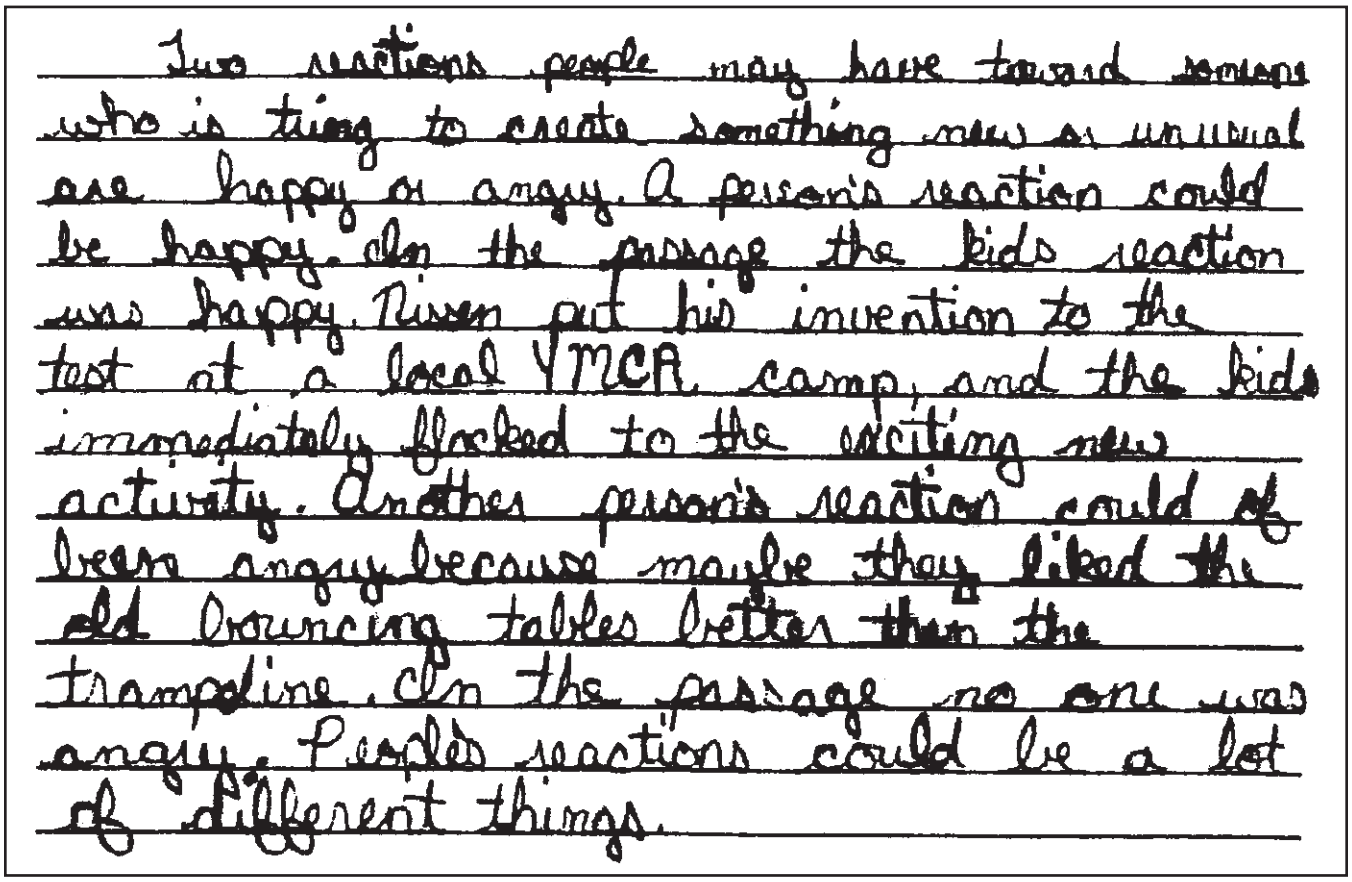
The student gives two reactions people may have toward someone who is trying to create something new or unusual and uses relevant information or evidence from the passage to support the reaction ("when they think it's useless…the neighbors thought he was a bit strange to be so devoted to a project like that, to them, it seem to have no practical value"; "didn't buy many things he just got them from a junkyard. The people…might get mad."). The response demonstrates a thorough understanding of the passage.

One reaction people may have toward someone who is trying to create something new or unusual are when they think it's useless. for example, in the story the neighbors thought he was a bit strange to be so devoted to a project like that, to them, it seem to have no practical value.

Another reaction people may have toward someone is when he doesn't buy their stuff. In the story Nissen didn't buy many things he just get them from a junkyard. The people in the stores might get mad because they might just sell auto parts and the expect Nissen to buy them.

Score Point: 3

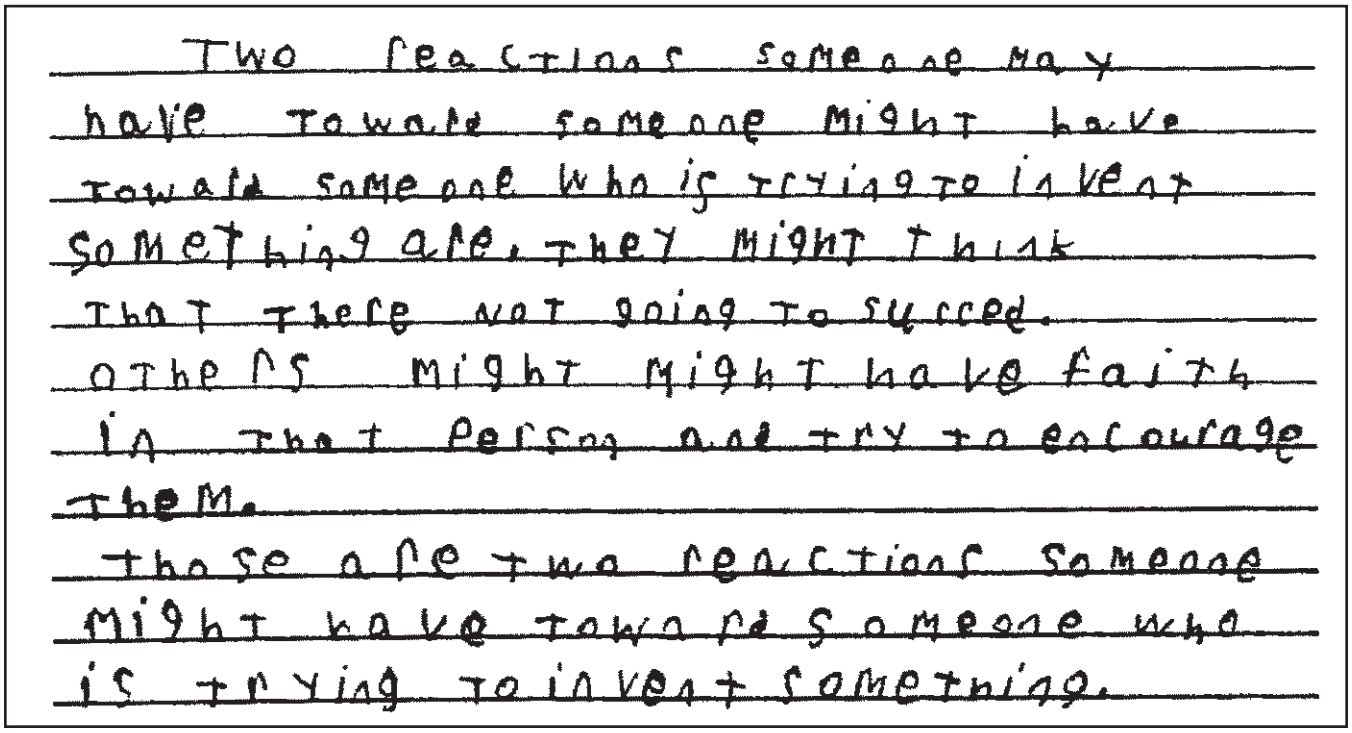
The student gives two reactions people may have toward someone who is trying to create something new or unusual and uses relevant information from the passage to support only one of those reactions ("happy... the kids reaction was happy. Nissen put his invention to the test at a local YMCA camp, and the kids immediately flocked to the exciting new activity"). However, there is not enough evidence to support the second reaction ("angry because maybe they liked the old bouncing tables better than the trampoline"). The response provides evidence of general but not comprehensive understanding of the passage.



Two reactions people may have toward someone who is tiing to create something new or unusual are happy or angry. A person's reaction could be happy. On the passage the kids reaction was happy. Nissen put his invention to the test at a local YMCA camp, and the kids immediately flocked to the exciting new activity. Another person's reaction could of been angry because maybe they liked the old bouncing tables better than the trampoline. On the passage no one was angry. People reactions could be a lot of different things.

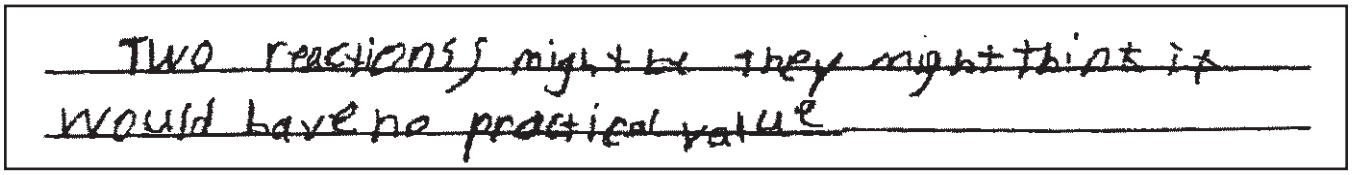
Score Point: 2

The student gives two reactions people may have toward someone who is trying to create something new or unusual but uses little or no information from the passage to support them ("they might think that there are not going to succeed"; "Others might have faith in that person and try to encourage them"). This is an example of a basic understanding of the passage.


Two reactions someone may
have toward someone might have
toward someone who is trying to invent
something are, they might think
that there not going to succed.
Other might might have faith
in that person and try to encourage
them.
those are two reactions someone
might have toward someone who
is trying to invent something.

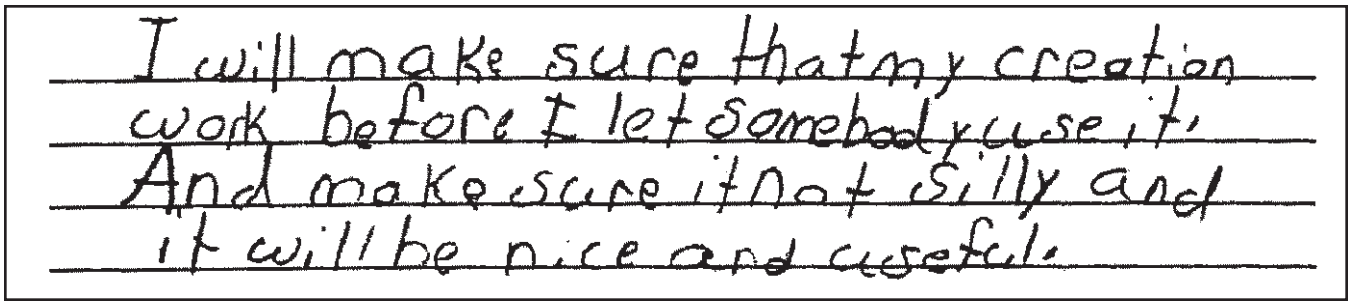
Score Point: 1

The student uses little or no information from the passage to give a reaction people may have toward someone who is trying to create something new or unusual ("they might think it would have no practical value"). The response is inadequate and provides evidence of minimal understanding.



Score Point: 0

There is no evidence that the student understands the task. The response is irrelevant.



Reading Passage C—2007 Benchmark Grade 5

For a copy of the reading passage, “Snow Business” by Mark Anders, please refer to the hard copy version of the Teacher Handbook.

For a copy of the reading passage, "Snow Business" by Mark Anders, please refer to the hard copy version of the Teacher Handbook.

Reading Item C—2007 Benchmark Grade 5

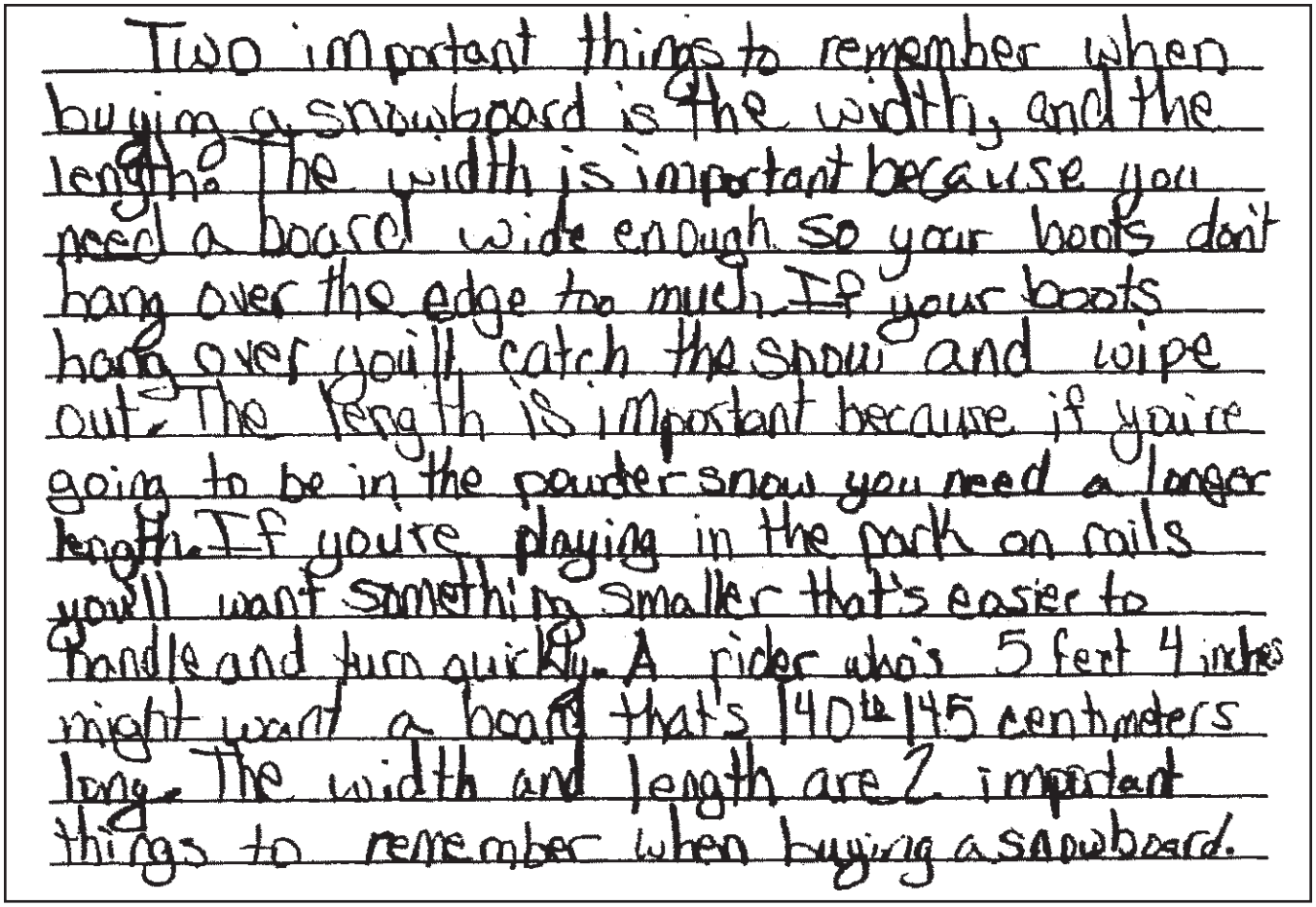
C. What are two important things to remember when buying a snowboard? Provide two details from the passage to show why they are important.

Reading Item C Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The response states two important things to remember when buying a snowboard and provides two details from the passage to show why they are important.
3	The response states two important things to remember when buying a snowboard and provides one detail from the passage to show why they are important. **OR** The response states one important thing to remember and provides two details from the passage to show why it is important.
2	The response states one important thing to remember when buying a snowboard and provides one detail from the passage to show why it is important. **OR** The response states two important things to remember.
1	The response states one important thing to remember when buying a snowboard. **OR** The response provides a detail that shows some understanding of the passage.
0	The response is totally incorrect or irrelevant. There is no evidence that the student understands the task, or the response may be off-topic.
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.)

Score Point: 4

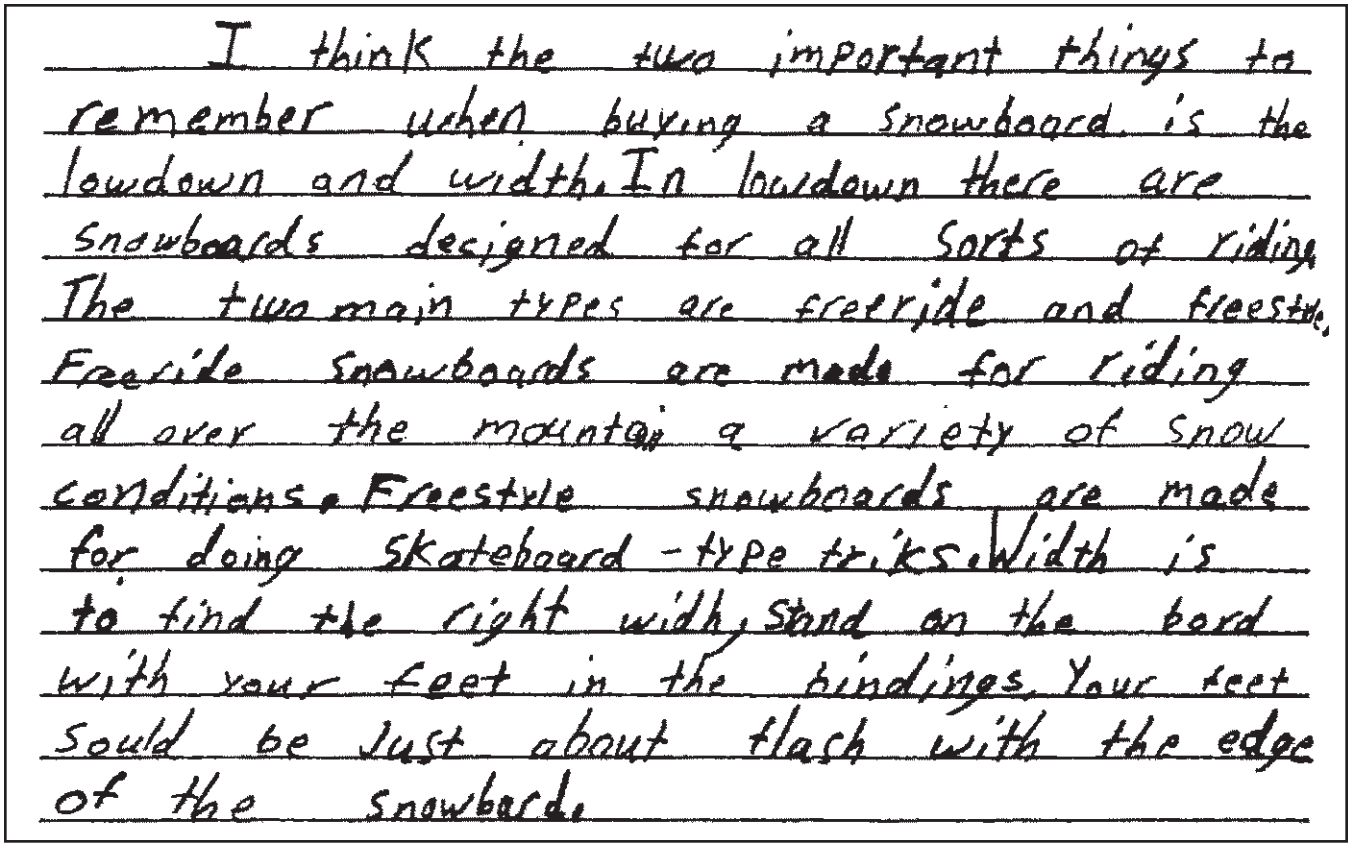
The student explains two important things to remember when buying a snowboard ("width, and the length") and thoroughly explains why they are important ("The width is important because you need a board wide enough so your boots don't hang over the edge too much. If your boots hang over you'll catch the snow and wipe out"; and "The length is important because if you're going to be in the powder snow you need a longer length. If you're playing in the park on rails you'll want something smaller that's easier to handle and turn quickly"). The response demonstrates a thorough understanding of the passage.



Two important things to remember when buying a snowboard is the width, and the length. The width is important because you need a board wide enough so your boots don't hang over the edge too much. If your boots hang over you'll catch the snow and wipe out. The length is important because if you're going to be in the powder snow you need a longer length. If you're playing in the park on rails you'll want something smaller that's easier to handle and turn quickly. A rider who's 5 feet 4 inches might want a board that's 140 to 145 centimeters long. The width and length are 2 important things to remember when buying a snowboard.

Score Point: 3

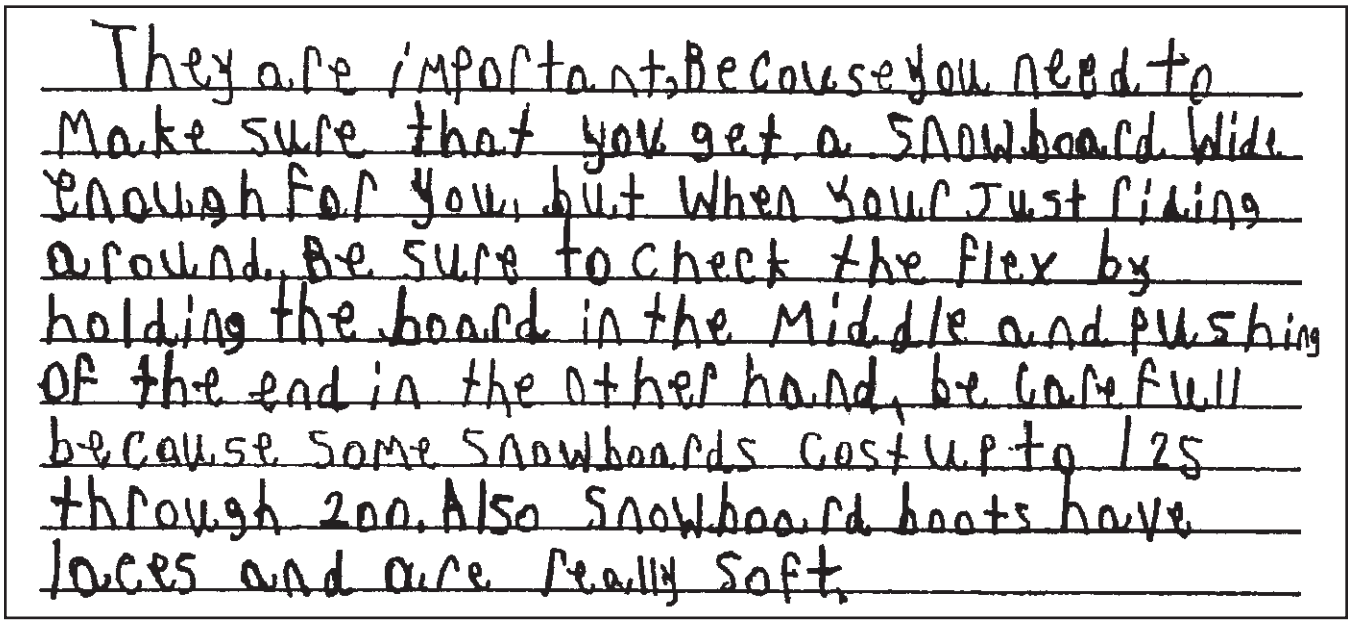
The student explains two important things to remember when buying a snowboard ("lowdown and width"). However, there is relevant information from the passage to support only one explanation ("Freeride snowboards are made for riding all over the mountain a variety of snow conditions. Freestyle snowboards are made for doing skateboard-type triks"). The response provides evidence of general but not comprehensive understanding of the passage.



I think the two important things to remember when buying a snowboard is the lowdown and width. In lowdown there are snowboards designed for all sorts of riding. The two main types are freeride and freestyle. Freeride snowboards are made for riding all over the mountain a variety of snow conditions. Freestyle snowboards are made for doing skateboard-type triks. Width is to find the right width, Stand on the bord with your feet in the bindings. Your feet sould be just about flash with the edge of the snowbords.

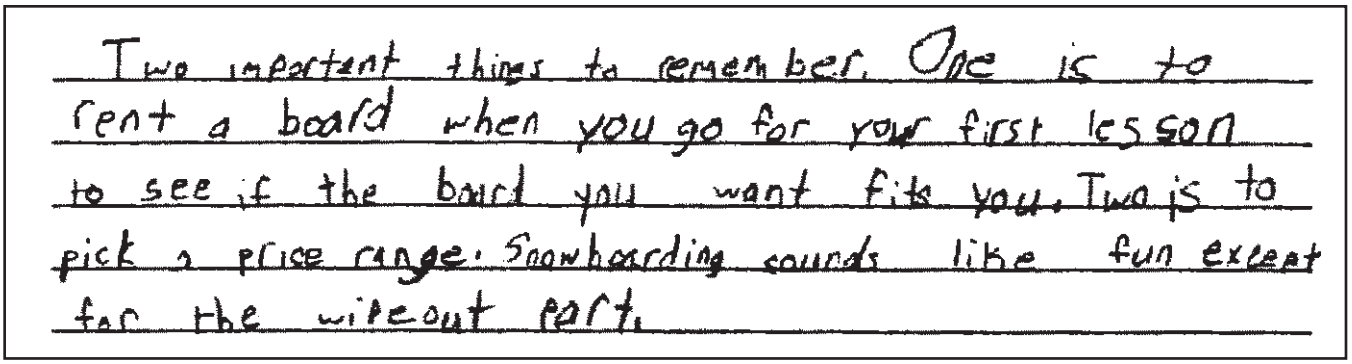
Score Point: 2

The student explains important things to remember when buying a snowboard (width, check the flex, price, boots) but omits evidence from the passage to support why they are important. This is an example of a basic understanding of the passage.


They are important, Because you need to
Make sure that you get a Snowboard Wide
Enough for you, but When your Just Riding
around, Be sure to check the flex by
holding the board in the Middle and pushing
of the end in the other hand, be Carefull
because Some Snowboards Cost up to 125
through 200. Also Snowboard boots have
laces and are really Soft.

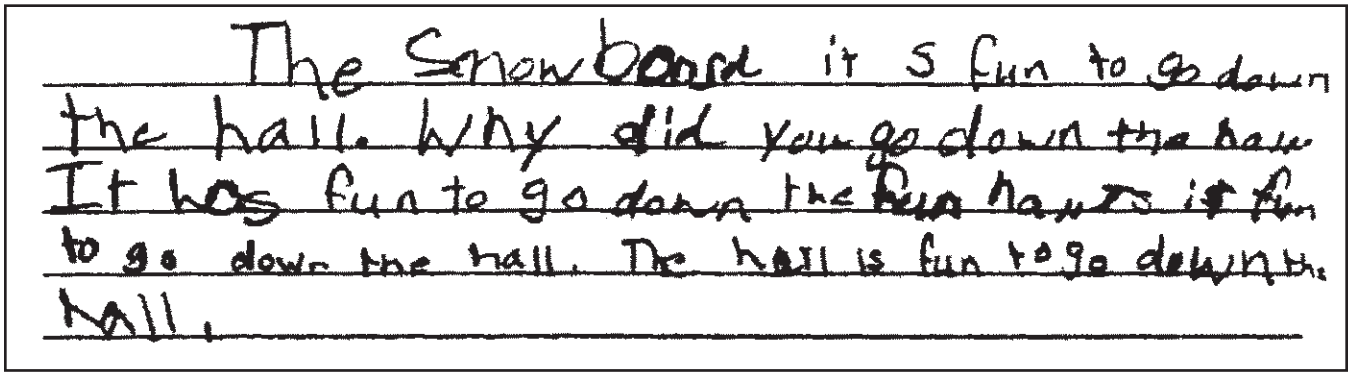
Score Point: 1

The student explains one important thing to remember when buying a snowboard but provides no information from the passage to support it. The response is inadequate and provides evidence of minimal understanding.


Two important things to remember. One is to rent a board when you go for your first lesson to see if the board you want fits you. Two is to pick a price range. Snowboarding sounds like fun except for the wipeout part.

Score Point: 0

There is no evidence that the student understood the prompt. The response is inaccurate and irrelevant.


The Snowboard it s fun to go down the hall. Why did you go down the hall It has fun to go down the hall hall is fun to go down the hall. The hall is fun to go down the hall.

Acknowledgments

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Pages 57–58: "Snow Business" By permission of Mark Anders and Boys' Life, November 2003, published by the Boy Scouts of America.

WRITING RESPONSES

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."

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 Prompts—2007 Benchmark Grade 5

These are the two writing prompts administered to all grade 5 students in April 2007.

Prompt #1

Your teacher has asked you to finish this story.

> **Yesterday, my friend and I decided to explore an old house. We slowly opened the door, and in the middle of the room we saw something that would change our lives forever.**

Before you begin to write, think about what you saw when you opened that door. What did you see? What happened next?

Now finish the story and tell what happened when you opened that door. Give enough detail so that your teacher will understand.

Prompt #2

Your teacher has asked you to write about this topic:

> **If you could choose any person to be your older sister or brother, who would it be?**

Before you begin to write, think about choosing someone to be your older sister or brother. Who would you choose? Would it be someone famous or someone you know? **Why** would you choose this person?

Now write about the person you would choose to be your older sister or brother. Be sure to name the person and explain why you chose this person. 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 detail 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 a variety of 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 Dream Sister

I've all ways wanted a big Sister. I want my big sister to be Ms. . One reason why I want Ms. to be my big sister berause she's respectful. She nevers yells unless you are doing something that you dont suppose to do. My second reason is that she's a nice person. She never say bad language. My third reason is that she is kind. When your class is coming by she would let you class go first. My last reason is that she is a good teacher. She taught me stuff I didn't know about. She taught me how to subtrart and mutiply fractions. That is why I want Ms. to be my older sister.

Writing Annotation for Sample Response 1—Prompt 2—2007 Benchmark Grade 5

Content: 2

This response focuses on a clear central idea, and there is a sense of organization. The main weakness in this response is its lack of elaboration. The writer provides minimal support for each idea with few details. This response demonstrates inconsistent control of the Content domain.

Style: 2

In this response, there is some selected information ("She never yells"; "She taught me how to subtract and multiply fractions"), but the vocabulary is merely functional and fails to affect the reader. There is very little sentence variety, and the voice is dim. The writer demonstrates inconsistent control of the Style domain.

Sentence Formation: 4

This response demonstrates consistent control of the Sentence Formation domain. All of the sentences are correct, and the writer skillfully constructs both simple and complex sentences.

Usage: 2

This response has inflectional errors ("say" for "says"; "suspose" for "supposed"), as well as errors in agreement and verb tense. Errors in several features of the Usage domain demonstrate inconsistent control.

Mechanics: 3

This response has a significant number of misspellings and a missing comma. Most of the other punctuation is correct. The writer demonstrates reasonable control of the Mechanics domain.

Yesterday, my friend and I decided to explore an old house. We slowly opened the door, and in the middle of the room we saw something that could change our lives forever. It was one of the most enourmouse yellow backed, green eye, spiked belly, bullfrog I have ever seen. First my friend screemed then I screemed we both were screeming so much that the huge yellow backed, green eye, spiked belly, bullfrog screemed. After we were screeming like litte babies who lost thier pasifire we clacted out the rugged door. Then my friend asked me where was my red hat. We both stared eyeball to eyeball nothing being said, untill the yellow backed green eye, spiked belly, bull frog drilled hisself up from the ground. My friend started to run so I held him by the arm the yellow backed green eye, spiked belly, bullfrog pulled my hat out from behind his yellow back, and said in a deep scratchy voice is this your hat. I could hardly understand the poor old monster but he had my hat so, it had to of ben something good. When he gave me my hat I was a little frusstaded then I told the humungous monster do you want to go for hamburgers and he said something that convinced me to go. Later on the gigantic monster got to be pretty funny, and cool. Truly I think this big monster is a good friend.

Writing Annotation for Sample Response 2—Prompt 1—2007 Benchmark Grade 5

Content: 3

This response demonstrates reasonable control of the Content domain. The central idea (exploring an old house) is clearly presented. The response is organized chronologically and there is a sense of closure. However, the writer misses opportunities to elaborate in the second half of the narrative. The elaboration is too uneven for this response to merit a higher score.

Style: 4

The writer uses vivid and precise vocabulary to affect the reader ("enourmouse yellow backed, green eye, spiked belly, bullfrog"; "stared eyeball to eyeball"; "deep scratchy voice"). There is varied sentence structure and a strong voice. This response demonstrates consistent control of the Style domain.

Sentence Formation: 3

This response contains three contact run-ons. The rest of the sentences are correct, and the writer successfully constructs simple and compound sentences. Overall, this response demonstrates reasonable control of Sentence Formation features.

Usage: 2

This response contains inflection, agreement, and possessive pronoun errors. Errors in several features of the Usage domain demonstrate inconsistent control.

Mechanics: 2

This response is improperly formatted, and it contains numerous misspellings of basic words. There are also missing quotation marks, missing commas, and a missing question mark. The writer demonstrates inconsistent control of the Mechanics domain.

Yesterday my friend and I went to an old house. When we opened the door, we saw darkness. Jast a second later we heard a faint sound. "It's a-comin, it's a-comin. We creeped through and Jim (my fat friend) asked "Can you figure that out?" I whispered. "No." Soon we found a light switch. As my shaky hand reached for the switch, we jumped to hear a "grrr. "Jim, you see that light uptairs?" "Yeah, Jim replied. "On 3 rush for the stairs. "3!" I bolted before that "grrr" sound came closer. Jim wisped behind me and we sneaked to the light. Suddenly, we heard that faint sound again. "It's a-comin, it's a-comin. I walked toward the light as my hands were starting to sweat. This time I clutched the door handle and pushed as the filthy door creaked. When I peered inside I saw a bed with a steel-framed portract I stepped on. A window was over the bed with lots of cobwebs. 2 seconds later a figure rose from the bed. I signaled Jim to make a run for it. As we ran down the stairs I heard the faint sound getting louder and louder. I whispered to Jim, "Follow that noise." Soon, Jim found another set of stairs. I led Jim down to the sound. Now we could hear the sound loud enough. I turned to see and

found some old people trying out for a band. The lead singer kept say "it's a-comen" over and over because the rest of the band didn't know how to do the instruments. After about 5 minutes Jim and I left... with laughs. On the way home, Jim asked, "I wonder what that figure was that rose from the bed?" Suddenly, we stared at each other and thundered home.

Writing Annotation for Sample Response 3—Prompt 1—2007 Benchmark Grade 5

Content: 4

This response is organized chronologically and has a clear central idea. The writer includes numerous details to give the reader a clear idea of the message and elaborates these ideas evenly. There is a clear progression of ideas, a consistent point of view, and a strong conclusion. This response demonstrates consistent control of the Content domain.

Style: 4

The writer uses vivid vocabulary and purposefully selected information ("As my shaky hand reached"; "faint sound"; "as the filthy door creaked") to create suspense for the reader. The writer also creates suspense through the use of a phrase ("it's a-comin'") with multiple meanings: one indicating movement and the other indicating improvement. There is varied sentence structure as well as a strong voice. This response demonstrates consistent control of the Style domain.

Sentence Formation: 4

This response contains a variety of simple, compound, and complex sentences. The writer demonstrates skillful and consistent control of Sentence Formation features.

Usage: 4

The writer has skillfully handled inflections, agreement, tenses, and conventions. This response demonstrates consistent control of the features of the Usage domain.

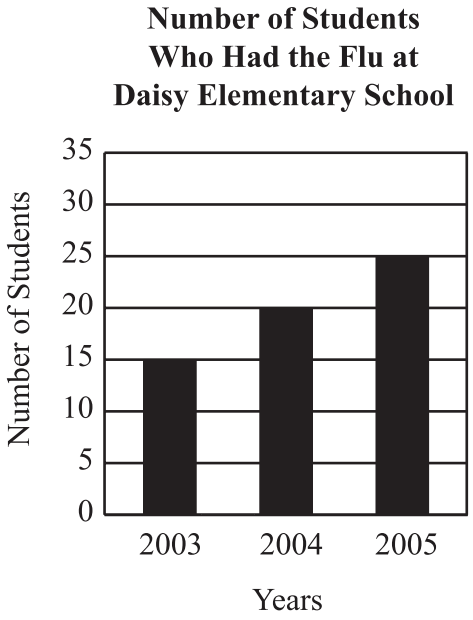
Mechanics: 4

Although there are some misspellings, missing commas, and a formatting error, this response displays consistent control of Mechanics features. Considering the numerous opportunities to err, the writer clearly controls capitalization, spelling, and punctuation.

SCIENCE RESPONSES

Science Item A—2007 Benchmark Grade 5

Look at the graph below.



1. How many students had the flu in 2004?

2. What happened year-to-year with the number of students who had the flu?

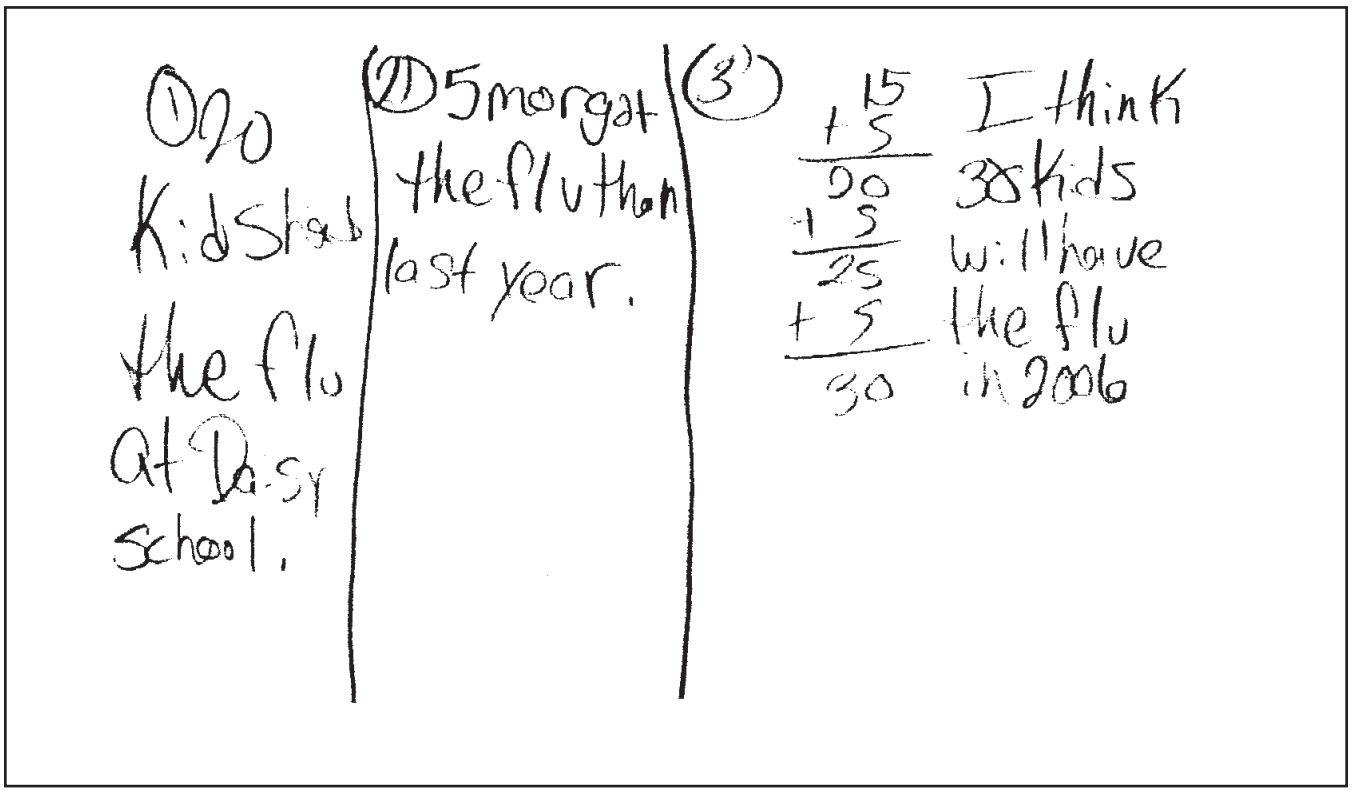
3. How many students do you predict will get the flu next year? Explain your answer.

Science Item A Scoring Rubric—2007 Benchmark Grade 5

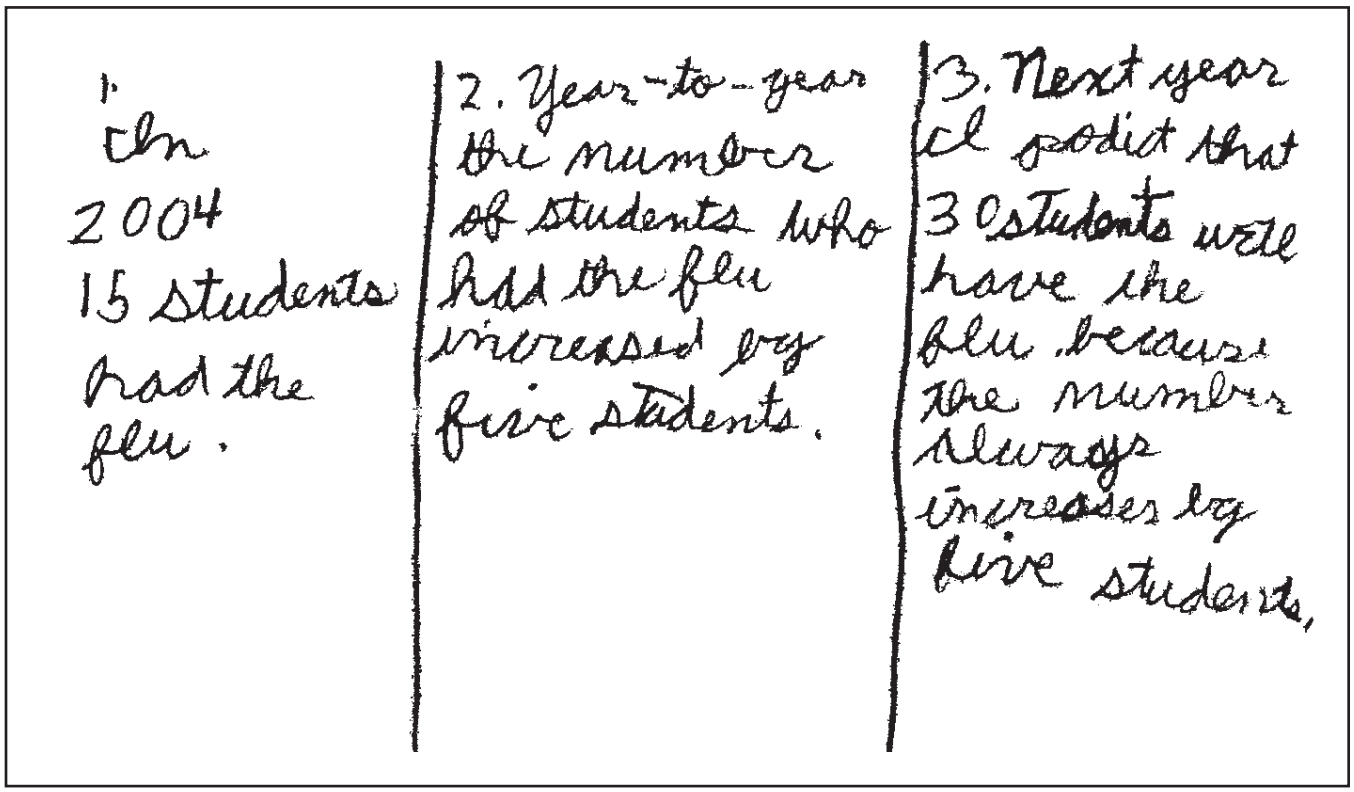
SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect statements.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point, or some minimal understanding is shown.
0	The student earns 0 points. No understanding is shown.
B	Blank—No Response. 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

Part	Points
1	**1 point possible** 1 point: **Correct answer: 20.**
2	**1 point possible** 1 point: **Correct explanation (or equivalent).** Ex: • "It increased." • "It went higher."
3	**2 points possible** 1 point: **Correct answer: 30.** AND 1 point: **Correct explanation (or equivalent).** Ex: • 25 + 5 = # • "It went up by 5 every year." Note: If no attempt at an explanation is given in Part 3, do not bring down the information from Part 2. OR The student may interpret the phrase "next year" as meaning the year 2008, in which case the following are acceptable. 1 point: **Correct answer: 40.** AND 1 point: **Correct explanation (or equivalent).** Ex: • 25 + 15 = # • "It went up by 5 every year so add 5 plus 5 plus 5 plus 25 equals #."



SCORE: 4		**Points**
Part 1:		
Correct answer:	20	1
Part 2:		
Correct answer:	"mor got the flu"	1
Part 3:		
Correct answer:	30	1
Correct explanation:	25 + 5	1
TOTAL POINTS:		**4**



SCORE: 3 **Points**

Part 1:

Incorrect answer:	15	–

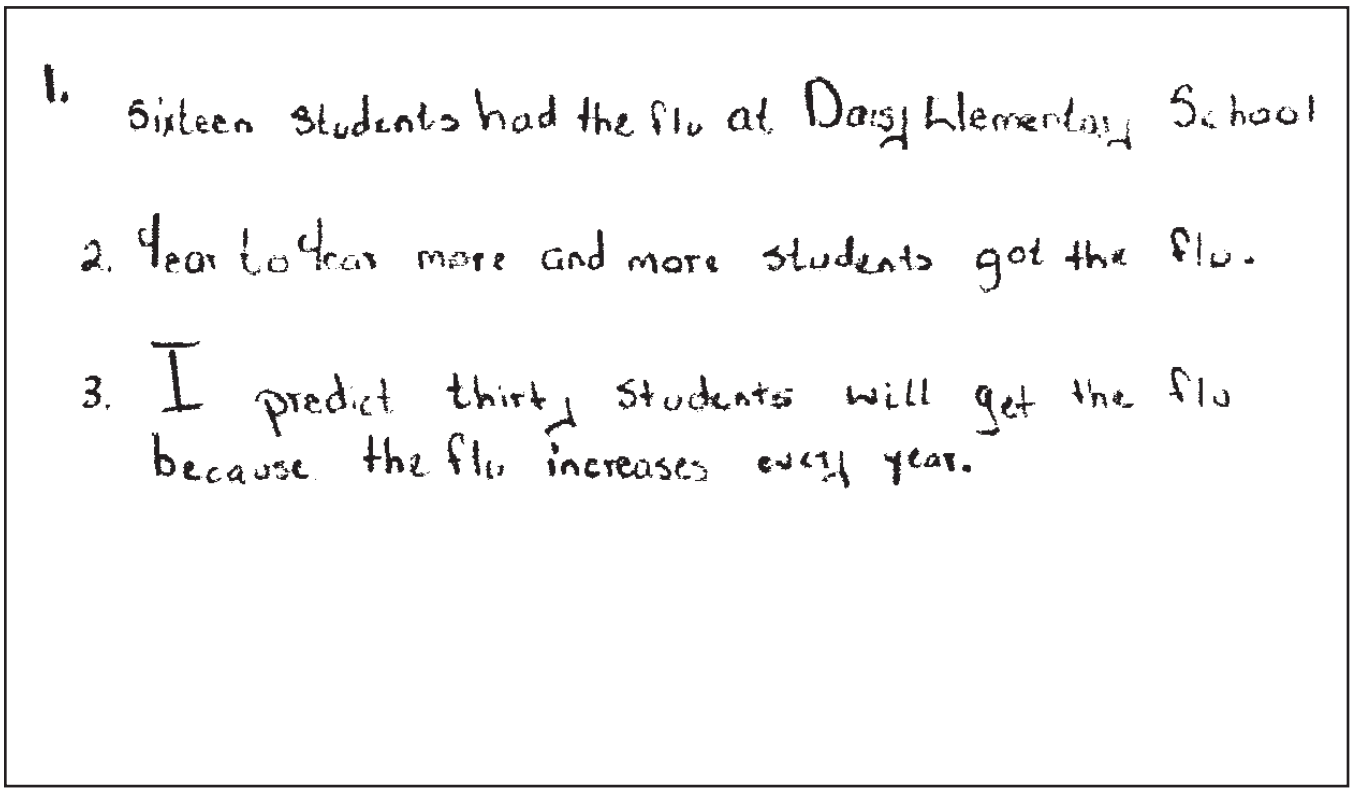
Part 2:

Correct answer:	"increased"	1

Part 3:

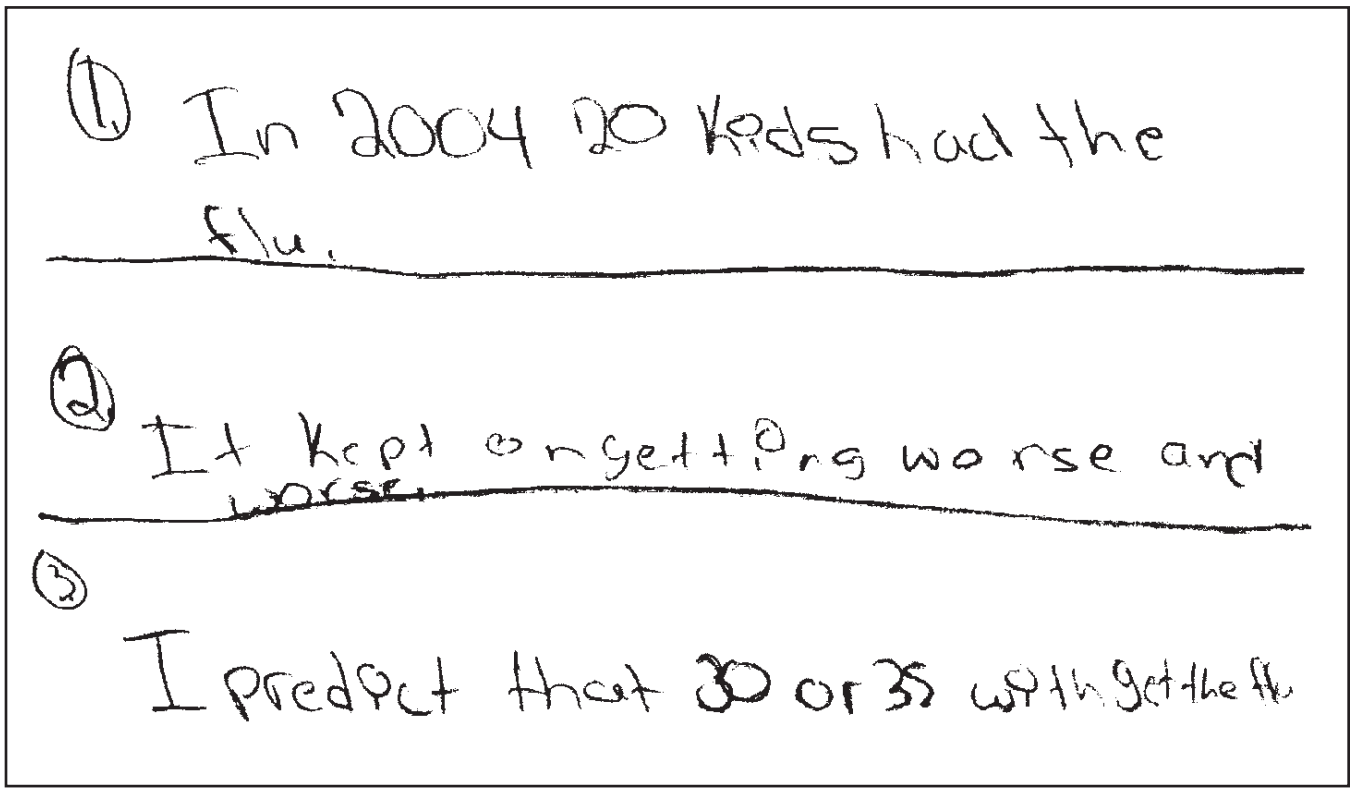
Correct answer:	30	1
Correct explanation:	"the number always increases by five students"	1

TOTAL POINTS: **3**

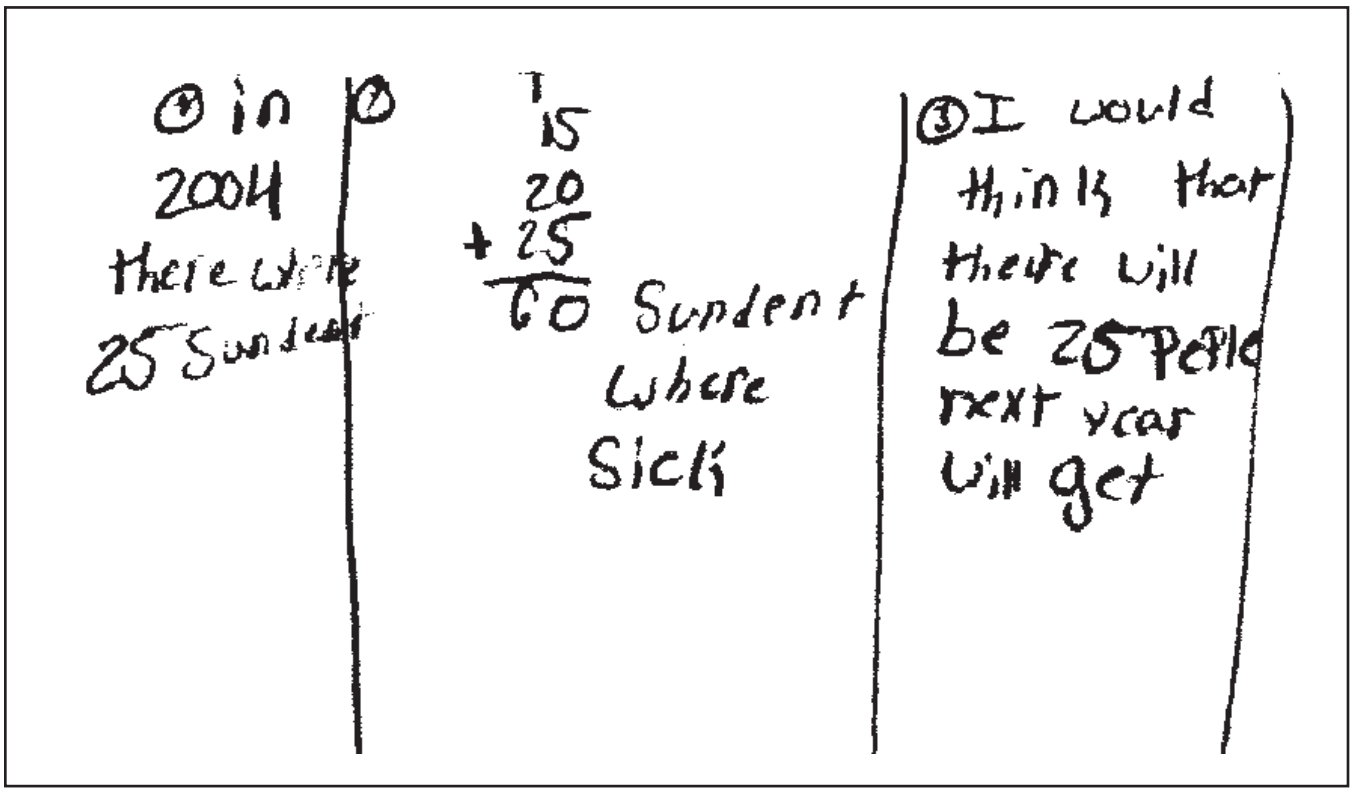


SCORE: 2

		Points
Part 1:		
Incorrect answer:	"sixteen"	–
Part 2:		
Correct answer:	"Year to year more and more"	1
Part 3:		
Correct answer:	30	1
Incomplete explanation:	"increases every year"	–
TOTAL POINTS:		**2**



SCORE: 1		**Points**
Part 1:		
Correct answer:	20	1
Part 2:		
Incorrect answer:	"kept on getting worse and worse"	–
Part 3:		
Incorrect answer:	30 or 35	–
Missing explanation:		–
TOTAL POINTS:		**1**



SCORE: 0 **Points**

Part 1:

Incorrect answer:	25	–

Part 2:

Incorrect answer:	60	–

Part 3:

Incorrect answer:	25	–
Missing explanation:		–

TOTAL POINTS: **0**

Science Item B—2007 Benchmark Grade 5

A cooperative learning team has been given the task of classifying the list of Arkansas animals below as either vertebrates or invertebrates. The information needs to be organized in table form so that it can be included in the team's presentation to its science class.

ant	bumblebee	earthworm	rattlesnake
bass	clams	leech	snail
bat	coyote	opossum	turtle
bullfrog	crawfish	raccoon	wasp

1. Construct a two-column table that classifies the animals as either vertebrates or invertebrates. The table must have an appropriate title and both columns must be properly labeled.

2. Explain the differences between vertebrates and invertebrates.

Science Item B Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect statements. The table includes a title.
3	The student earns 3–3½ points.
2	The student earns 2–2½ points.
1	The student earns ½–1½ points, or some minimal understanding is 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

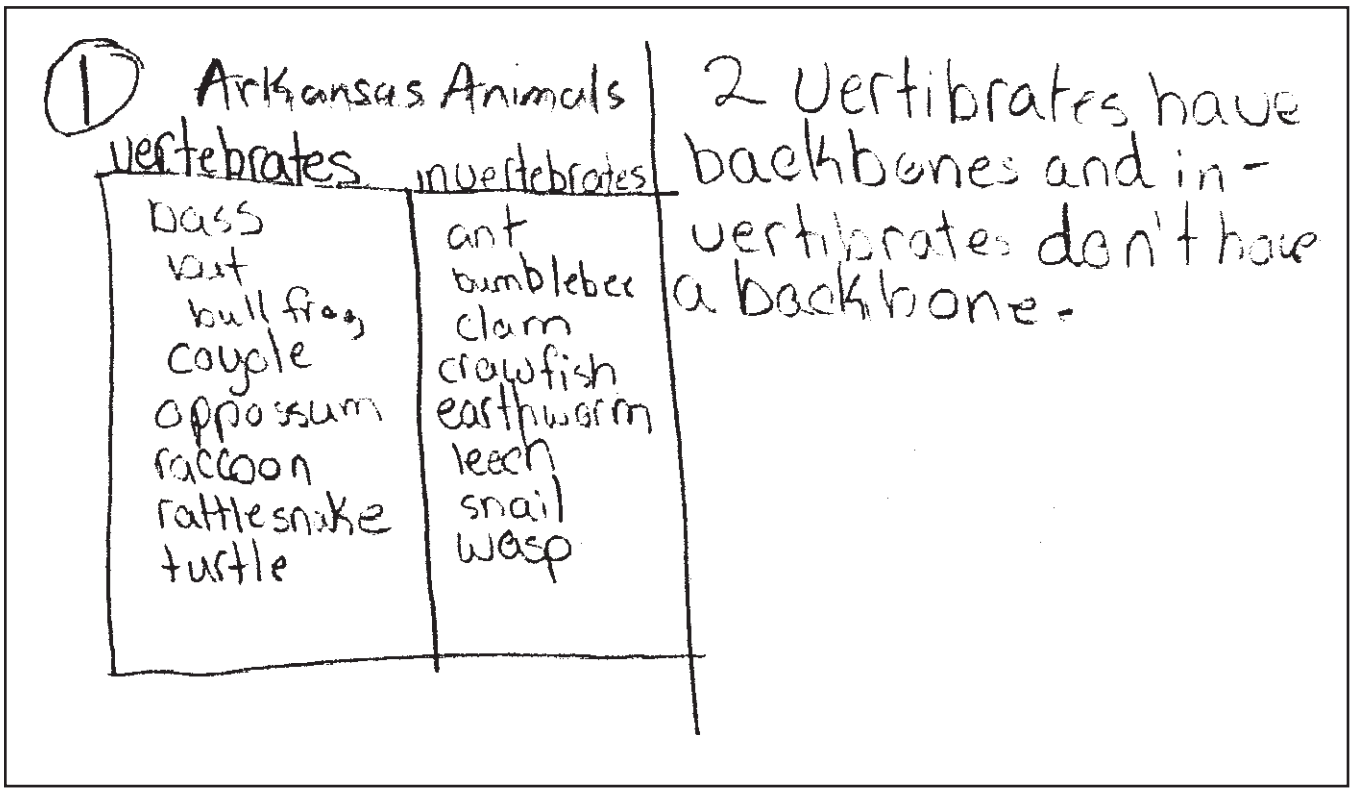
<table>
<tr><th>Part</th><th>Points</th></tr>
<tr><td>1</td><td>3 points possible
<table>
<tr><th colspan="2">Arkansas Animals</th></tr>
<tr><th>Invertebrates</th><th>Vertebrates</th></tr>
<tr><td>ant</td><td>bass</td></tr>
<tr><td>bumblebee</td><td>bat</td></tr>
<tr><td>crawfish</td><td>bullfrog</td></tr>
<tr><td>earthworm</td><td>coyote</td></tr>
<tr><td>leech</td><td>opossum</td></tr>
<tr><td>clams</td><td>raccoon</td></tr>
<tr><td>snail</td><td>rattlesnake</td></tr>
<tr><td>wasp</td><td>turtle</td></tr>
</table>
3 points: All 16 animals are classified correctly. Title is required for a score of 4.

OR
2 points: 13 to 15 animals are classified correctly.

OR
1 point: 9 to 12 animals are classified correctly.</td></tr>
<tr><td>2</td><td>1 point possible
Correct definitions

½ point: “Invertebrates are animals without a backbone/spine.”

AND
½ point: “Vertebrates are animals with a backbone/spine.”</td></tr>
</table>



SCORE: 4 **Points**

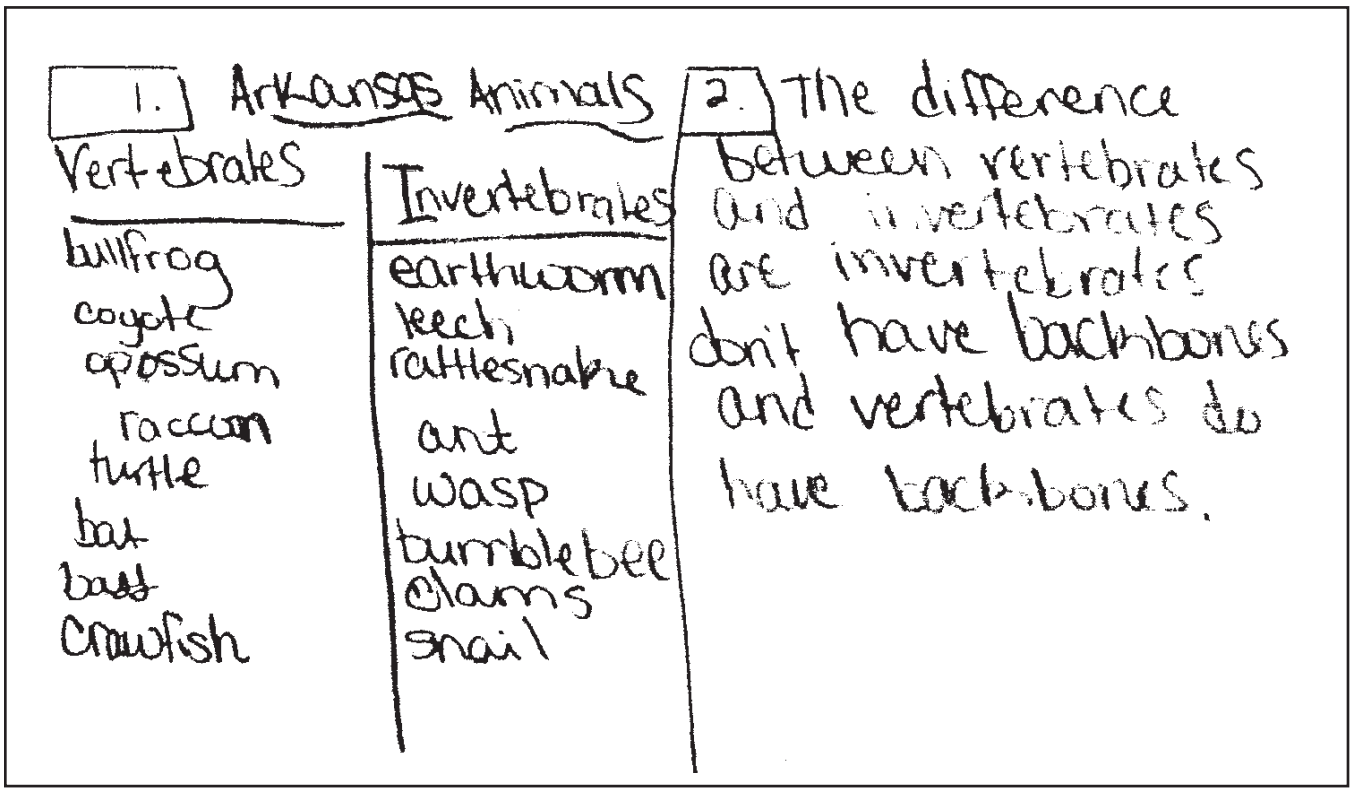
Part 1:

All 16 animals classified correctly (title included): 3

Part 2:

Correct definition of vertebrate:	"Vertibrates have backbones"	½
Correct definition of invertebrate:	"and invertebrates don't have a backbone"	½

TOTAL POINTS: **4**



SCORE: 3 **Points**

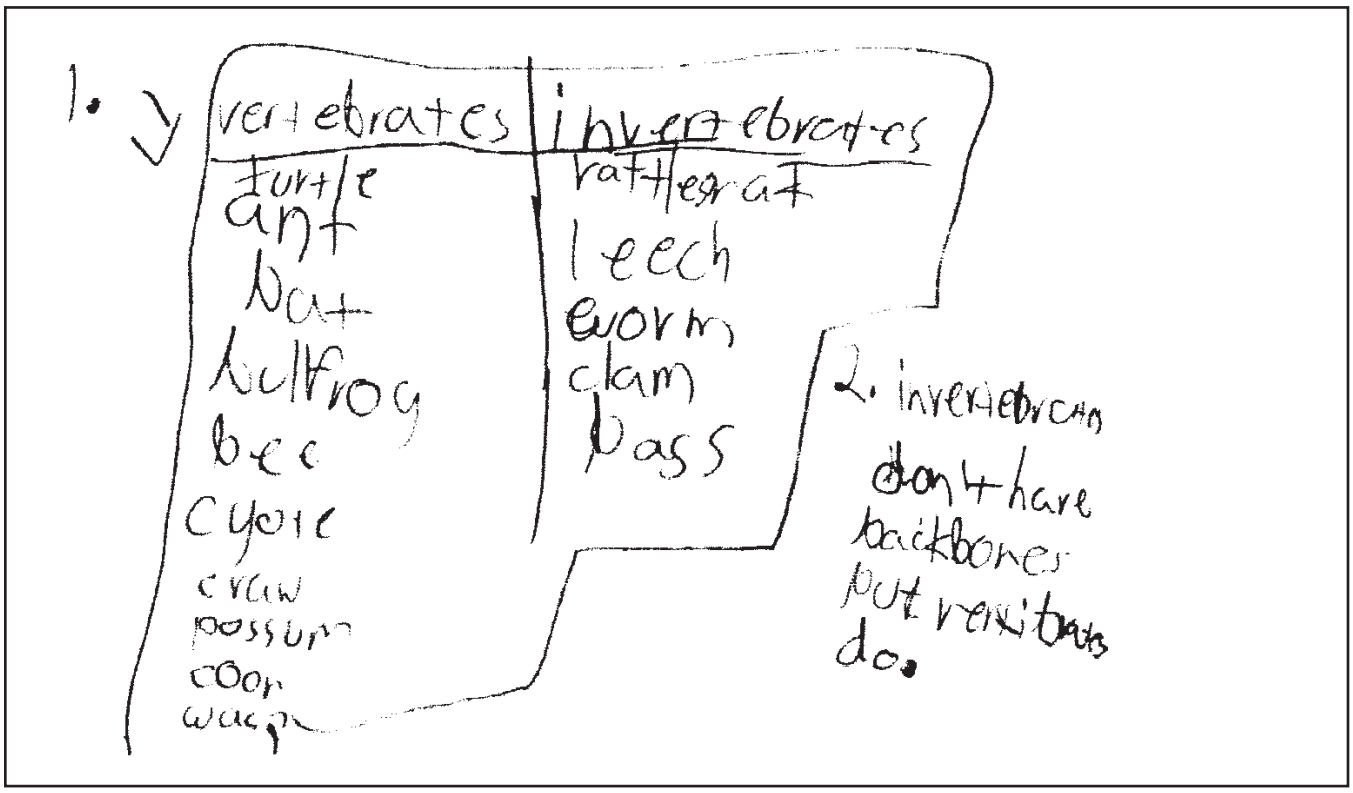
Part 1:

14 animals classified correctly:		2

Part 2:

Correct definition of vertebrate:	"vertebrates do have backbones"	½
Correct definition of invertebrate:	"invertebrates don't have backbones"	½

TOTAL POINTS: **3**



SCORE: 2 **Points**

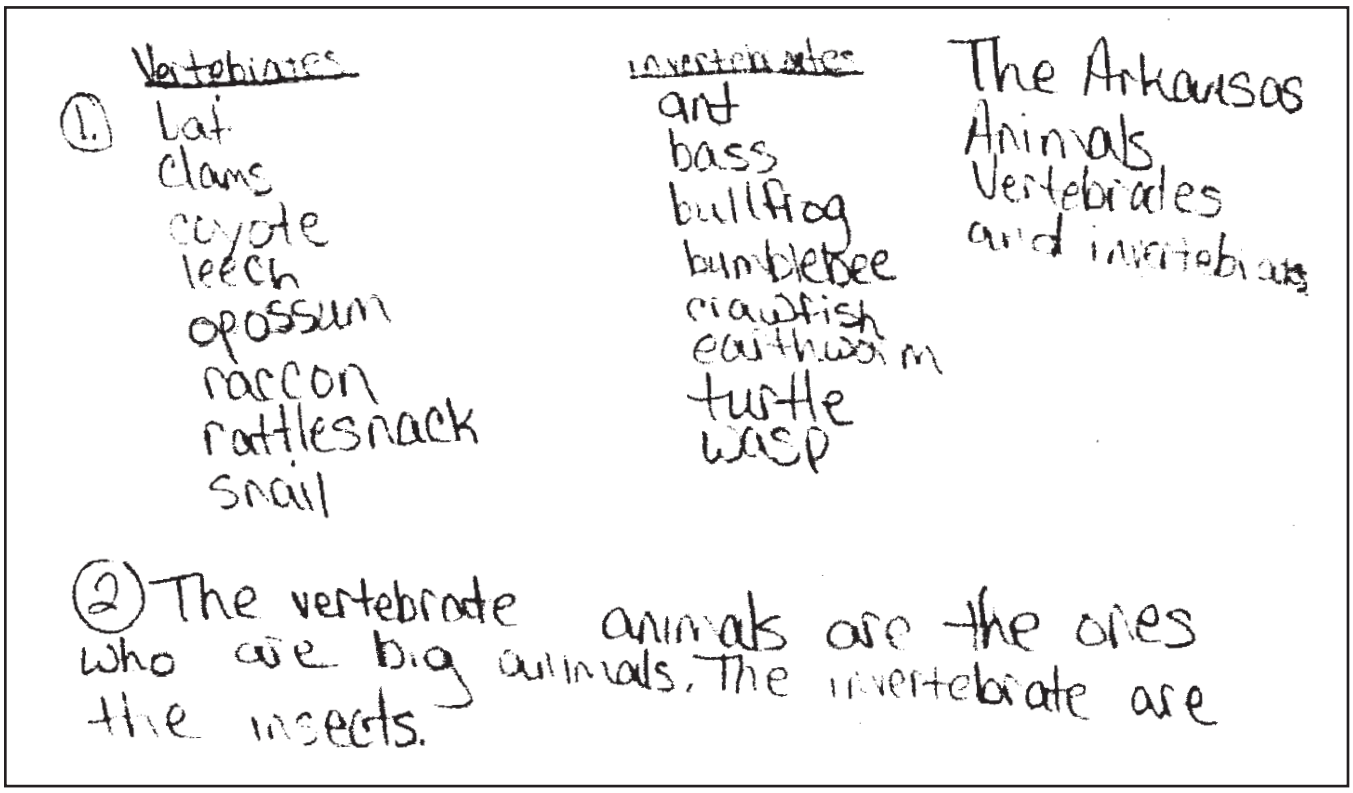
Part 1:

9 animals classified correctly: 1

Part 2:

Correct definition of vertebrate:	"vertebrates do"	½
Correct definition of invertebrate:	"invertebrates don't have backbones"	½

TOTAL POINTS: **2**



SCORE: 1 **Points**

Part 1:

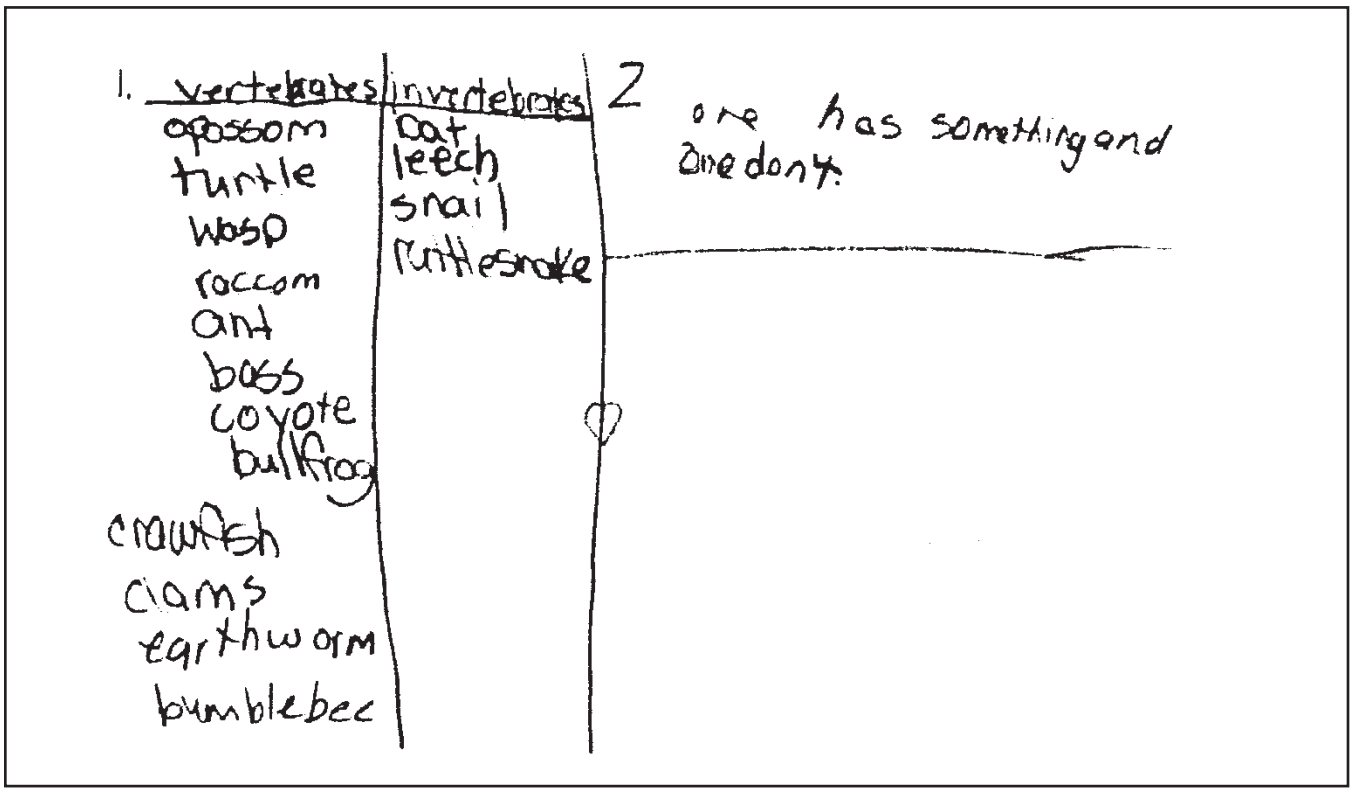
10 animals classified correctly: 1

Part 2:

Incorrect definition of vertebrate: "vertebrate...are big" –

Incorrect definition of invertebrate: "invertebrate are the insects" –

TOTAL POINTS: **1**



SCORE: 0 **Points**

Part 1:

8 animals classified correctly: –

Part 2:

Incorrect definition of vertebrate: "one has something" –

Incorrect definition of invertebrate: "one don't" –

TOTAL POINTS: **0**

Science Item C—2007 Benchmark Grade 5

As a star, the Sun shares many similarities with other stars. However, there are some significant differences between the Sun and other stars. Compare and contrast the Sun to other stars.

1. Scientists use the colors yellow, red, and blue to determine a star's temperature. List these types of stars in order from hottest to coolest.

2. Where does the Sun fall in this color classification?

3. Name the three physical factors that determine a star's brightness, as viewed from Earth.

4. Explain why the Sun appears to be bigger and brighter than the other stars.

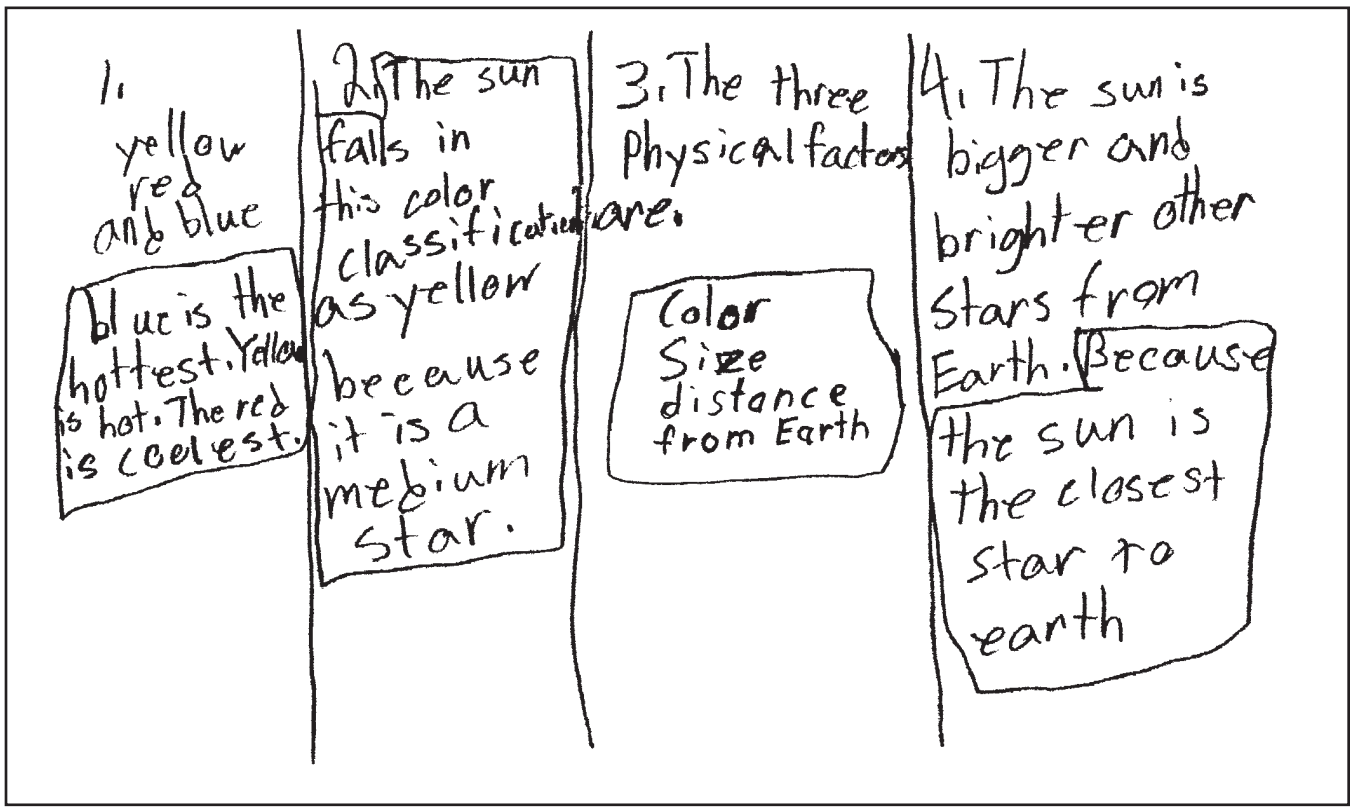
Science Item C Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect statements.
3	The student earns 3–3½ points.
2	The student earns 2–2½ points.
1	The student earns ½–1½ points, or some minimal understanding is 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.)

Science Item C Solution and Scoring—2007 Benchmark Grade 5

Solution and Scoring

Part	Points	
1	**1 point possible**	
	1 point:	**Correct answer: blue, yellow, red (must be in the correct order).**
	OR ½ point:	**Incomplete answer: Any combination with blue being first, or yellow being second, or red being third. OR Blue as the only answer.**
2	**1 point possible**	
	1 point:	**Correct answer: yellow, or correct indication of "yellow" based on Part 1 answer (Ex: "middle").**
3	**1 point possible**	
	1 point:	**Correct answer: size, temperature (or color), and distance from the Earth.**
	OR ½ point:	**Incomplete answer: student lists 1–2 of the above factors.**
4	**1 point possible**	
	1 point:	**Correct answer or equivalent: "The sun is closer to the earth than any other star."**



SCORE: 4 **Points**

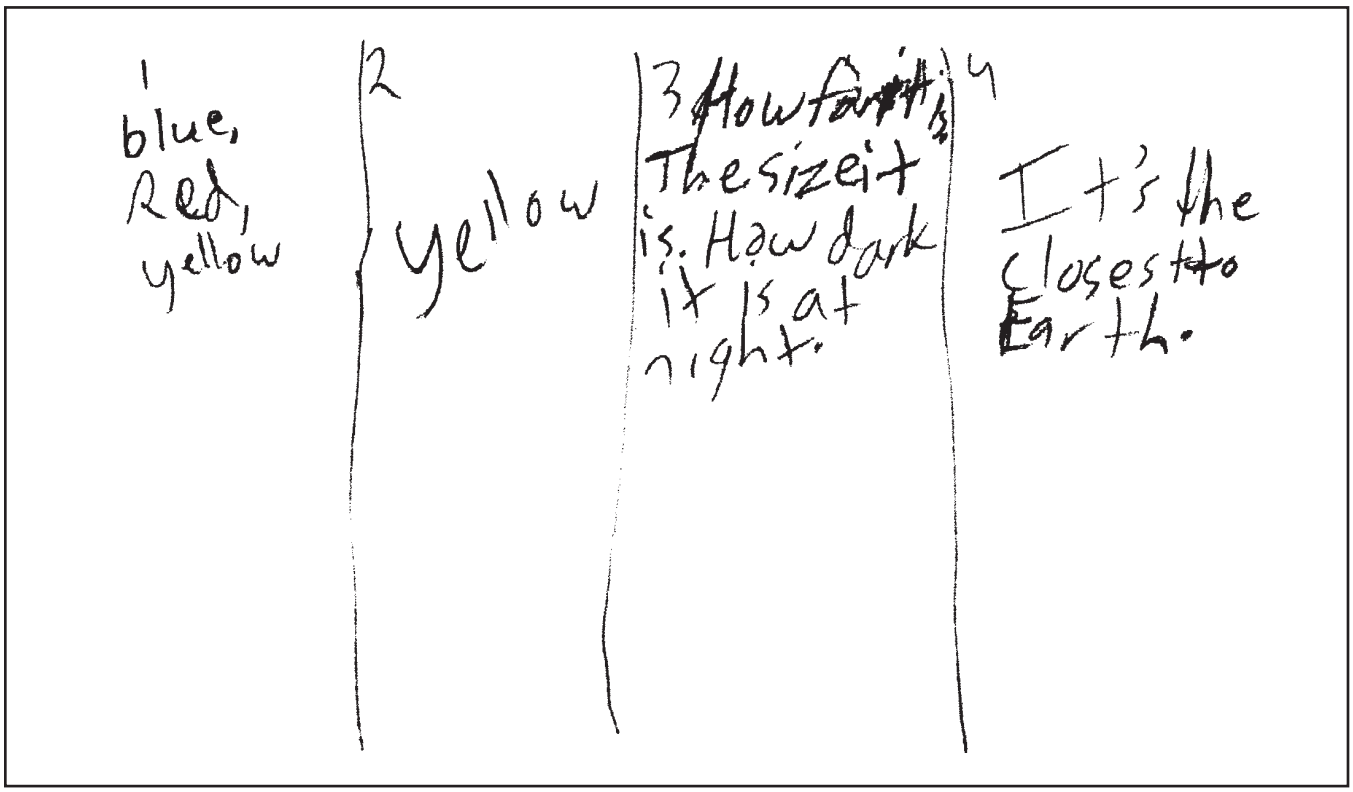
Part 1:
Correct answer: Blue, yellow, red 1

Part 2:
Correct answer: Yellow 1

Part 3:
Correct answer: "Color, size, distance from Earth" 1

Part 4:
Correct answer: "the sun is the closest star to earth" 1

TOTAL POINTS: **4**



SCORE: 3 **Points**

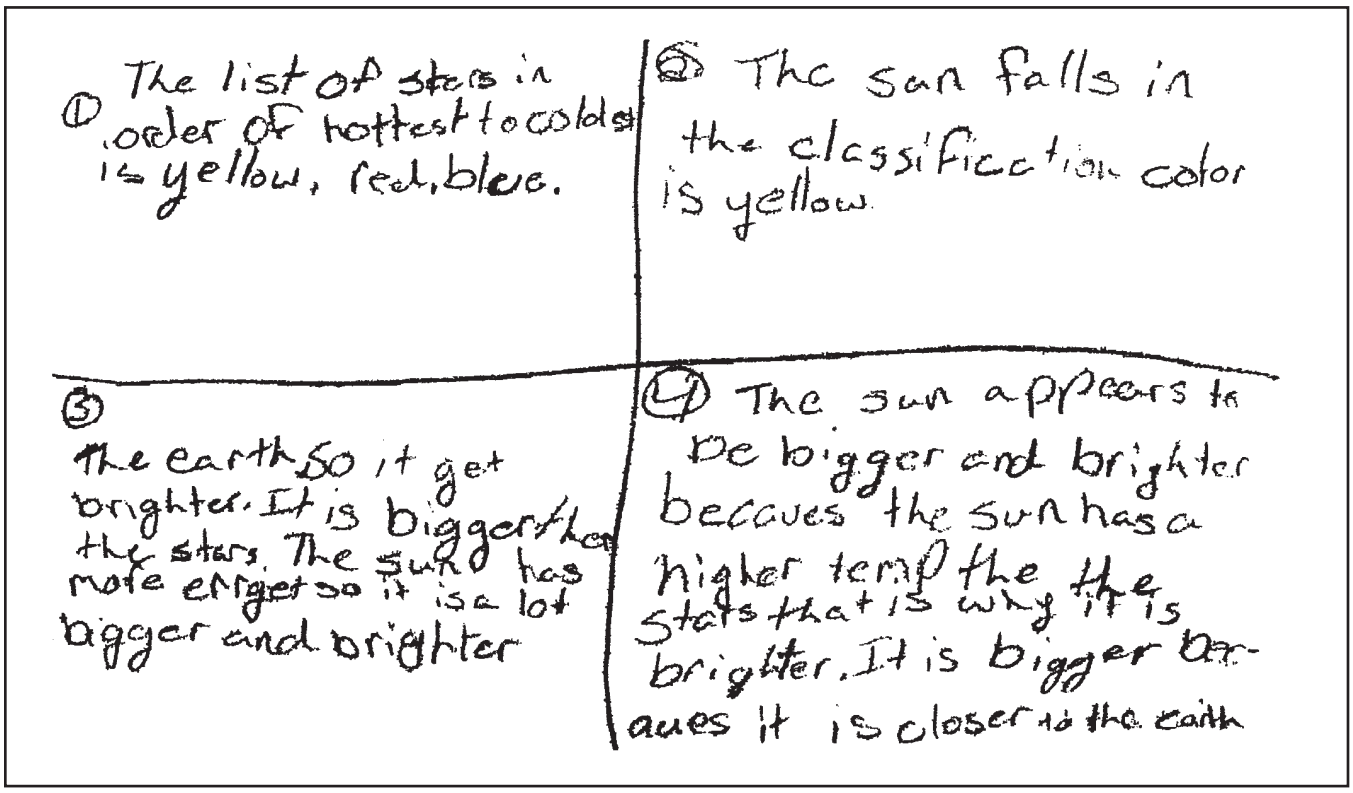
Part 1:
Incomplete answer: (blue is first) ½

Part 2:
Correct answer: Yellow 1

Part 3:
Incomplete answer: "How far it is. The size it is." ½

Part 4:
Correct answer: "It's the closest to Earth." 1

TOTAL POINTS: **3**



SCORE: 2 **Points**

Part 1:

Incorrect answer:	Yellow, red, blue	–

Part 2:

Correct answer:	Yellow	1

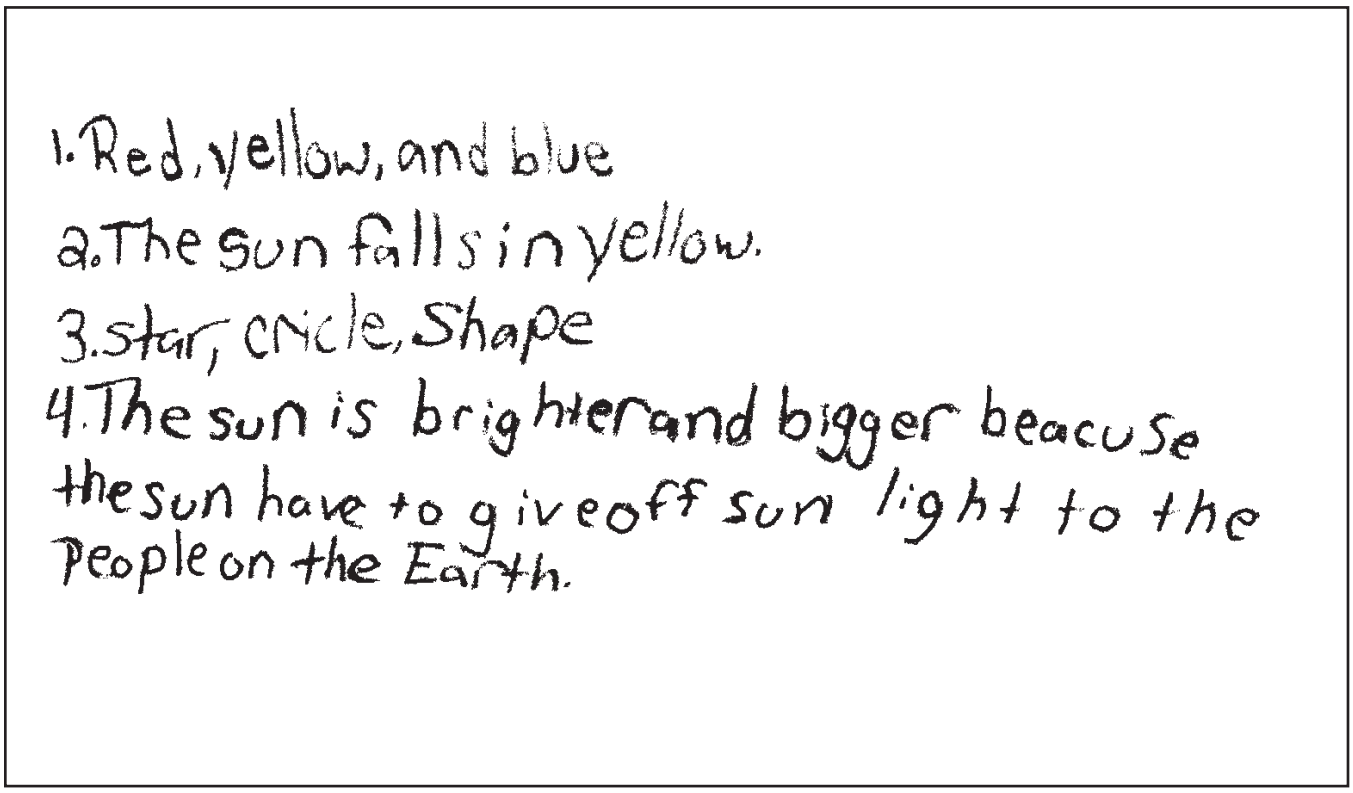
Part 3:

Incorrect answer:	"The sun has more enrget so it is a lot bigger and brighter"	–

Part 4:

Correct answer:	"it is closer to the earth"	1

TOTAL POINTS: **2**



SCORE: 1		**Points**
Part 1:		
Incomplete answer:	(Yellow is second)	½
Part 2:		
Correct answer:	yellow	1
Part 3:		
Incorrect answer:	"star, cricle, shape"	–
Part 4:		
Incorrect answer:	"the sun have to give off sun light"	–
TOTAL POINTS:		**1 ½**

1.) First the Sun, then the Earth, Finally Pluto.
2.) The sun would fall into orange.
3.) There's blue, yellow, orange.
4.) The sun is a lot of stars bunched together that are being heated.

SCORE: 0 **Points**

Part 1:
Incorrect answer: Sun, Earth, Pluto –

Part 2
Incorrect answer: orange –

Part 3
Incorrect answer: "There's blue, yellow, orange." –

Part 4
Incorrect answer: "The sun is a lot of stars bunched together" –

TOTAL POINTS: **0**

Science Item D—2007 Benchmark Grade 5

The table below shows laboratory observations made while testing various items for chemical and physical changes.

Experiment Number	Item	Observations Before	Action	Observations during Action and/or After
1	paper	paper is white, rectangular-shaped, smooth, and flat	paper is cut into four pieces	paper still white but smaller, smooth, flat
2	water and salt	water is clear liquid and tasteless; salt is whitish, cube-shaped, salty tasting	combined water and salt in a cup and stirred	clear, salty tasting, wet
3	baking soda and vinegar	baking soda is white, powdery, and bitter tasting; vinegar is clear liquid, strong odor, and bitter tasting	combined baking soda and vinegar on a plate	combination bubbled
4	water	water is clear liquid and tasteless	water is heated to boiling point	water boiled producing steam
5	water	water is clear liquid and tasteless	water is poured into ice cube trays, then placed in the freezer	water froze into a solid that was cloudy

1. Identify the items that underwent physical changes.

2. How do you know experiment number 5 is a physical change?

3. If given the right equipment and resources, choose one of the experiments and explain how you could reverse all physical changes.

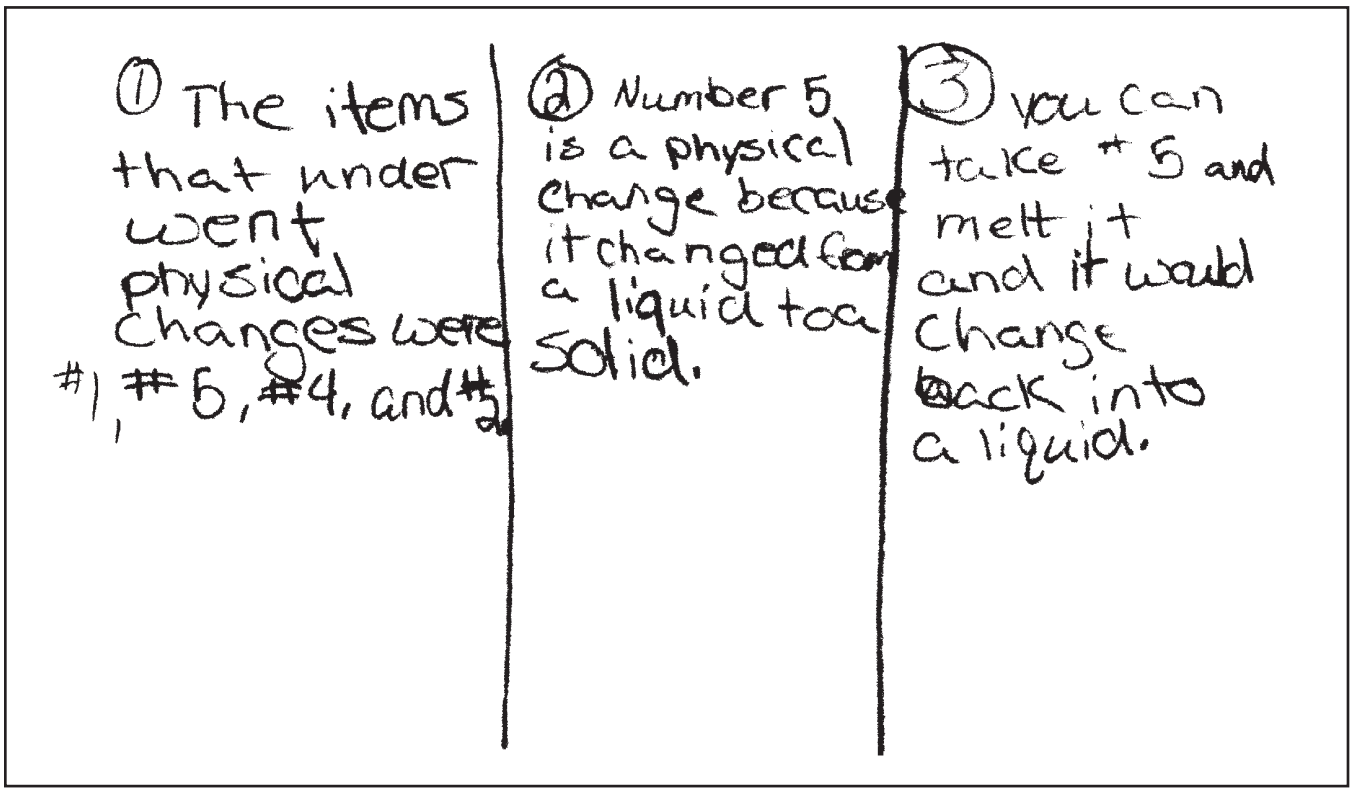
Science Item D Scoring Rubric—2007 Benchmark Grade 5

SCORE	DESCRIPTION
4	The student earns 4 points. The response contains no incorrect statements.
3	The student earns 3–3½ points.
2	The student earns 2–2½ points.
1	The student earns ½–1½ points, or some minimal understanding is shown. Ex: In Part 2 the student responds, "The water freezes." No credit in any part.
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.)

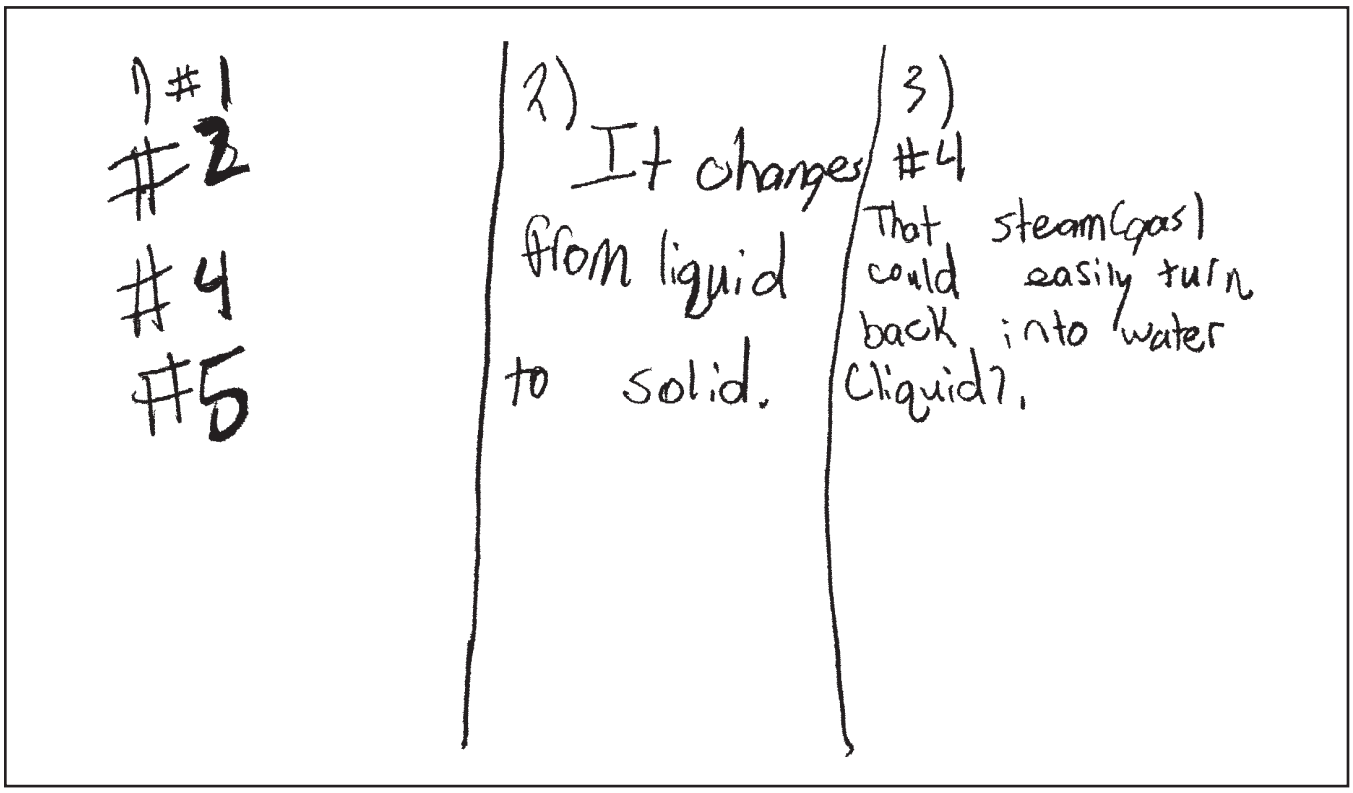
Science Item D Solution and Scoring—2007 Benchmark Grade 5

Solution and Scoring

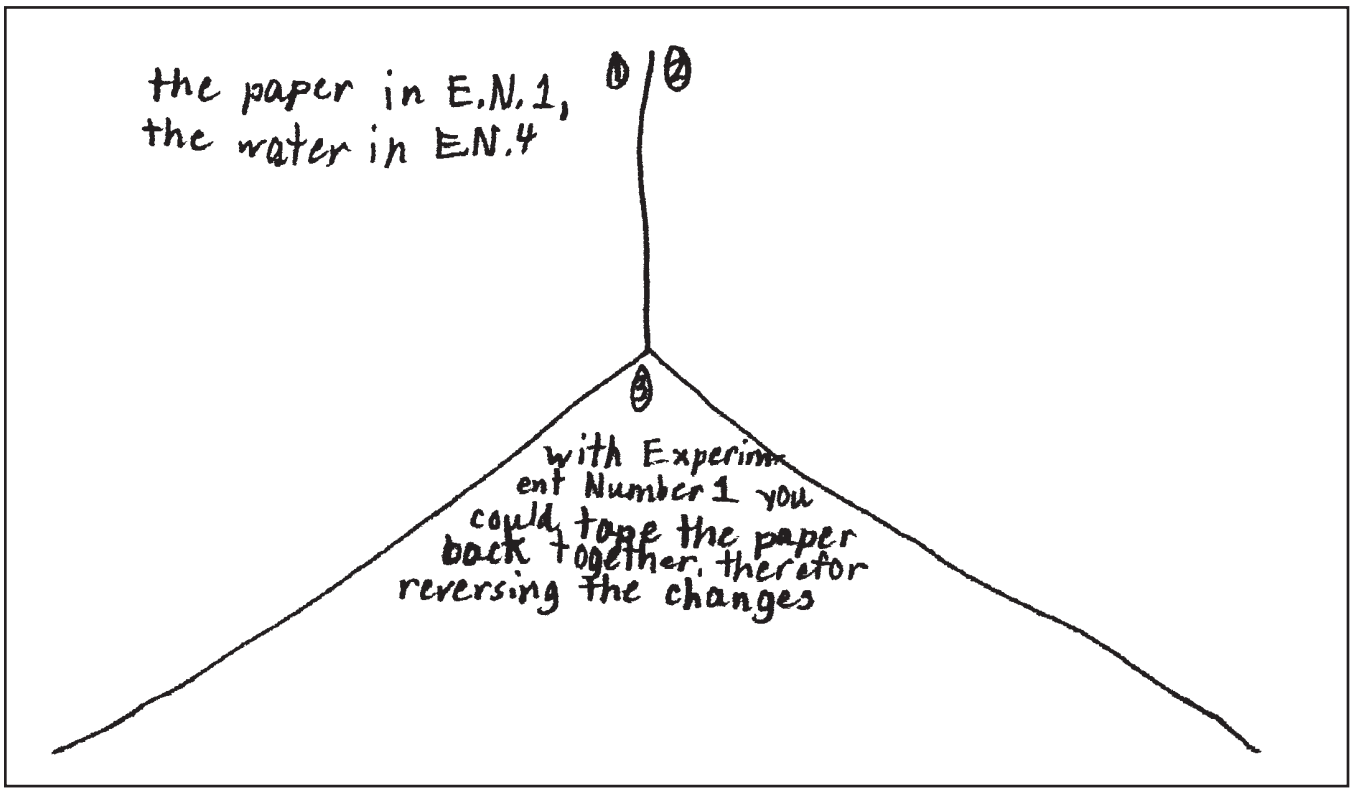
Part	Points
1	**2 points possible** 2 points: **Correct answers: 1, 2, 4, 5 (½ point for each correct answer).** OR 2 points: **Correct answers: paper, water, salt.** OR 1 point: **Incomplete answer: 2 correct answers.** OR ½ point: **Incomplete answer: 1 correct answer.** Note: If the response includes an incorrect item, (baking soda, vinegar, or item #3) NO points are awarded for part 1.
2	**1 point possible** 1 point: **Correct explanation.** Ex: • "The water did not become a new substance, only its appearance changed." • "It changed from a liquid to a solid." (it only changed state) • "The water turned into a solid." • "The ice can melt back into a liquid." (the process is reversible)
3	**1 point possible** 1 point: **Correct explanation (explanations will vary).** Ex: • Item 1: "The paper could be glued back together into a single piece." • Item 2: "The water could be evaporated leaving just the salt." • Item 4: "The steam could be condensed back into a liquid." • Item 5: "The ice could be heated."



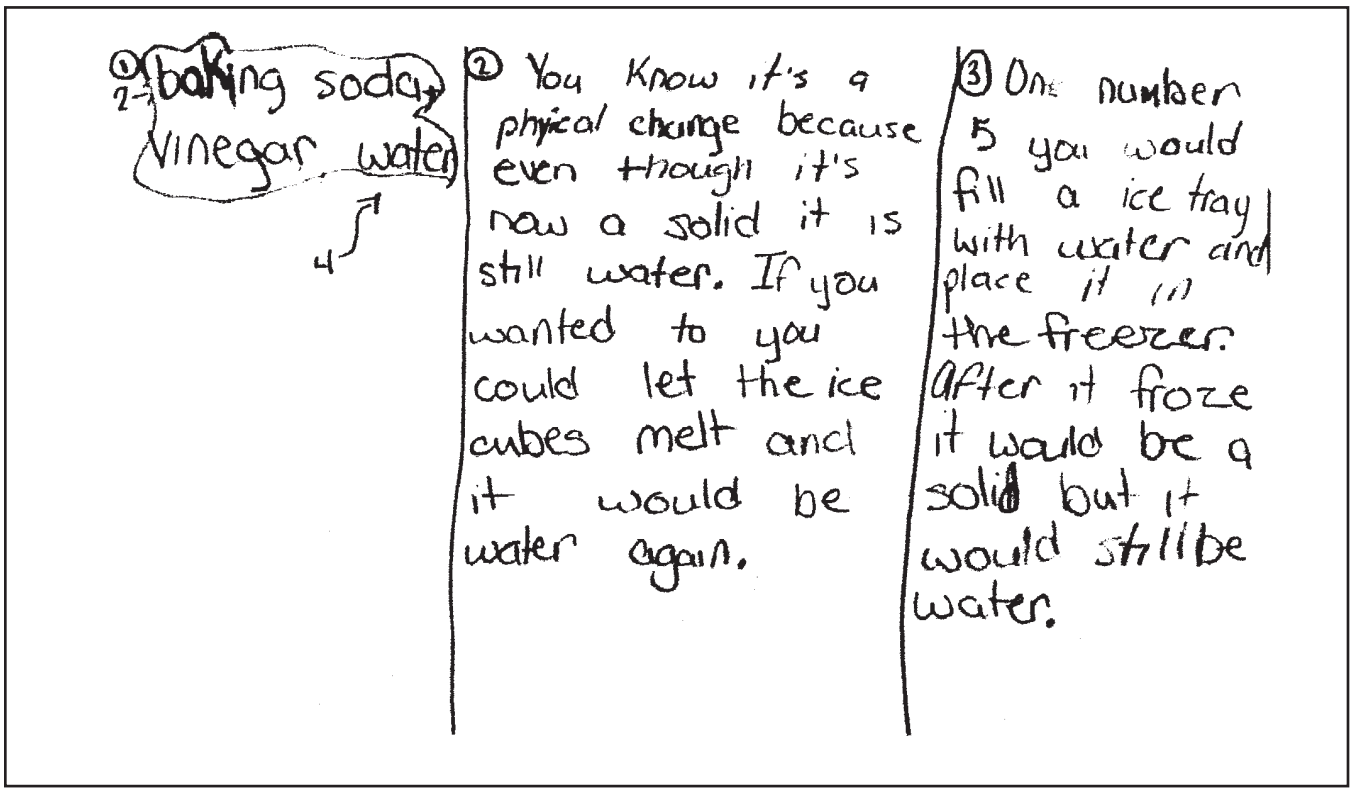
SCORE: 4		**Points**
Part 1:		
Correct answer:	1, 5, 4, and 2	2
Part 2:		
Correct explanation:	"it changed from a liquid to a solid"	1
Part 3:		
Correct explanation:	"take #5 and melt it and it would change back into a liquid"	1
TOTAL POINTS:		**4**



SCORE: 3		**Points**
Part 1:		
Correct answer:	1, 2, 4, 5	2
Part 2:		
Correct explanation:	"It changes from liquid to solid."	1
Part 3:		
Vague explanation:	"That steam (gas) could easily turn back into water (liquid)."	–
TOTAL POINTS:		**3**



SCORE: 2		**Points**
Part 1:		
Partially correct answer:	paper, water	1
Part 2:		
Missing answer:		–
Part 3:		
Correct explanation:	"tape the paper back together"	1
TOTAL POINTS:		**2**



SCORE: 1 **Points**

Part 1:

Incorrect answer:	response includes incorrect items	–

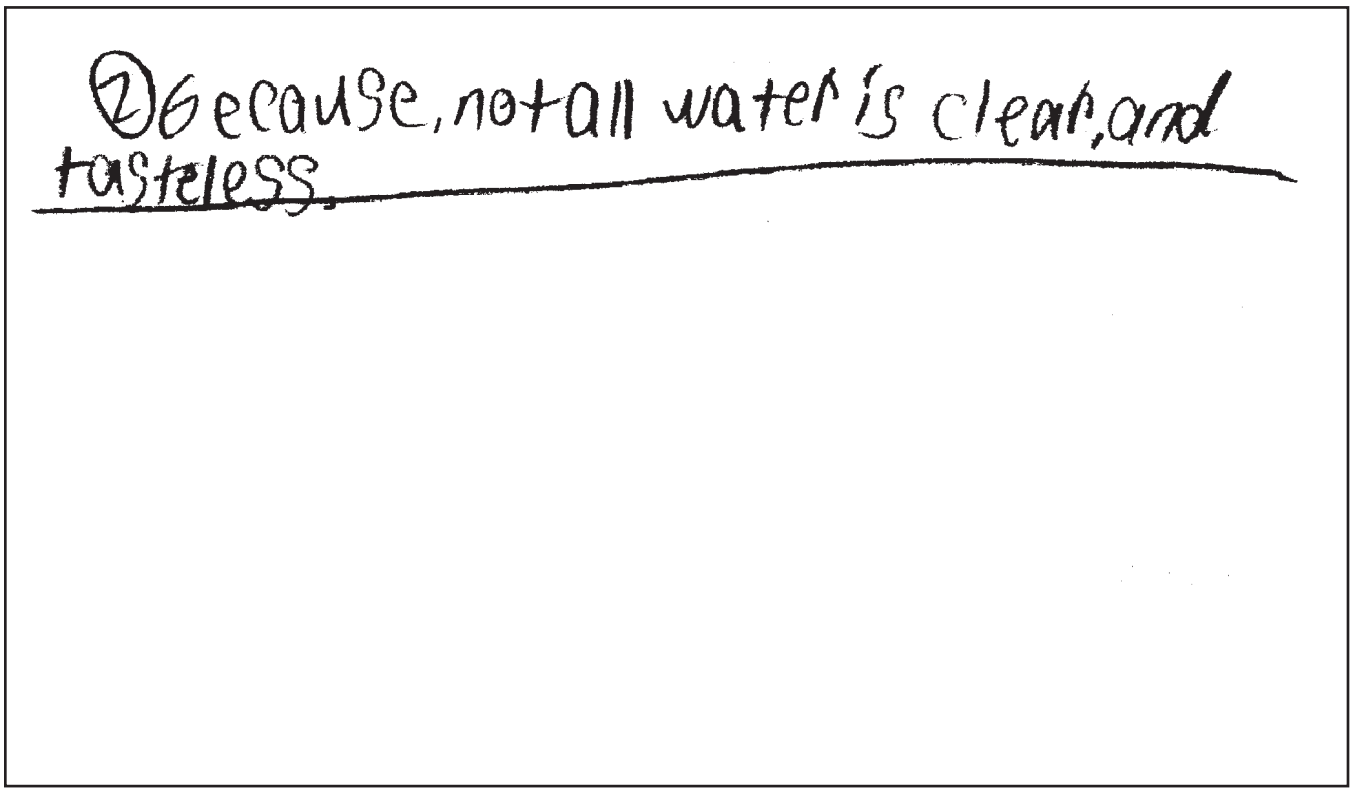
Part 2:

Correct explanation:	"even though it's now a solid it is still water. If you wanted to you could let the ice cubes melt and it would be water again." (the process is reversible)	1

Part 3:

Incorrect explanation:	"you would fill a ice tray with water and place it in the freezer"	–

TOTAL POINTS: **1**



SCORE: 0		**Points**
Part 1:		
Missing answer:		–
Part 2:		
Incorrect explanation:	"not all water is clear, and tasteless"	–
Part 3:		
Missing explanation:		–
TOTAL POINTS:		**0**

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

DEVELOPED FOR THE ARKANSAS DEPARTMENT OF EDUCATION, LITTLE ROCK, AR 72201

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