

Arkansas Comprehensive Testing, Assessment, and Accountability Program

## TEACHER HANDBOOK

# AUGMENTED BENCHMARK EXAMINATION GRADE 5

## **APRIL 2011 ADMINISTRATION**

This document is the property of the Arkansas Department of Education, and all rights of this document are reserved by the Arkansas Department of Education. Arkansas public schools may reproduce this document in full or in part for use with teachers, students, and parents. All other uses of this document are forbidden without written permission from the Arkansas Department of Education. All inquiries should be sent to the Assessment Office at the Arkansas Department of Education, 501-682-4558.

#### TABLE OF CONTENTS

|  | PAGE |
|--|------|
| Introduction—2011 Grade 5 Augmented Benchmark Examination    | 1    |
| SCORING STUDENT RESPONSES TO OPEN-RESPONSE ITEMS             |      |
| Reader Training  | 2    |
| Scoring Procedures   | 2    |
| Science Item A—2011 Grade 5                                  |      |
| Solution and Scoring   | 5    |
| SCIENCE ITEM A SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5 |      |
| Score: 4   | 6    |
| Score: 3   | 7    |
| Score: 2   | 8    |
| Score: 1   | 9    |
| Score: 0   | 10   |
| SCIENCE ITEM B—2011 GRADE 5                                  |      |
| Solution and Scoring   | 12   |
| SCIENCE ITEM B SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5 |      |
| Score: 4   | 13   |
| Score: 3   | 14   |
| Score: 2   |      |
| Score: 1   | 16   |
| Score: 0   | 17   |
| Math Item A—2011 Grade 5                                     |      |
| Solution and Scoring   | 21   |
| MATH ITEM A SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5    |      |
| Score: 4   | 22   |
| Score: 3   | 23   |
| Score: 2   | 24   |
| Score: 1   | 25   |
| Score: 0   | 26   |
| MATH ITEM B—2011 GRADE 5                                     |      |
| Solution and Scoring   | 28   |
| MATH ITEM B SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5    |      |
| Score: 4   | 29   |
| Score: 3   |      |
| Score: 2   |      |
| Score: 1   | 32   |
| Score: 0   | 33   |
| Math Item C—2011 Grade 5                                     |      |
| Solution and Scoring   | 35   |

#### TABLE OF CONTENTS

| MATH ITEM C SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5                    |    |
|--|----|
| Score: 4   | 37 |
| Score: 3   |    |
| Score: 2   | 39 |
| Score: 1   | 40 |
| Score: 0   | 41 |
| READING PASSAGE A—2011 GRADE 5   | 44 |
| READING ITEM A—2011 GRADE 5  | 47 |
| READING ITEM A SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5                 |    |
| Score Point: 4   |    |
| Score Point: 3   |    |
| Score Point: 2   |    |
| Score Point: 1   |    |
| Score Point: 0   | 49 |
| READING PASSAGE B—2011 GRADE 5   | 50 |
| READING ITEM B—2011 GRADE 5  | 53 |
| READING ITEM B SAMPLE RESPONSES AND ANNOTATIONS—2011 GRADE 5                 |    |
| Score Point: 4   | 54 |
| Score Point: 3   | 55 |
| Score Point: 2   | 55 |
| Score Point: 1   |    |
| Score Point: 0   | 56 |
| Writing Responses  |    |
| Scoring Student Responses to Writing Prompts                                 |    |
| Domain Scoring   |    |
| Scoring Scale  |    |
| Nonscoreable and Blank Papers  |    |
| Writing Domains and Definitions—2011 Grade 5 Augmented Benchmark Examination | 59 |
| WRITING PROMPT—2011 GRADE 5 Prompt   | 60 |
|  |    |
| Writing Sample Responses 1   | 61 |
| Writing Sample Response 1  |    |
| Writing Sample Response 3  |    |
| withing bumple response J  |    |

#### Introduction—2011 Grade 5 Augmented Benchmark Examination

The Arkansas Comprehensive Testing, Assessment, and Accountability Program (ACTAAP) includes an Augmented Benchmark Examination for grade 5 students. It consists of multiple-choice and open-response items that directly assess student knowledge relative to science, math, reading, and writing. The Arkansas Curriculum Frameworks are the basis for development of the Augmented Benchmark Examinations.

In April 2011, fifth-grade students participated in the *Grade 5 Augmented Benchmark Examination*. Results of this examination will be provided to all students, schools, and districts to be used as the basis for instructional change.

This handbook provides information about the scoring of student responses to two-open response items in science, three open-response items in math, two open-response items in reading, and to one direct writing prompt. It describes the scoring procedures and the scoring criteria (rubrics) used to assess student responses. Copies of actual student responses are provided, along with scores given to those responses, to illustrate how the scoring criteria were applied in each content area.

Additional information about the *Grade 5 Augmented Benchmark Examination* is available through the Arkansas Department of Education. Questions can be addressed to the Assessment Office at 501-682-4558.

#### SCORING STUDENT RESPONSES TO OPEN-RESPONSE ITEMS

The multiple-choice and open-response test items for the Science, Math, Reading, and Writing components of the *Grade 5 Augmented Benchmark Examination* are developed with the assistance and approval of Content Advisory Committees. All passages and items on the *Grade 5 Augmented Benchmark Examination* are based on the Arkansas Curriculum Frameworks and developed with the assistance and approval of Content Advisory Committees and Bias Review Committees. These committees comprise active Arkansas educators with expertise in science, math, English, and/or language arts education.

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. Qualified readers for Arkansas scoring will be those with a four-year college degree in science, math, English, language arts, education, 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 writing prompt, the science open-response item, the math open-response item, or the reading passage and its open-response item as it appeared in the test booklet and to respond—just as the student test takers are required to do. This step gives the readers some insight into how the students might have responded. The next step is the readers' introduction to the scoring rubric. All of the specific requirements of the rubric are explained by the Scoring Director who has been specifically trained to lead the scoring group. Then responses (anchor papers) that illustrate the score points of the rubric are presented to the readers and discussed. The goal of this discussion is for the readers to understand why a particular response (or type of response) receives a particular score. After discussion of the rubric and anchor papers, readers practice scoring sets of responses that have been pre-scored and selected for use as training papers. Detailed discussion of the responses and the scores they receive follows.

After three or four of these practice sets, readers are given "qualifying rounds." These are additional sets of prescored 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 *Grade 5 Augmented Benchmark Examination* 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 the Scoring Director 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.

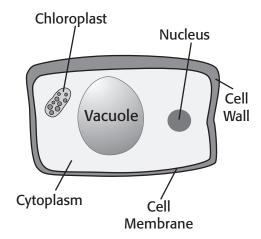
#### **Scoring Procedures**

All student responses to the *Grade 5 Augmented Benchmark Examination* 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 science open-response items, the math open-response items, reading passages with their open-response items, and a writing prompt 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 *Grade 5 Augmented Benchmark Examination*.

## SCIENCE RESPONSES

**A** The picture shows a close-up view of a cell.



- 1. What tool is used to get a close-up view of cells?
- 2. Is this a plant cell or an animal cell?
- 3. Provide two clues that helped you identify the type of cell.

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

#### Science Item A Scoring Rubric—2011 Grade 5

| Score | Description  |
|-------|--|
| 4     | The student earns 4 points. The response shows a complete understanding of the similarities and differences between plant and animal cells. The response correctly addresses four out of the four tasks with no errors.                |
| 3     | The student earns 3 points. The response shows a nearly complete understanding of the similarities and differences between plant and animal cells. The response correctly addresses three out of the four tasks.                       |
| 2     | The student earns 2 points. The response shows a limited understanding of the similarities and differences between plant and animal cells. The response correctly addresses two out of the four tasks.                                 |
| 1     | The student earns 1 point. The response shows a minimum understanding of the similarities and differences between plant and animal cells. The response correctly addresses one out of the four tasks.                                  |
| 0     | The student earns 0 points. The response shows insufficient understanding of the similarities and differences between plant and animal cells. The response, if any, contains major errors or may be entirely irrelevant or incoherent. |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)  |

## SCIENCE ITEM A—2011 GRADE 5

#### **SOLUTION AND SCORING**

| Part | Points  |
|------|---|
| 1    | 1 point possible  • 1 point for identifying a microscope.   |
| 2    | 1 point possible  • 1 point for correctly recognizing that the cell is a plant cell.  |
| 3    | 2 points possible  • 1 point each for identifying that two of the following structures are unique to plant cells. (Cell Wall or Large Vacuole or Chloroplast) |

| Part 1          |               |              | Points |
|-----------------|---------------|--------------|--------|
| Correct Answer: | "microscope"  |              | 1      |
| Part 2          |               |              |        |
| Correct Answer: | "plant cell"  |              | 1      |
| Part 3          |               |              |        |
| Correct Answer: | "cell wall"   |              | 1      |
| Correct Answer: | "big vacuole" |              | 1      |
|                 |               | Total Points | 4      |

microscore plant ed/
3 cell wall

| Part 1            |               | Points |
|-------------------|---------------|--------|
| Incorrect Answer: | "Telescope"   | -      |
| Part 2            |               |        |
| Correct Answer:   | "plant cell"  | 1      |
| Part 3            |               |        |
| Correct Answer:   | "cell wall"   | 1      |
| Correct Answer:   | "chloroplast" | 1      |
|                   | Total Points  | 3      |

O The Tool that is used is the Telescope.

@ This sell Is a plant cell.

superboat.

The soil Hor and the sound ont the sound out it mad those two things on wime!

The soil Hor and the soil hor and

| Part 1            |   | Points |
|-------------------|---|--------|
| Incorrect Answer: | "Magnfinding glass"                     | -      |
| Part 2            |   |        |
| Correct Answer:   | "Plant cell"                            | 1      |
| Part 3            |   |        |
| Correct Answer:   | "ainmal cell does not have a cell wall" | 1      |
| Incorrect Answer: | "by what it looks like and the shape"   | -      |
|                   | Total Points                            | 2      |

| you could Plant cell. do get a close MOT a animal a cell you would be a Magnifinding lo | Because a inmal cell wall.  Ou could tell to by what it was since and he shape. |
|---|---|
|---|---|

| Part 1            |                   |              | Points |
|-------------------|-------------------|--------------|--------|
| Incorrect Answer: | "magneting glass" |              | -      |
| Part 2            |                   |              |        |
| Correct Answer:   | "Plant cell"      |              | 1      |
| Part 3            |                   |              |        |
| Incorrect Answer: | "cell membrane"   |              | -      |
| Incorrect Answer: | "nucleus"         |              | -      |
|                   |                   | Total Points | 1      |

Thefool is a magneting glass.

it is a plant cell

cluel- It has a cell monblone

ciae 2- it has nucleus.

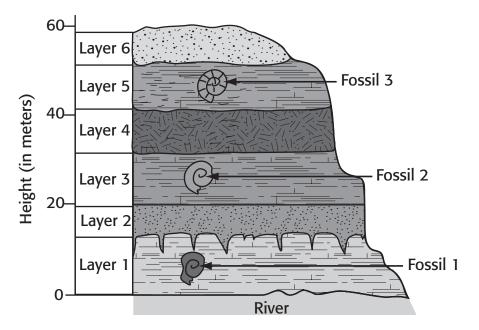
| Part 1            |                 | Points |
|-------------------|-----------------|--------|
| Incorrect Answer: | "Cell membrane" | -      |
| Part 2            |                 |        |
| Incorrect Answer: | "animal cell"   | -      |
| Part 3            |                 |        |
| Incorrect Answer: | "Nucleus"       | -      |
| No Answer Given:  |                 | -      |
|                   | Total Points    | 0      |

1. Cell membrane

2. it is a animal cell?

3. The NUCLEUS

**B** The diagram below represents a cliff along a river. Several rock layers make up this cliff.



- 1. Which of the six rock layers is the oldest? Explain why.
- 2. Which of the three fossils is the youngest? Explain why.
- 3. Provide one explanation on how the fossil remains of an animal that lived in water are now found high on a cliff in a dry area.
- 4. Provide another explanation on how the fossil remains of an animal that lived in water are now found high on a cliff in a dry area.

BE SURE TO LABEL YOUR RESPONSES 1, 2, 3, AND 4.

## Science Item B Scoring Rubric—2011 Grade 5

| Score | Description   |
|-------|---|
| 4     | The student earns 4 points. The response shows a complete understanding of fossil record evidence. The response correctly addresses four out of the four tasks with no errors.                |
| 3     | The student earns 3 points. The response shows a nearly complete understanding of fossil record evidence. The response correctly addresses three out of the four tasks.                       |
| 2     | The student earns 2 points. The response shows a limited understanding of fossil record evidence. The response correctly addresses two out of the four tasks.                                 |
| 1     | The student earns 1 point. The response shows a minimum understanding of fossil record evidence. The response correctly addresses one out of the four tasks.                                  |
| 0     | The student earns 0 points. The response shows insufficient understanding of fossil record evidence. The response, if any, contains major errors or may be entirely irrelevant or incoherent. |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)   |

#### **SOLUTION AND SCORING**

| Part | Points  |
|------|---|
| 1    | <ul> <li>1 point possible</li> <li>½ point for correctly identifying Layer 1 as the oldest rock layer.</li> <li>½ point for correctly explaining why Layer 1 is the oldest.</li> </ul>          |
| 2    | <ul> <li>1 point possible</li> <li>½ point for correctly identifying Fossil 3 as the youngest fossil.</li> <li>½ point for correctly explaining why Fossil 3 is the youngest fossil.</li> </ul> |
| 3    | 1 point possible  • 1 point for providing a reasonable explanation on why fossils of aquatic animals are now found in a dry area.   |
| 4    | 1 point possible  • 1 point for providing a second reasonable explanation on why fossils of aquatic animals are now found in a dry area.  |

| Part 1               |   | Points |
|----------------------|---|--------|
| Correct Answer:      | "Layer 1"   | 1/2    |
| Correct Explanation: | "its on the bottem"   | 1/2    |
| Part 2               |   |        |
| Correct Answer:      | "Fossil 3"  | 1/2    |
| Correct Explanation: | "it is on top"  | 1/2    |
| Part 3               |   |        |
| Correct Answer:      | "A drought could have occured."   | 1      |
| Part 4               |   |        |
| Correct Answer:      | "Earth's plates could have pushed together and caused the land to raise." | 1      |
|                      | ·   |        |

Total Points

Dependent because its on the bottern.

Tossil 3, because it is an top and isn't shriveled up.

The arthis plates could have occured.

Therefore pushed together and caused the bird to raise.

| Part 1               |                       | Points |
|----------------------|-----------------------|--------|
| Correct Answer:      | "layer named 1"       | 1/2    |
| Correct Explanation: | "it is at the bottom" | 1/2    |

#### Part 2

| Correct Answer:      | "fossil number 3"  | 1/2 |
|----------------------|--------------------|-----|
| Correct Explanation: | "it is at the top" | 1/2 |

#### Part 3

| Correct Answer: | "the rocks could have shiftedand the fossil could have been pushed upward" | 1 |
|-----------------|--|---|

#### Part 4

| Incorrect Answer: | "an animal that could breathe on land and water" | 1 |
|-------------------|--|---|
|                   | Total Points                                     | 3 |

is the oldest because it is at the bottom top to the bottom layer of the bottom layer is the oldest.

3. The explanations
the rocks could have
shifted while the fossil
was in there, and the
"fossil could have been to
pushed upward.

2. The youngest fossil is fossil is fossil is fossil number 3, because it it is at the top. The fossils at the bottom are older when time goes by it works its hay no causing mare's fossil to grow.

4. The fossil could have been an animal that could breathe on land and mater.

| Part 1                 |  | Points         |
|------------------------|--|----------------|
| Correct Answer:        | "Rock layer 1"                                   | 1/2            |
| Correct Explanation:   | "it is at the Bottom"                            | 1/2            |
| Part 2                 |  |                |
| Correct Answer:        | "Fossil 3"                                       | 1/2            |
| Incorrect Explanation: | "it is the Brightest"                            | -              |
| Part 3                 |  |                |
| Correct Answer:        | "because the land used to be covered with water" | 1              |
| Part 4                 |  |                |
| Incorrect Answer:      | "because the water level went down"              | -              |
|                        | Total Points                                     | $2\frac{1}{2}$ |

Decause It is gt the Dottom,

2. Fossil 3 is the youngest. I know because

It is the Brightest I know because
water are high on a dry cliff becomes the bank

Of an animal that lived water are now found on high cliff in a dry area is because the worter wood on high cliff.

Went down and it got stuck up their in the high cliff.

| Part 1                |           | Points |
|-----------------------|-----------|--------|
| Correct Answer:       | "Layer 1" | 1/2    |
| No Explanation Given: |           | -      |

#### Part 2

| Incorrect Answer:     | "Layer 5" | - |
|-----------------------|-----------|---|
| No Explanation Given: |           | - |

#### Part 3

|                 |                      | L |
|-----------------|----------------------|---|
| Correct Answer: | "the water dried up" | 1 |

#### Part 4

| Incorrect Answer: | "The water was up by the cliff" | -              |
|-------------------|---------------------------------|----------------|
|                   | Total Points                    | $1\frac{1}{2}$ |

Dhayer 1 is the Older 2) Layer 5 is the Younget. 3) the water dried uf. The water was at by the cliff

| Part 1                 |                                 | Points |
|------------------------|---------------------------------|--------|
| Incorrect Answer:      | "fossil 3"                      | -      |
| Incorrect Explanation: | "because it's on layer 6 and 5" | -      |
| Part 2                 |                                 |        |
| Incorrect Answer:      | "layer 1, 2 and 3"              | -      |

## Part 3

**Incorrect Explanation:** 

| Incorrect Answer: | "on the top it's dry and on the bottom it's Wet" | - |
|-------------------|--|---|

"because they are at the bottom"

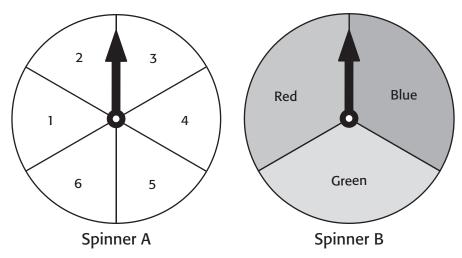
#### Part 4

| Incorrect Answer: | "they need the water to live" | - |
|-------------------|-------------------------------|---|
|                   | Total Points                  | 0 |

The oldest layar of rock it the fossils that are yongest are layer 1, 2, and 3, of cookse they are at the bottomits are hard they have and on the topits of the bottomits water to live.

## MATH RESPONSES

A Mrs. Breen used the spinners shown to play a game with her students. Each spinner is divided into equal-sized sections.



- 1. In your Student Answer Document, list all outcomes that are possible from spinning both spinners at the same time.
- 2. What is the total number of outcomes that are possible?
- 3. Mrs. Breen decides to add a fourth color to Spinner B, keeping the sections of equal size. What is the total number of outcomes if Spinner A and the new Spinner B are spun?

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

### Math Item A Scoring Rubric—2011 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.  |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.) |

#### **SOLUTION AND SCORING**

| Part | Points  |
|------|---|
| 1    | 2 points:  Correct and complete list of all 18 possible outcomes with no repeats.  Give credit for the following or equivalent:  Ex. R1,R2,R3,R4,R5,R6,B1,B2,B3,B4,B5,B6,G1,G2,G3,G4,G5,G6  Ex.  Red  Red  Red  Red  Red  Red  Red  Re  |
|      | Blue  1 2 3 4 5 6  Green  1 2 3 4 5 6   |
|      | Ex. Red 1-6 Blue 1-6 Green 1-6 (with a correct answer of 18 in part 2)  OR 1 point:  • A correct list of the possible 18 outcomes with repeats.  or • A correct list of at least 12 of the possible 18 outcomes.  or • A correct list for 1 color with correct procedure for other colors.  Ex. "R1,R2,R3,R4,R5,R6 and the same for blue and green" |
| 2    | 1 point possible 1 point: Correct answer: 18 outcomes   |
| 3    | 1 point possible 1 point:  • Correct answer: 24 outcomes or • An outcome of 6 more based on an incorrect answer in part 2.  |

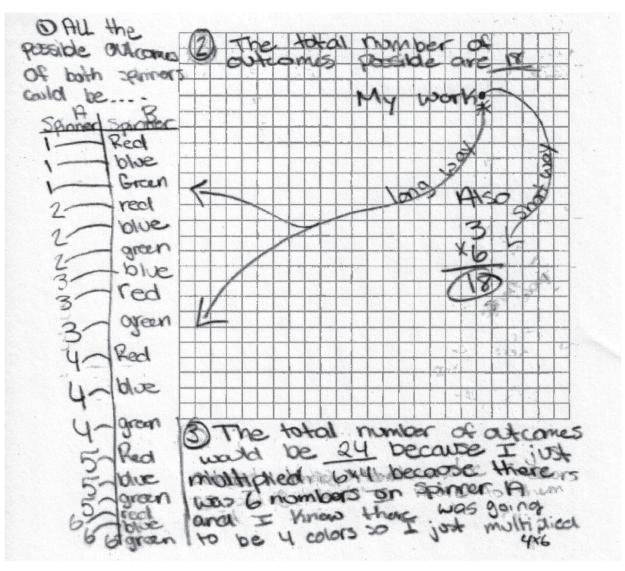
| <u>Part 1</u>        |  | Points |
|----------------------|--|--------|
| Correct 18 outcomes: | Table with 1-red,1-green, 1-blue<br>2-red, 2-green, 2-blue<br>Etc. | 2      |

#### Part 2

| Correct answer: | "outcomes possible are 18" | 1 |
|-----------------|----------------------------|---|
|-----------------|----------------------------|---|

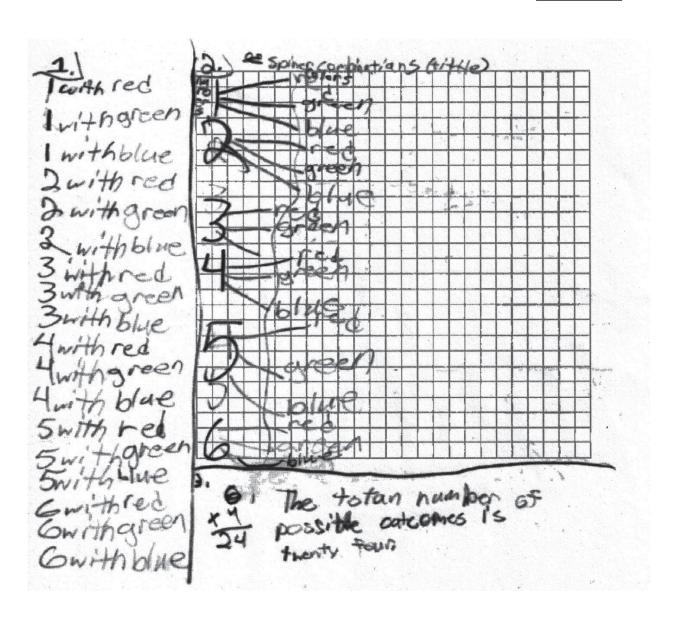
#### Part 3

| Correct answer: | "The total number of outcomes would be 24" | 1 |
|-----------------|--|---|
|                 | Total Points                               | 4 |

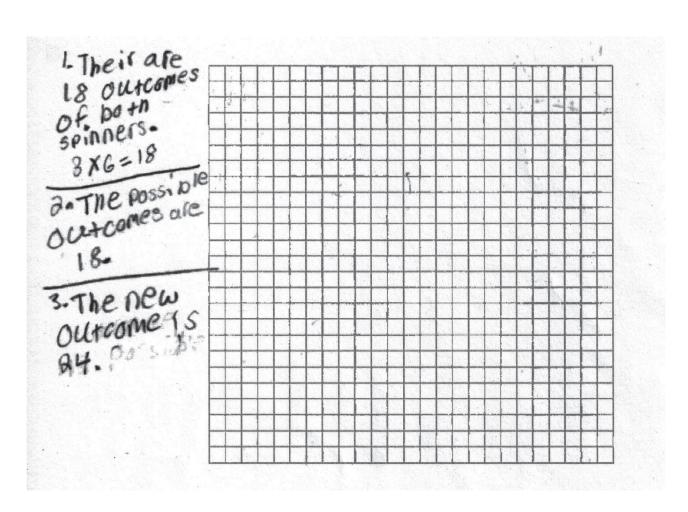


| Part 1                       |  | Points |
|------------------------------|--|--------|
| Correct list of 18 outcomes: | 1 w/red, 1 w/green, 1 w/blue<br>2 w/red, 2 w/green, 2 w/blue, etc. | 2      |
| Part 2                       |  |        |
| Incorrect answer:            | List with no 18  | -      |
| Part 3                       |  |        |
| Correct answer:              | "possible outcomes is twenty four"                                 | 1      |

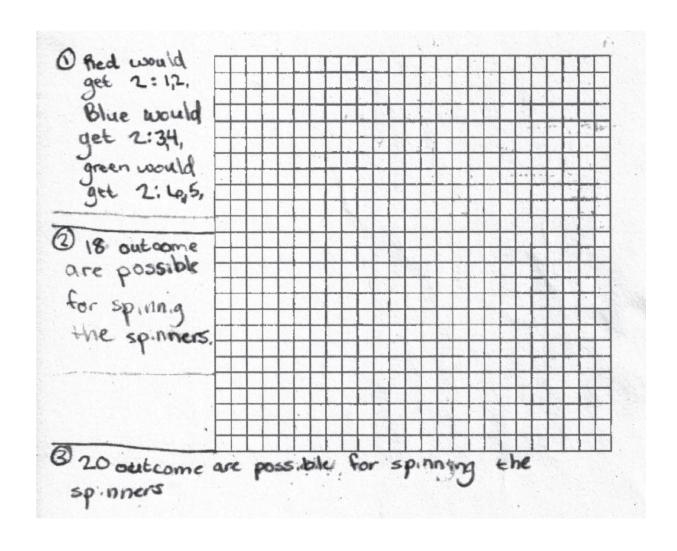
**Total Points** 



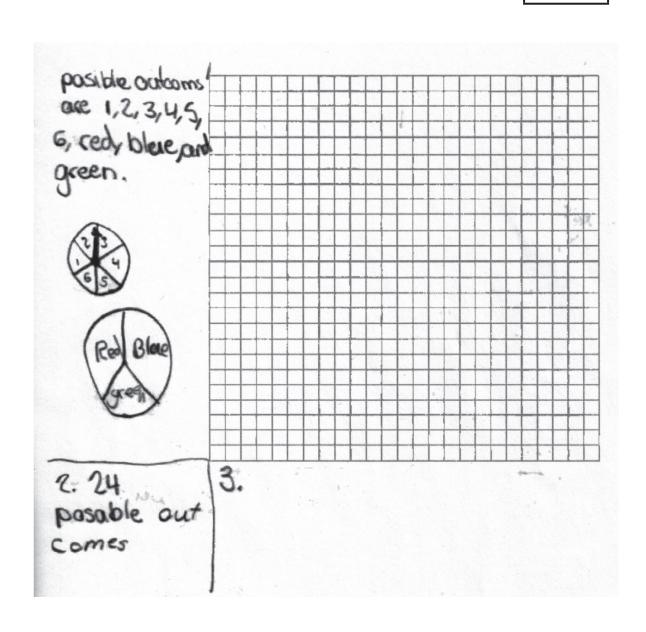
| Part 1          |                                 | Points |
|-----------------|---------------------------------|--------|
| Missing answer: | No listing is given             | -      |
| Part 2          |                                 |        |
| Correct answer: | "The possible outcomes are 18." | 1      |
| Part 3          |                                 |        |
| Correct answer: | "The new outcome is 24."        | 1      |
|                 | Total Points                    | 2      |



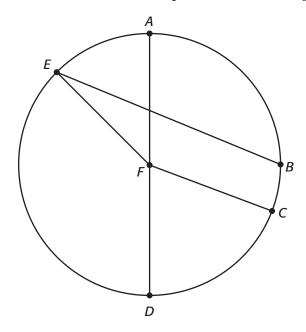
| Part 1                       |  | Points |
|------------------------------|--|--------|
| Incomplete list of outcomes: | Red 1, 2 Blue 3, 4 Green 6, 5 (only 6 out of 18) | -      |
| Part 2                       |  |        |
| Correct answer:              | "18 outcome are possible"                        | 1      |
| Part 3                       |  |        |
| Incorrect answer:            | "20 outcome are possible"                        | -      |
|                              | Total Points                                     | 1      |



| Part 1                    |  | Points |
|---------------------------|--|--------|
| Missing list of outcomes: | Repeats the prompt "1, 2, 3, 4, 5, 6, red, blue, and green." | -      |
| Part 2                    |  |        |
| Incorrect answer:         | "24"   | -      |
| Part 3                    |  |        |
| Missing answer:           |  | -      |
|                           | Total Points   | 0      |



**B** Mr. Thomas drew circle F and labeled the points and line segments as shown.



- 1. Name 2 line segments that are chords of circle F.
- 2. Which is the longest chord of circle F? Use words, numbers, and/or pictures to explain how you determined your answer.
- 3. What point on the circle must be included to name a radius? Use words, numbers, and/or pictures to explain how you determined your answer.

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

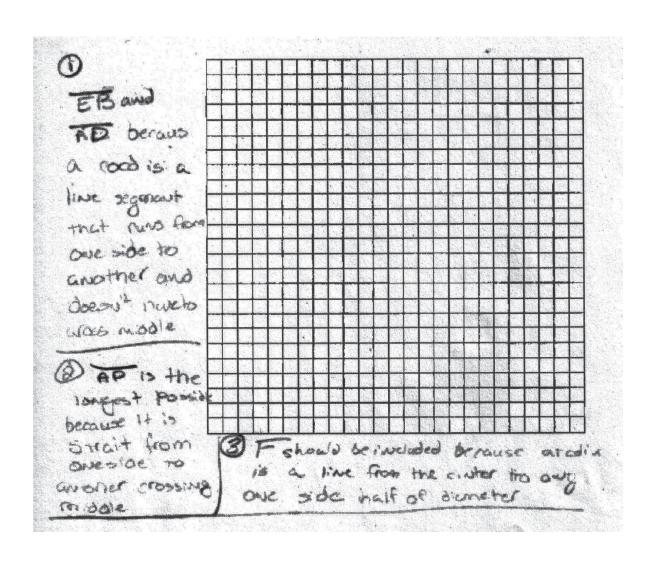
#### Math Item B Scoring Rubric—2011 Grade 5

| 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 $2-2\frac{1}{2}$ points.  |
| 1     | The student earns $\frac{1}{2}-1\frac{1}{2}$ points, or some minimal understanding is shown.  |
| 0     | The student earns 0 points. No understanding is shown.  |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.) |

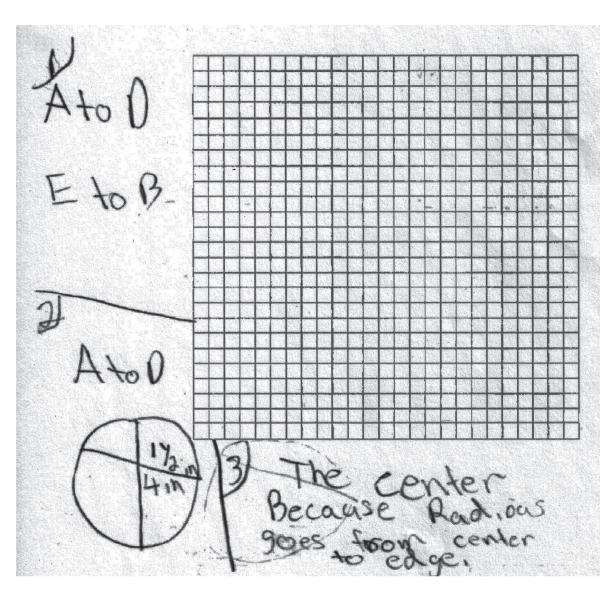
#### **SOLUTION AND SCORING**

| Part | Points   |   |  |  |
|------|--|---|--|--|
| 1    | 1 point possible   |   |  |  |
|      | 1 point: <b>OR</b>   | <b>Correct answer:</b> $\overline{AD}$ and $\overline{EB}$ (correct segment notation is not required)   |  |  |
|      | ½ point:   | 1 correct answer: $\overline{AD}$ or $\overline{EB}$<br>Note: No credit is given if more than 1 incorrect answer is included.   |  |  |
| 2    | 1½ points possible   |   |  |  |
|      | 1½ points:   | Correct answer: $\overline{AD}$ Correct procedure shown and/or explained. Give credit for the following or equivalent: Ex: " $\overline{AD}$ It's the diameter and the diameter is the longest chord" Ex: " $\overline{AD}$ because it goes thru the middle"  |  |  |
|      |  | Ex. AD because it goes thru the initiale  |  |  |
|      | OR   | OR CONTRACTOR OF THE PROPERTY |  |  |
|      | 1 point:   | • Correct answer: $\overline{AD}$<br>Incorrect or no procedure is shown and/or explained  |  |  |
|      |  | or • Incorrect or no line segment is given. Correct procedure shown and/or explained  |  |  |
| 3    | 1½ points  | possible  |  |  |
|      | 1½ points: Correct answer: Point F.  Correct procedure shown and/or explained.  Give credit for the following or equivalent:  Ex: "Point F is the center and the radius goes from the center to the Ex: "Point F is in the middle" |   |  |  |
|      | OR   |   |  |  |
|      | 1 point:   | • Correct answer: Point F Procedure is incomplete, incorrect or missing or  |  |  |
|      |  | <ul> <li>Answer is incorrect or missing.</li> <li>Correct procedure is shown and/or explained</li> </ul>  |  |  |
|      | OR   |   |  |  |
|      | ½ point:   | A correct radius is given: $\overline{AF}$ and/or $\overline{CF}$ and/or $\overline{DF}$ and/or $\overline{EF}$<br>Note: No credit is given if an incorrect radius is included.   |  |  |

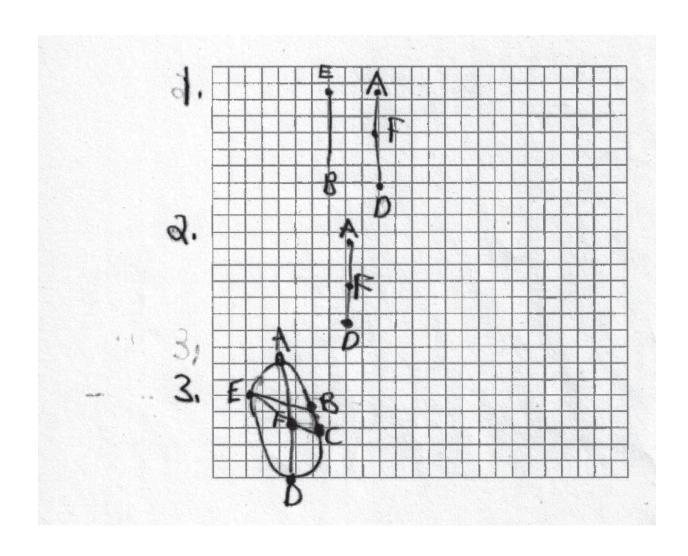
| Part 1                                 |  | Points         |
|--|--|----------------|
| Correct answer:                        | " $\overline{EB}$ and $\overline{AD}$ "  | 1              |
| Part 2                                 |  |                |
| Correct answer with Correct procedure: | " $\overline{AD}$ because it is strait from oneside to another crossing middle"    | $1\frac{1}{2}$ |
| Part 3                                 |  |                |
| Correct answer with Correct procedure: | "F should be included because a radi is a<br>line from the center to ony one side" | $1\frac{1}{2}$ |
|  | Total Points   | 4              |



| <u>Part 1</u>                            |  | Points |
|--|--|--------|
| Correct answer:                          | "A to D" "E to B"                                      | 1      |
| Part 2                                   |  |        |
| Correct answer with Missing explanation: | "A to D"   | 1      |
| Part 3                                   |  |        |
| Missing answer with Correct explanation: | "The center Because Radious goes from center to edge." | 1      |
|  | Total Points   | 3      |



| <u>Part 1</u>                            |                | Points |
|--|----------------|--------|
| Correct answer:                          | EB AF          | 1      |
| Part 2                                   |                |        |
| Correct answer with Missing explanation: | A              | 1      |
| Part 3                                   |                |        |
| Missing answer with Missing explanation: | Redrew prompt. | -      |
|  | Total Points   | 2      |



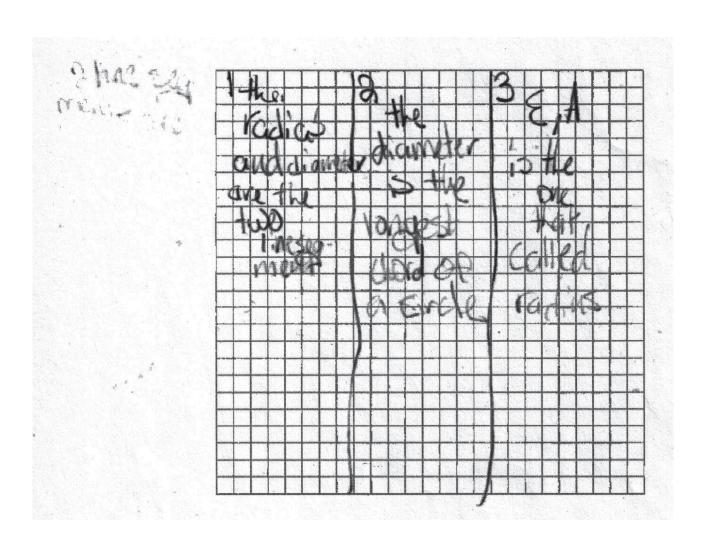
| <u>Part 1</u>      |                       | Points |
|--------------------|-----------------------|--------|
| No correct answer: | "radias and diameter" | -      |

#### Part 2

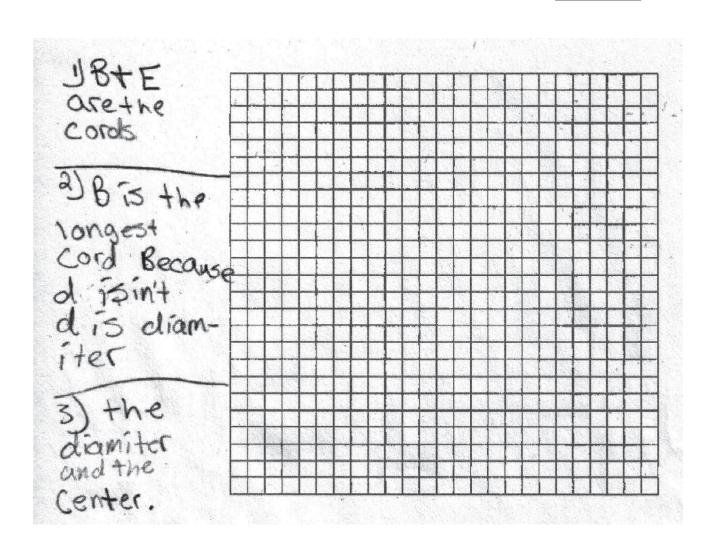
| No answer with       | "the diameter is the longest chord of a | 1 |
|----------------------|---|---|
| Correct explanation: | circle"                                 | 1 |

#### Part 3

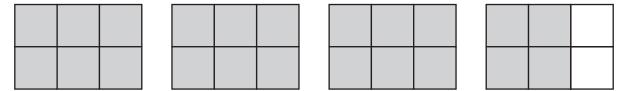
| Incorrect answer with Incorrect explanation: | "E,A is the one that called radius" | - |
|--|-------------------------------------|---|
|  | Total Points                        | 1 |



| Part 1                                       |   | Points |
|--|---|--------|
| No correct answer:                           | "B + E are the cords"                         | -      |
| Part 2                                       |   |        |
| Incorrect answer with Incorrect explanation: | "B is the longest cordd isin't d is diamiter" | -      |
| Part 3                                       |   |        |
| Incorrect answer with Missing explanation:   | "the diamiter and the center"                 | -      |
|  | Total Points                                  | 0      |



**C** The picture shown represents a mixed number.



- 1. What is a mixed number that is being represented above? Show all your work and/or explain your answer.
- 2. Can your answer in Part 1 be simplified? Explain your reasoning using words, numbers, and/or pictures.
- 3. Write an improper fraction that is equivalent to this mixed number. Show all your work and/or explain your answer.

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

## Math Item C Scoring Rubric—2011 Grade 5

| Score | Description   |
|-------|---|
| 4     | The student earns 5 points. The response contains no incorrect work.  |
| 3     | The student earns 3–4½ points.  |
| 2     | The student earns 2–2½ points.  |
| 1     | The student earns $\frac{1}{2}-1\frac{1}{2}$ points, or some minimal understanding is shown.  |
| 0     | The student earns 0 points. No understanding is shown.  |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.) |

## **SOLUTION AND SCORING**

| Part | Points     |   |
|------|------------|---|
| 1    | 2 points p |   |
|      | 2 points:  | Correct answer: $3\frac{4}{6}$ or $3\frac{2}{3}$  |
|      |            | Correct procedure shown and/or explained. Give credit for the following or equivalent: Ex.: "There are 3 whole rectangles shaded and 4 out of 6 in the other box. The answer is $3\frac{4}{6}$ ." |
|      |            | Ex.: "There are 3 whole boxes shaded and 2 out of 3 in the last. The answer is $3\frac{2}{3}$ ."  |
|      | OR         | Ex.: " $1+1+1+\frac{4}{6}=3\frac{4}{6}$ .   |
|      | 1 point:   | • Correct answer: $3\frac{4}{6}$ or $3\frac{2}{3}$  |
|      |            | Procedure is incomplete, incorrect or missing   |
|      |            | or • Answer is incorrect due to a calculation, counting, or copy error. Correct procedure is shown and/or explained.  |

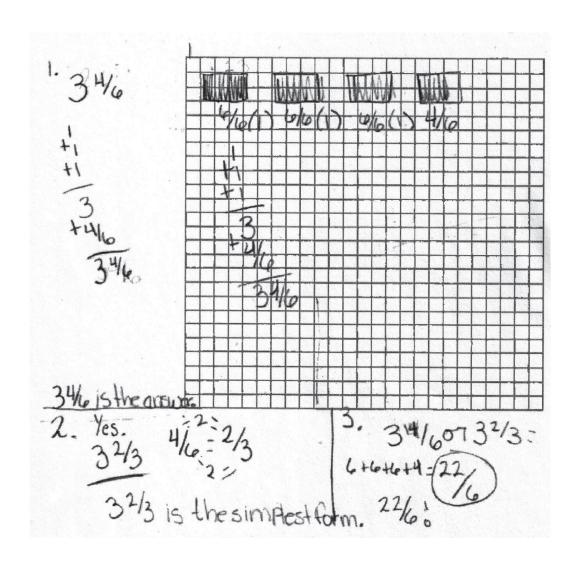
| Part | Points                                     |   |
|------|--|---|
| 2    | 1 point po<br>1 point:                     | Correct answer Correct procedure shown and/or explained Give credit for the following or equivalent:  Note: Answer and/or procedure may be based on an incorrect fraction in Part 1.  Ex.: (with answer of $3\frac{4}{6}$ in Part 1)  "Yes it can be simplified because both 4 and 6 can be divided by 2."  Ex.: (with answer of $3\frac{4}{6}$ in Part 1)  " $3\frac{4}{6} = 3\frac{2}{3}$ because $\frac{4 \div 2}{6 \div 2} = \frac{2}{3}$ Ex.: (with answer of $3\frac{2}{3}$ in Part 1)  "No because 2 and 3 do not have a common factor other than 1."  Ex.: (with an incorrect answer Part 1)                                    |
|      | OR ½ point:                                | " $\frac{22}{24}$ can be divided by 2 over 2 and reduced to $\frac{11}{12}$ • Correct simplification of answer in Part 1.  Ex.: answer of $3\frac{2}{3}$ or  • Correct answer yes or no based on Part 1.  |
| 3    | 2 points po<br>2 points:<br>OR<br>1 point: | Correct answer: $\frac{22}{6}$ or $\frac{11}{3}$ (or correct improper fraction based on an incorrect fraction in Part 1.)  Correct procedure shown and/or explained.  Give credit for the following or equivalent:  Ex.: " $6 \times 3 = 18 + 4 = 22$ "  Ex.: " $3 \times 3 = 9 + 2 = 11$ "  Ex.: " $3 \frac{4}{6} = \frac{22}{6}$ "  • Correct answer: $\frac{22}{6}$ or $\frac{11}{3}$ (or correct improper fraction based on an incorrect fraction in Part 1.)  Procedure is incomplete, incorrect or missing  or  • Answer is incorrect due to a calculation, counting, or copy error. Correct procedure is shown and/or explained. |

| Part 1                                   |                            | Points |
|--|----------------------------|--------|
| Correct answer with Correct explanation: | "3 4/6"<br>1+1+1+4/6=3 4/6 | 2      |

#### Part 2

| Correct answer with Correct explanation: | "Yes"  Demonstrates that both 4 and 6 are divisible by 2 | 1 |
|--|--|---|
|--|--|---|

| Correct answer with Correct procedure: | "22/6"<br>6+6+6+4=22 | 2 |
|--|----------------------|---|
|  | Total Points         | 5 |

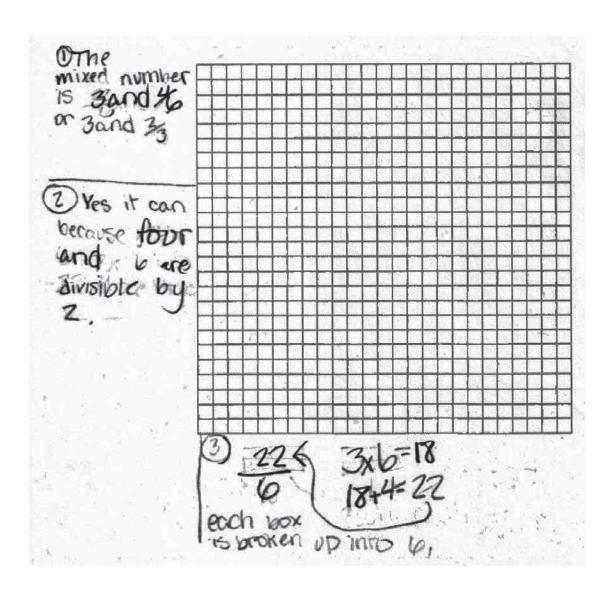


| Part 1                                   |                          | Points |
|--|--------------------------|--------|
| Correct answer with Missing explanation: | "3 and 4/6 or 3 and 2/3" | 1      |

#### Part 2

| Correct answer with  | "Yes"                                   | 1 |   |
|----------------------|---|---|---|
| Correct explanation: | "because four and 6 are divisible by 2" | 1 | l |

| Correct answer with Correct procedure: | "22/6"<br>3x6=18+4=22 | 2 |
|--|-----------------------|---|
|  | Total Points          | 4 |

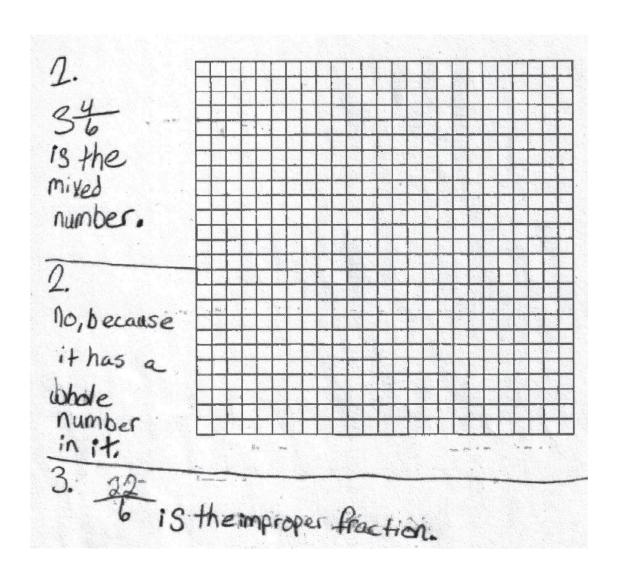


| Part 1                                 |         | Points |
|--|---------|--------|
| Correct answer with Missing procedure: | "3 4/6" | 1      |

#### Part 2

| Incorrect answer with Incorrect explanation: | "no, because it has a whole number in it." | - |
|--|--|---|
|--|--|---|

| Correct answer with Missing procedure: | "22/6"       | 1 |
|--|--------------|---|
|  | Total Points | 2 |

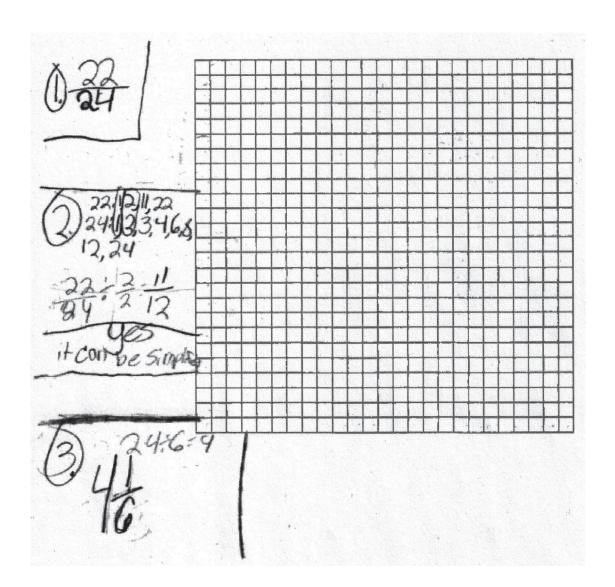


| <u>Part 1</u>                              |         | Points |
|--|---------|--------|
| Incorrect answer with Missing explanation: | "22/24" | -      |

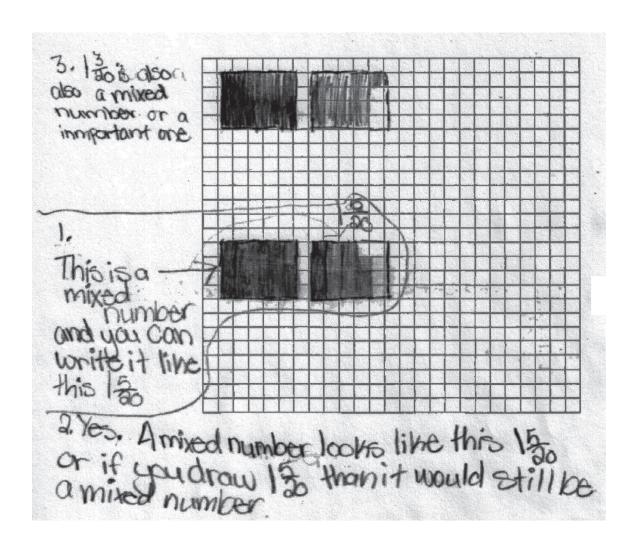
### Part 2

| Correct answer with | "yes it can be simplified" | 1 |
|---------------------|----------------------------|---|
| Correct procedure:  | 22/2=11 24/2=12            | 1 |

| Incorrect answer with Incorrect procedure: | "4 1/6"<br>24/6=4 | - |
|--|-------------------|---|
|  | Total Points      | 1 |



| Part 1                                       |                                      | Points |
|--|--------------------------------------|--------|
| Incorrect answer with Incorrect explanation: | "you can write it like this 1 5/20"  | -      |
| Part 2                                       |                                      |        |
| Incorrect answer with Incorrect explanation: | "Yes1 5/20"                          | -      |
| Part 3                                       |                                      |        |
| Incorrect answer with Missing procedure:     | "1 3/20 is also also a mixed number" | -      |
|  | Total Points                         | 0      |



# READING RESPONSES

## **How Grape Jelly Is Made**

by George Jones

There has never been a team like peanut butter and jelly. They stick together through thick and thin. In fact, jelly got its name from being thick and sticky. It comes from the French word *gelée*, which means thickened. Jelly can be made out of many kinds of fruit. Grape jelly is one of the most popular jellies in the United States.

- 1. The dark purple color and special flavor of grape jelly come from Concord grapes, which are grown mainly in New York, Pennsylvania, Michigan, and Washington. Grapes grow in bunches on vines. Grape farms are called vineyards.
- 2. Grapes are harvested in the fall, when they are sweet and juicy. They are so ripe that they fall right off their stems when a machine called a harvester shakes the vines.
- 3. The grapes fall into long <u>troughs</u> on the harvester and then drop



from a tube at the side of the machine into large crates. Each full crate weighs as much as two cars. Farm workers operate the harvester and make sure to stop the machine when the crate is full.

4. Truck drivers take the crates to the jelly factory. First, an inspector looks carefully at samples of the grapes to be sure they are ripe. Then a forklift operator lifts each crate of grapes from the unloading area and empties it into a long rectangular funnel called a hopper.

5. The hopper funnels the grapes into pipes that flow into a room inside the jelly factory. As the grapes are pumped through the pipes, they begin to get crushed. Then paddles push them through holes just big enough for grapes and juice to flow through. Stems and leaves are left behind. The crushed grapes flow into a big vat.<sup>1</sup>



- 6. As the grapes are heated in the vat, they get softer—so the juice separates easily from the skins and seeds. The mixture is forced through a dejuicer or filter, which lets only the juice through. This time the skins and seeds are left behind. Then the juice is heated until it almost boils, and quickly chilled until it almost freezes. This process, called pasteurization, completely kills any germs that might have been in the juice.
- 7. The grape juice is kept cold in refrigerated 700,000-gallon tanks until it is time to make a batch of jelly. Then the juice is pumped from the tanks into

big kettles to be cooked three times. Sugars and pectin are added to make it thicker. A worker uses a dipper to check the thickness.



- 8. The jelly goes into a finishing kettle for the last stage of cooking. While the jelly is still hot, it is pumped from the kettle to the filler and into jelly jars in exactly measured amounts.
- 9. The jars must have nothing but jelly inside of them—not even air! Germs from the air could make the jelly unsafe to eat. When a cover is put on top of each jar, the air is sucked out in a process called vacuum sealing.



<sup>1</sup>vat: large container for storing liquids

- 10. As the jars full of jelly are carried along an assembly line, machines brush paste and wrap a label around each one. The label tells the flavor of the jelly, who made it, every ingredient in it, and the jelly's nutritional facts.
- 11. Before the jelly leaves the factory, workers test samples from random jars in each batch for taste and color. Machines also test samples to make sure that no air is sealed in the jars.
- 12. If the jelly passes all the tests, the jars are packed in cardboard boxes with sheets of cardboard between them so they won't bump and break. The boxes are loaded onto trucks and shipped to stores. The jelly is ready to meet its partner—peanut butter—on the other side of the sandwich.

**A** Use at least four details from the passage to explain what must happen once the jars are filled with jelly.

## Reading Item A Scoring Rubric—2011 Grade 5

| Score | Description  |
|-------|--|
| 4     | The response provides at least four accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly.  |
| 3     | The response provides three accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly.  |
| 2     | The response provides two accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly.  |
| 1     | The response provides one accurate and relevant detail from the passage to explain what must happen once the jars are filled with jelly.  OR  The response demonstrates minimal understanding of the question. |
| 0     | The response is incorrect or irrelevant.   |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)  |

#### **SCORE POINT: 4**

The student provides more than four accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly ("First they must be vacum sealed so they don't have air bacteria in the jelly."; "Next the machines put a label on the jar telling whats in the jelly and the people who made it."; Then workers test samples for color and taste...machines check samples for any air."; "...they are put in cardboard boxes to be shipped to stores for people to buy and eat"). The response demonstrates a thorough understanding of the passage.

1. First they must be vacum sealed so they don't put a label on the part telling whats in the jelly.

3. Then workers tell samples 4. If they post the tests for color and taste while they are put in carboard machines check samples for boxes to be shipped to stores for people to buy and eat.

#### **SCORE POINT: 3**

The student provides three accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly ("...they must be vacumed of all air, ...they must be labeled, finally, they must be shipped"). The student cannot receive credit for ("Next, the must be tested for thickness,") because this happens to the jelly before it is placed in the jars. The response provides evidence of general but not comprehensive understanding of the passage.

Next they must be vacumed of all airs west the must be tested for thickness then they must be shipped.

#### SCORE POINT: 2

The student provides two accurate and relevant details from the passage to explain what must happen once the jars are filled with jelly ("...they are put in carbord boxes with car bord in betwean them and shiped to the store"). This is an example of basic understanding of the passage.

Jelly they are Purio carbond boxes with car bordinbe twen them and shiped to the store.

#### Score Point: 1

The student provides one accurate and relevant detail from the passage to explain what must happen once the jars are filled with jelly ("When the jars are filled with jelly you have to label it with a jelly tag"). The response is inadequate and provides evidence of minimal understanding.

When the jors are filled with Jelly you have to label it with a selly tag

#### **SCORE POINT: 0**

The response is irrelevant.

there is Lots of ways to

## **Cooking by the Numbers**

by J.P. Russell

- "Cooking contests are for girls!"
- I didn't mean to shout. But how would you feel if your best friend woke you up on a Saturday morning, carrying a grocery sack and wearing an apron dotted with smiley faces?

Hayden dropped a bag of flour onto my stomach. "Not true, Rick. Most of America's great cooks are men." He patted his pocket. "I have the numbers to prove it."

Ever since Hayden had run for class president and lost, he had become a big fan of polls. Last week, he polled students in the cafeteria to find out how many of them thought lemon sours were fruit. Now he dug a wrinkled paper from his pocket and read:

"Fifty-six percent of women chose a male chef as their favorite TV cook. Sixty-seven percent of women eat at restaurants where men wear white floppy hats. And ninety-nine percent of married women wish their husbands would cook dinner."

He grinned. "Not even Spider-Man gets those numbers, Rick."

As I struggled to sit up, the flour bag thudded onto the floor. A white cloud puffed into my face.

Coughing, I sputtered, "You made that up."

Hayden thumped my back. "Nope. Found it on a Web site. In fact, I'm thinking about posting my own poll results."

I snorted. "Right. Like people care what color hair gel our classmates use. What do those numbers have to do with winning the contest, anyway?"

Hayden sighed and began ticking answers off on his fingers. "It's a Women's Club contest, so the judges must be women. Most of the contestants will be women. Women prefer men who cook—I'm a man." He paused, then curled his third finger down again. "OK, I'm a boy. But I have a winning recipe."

He turned the paper over and read: "Women's top-five sweets."

I studied the scrawled words: *Hot fudge. Sugared dates. Butterscotch. Candied peaches. Chocolate.* "You're putting all those in one recipe?"

He nodded smugly. "Giant brownies. Tucker's Temptations."

More like Hayden's Half-Baked Hope, I thought. "When is the contest?" I asked.

"This morning."

My ears had taken a nap. "Today morning? Or tomorrow morning?"

"Today morning. Ten o'clock. At the Channel 10 studio."

I tried to dive back under the covers, but Hayden grabbed my arm. "If I win, half the prize is yours. Now get dressed."

Minutes later, we locked our bikes outside the TV studio. A woman with spiky black hair met us inside. She glanced at Hayden's apron. "Name?"

"Hayden Tucker, soon to be famous for Tucker's Temptations," Hayden said.

She checked her clipboard. "T . . . Tucker. OK. Good luck."

As we entered the contestant kitchen, I stopped. Our luck definitely wasn't good. Hayden bumped into me. "Watch it—"

I pointed at the judges' table.

"Men!" Hayden gasped. "Nobody has ever done a poll on male cooking judges."

I was busy reading a nearby sign. "Uh, Hay, how much do you know about this contest?"

"What I heard through my mom's cooking club. Why?"

"Missed the part about vegetarian dinner recipes, huh?"

Hayden's face turned to mato red. "Vege . . . vege . . . ," he stammered. "Vegetarian . . . as in with vegetables," I explained. "Dinner . . . as in before dessert."

Just then the spiky-haired woman rushed past. "On air in ten."

Her voice jolted Hayden into action. Slinging the grocery sack over his shoulder, he headed to his workspace. "We can win this."

"But your recipe doesn't use vegetables," I protested.

"Says you," he argued, "but fifty-eight percent of sixth-graders in my To Eat or Not to Eat poll said that dates are vegetables. They won't touch them."

The next hour was a blur—mostly because of the flour cloud Hayden stirred up as he mixed, pounded, and shaped his new creation.

As the judges approached, he whispered, "Remember—you get half the prize."

I snickered. I was one hundred percent sure that Hayden had no idea that the prize was a designer apron-and-mitt set.

"What's on the menu?" the head judge asked, smiling.



"I call it Luscious Loaf," Hayden announced as he offered each man a slice.

"Surprising," said one judge, chewing slowly.

"Interesting texture," muttered another.

"Water . . . ," gasped a third.

They hurried away, leaving Hayden with a plate of half-eaten loaf slices.

Later, when Tangy Asparagus Souffle won, Hayden didn't seem too disappointed. As I watched, he wiped his hands on his apron and loaded a new tray with Luscious Loaf.

"I really should congratulate the winner," Hayden said, "and ask the other contestants a few questions." He picked up the tray and headed toward them.

I laughed and followed him. I knew we wouldn't be going home soon. Because there was only one thing Hayden Tucker liked better than entering contests . . . and that was conducting polls.

**B** Identify two times in the passage when Hayden is surprised by events.

Describe his reaction to each event using details from the passage.

## Reading Item B Scoring Rubric—2011 Grade 5

| Score | Description  |
|-------|--|
| 4     | The response identifies two times in the passage when Hayden is surprised by events and describes his reaction to each event using accurate and relevant details from the passage.   |
| 3     | The response identifies two times in the passage when Hayden is surprised by events and describes his reaction to one of the events using accurate and relevant details from the passage.  |
| 2     | The response identifies one time in the passage when Hayden is surprised by events and describes his reaction to the event using accurate and relevant details from the passage.  OR  The response identifies two times in the passage when Hayden is surprised by events.  OR  The response describes Hayden's reaction to each event using accurate and relevant details from the passage. |
| 1     | The response identifies one time in the passage when Hayden is surprised by events.  OR  The response describes Hayden's reaction to one event using accurate and relevant details from the passage.  OR  The response demonstrates minimal understanding of the question.   |
| 0     | The response is incorrect or irrelevant.   |
| В     | Blank—No Response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)  |

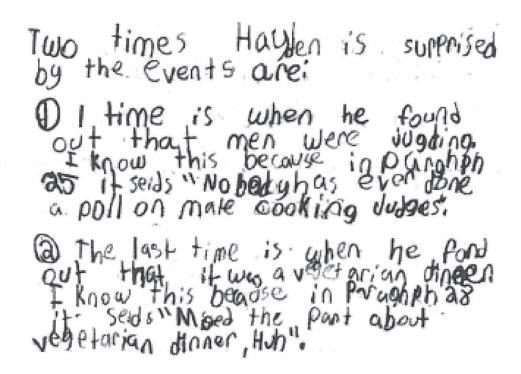
#### **SCORE POINT: 4**

The student identifies two times in the passage when Hayden is surprised by events and describes his reaction to each event using accurate and relevant details from the passage. The first surprise is ("he is surprised ...upon finding out the judges are men. He got his information from a women's cooking club, so he was sure the judges would be women."). His reaction to this surprise is ("…Men!' Hayden gasped, 'NObody has ever done a poll on Male cooking judges!""). The second surprise is ("…when he finds the contest is for vegetarian dinner recipes and he has a women's dessert"). His reaction to this second surprise is ("He handles his sitiouation by making a new recipe he calls Luscious Loaf"). The response demonstrates a thorough understanding of the passage.

Mayden is surprised in the story. One situidion he is superised in is higher finding out the judges are mentle got his laternation from a women cooking club, so he we sure the judges work nearly be worth the judges were mun, lite was probably thinking he needed to rethink his recipe my inference is supported by his quote of Men!" Mayden quaped, "Notody has ever done a poll of Make cooking tudges!" Haydents higher really goes bad when he finds the contest is for blegetarian dinner recipies, and he has a women's dessert. Now he knows he needs a new recipe. He handles his sitious home by making a new recipe he calls Luscious Loaffeven though his pirst reaction was worry and surprise.

#### **SCORE POINT: 3**

The student identifies two times in the passage when Hayden is surprised by events and describes his reaction to one of the events using accurate and relevant details from the passage. The first surprise is ("...when he found out that men were judging"). His reaction to this surprise is his statement that ("'Nobody has ever done a poll on male cooking Judges'."). The second surprise is ("...when he fond out that it was a vegetarian dinner"), and the student did not mention a reaction to this surprise. The student cannot receive credit for ("'Missed the part about vegetarian dinner, Huh'.") because this is Rick's reply, not Hayden's response. The response provides evidence of general but not comprehensive understanding of the passage.



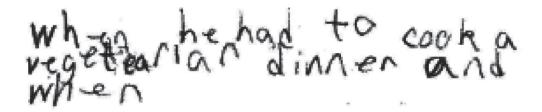
#### **SCORE POINT: 2**

The student identifies one time in the passage when Hayden is surprised by events and describes his reaction to the event by using accurate and relevant details from the passage. The surprise is ("When Rick told Hayden that the contest was for a vegetaria dinner recipe") and his reaction was ("Hayden had stammered to say the word vegetarian."). This is an example of basic understanding of the passage.

When Rich told Houghen that the contest was for a vegetoria dinner recipe Houghen was surprissed. Hacyden had stammered to say the word vegetarian. Hayden was surprissed when one of the sugas gasped for worter.

#### **Score Point: 1**

The student identifies one time in the passage that Hayden was surprised by events ("When he had to cook a vegetearian dinner"). The response is inadequate and provides evidence of minimal understanding.



#### Score Point: 0

The response is irrelevant.

NOT LEAV his Friends and he will Hewill not get New Friends.

## **Acknowledgments**

The Arkansas Department of Education would like to thank those who have granted permission to reproduce the following copyrighted material:

#### **Text**

Pages 44–46: "How Grape Jelly is Made" from *My First Book of How Things Are Made* by George Jones. Copyright © 1995 by Pond Press. Reprinted by permission of Scholastic, Inc.

Photos: Man with grapes. Copyright © Cristian Lazzari 2009, www.iStockPhotos.com; Grapes heated. Copyright © Grafton Smith 2009; Checking thickness. Copyright © Grafton Smith 2009; Jelly into jars. Copyright © Grafton Smith 2009.

Pages 50–52: "Cooking by the Numbers" by J.P. Russell. Copyright © 2007 by Highlights for Children, Inc., Columbus, Ohio.

## WRITING RESPONSES

#### SCORING STUDENT RESPONSES TO WRITING PROMPTS

#### **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 by a third reader 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.

#### Nonscoreable and Blank Papers

Nonscoreable papers include student responses that are off-topic, illegible, incoherent, written in a language other than English, or too brief to assess. Nonscoreable papers will receive a score of "0." Blank papers indicate no response was written and will be reported as NA (no attempt), which translates into a score of "0."

## Writing Domains and Definitions— 2011 Grade 5 Augmented Benchmark Examination

#### 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
- Unity
- Elaboration
- 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
- Expansion through standard coordination and modifiers
- Standard word order
- Embedding through standard subordination and modifiers
- · Absence of fused sentences

#### 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
- · Word meaning
- Agreement
- 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
- Formatting
- · Punctuation
- Spelling

This is one of the two writing prompts administered to all grade 5 students in April 2011.

#### **Prompt**

You have been asked to write a story for your principal. You must write about this topic:

#### What is a happy time you will always remember?

Before you begin to write, think about the happy times you have had and choose **one** to write about. What made this a happy time? Why will you always remember it?

Now write a story about a happy time that you will always remember. Be sure to tell what happened and give enough detail so that your principal will understand.

| Look at the ideas in your response.  | Are your sentences alike? (Hint: Use different kinds of sentences.)   |
|--|---|
| 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?  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, | k 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?  k at your handwriting.  Can others read your handwriting with no trouble? |

#### WRITING SAMPLE RESPONSE 1

#### Content: 4

The writer conveys a clear central idea ("Here is one day that is happy to me"). Each event is fully elaborated with details ("I quickly drew my old ben pearson recurve...killed my first buck. He was a big one too, an eight point...Not only were there crows, but bluebirds and cardnals, too...chiken, noodle salad, and pumpkin pie...our team, the Boston Red Sox, beat the San Francisco Giants by 1 home run in the last inning"). An organizational plan is evident in the progression of ideas. There is presence of closure. This response demonstrates consistent control of the Content domain.

#### Style: 4

The writer engages the reader with precise, vivid vocabulary ("...shot that deer hard right were you want to shoot it. It went down like a collapsing skyscraper...I still couldn't beleive how fast the buck went down...delicous, juicy lunch...I even caught that homerun ball. I got it signed by every player on the team."). Sentences are varied and a strong voice is heard throughout. This response demonstrates consistent control of the Style domain.

#### **Sentence Formation: 4**

The response displays mature sentence structures that are mostly correct. Complex sentence structures are used throughout and demonstrate the writer's consistent control of the Sentence Formation domain.

#### Usage: 4

Control of inflections, tenses, agreement, and word meaning are demonstrated. This response displays consistent control of the Usage domain.

#### **Mechanics: 4**

Capitalization, punctuation, spelling, and formatting are mostly correct in this response. The Mechanics domain is consistently controlled.

Here is one day that is happy to me because had a lot of fun. My Many Dady and I went to several different events on this day of happiness. First, we got up early in the marning to go deer hunting. Everything was perfect when we got on the deer stand. Dad now sampling white move. It was a deer's tail. I quickly drew my old ben pearson recurre and shat that deer hard right were non want to shoot it It went down like a collapsing skyscraper. Mom even killed the doe next to mine. When I got all the stand with Man I realized I had killed my first back. He was a big one too, an eight point. We went home and cleaned is Dad helped me skin the deer. We throw the meat in the freezer and hung the hides out to dry. I still couldn't believe how fist the back went Next we went to the park in our town. Ve went to fresh the birds as usuall. This lime was different because all kinds of birds ear our bread. Not only were there evons but bluebirds and cardnals, too. We are a delicone juice hand There was chiken noodle salad and pumpkin pie. That was very happy to me be also talked laughed and played on the swing set last we went to the ballpark to watch baseball game. We had dinner their and I of:11 couldn't believe what an appetite I had after what we ate at the park. Anymays, our team, the Boston Red Sox, beat the Sun Francisco Giants by I have run in the last inning. I even caught that Lomerun ball I got it signed by every player on the team In conclusion that was the happiest day of my life I did several fun events with my loving parents.

#### WRITING SAMPLE RESPONSE 2

#### **Content: 3**

This response has a clear central idea ("I am going to name it off and explane why I will all wase remember this happyest time ever"). While there is some elaboration ("Next, I whent to sea world...I got to swim in the water with the dolphins...one of the dolphins jumped up and grabed me swimed me all around the pool"), details in the response are sparse. The response is organized with a progression of ideas and a brief conclusion. The writer exhibits reasonable control of the Content domain.

#### Style: 3

The writer uses some purposeful selection of information ("humongis water park"; "one of the dolphins jumped up and grabed me") which is mixed with a great deal of general information ("I whent all around disney world so I got to see every thing around me!"). The writer's voice is present but not strong. Reasonable control of the Style domain is demonstrated.

#### **Sentence Formation: 2**

The writer includes some complex sentences ("I whent all around disney world so I got to see every thing around me"; "To sum up I thank my principal will be suprised on my funest time ever!"). However, there is a run-on ("It was the best time ever we whent to a humongis water park.") and there are sentences with missing words. The response exhibits reasonable control of the Sentence Formation domain.

#### Usage: 2

This response shows some weakness in grammar skills. The writer uses some wrong words ("thank" for think, "on" for by) and inflectional errors. This response demonstrates reasonable control of the Usage domain.

#### **Mechanics: 3**

The response contains spelling errors ("whent," "allwase," "remeber," "happyest," "humongis," "comming," "secshion," "parke," "casle," "fireworkes," "suprised"), inappropriate word divisions ("all wase," "every thing"), and there is a missing end mark. Inconsistent control of the Mechanics domain is demonstrated.

| My principal has asked me to write a story about a happy time that I will allunese |
|--|
| umeler Do & am going want off and explane why                                      |
| I will all work remember this happyest time ever.                                  |
| - Sust, the happart time is going Elonador. It was                                 |
| the less time ever use whent to a humangis water park!                             |
| In unter parke had a ling slide that had notes commismo                            |
| through the Shere was a secshion in the parke that                                 |
| Mato, a whento to see world a had a bot  |
| of fun from a got to sowin in the wall with  |
| the dolphins! Then one of the dolphins Jumped up                                   |
| and groved are suramed me all around the pool.                                     |
| doot, but not least I whent to disney would!                                       |
| I got to se the lung cash and the fireworker going                                 |
| off 11 2 whent all around disney would so  |
| I got to see them thing around me!   |
| - 20 DUM AND I STORE OF PUNCTION WILL  |
| be supressed on my funish time even!   |
|  |
|  |
|  |
|  |
|  |
|  |

#### Writing Sample Response 3

#### Content: 2

The writer has a central idea ("I have alot of happy time But I would only like to share one."). The response presents three days' events in a list-like fashion, without any elaboration. The closure is simplistic. The writer exhibits inconsistent control of the Content domain.

#### Style: 2

The writer uses mostly general and simplistic vocabulary ("...set up camp and Road are Bickes...set around the campfire and went tobead...whene we got Back we went to bead...we packed up and went home"). Tone and voice are present but very dim. Inconsistent control of the Style domain is demonstrated.

#### **Sentence Formation: 3**

The writer uses a couple of complex sentences ("I have alot of happy time But I would only like to share one. On Jun 10th 2003 I went to the Buffalo River four my Granys Family Reunuen."). But, most sentences are simple and there is a run-on. The writer displays reasonable control of the Sentence Formation domain.

#### Usage: 3

The response shows some weakness in grammar skills. The writer uses some wrong words ("set" for sat; "bead" for bed; "four" instead of for; "road" for rode) and has some inflectional errors. This response demonstrates reasonable control of the Usage domain.

#### **Mechanics: 2**

There are a number of spelling errors in this response ("alot"; "Jun"; "Grany"; "Reunuen"; "Bickes"; "thene"; "canous"; "whene"; "Thise"; "happyest") and a missing apostrophe. This response demonstrates inconsistent control of the Mechanics domain.

I have also of happy time But I would only like to share one. On DunlOth 2003 I went to the Buffalo Bluer four my Granys family Reunium. The first day we set up romp and had are sites. Then we set around the comp fire and went tobaid. The seround day we ate at my granys family Rewarm thene that after noon we took canous to Tyler Bend and Floated to followed. Whene we got Back we went to bead. The next day we packed up and went home! Thise will be the happyest time that I will aways Remember.



Arkansas Comprehensive Testing, Assessment, and Accountability Program

Developed for the Arkansas Department of Education, Little Rock, AR 72201

QAI 08524-AR1102-THB-GR5

