

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

RELEASED ITEM BOOKLET

GRADE 3

AUGMENTED BENCHMARK EXAMINATION

April 2012

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 Office of Student Assessment at the Arkansas Department of Education, 501-682-4558.

Arkansas Department of Education

Acknowledgments

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

Text

Pages 2–4: “Fox Makes Lunch” by Barbara Owen. Copyright © 2006 by Highlights for Children, Inc., Columbus, Ohio.

Pages 7–8: “Good Times” by Jean Patrick. From *Boy’s Quest Magazine*. Copyright © 1998 by Jean Patrick.

Table of Contents—2012 Augmented Benchmark Grade 3

	PAGE(S)
PART I	
Overview	1
PART II	
Released Test Items with Correct Responses and Rubrics	
Released Reading Items	2
Released Writing Prompt	13
Released Writing Items	15
Released Mathematics Items.....	16
PART III	
Item Correlation with Curriculum Framework	
The Arkansas English Language Arts Curriculum Framework—Reading Strand	33
Released Items for Reading	34
Non-Released Items for Reading.....	35
The Arkansas English Language Arts Curriculum Framework—Writing Strand	36
Released Items for Writing	37
Non-Released Items for Writing	38
The Arkansas Mathematics Curriculum Framework.....	39
Released Items for Mathematics.....	43
Non-Released Items for Mathematics.....	44

Part I Overview—2012 Augmented Benchmark Grade 3

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

As part of this program, all grade 3 students in Arkansas public schools participated in the *Grade 3 Augmented Benchmark Examination* in April 2012.

This Released Item Booklet for the *Grade 3 Augmented Benchmark Examination* contains test questions or items that were asked of students during the April 2012 operational administration. The test items included in Part II of this booklet are some of the items that contributed to the student performance results for that administration.

Students were given approximately two hours each day to complete assigned test sessions during the four days of testing in April 2012. Students were permitted to use a calculator for the mathematics items (both multiple-choice and open-response items), with the exception of mathematics questions 1–5 in this Released Item Booklet (items 1–10 in the test booklet). Students were also supplied with a reference sheet to be used during the mathematics sessions so that all students would have equal access to this information during testing. (See the reference sheet on page 32 of this booklet.) All of the reading, writing, and mathematics multiple-choice items within this booklet have the correct response marked with an asterisk (*). The open-response questions for reading, mathematics, and the essay prompt for writing are listed with scoring guides (rubrics) immediately following. These rubrics provide information on the scoring model used for each subject, with the scoring model for writing defining the overall curricular and instructional link for that subject with the *Arkansas English Language Arts Curriculum Framework*. The domain scoring model, implemented within Arkansas for a number of years, illustrates the appropriate instructional approaches for writing within the state.

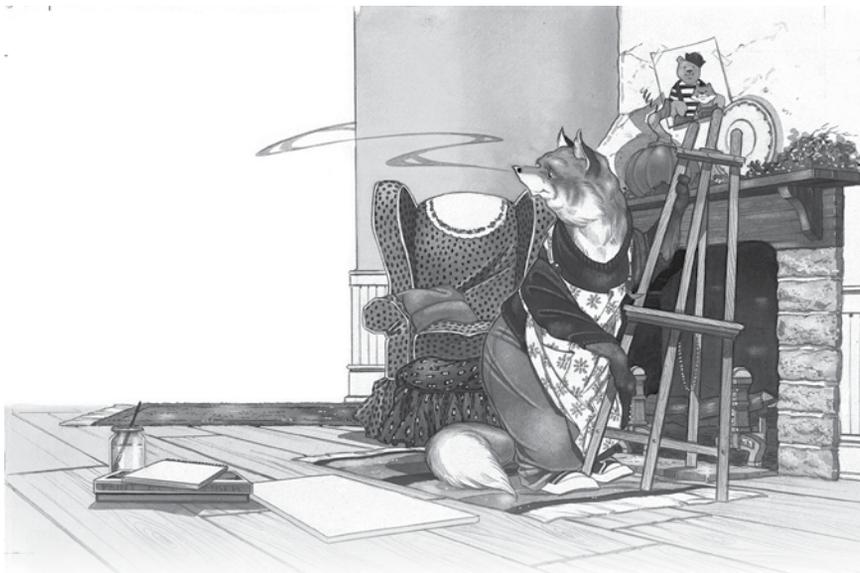
The development of the *Grade 3 Augmented Benchmark Examination* was based on the Arkansas Curriculum Frameworks. These frameworks have common distinct levels: Strands to be taught in concert, Content Standards within each Strand, and Student Learning Expectations within each Content Standard. Abridged versions of the *Arkansas English Language Arts Curriculum Framework—Reading Strand*, *Arkansas English Language Arts Curriculum Framework—Writing Strand*, and *Arkansas Mathematics Curriculum Framework* can be found in Part III of this booklet. It is important to note that these abridged versions list only the predominant Strand, Content Standard, and Student Learning Expectation associated with each item. However, since many key concepts within the Arkansas Curriculum Frameworks are interrelated, in many cases there are other item correlations or associations across Strands, Content Standards, and Student Learning Expectations.

Part III of the Released Item Booklet contains a tabular listing of the Strand, Content Standard, and Student Learning Expectation that each question was designed to assess. The multiple-choice and open-response items found on the *Grade 3 Augmented Benchmark Examination* were developed in close association with the Arkansas education community. Arkansas teachers participated as members of the Content Advisory Committee, for each subject area, providing routine feedback and recommendations for all items. The number of items associated with specific Strands, Content Standards, and Student Learning Expectations was based on approximate proportions suggested by the Content Advisory Committee, and their recommendations were accommodated to the greatest extent possible given the overall test design. Part III of the Released Item Booklet provides Arkansas educators with specific information on how the *Grade 3 Augmented Benchmark Examination* items align or correlate with the Arkansas Curriculum Frameworks to provide models for classroom instruction.

Read the passage. Then answer multiple-choice questions 1 through 8 and open-response question A.

Fox Makes Lunch

by Barbara Owen



Fox hummed as he poured lemonade into molds for ice pops. He had invited Bear for lunch.

“Bear will be surprised,” Fox said to himself. “He doesn’t know what a great cook I am.”

Fox looked at his cookbook. “This cookie recipe looks easy,” he thought. He read further. *You may double the recipe for more cookies.* “Yes!” said Fox. “We need lots of cookies.”

Fox got out one stick of butter, then one more. He measured one-half cup of sugar, then another half cup. He used two of everything the recipe called for.

Soon the batter was ready. Fox looked at the cookbook:

Oven temperature: 300 degrees Fahrenheit.

“I’ll double that to 600 degrees,” said Fox. But the dial on his oven only went to 500 degrees. That would have to do.

Baking time: 10 minutes.

“I’ll double that to 20 minutes,” said Fox. He put the cookies in the oven.

Next he put eggs in a pan of water on the stove. Egg-salad sandwiches were Bear’s favorite.

Fox got out the paint-by-number picture of a beehive he had started. It was going to be a present for Bear. But Fox would have to work fast to finish the painting before Bear arrived.

“Somebody’s burning something,” Fox thought as he set up his easel. “Yikes! My cookies!”

He ran to the stove. The cookies were hard black rocks. “There must be something wrong with that recipe,” thought Fox as he dumped the cookies into the garbage can.

14 The water with the eggs was bubbling. Fox went back to the painting. *Let one color dry before starting the next color*, said the directions. But Fox didn’t have time for that. He painted all the number-three spaces sunset orange. When he had finished the threes, he painted the fours midnight black.

Fox looked at the clock and painted faster. When he had finished the fives, he stood back and looked at his picture. Something was wrong. All the colors were running together and becoming mud brown!

Fox smelled something burning again. He ran to the kitchen. The egg pan was dry. The eggs were turning black. Then he noticed the ice pops on the counter. “Oh no!” he said. “I forgot to put them in the freezer.”

Ding! Fox ran to open the door.

“I’m here,” said Bear cheerfully.

“Oh, dear—I mean, hello!” said Fox. He was trying to stand in front of the painting.

“What are you hiding?” Bear asked.

“Well, uh, it’s a surprise.” Fox moved away.

“It’s a picture of me!” said Bear. “A big brown bear.”

Fox looked at his painting. The beehive did sort of look like a big brown bear now.

“What a surprise!” said Bear, hugging his friend.

“Yes, it is,” said Fox. “And we’re having lemonade and bread-and-mayonnaise sandwiches for our lunch.”

“Sounds interesting,” said Bear.

Fox grinned. “I knew you’d like my cooking,” he said.

- 1** Why does Fox decide to bake the cookies for 20 minutes?
- A** Fox does not know how to tell time.
 - * **B** Fox doubles everything about the recipe.
 - C** Fox reads the list of ingredients incorrectly.
 - D** Fox knows that his friend will arrive at about that time.

- 2** Fox wants to use the boiled eggs for
- A** cookies.
 - B** paintings.
 - C** lemonade.
 - * **D** sandwiches.

- 3** Which of the following things does Fox do last?
- A** He invites Bear over to lunch.
 - B** He puts eggs in a pan of water.
 - * **C** He paints a picture of a beehive.
 - D** He mixes batter to make cookies.

- 4** Why is the sentence below italicized?
- You may double the recipe for more cookies.*
- * **A** Fox was reading.
 - B** Fox was thinking.
 - C** Bear was speaking.
 - D** Bear was singing.

5 Which word means the **opposite** of finished as it is used in paragraph 14?

- A** dried
- B** ended
- * **C** started
- D** planned

6 Fox believes there is something wrong with the recipe because his cookies

- * **A** burned.
- B** bubbled.
- C** were frozen.
- D** ran together.

7 What is the mood at the end of this passage?

- A** angry
- * **B** happy
- C** scared
- D** serious

8 Why did the author **most likely** write this passage?

- * **A** to tell a funny story
- B** to teach how to cook
- C** to give directions for making egg salad
- D** to describe what burned cookies look like

Reading Item A—2012 Grade 3

- A** How does Fox feel about Bear coming for lunch? Give three examples from the passage to support your answer.

Reading Item A Scoring Rubric—2012 Grade 3

Score	Description
4	The response tells how Fox feels about Bear coming for lunch and includes at least three examples for support.
3	The response tells how Fox feels about Bear coming for lunch and includes two examples for support.
2	The response tells how Fox feels about Bear coming for lunch and includes one example for support.
1	The response tells how Fox feels about Bear coming for lunch but fails to provide an example for support. OR The response demonstrates minimal understanding of the question.
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)

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

Good Times

by Jean Patrick

Suppose you are at a football game. You're having a great time. What will you save?

- a) the football program
- b) the ticket stub
- c) the popcorn bag with the team's name

If you said "yes" to all three, you're a collector of ephemera.

Ephemera (E-FE-MEH-RAH) is a fancy name for paper items that are used only for a short time. There's no limit to what you can collect. If you take a trip, you can collect maps, postcards, brochures, campground passes, or even napkins from restaurants. If you go to a concert or a play, you can collect programs, tickets, and playbills.

Now What?

You've returned from your game, your trip, or wherever else you had a good time. You have a huge bag of ephemera that you've collected. How will you display your collection?

You'll need poster board, scissors, markers, and a glue stick (or glue). Next, dump all your ephemera on a table. Cut out pictures from brochures or programs. Cut out the names of museums or descriptions of exhibits. Clip sections from a road map.

Finally, glue everything on a poster board. If you have room, put a title on the top. You also can try these ideas:

- Outline your pictures, postcards, or ticket stubs with bright markers.
- Laminate your poster with plastic. (Most office stores can do this.)
- Glue small objects (rocks, shells, souvenir pencils) to your poster.
- When the glue is dry, attach a plastic hanger to the poster. Your collection can hang on the wall!

The Future

You can also save ephemera in a scrapbook. However, as time goes by, your paper pictures may fade or turn brown. The paper may also become brittle and turn to dust!

To prevent this, use “archival quality” (material that helps protect paper) scrapbook pages and supplies. (This is very important if you add photographs to your scrapbook.)

You can find scrapbook supplies at most craft stores. With proper care, you’ll have ephemera that lasts a long time!

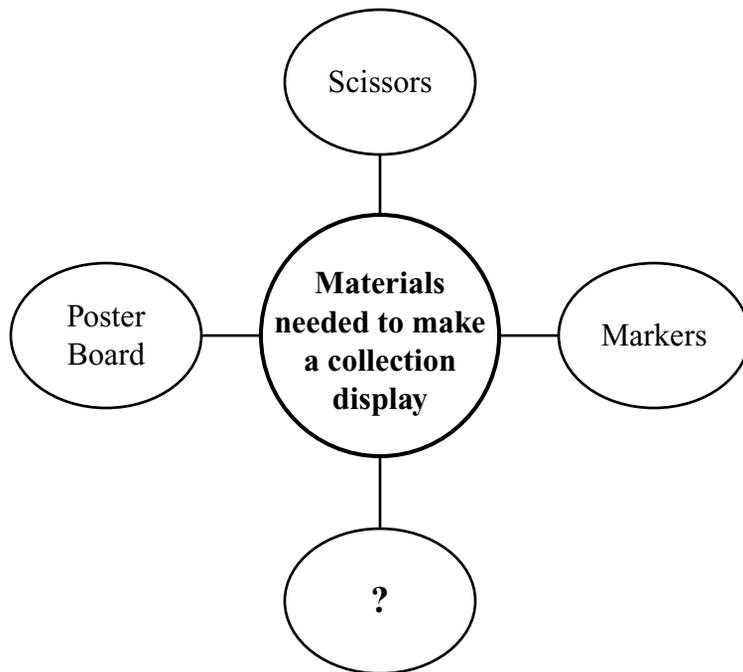


An ephemera collection is a memory collection. This ephemera collection is ready to hang on a wall. Shea Patrick holds his ephemera collection.

- 9** By looking at the photograph before reading the passage, it can be concluded that this passage will be about
- A** kids who like to draw pictures.
 - B** the students who collect postcards.
 - C** the history of the buffalo in South Dakota.
 - * **D** posters that show many things about one topic.
- 10** The author **most likely** included the photograph in the passage to show
- * **A** what an ephemera collection looks like.
 - B** what a third grader enjoys learning.
 - C** where to buy scrapbook materials.
 - D** where a boy went on vacation.

- 11** Based on the passage, if a student were to start an ephemera collection, what would be the first step?
- A** glue plastic objects onto a poster
 - B** make a poster to show the collection
 - * **C** collect paper objects from events for the poster
 - D** laminate the poster so it will stay protected

12 Read the web.



Which of these belongs in the blank circle of this web?

- A** Program
- B** Road map
- * **C** Glue stick
- D** Ticket stub

- 13** Students **probably** would want to read this passage if they are
- A** giving a report about a historic football game.
 - B** studying about office supply stores in school.
 - C** researching places to visit on their summer vacations.
 - * **D** learning what to do with things they have gathered on a trip.
- 14** What is the **best** conclusion that can be made about Shea Patrick from this passage?
- A** He enjoys different summer activities.
 - * **B** He went on a trip to South Dakota.
 - C** He likes to learn about animals.
 - D** He is from South Dakota.
- 15** Which of these items from a baseball game would be considered ephemera?
- A** a hat
 - B** a plastic cup
 - * **C** a team poster
 - D** an autographed glove
- 16** The **best** way readers could apply the main message of this passage to their own lives is by thinking about
- A** posters they have made for school.
 - B** a time they visited an office supply store.
 - * **C** things they have collected from special events.
 - D** a baseball game they want to attend this summer.

Reading Item B—2012 Grade 3

- B** Name two places described in the passage where a person can collect ephemera. Describe one thing that could be collected from each place.

Reading Item B Scoring Rubric—2012 Grade 3

Score	Description
4	The response describes two places in the passage where a person can collect ephemera and describes one thing that can be collected from each place.
3	The response describes two places in the passage where a person can collect ephemera and describes one thing that can be collected from one of those places.
2	The response describes one place in the passage where a person can collect ephemera and describes one thing that can be collected from that place. OR The response describes two places in the passage where a person can collect ephemera.
1	The response describes one place in the passage where a person can collect ephemera. OR The response demonstrates minimal understanding of the question.
0	The response is totally incorrect and shows no evidence that the student understands the task. The response may be off topic or completely irrelevant.
B	Blank—No response. A score of "B" will be reported as "NA." (No attempt to answer the item. Score of "0" is assigned for the item.)

WRITING PROMPT

Read this sentence and write a story about what happened next.

One day a kangaroo hopped into my yard!

Now write a story about what happened next. Give enough detail so that your teacher will understand what happened when the kangaroo hopped into your yard.

WRITER'S CHECKLIST

- | | |
|--|---|
| <p>1. Look at the ideas in your response.</p> <ul style="list-style-type: none"><input type="checkbox"/> Have you focused on one main idea?<input type="checkbox"/> Have you used enough detail to explain yourself?<input type="checkbox"/> Have you put your thoughts in order?<input type="checkbox"/> Can others understand what you are saying? <p>2. Think about what you want others to know and feel after reading your paper.</p> <ul style="list-style-type: none"><input type="checkbox"/> Will others understand how you think or feel about an idea?<input type="checkbox"/> 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.)<input type="checkbox"/> Do you have sentences of different lengths? (Hint: Be sure you have a variety of sentence lengths.) | <ul style="list-style-type: none"><input type="checkbox"/> Are your sentences alike? (Hint: Use different kinds of sentences.) <p>3. Look at the words you have used.</p> <ul style="list-style-type: none"><input type="checkbox"/> Have you described things, places and people the way they are? (Hint: Use enough detail.)<input type="checkbox"/> Are you the same person all the way through your paper? (Hint: Check your verbs and pronouns.)<input type="checkbox"/> Have you used the right words in the right places? <p>4. Look at your handwriting.</p> <ul style="list-style-type: none"><input type="checkbox"/> Can others read your handwriting with no trouble? |
|--|---|

Domain Scoring Rubric

Content (C)

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

- Central idea
- Elaboration
- Unity
- Organization

Style (S)

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

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

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

Scoring Scale

Each domain is scored independently using the following scale.

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

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

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

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

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

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

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."

1 Read the paragraph below.

My dog knows many tricks. He can chase a ball and bring it back. He barks twice when I hold a treat above his head. He knows how to sit and stay when I give him the command.

Which sentence fits **best** in the paragraph?

- A** My dog likes one kind of food.
- * **B** He will roll over when he is told.
- C** He wags his tail most of the time.
- D** My dog sleeps in a box near the door.

2 Which sentence uses commas correctly?

- A** The dog ran barked, and jumped when we arrived.
- * **B** I saw cows, horses, and pigs when I visited the farm.
- C** We had, pizza, salad, and cake at lunch on Friday.
- D** The pencils, pens paper and erasers, were placed neatly on the desk.

3 Which sentence tries to persuade the reader to exercise?

- * **A** If you exercise, you will build strong muscles and bones.
- B** Some people choose to exercise outdoors instead of in a gym.
- C** Walking, cleaning the home, and playing sports are just a few examples of exercise.
- D** Many people forget to exercise because they like to sit and rest when they are not busy at school or at home.

4 Sarah is writing the story of her life. Which chapter should come first?

- A** My First Bike
- B** Starting School
- C** My Favorite Pets
- * **D** When I Was Born

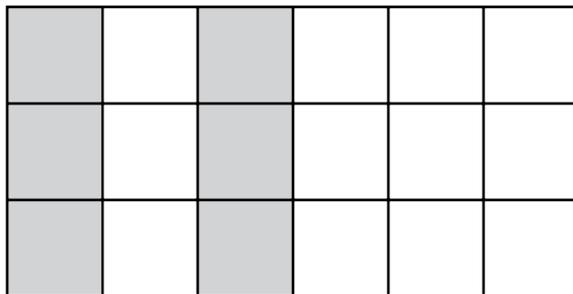
CALCULATOR NOT PERMITTED—ITEMS 1–5 

- 1 Ms. Garold drew the figure below on the board.



What did Ms. Garold draw?

- A** Ray
*** B** Line
C Line segment
D Parallel lines
-
- 2 Cameron has some flowers. The shaded figure below shows the fraction of her flowers that are roses.



What fraction of Cameron's flowers are roses?

- * A** $\frac{6}{18}$
B $\frac{2}{4}$
C $\frac{6}{12}$
D $\frac{2}{3}$

- 3** The table below shows how many windows can be washed by different numbers of people.

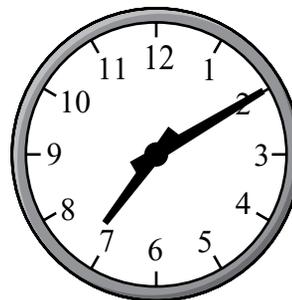
Window Washing

Number of People	Windows Washed
1	4
2	8
3	?
4	16

How many windows can 3 people wash?

- A** 9
- B** 10
- * **C** 12
- D** 15

- 4** Chris arrived at school at the time shown on the clock.

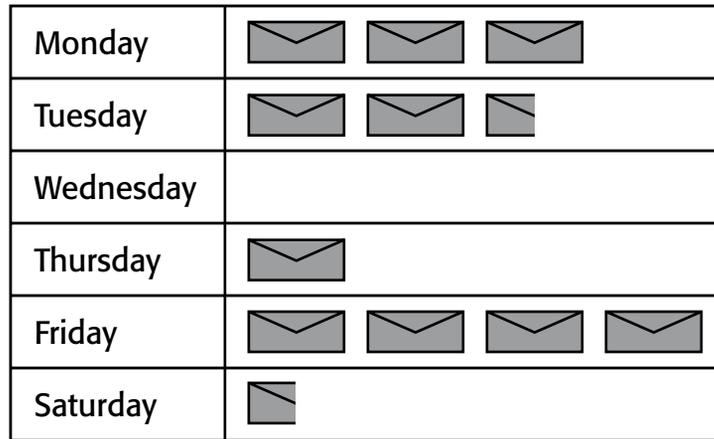


At what time did Chris arrive at school?

- * **A** 7:10
- B** 7:02
- C** 2:35
- D** 2:07

- 5 A family graphed the number of pieces of mail they received each day last week.

Mail



Each  represents 2 pieces of mail.

How many total pieces of mail did the family receive last week?

- A 11
- B 12
- * C 22
- D 24

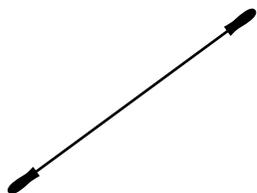
CALCULATOR PERMITTED—ITEMS 6–20 and A–C



- 6 Moniqua lays four jump ropes on the ground.



1



2



3



4

Which two jump ropes are parallel?

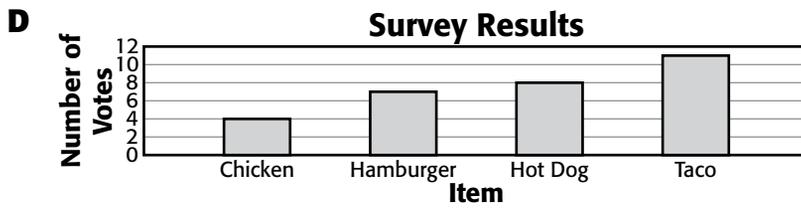
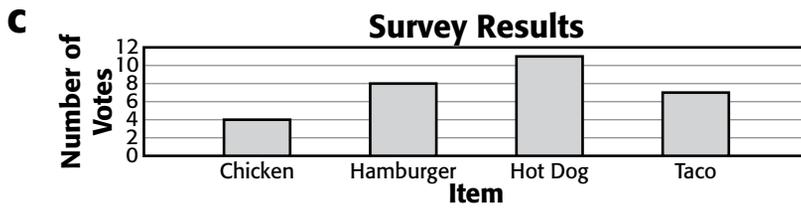
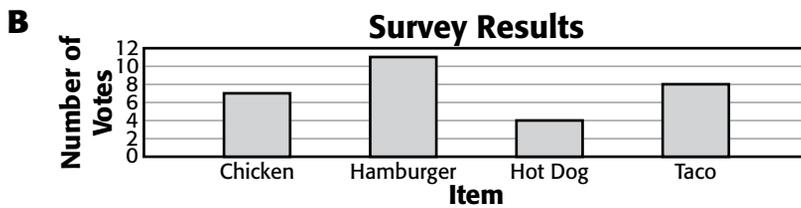
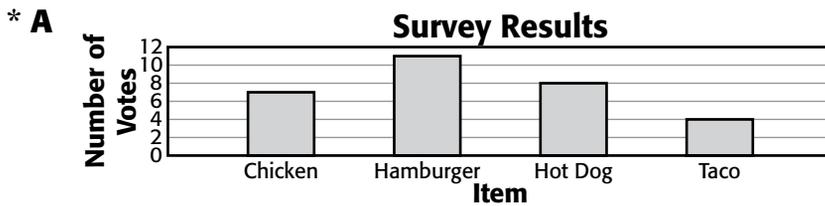
- * **A** 1 and 3
- B** 1 and 4
- C** 2 and 3
- D** 2 and 4

- 7 Rita asked 30 students to vote on which food is their favorite. She recorded the results in the tally chart below.

Survey Results

Item	Number of Votes
Chicken	///
Hamburger	/// ///
Hot Dog	///
Taco	

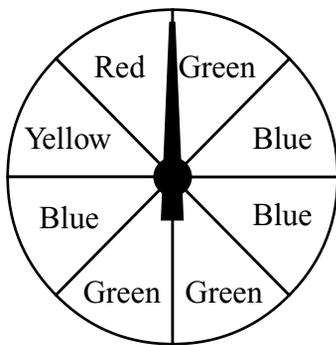
Which graph correctly displays the survey results?



8 Which of the following is true?

- * A $\$5.45 < \5.46
- B $\$5.45 > \5.46
- C $\$5.55 < \5.49
- D $\$5.65 > \5.66

9 Pat has a spinner with 8 sections the same size.



If Pat spins the spinner, what is the probability that it will stop on blue?

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

10 Latoya put her 24 rings into boxes. She put 6 rings in each box. Which number sentence shows how to find the number of boxes?

- A $24 \times 6 = \Delta$
- * B $24 \div 6 = \Delta$
- C $24 - 6 = \Delta$
- D $24 + 6 = \Delta$

11 Maria and Jen are going boating. The sign below shows the types of boat they can rent, and the amount of time they can rent them.

BOAT RENTALS

Types of Boat	
Canoe	Kayak
Rowboat	Pedal Boat

Amount of Time	
1 Hour • Half-day • Full-day	

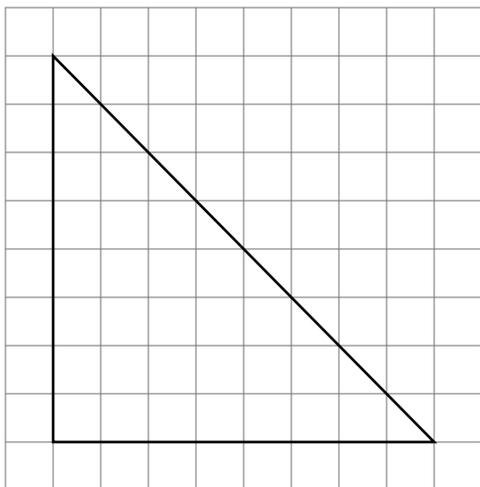
What is the total number of combinations of boat type and amount of time?

- A 7
- B 8
- C 9
- * D 12

- 12** Claudia is counting the number of boards in her fence. There are 6 boards in each section. She finds the number of boards by counting 6, 12, 18, 24, and so on. Which of the following is another way for her to count the number of boards in 12 sections?

A $6 + 12$
*** B** 6×12
C $6 + 24$
D 2×24

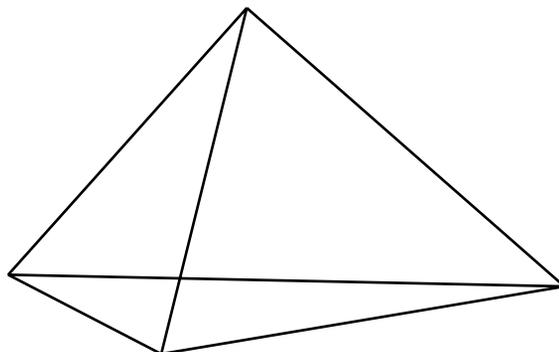
- 13** A drawing of Michelle's playroom is shown below.



What is the area of the playroom?

A 24 squares
*** B** 32 squares
C 36 squares
D 64 squares

- 14** Mr. Pittman showed his students the triangular pyramid shown below.



How many vertices does the triangular pyramid have?

A 8
B 6
*** C** 4
D 3

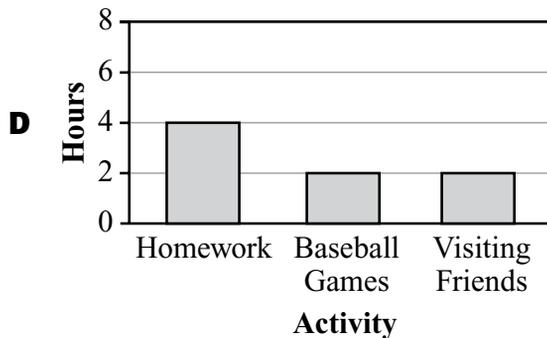
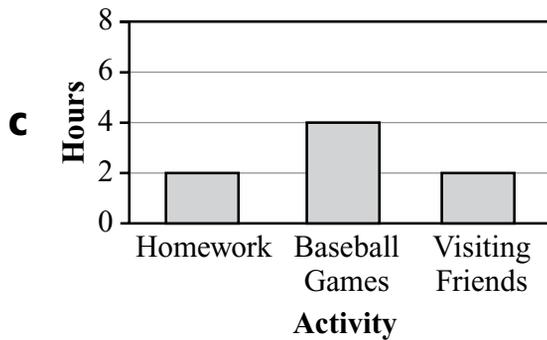
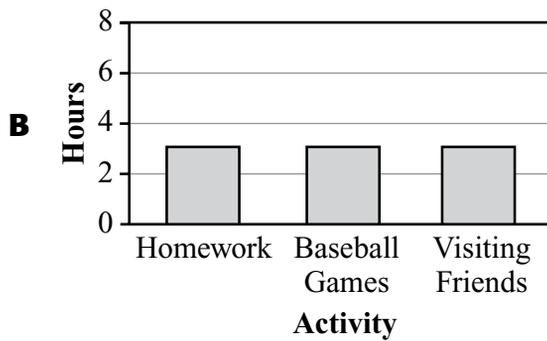
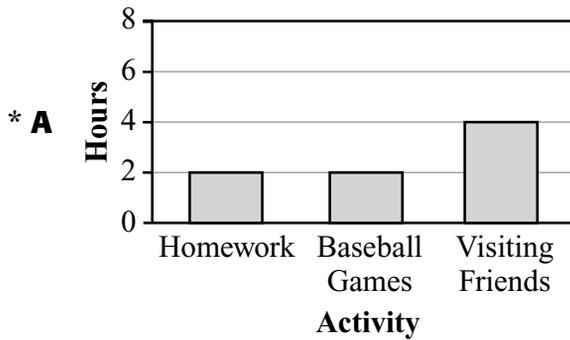
- 15** Brent went to the baseball game wearing a T-shirt and shorts. What was the **most** likely temperature?

A 32°F
B 45°F
C 52°F
*** D** 78°F

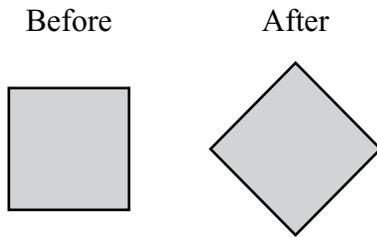
16 Last weekend Will spent the following amounts of his time on activities.

Activity	Time (hours)
Homework	2
Baseball Games	2
Visiting Friends	4

Which of the following bar graphs shows this data?

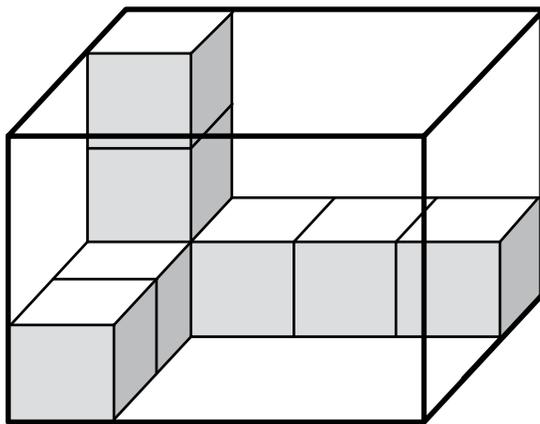


- 17** The picture below shows a shape before and after it was transformed.



Which transformation was used?

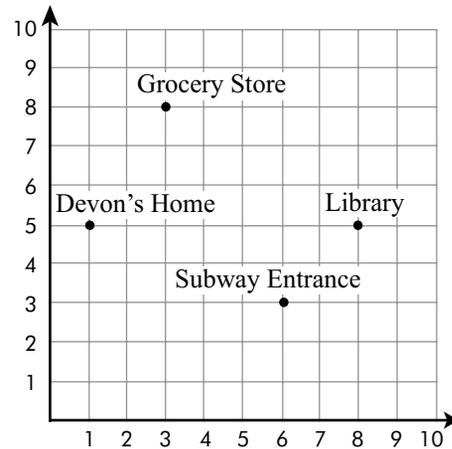
- A** Slide (translation)
 - * **B** Turn (rotation)
 - C** Flip (reflection)
 - D** Slide and flip (translation and reflection)
- 18** Doyle was filling a box with cubes as shown.



How many cubes in all would Doyle need to fill the box?

- A** 7 cubes
- B** 12 cubes
- C** 24 cubes
- * **D** 36 cubes

- 19** Devon made a map of his neighborhood.



Using the map above, which of these is a path from the grocery store to the subway entrance?

- * **A** Move 5 units down and 3 units to the right
 - B** Move 5 units up and 3 units to the left
 - C** Move 3 units down and 6 units to the left
 - D** Move 3 units up and 6 units to the right
- 20** What are the next 3 numbers in the sequence shown below?

297, 298, ____, ____, ____, ...

- A** 299, 301, 302
- B** 300, 301, 302
- * **C** 299, 300, 301
- D** 297, 296, 295

Mathematics Item A—2012 Grade 3
--

- A** Mary Ellen has 8 packs of beads. Four packs contain 100 beads each. Three packs contain 10 beads each. One pack has only 5 beads left in it.
1. How many beads does Mary Ellen have in all? Explain your answer using words and/or numbers.
 2. Mary Ellen’s aunt plans to give her 4 packs of beads for her birthday. Two packs contain 100 beads each, and 2 packs contain 10 beads each. After her aunt gives her the new beads, how many beads will Mary Ellen have in all? Explain your answer using words and/or numbers.

BE SURE TO LABEL YOUR RESPONSES 1 AND 2.

Mathematics Item A Scoring Rubric—2012 Grade 3

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” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>1 point: Correct answer: 435</p> <p>AND</p> <p>1 point: Correct and complete procedure shown and/or explained. <i>Work may contain a calculation or copy error.</i> Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • $100 + 100 + 100 + 100 + 10 + 10 + 10 + 5 = \#$ • $400 + 30 + 5 = 435$ • “I added 4 (100’s), 3 (10’s) and 5(1’s) to get my answer.”
2	<p>2 points possible:</p> <p>1 point: Correct answer: 655 <i>(or correct answer based on incorrect answer in Part 1)</i></p> <p>AND</p> <p>1 point: Correct and complete procedure shown and/or explained. <i>Work may contain a calculation or copy error.</i> Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • $435 + 100 + 100 + 10 + 10 = 655$ • $435 + 220 = \#$ • “She already had 435 beads. If she adds 220 more beads, she will have 655 beads.” • “I added my answer in Part 1 to 220 to get the # of beads she has now.”

Mathematics Item B—2012 Grade 3
--

- B** Jed is training for a race. He ran 3 miles a day for 11 days.
1. Write a number sentence to find the total number of miles Jed ran. Solve your number sentence.
 2. Jed’s friend, Pilar, is training for the same race. She ran 2 miles a day for 18 days. Write a number sentence to find the total number of miles Pilar ran.
 3. Write a number sentence using $<$, $>$, or $=$ to compare the number of miles Jed and Pilar ran.

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

Mathematics Item B Scoring Rubric—2012 Grade 3

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” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>1 point: Correct number sentence. Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • $3 \times 11 =$ • $11 + 11 + 11 =$ <p>AND</p> <p>1 point: Correct solution. Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • 33 (miles)
2	<p>1 point possible:</p> <p>1 point: Correct number sentence that correctly determines the total number of miles Pilar ran. Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • $2 \times 18 = 36$ • $18 + 18 = 36$
3	<p>1 point possible:</p> <p>1 point: Correct number sentence comparing the number of miles Jed and Pilar ran. <i>May be based on an incorrect Part 1, incorrect Part 2, or both.</i> Give credit for the following or equivalent:</p> <ul style="list-style-type: none"> • $33 < 36$ • $36 > 33$ • $2 \times 18 > 3 \times 11$ • Jed 33 < Pilar 36

Mathematics Item C—2012 Grade 3
--

- C** The clock below shows the time that Maya’s violin lesson began.



1. What time was it when Maya’s violin lesson began? Explain your answer using words, numbers, and/or pictures.
2. Maya’s violin lesson lasted for 30 minutes. What time was it when Maya’s lesson ended? Explain your answer using words, numbers, and/or pictures.
3. Maya told her dad to pick her up from her lesson at a quarter after the hour. Explain whether Maya told her dad the correct time. Explain your answer using words, numbers, and/or pictures.

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

Mathematics Item C Scoring Rubric—2012 Grade 3

Score	Description
4	The student earns 5 points. The response contains no incorrect work.
3	The student earns 3 - 4 points.
2	The student earns 1½ - 2½ points.
1	The student earns ½ - 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” is assigned for the item.)

Solution and Scoring

Part	Points
1	<p>2 points possible:</p> <p>1 point: Correct answer. Give credit to the following or equivalent:</p> <ul style="list-style-type: none">• 10:15 <p>AND</p> <p>1 point: Correct explanation. Give credit to the following or equivalent:</p> <ul style="list-style-type: none">• The short hand is at the hour hand...it represents the hour, which is pointing at the 10. The long hand is the minute hand...it represents the minutes...it is pointing at the 3 which represents 15 minutes. <p>OR</p> <p>1 point: Correct explanation with arithmetic or minor procedural error.</p>

Part	Points
2	<p>2 points possible:</p> <p>1 point: Correct answer. <i>Answer can be based on an incorrect Part 1</i> Give credit to the following or equivalent:</p> <ul style="list-style-type: none">• 10:45 <p>AND</p> <p>1 point: Correct explanation. (<i>can be based on incorrect Part 1</i>)</p> <ul style="list-style-type: none">• $10:15 + 30 = 10:45$ <p>OR</p> <p>1 point: Correct explanation with arithmetic or minor procedural error.</p>
3	<p>1 point possible:</p> <p>1 point: Correct explanation. Give credit to the following or equivalent:</p> <ul style="list-style-type: none">• Maya was not correct in her description. 10:45 is a quarter until 11:00 or 10:45. Her father will be there at 11:15...she will have to wait until 11:15, which is a half hour after she got out of the violin practice. <p>OR</p> <p>½ point: Evidence of a correct explanation based on an incorrect answer in Part 1.</p>

Copying this page is a breach of security.

Mathematics Reference Sheet Grade 3

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

1 foot = 12 inches

1 cup = 8 ounces (oz)

1 kilogram = 1000 grams

1 yard = 3 feet

1 pint = 2 cups

1 liter = 1000 milliliters

1 quart = 2 pints

1 gallon = 4 quarts

1 pound (lb) = 16 ounces (oz)

Unauthorized use, review, duplication, or
reproduction of this document is prohibited.
Arkansas Department of Education April 2011.



The Arkansas English Language Arts Curriculum Framework—Reading Strand*

Content Standards	Student Learning Expectations
<p>9. Comprehension: Students shall apply a variety of strategies to read and comprehend printed material.</p>	<ol style="list-style-type: none"> 1. Activate prior knowledge by previewing and using text structure. 3. Make connections from text to world during reading. 5. Generate questions and check the text for answers. 6. Question the author's purpose. 7. Ask questions and support answers by connecting prior knowledge with literal and inferential information found in the text. 8. Discuss why an author may have selected particular words or phrases. 9. Draw inferences, such as conclusions or generalizations, and support them with text evidence and/or personal experiences. 10. Organize information and events logically. 11. Determine the purpose for reading.
<p>10. Variety of Texts: Students shall read, examine, and respond to a wide range of texts for a variety of purposes.</p>	<ol style="list-style-type: none"> 6. Use graphic organizers including character webs and K-W-L charts to make meaning of the reading selection. 14. Identify language and <i>literary devices</i>, including mood.
<p>11. Vocabulary, Word Study, and Fluency: Students shall acquire and apply skills in vocabulary development and word analysis to be able to read fluently.</p>	<ol style="list-style-type: none"> 1. Use context clues to determine the precise meaning of new words. 2. Use knowledge of irregular plurals, verb tenses, <i>homonyms</i>, <i>homographs</i>, <i>homophones</i>, prefixes, and suffixes to read with meaning. 5. Recognize and use variations of print. 9. Categorize words as nouns, action verbs, synonyms, and antonyms during discussions about words.

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

Released Items for Reading*

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

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the English Language Arts items.

Non-Released Items for Reading*

Strand	Content Standard	Student Learning Expectation
R	11	1
R	9	5
R	10	14
R	9	7
R	9	7
R	11	2
R	9	8
R	9	11
R	9	9

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the English Language Arts items.

The Arkansas English Language Arts Curriculum Framework—Writing Strand*

Content Standards	Student Learning Expectations
4. Process: Students shall employ a wide range of strategies as they write, using the writing process appropriately.	11. Edit for spelling of appropriate words, <i>usage</i> , punctuation, capitalization, and sentence structure.
5. Purposes, Topics, Forms and Audiences: Students shall demonstrate competency in writing for a variety of purposes, topics and audiences employing a wide range of forms.	2. Write to persuade, inform, entertain, and describe.
6. Conventions: Students shall apply knowledge of Standard English conventions in written work.	16. Use commas in a series and greeting and closing of a letter.
7. Craftsmanship: Students shall develop personal style and voice as they approach the craftsmanship of writing.	1. Use <i>organizational structure</i> that is useful to the reader. 2. Include relevant information and elaboration on the topic.

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

Released Items for Writing*

Item	Strand	Content Standard	Student Learning Expectation
1	W	7	2
2	W	6	16
3	W	5	2
4	W	7	1

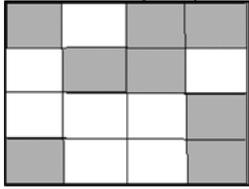
* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Writing items.

Non-Released Items for Writing*

Strand	Content Standard	Student Learning Expectation
W	4	11

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Writing items.

The Arkansas Mathematics Curriculum Framework*

Strands	Content Standards	Student Learning Expectations
<p>1—Number and Operations (NO)</p>	<p>1. Number Sense: Students shall understand numbers, ways of representing numbers, relationships among numbers and number systems.</p>	<p>2. Use the <i>place value</i> structure of the base ten number system and be able to represent and compare <i>whole numbers</i> including thousands (using models, illustrations, symbols, <i>expanded notation</i> and problem solving). Ex. 2,308 <u> </u> 2,038</p> <p>4. Represent fractions (halves, thirds, fourths, sixths and eighths) using words, numerals and physical models. Ex. <ul style="list-style-type: none"> • identify and illustrate parts of a whole and parts of sets of objects. • recognize that a fractional part of a rectangle does not have to be shaded with <i>contiguous</i> parts  </p> <p>6. Use the <i>place value</i> structure of the base ten number system and be able to represent and compare decimals to hundredths in money (using models, illustrations, symbols, <i>expanded notation</i> and problem solving). Ex. \$193.76 <u> </u> \$139.67</p>
	<p>2. Properties of Number Operations: Students shall understand meanings of operations and how they relate to one another.</p>	<p>4. Model, represent and explain division as measurement and partitive division including equal groups, related rates, price, <i>rectangular arrays</i> (area model), combinations and multiplicative comparison. Ex. <ul style="list-style-type: none"> • translate contextual situations involving division into conventional mathematical symbols • explain how a remainder may impact an answer in a real world situation </p>
	<p>3. Numerical Operations and Estimation: Students shall compute fluently and make reasonable estimates.</p>	<p>1. Develop, with and without appropriate <i>technology</i>, <i>computational fluency</i>, in multi-<i>digit</i> addition and subtraction through 999 using contextual problems <ul style="list-style-type: none"> • <i>strategies</i> for adding and subtracting numbers • <i>estimation</i> of sums and <i>differences</i> in appropriate situations • relationships between operations <p>2. Develop, with and without appropriate <i>technology</i>, fluency with basic number combinations for multiplication and division facts (10 x 10)</p> <p>3. Develop, with and without appropriate <i>technology</i>, <i>computational fluency</i> in multiplication and division up to two-<i>digit</i> by one-<i>digit</i> numbers using two-<i>digit</i> by one-<i>digit</i> number <i>contextual problems</i> using <ul style="list-style-type: none"> • <i>strategies</i> for multiplying and dividing numbers, • performance of <i>operations</i> in more than one way, • <i>estimation</i> of <i>products</i> and <i>quotients</i> in appropriate situations, and • relationships between operations <p>4. Solve simple problems using one operation involving addition and subtraction using a variety of methods and tools (e.g., objects, mental computation, paper and pencil and with and without appropriate <i>technology</i>)</p> </p></p>

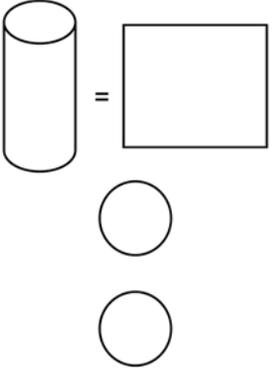
* The Content Standards and Student Learning Expectations listed are those that specifically relate to the released and non-released test items in this booklet

The Arkansas Mathematics Curriculum Framework* (continued)

Strands	Content Standards	Student Learning Expectations												
2—Algebra (A)	4. Patterns, Relations, and Functions: Students shall recognize, describe, and develop patterns, relations, and functions.	1. Count forward and backward when given a number less than or equal to 1000 _____, 399, _____ 2. Relate <i>skip-counting patterns</i> to multiplication. 3. Identify a number that is more or less than any <i>whole number</i> up to 1000 using <i>multiples</i> of ten and/or 100. Ex. 100 less than 587 is 487 10 more than 196 is 206 4. Use repeating and growing numeric or geometric <i>patterns</i> to solve problems.												
	5. Algebraic Representations: Students shall represent and analyze mathematical situations and structures using algebraic symbols.	1. Select and/or write number sentences (<i>equations</i>) to find the unknown in problem-solving contexts involving <i>two-digit times one-digit</i> multiplication using appropriate labels. 2. Express mathematical relationships using <i>equalities</i> and <i>inequalities</i> ($>$, $<$, $=$, \neq). Ex. 4×9 _____ $36 - 3$ 3. Use a symbol to represent an unknown quantity in a number sentence involving <i>contextual situations</i> and find the value. Ex. Mary buys <i>two</i> bags of candy with the same number of pieces in each bag. If she has sixteen pieces in all, how many pieces of candy are in each bag? $2 \times _ = 16$												
	6. Algebraic Models: Students shall develop and apply mathematical models to represent and understand quantitative relationships.	1. Complete a chart or table to organize given information and to understand relationships and explain the results. Ex. The library has 5 workstations. Four students can sit at each station. How many students can sit at all the stations? <table style="margin-left: 40px;"> <thead> <tr> <th style="text-align: left;">stations</th> <th style="text-align: left;">students</th> </tr> </thead> <tbody> <tr><td>1</td><td>4</td></tr> <tr><td>2</td><td>?</td></tr> <tr><td>3</td><td>?</td></tr> <tr><td>4</td><td>?</td></tr> <tr><td>5</td><td>?</td></tr> </tbody> </table>	stations	students	1	4	2	?	3	?	4	?	5	?
	stations	students												
1	4													
2	?													
3	?													
4	?													
5	?													
7. Analysis of Change: Students shall analyze change in various contexts.	1. Identify the change over time. Ex. We have recorded the morning and afternoon temperatures all week. Which day had the greatest change in temperature?													

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

The Arkansas Mathematics Curriculum Framework* (continued)

Strands	Content Standards	Student Learning Expectations
3—Geometry (G)	8. Geometric Properties: Students shall analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships.	<ol style="list-style-type: none"> 1. Compare, contrast and build <i>three-dimensional</i> solids by investigating the number of <i>faces</i>, <i>edges</i>, and <i>vertices</i> on models. 2. Identify regular <i>polygons</i> with at least 4 sides (square, pentagon, hexagon and octagon). 3. Identify and draw <i>line</i>, <i>line segment</i> and <i>ray</i> using appropriate labels. 4. Identify and draw <i>intersecting</i> and <i>parallel lines</i>.
	9. Transformation of Shapes: Students shall apply transformations and the use of symmetry to analyze mathematical situations.	<ol style="list-style-type: none"> 1. Draw one or more <i>lines of symmetry</i> in a <i>polygon</i>. 2. Describe the motion (<i>transformation</i>) of a <i>two-dimensional</i> figure as a <i>flip (reflection)</i>, <i>slide (translation)</i> or <i>turn (rotation)</i>.
	10. Coordinate Geometry: Students shall specify locations and describe spatial relationships using coordinate geometry and other representational systems.	<ol style="list-style-type: none"> 1. Locate and identify points on a <i>coordinate grid</i> and name the <i>ordered pair (quadrant one only)</i> using common language and geometric vocabulary (horizontal and vertical).
	11. Visualization and Geometric Models: Students shall use visualization, spatial reasoning, and geometric modeling.	<ol style="list-style-type: none"> 2. Determine which new figure will be formed by combining and subdividing models of existing figures. Ex. 

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

The Arkansas Mathematics Curriculum Framework* (continued)

Strands	Content Standards	Student Learning Expectations
4—Measurement (M)	12. Physical Attributes: Students shall use attributes of measurement to describe and compare mathematical and real-world objects.	3. Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer. Ex. If I need to wear mittens and a scarf, what temperature would it be? 35° F or 70° F? 4. Demonstrate the relationship among different <i>standard units</i> . <u>Length:</u> 12 in = 1 ft, 3 ft = 1 yd, 36 in = 1 yd <u>Capacity:</u> 2 cups = 1 pint, 2 pints = 1 quart 4 quarts = 1gallon <u>Weight:</u> 16 ounces = 1 lb
	13. Systems of Measurement: Students shall identify and use units, systems, and processes of measurement.	2. Tell time to the nearest one-minute intervals. 3. Express time to the half hour and quarter hour using the terms half-past, quarter after, quarter-until. 4. Determine <i>elapsed time</i> in <i>contextual situations</i> to five-minute intervals. <u>End time unknown</u> Ex. Lunch began at 10:45 and lasted 25 minutes. When was lunch over? <u>Elapsed hours unknown</u> Ex. John went to Tim’s house at 3:15. He left at 4:20. How long did he stay? 9. <i>Estimate</i> and measure length, <i>capacity/volume</i> and <i>mass</i> using appropriate customary units <u>Length:</u> 1 inch <u>Perimeter:</u> inches, feet, etc <u>Area:</u> square inches (use models) <u>Weight:</u> pounds/ounces <u>Capacity:</u> cups, pints, quarts, gallons 11. Find the <i>area</i> of any region counting squares and half-squares. 12. Develop <i>strategies</i> for finding the <i>volume</i> (cubic units) of <i>rectangular prisms</i> and <i>cubes</i> using models.
5—Data Analysis and Probability (DAP)	14. Data Representation: Students shall formulate questions that can be addressed with data and collect, organize and display relevant data to answer them.	1. Design a survey question after being given a topic and collect, organize, display and describe simple data using <i>frequency tables</i> or <i>line plots</i> , <i>pictographs</i> , and <i>bar graphs</i> .
	15. Data Analysis: Students shall select and use appropriate statistical methods to analyze data.	1. Read and interpret <i>pictographs</i> and <i>bar graphs</i> in which symbols or intervals are greater than one. 2. Match a set of data with a graphical representation of the data.
	16. Inferences and Predictions: Students shall develop and evaluate inferences and predictions that are based on data.	1. Make predictions for a given set of data.
	17. Probability: Students shall understand and apply basic concepts of probability.	1. Use fractions to predict <i>probability</i> of an event. Ex. If there were 5 blue tiles, 3 red tiles, and 2 green tiles in a bag, what is the <i>probability</i> you would pull out a green tile? 2. Conduct simple <i>probability</i> experiments, record the data and draw conclusions about the likelihood of possible <i>outcomes</i> (roll number <i>cubes</i> , pull tiles from a bag, spin a spinner, or determine the fairness of games). 3. Use physical models, pictures, and organized lists to find combinations of two sets of objects. Ex. Sarah has a red shirt, white shirt, and blue shirt. She also has a pair of khaki pants and blue pants. How many different combinations of shirts and pants can she wear?

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

Released Items for Mathematics*

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

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Mathematics items.

Non-Released Items for Mathematics*

Strand	Content Standard	Student Learning Expectation
G	11	2
A	4	3
G	8	2
G	11	2
D	17	3
D	17	2
M	12	4
G	9	1
A	5	1
A	5	2
A	7	1
N	3	4
A	4	4
D	16	1
M	13	4
M	13	9
N	1	2
N	1	4
N	2	4
N	3	1
N	3	2
N	3	3

* Only the predominant Strand, Content Standard, and Student Learning Expectation are listed for the Mathematics items.

ACTAAP

Arkansas Comprehensive Testing, Assessment, and Accountability Program

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

AR1202



QA110491