

GRADE  
• 4 •

LEAP

August 2012

# Assessment Guide

- **ENGLISH LANGUAGE ARTS**
- **MATHEMATICS**
- **SCIENCE**
- **SOCIAL STUDIES**

**LDOE** | Louisiana Department of  
**EDUCATION**  
*Louisiana Believes.*

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This *Assessment Guide* may be distributed in its entirety to all teachers. However, schools may choose to provide the specific content chapters to teachers who are responsible for each content area.

**All teachers should be provided with the following sections of the *Assessment Guide*:**

- Preface
- Appendices A, B, C, and D, which include a glossary, frequently asked questions, information about testing special populations, a Writer's Checklist, and a Mathematics Reference Sheet.

## Preface

*Louisiana Believes* embraces the principle that all children can achieve at high levels, as evidenced in Louisiana's recent adoption of the Common Core State Standards (CCSS). *Louisiana Believes* also promotes the idea that Louisiana's educators should be empowered to make decisions to support the success of their students. In keeping with these values, the Department has created transitional assessment guides to help prepare teachers and students as they transition to the new CCSS over the next two years. These guides reflect the State's commitment to consistent and rigorous assessments and provide educators and families with clear information about expectations for student performance.

### What is the purpose of the *Assessment Guide*?

The *LEAP Assessment Guide* provides an overview of Louisiana assessments administered through the Louisiana Educational Assessment Program (LEAP). In addition to providing teachers with a description of the overall design of the LEAP tests, this guide presents sample test items and suggested informational resources.

Teachers should use this guide to:

- become familiar with the LEAP test format,
- include similar item formats in classroom instruction and assessments,
- align instruction and assessment with the Louisiana Comprehensive Curriculum and Grade-Level Expectations (GLEs), and
- provide appropriate test accommodations.

Questions regarding this *Assessment Guide* should be addressed to the Division of Assessments and Accountability, Louisiana Department of Education (LDOE), at 225-342-3393 or toll free at 1-877-453-2721.

### Why has the *Assessment Guide* been revised?

In 2010, the Board of Elementary and Secondary Education (BESE) approved the Common Core State Standards (CCSS) ([http://www.doe.state.la.us/topics/common\\_core.html](http://www.doe.state.la.us/topics/common_core.html)), which will eventually replace Louisiana's English language arts (ELA) and mathematics standards and GLEs. After adopting the CCSS, Louisiana became a governing member of a 24-state

consortium—the Partnership for Assessment of Readiness for College and Careers (PARCC)—working to develop next-generation assessments that measure the full range of the CCSS. In preparation for the PARCC assessments, which are to be administered starting in the 2014–2015 school year, the Department has created transitional assessments in ELA and mathematics. This revised guide provides information about the changes to LEAP during the transition to the CCSS.

**It is important to note that the LEAP Science and Social Studies tests have not changed. The content standards and benchmarks that form the basis for these tests have not changed. Rather, the format and the organization of the guides have been revised to reflect the ELA and mathematics transition to the CCSS, and the text has been edited for conciseness.**

### How will students and teachers transition to the CCSS and PARCC?

The state has developed an implementation plan to ease the transition to the more rigorous new standards and assessments. This plan, outlined below, includes two years of implementation of transitional curriculum and assessments. Full implementation of the CCSS and PARCC assessments will occur in the 2014–2015 school year. Table 1 provides an overview of the assessment plan for grades 3–8.

**Table 1: Assessment Implementation Plan**

2012–2013	2013–2014	2014–2015
Transitional	Transitional	PARCC

**2012–2013 and 2013–2014: Transition Years** – The transitional LEAP assessments will be administered during the spring of 2013 and the spring of 2014. These assessments are not designed to be more difficult than the current LEAP assessments, but teachers will need to shift their instruction for their students to be fully prepared.

The LEAP tests administered through the 2011–2012 school year measured the knowledge and skills contained in the state’s content standards and benchmarks that are clustered by grades K–4 in the grade 4 LEAP assessments and grades 5–8 in the grade 8 LEAP assessments. The LEAP ELA tests will continue to measure the skills presented in these clusters, but the writing prompts on the transitional assessments will be a new type of prompt that focuses on a key instructional shift—writing grounded in textual evidence. Instead of responding to a “stand alone” writing prompt, students will read one or two passages and use the information from the text(s) to support the response. The Reading and Responding, Using Information Resources, and Proofreading components will continue to be assessed in the same way.

The grade 4 LEAP mathematics transitional assessments will change to only include items that measure content common to the grade 4 GLEs and the CCSS (<http://www.louisianaschools.net/topics/gle.html>).



**2014–2015: Full Implementation** – The new PARCC assessments for the LEAP grades will be administered starting in the spring of 2015. The CCSS will replace the GLEs in ELA and mathematics.

## **What is the purpose of the LEAP?**

Through the LEAP, students are able to demonstrate what they know about a content area, as well as their mastery of the standards, benchmarks, and GLEs, to help educators determine how students are progressing in relation to the content standards from year to year. The LEAP tests remain high stakes for students in grades 4 and 8 because they are tied to promotional policy. The high-stakes testing policy can be accessed at <http://www.doe.state.la.us/testing/>.

The LEAP assessments are part of the testing program that complies with the requirements of the No Child Left Behind Act (NCLB), the federal act that requires states to administer tests in reading and mathematics: yearly in grades 3 through 8 and once in grades 10 through 12, as well as in science: once in grades 3 through 5, once in grades 6 through 9, and once in grades 10 through 12. Some of the NCLB requirements are met through Louisiana’s *i*LEAP tests in ELA, mathematics, and science at grades 3, 5, 6, and 7 and by End-of-Course (EOC) high school assessments.

NCLB requires that state assessments be aligned to state content standards. In addition, NCLB requires that states express student results in terms of the state’s performance standards—Louisiana’s achievement levels. The LEAP assessments, which are given at grades 4 and 8, have been developed to align to the Louisiana content standards, benchmarks, and GLEs.

## **What Does the *Assessment Guide* Include?**

The *Assessment Guide* provides information for teachers regarding the purpose and structure of the LEAP. Separate guides are available for both of the LEAP grade levels: 4 and 8. The guides include information about:

- test design (format and blueprints),
- test content,
- sample test items, and
- scoring.

## **General LEAP Test Design**

The LEAP includes multiple-choice and constructed-response items. Table 2 presents the overall design (test components) of the LEAP for each of the content areas assessed. It presents the approximate number of items for each test and the item types, indicated by multiple-choice (MC) and constructed-response (CR).

**Table 2: Overall Design of the LEAP**

CONTENT AREA	TEST SESSIONS
<p><b>English Language Arts (Grades 4 and 8)</b></p>	<ul style="list-style-type: none"> <li>• Writing (in response to a text-based prompt)</li> <li>• Reading and Responding               <ul style="list-style-type: none"> <li>○ 4 reading passages: 2 short/2 long</li> <li>○ 4 to 6 MC items (1 point each) per passage</li> <li>○ 2 CR (short-answer) items (2 points each) per passage</li> <li>○ Grade 8 only: one extended CR item (4 points)</li> </ul> </li> <li>• Using Information Resources               <ul style="list-style-type: none"> <li>○ One resource packet with 4 to 6 sources</li> <li>○ 5 MC items and 2 CR (short-answer) items</li> </ul> </li> <li>• Proofreading               <ul style="list-style-type: none"> <li>○ One short passage</li> <li>○ 8 MC items</li> </ul> </li> </ul>
<p><b>Mathematics (Grades 4 and 8)</b></p>	<ul style="list-style-type: none"> <li>• 60 MC items               <ul style="list-style-type: none"> <li>Grade 4:                   <ul style="list-style-type: none"> <li>○ 36 noncalculator</li> <li>○ 24 calculator</li> <li>○ Problem-solving context</li> </ul> </li> <li>Grade 8:                   <ul style="list-style-type: none"> <li>○ 30 noncalculator</li> <li>○ 30 calculator</li> <li>○ Problem-solving context</li> </ul> </li> </ul> </li> <li>• Extended CR items (4 points)               <ul style="list-style-type: none"> <li>○ Grade 4: 3 items</li> <li>○ Grades 8: 4 items</li> </ul> </li> </ul>
<p><b>Science (Grades 4 and 8)</b></p>	<ul style="list-style-type: none"> <li>• 40 MC items (across 5 strands)               <ul style="list-style-type: none"> <li>○ Science as Inquiry</li> <li>○ Physical Science</li> <li>○ Life Science</li> <li>○ Earth and Space Science</li> <li>○ Science and the Environment</li> </ul> </li> <li>• 4 CR (short-answer) items (2 points)               <ul style="list-style-type: none"> <li>○ 1 per <i>content</i> strand</li> </ul> </li> <li>• Comprehensive Science Task               <ul style="list-style-type: none"> <li>○ 3 CR (short-answer) items (inquiry strand)</li> <li>○ 1 extended CR item (4 points) related to <i>content</i> strand</li> </ul> </li> </ul>
<p><b>Social Studies (Grades 4 and 8)</b></p>	<ul style="list-style-type: none"> <li>• MC Items (across 4 strands)               <ul style="list-style-type: none"> <li>○ Geography</li> <li>○ Civics</li> <li>○ Economics</li> <li>○ History</li> </ul> </li> <li>Grade 4               <ul style="list-style-type: none"> <li>○ 50 MC</li> </ul> </li> <li>Grade 8               <ul style="list-style-type: none"> <li>○ 60 MC</li> </ul> </li> <li>• Extended CR item (4 points)               <ul style="list-style-type: none"> <li>○ 4 items (1 per strand)</li> </ul> </li> </ul>

## Characteristics of Items

**Multiple-choice items** assess knowledge, conceptual understanding, and application of skills in each of the four content areas. The multiple-choice items consist of an interrogatory stem followed by four response options (A, B, C, D) and are scored correct or incorrect.

**Constructed-response items** occur in each of the four content areas. These items require students to compose an answer, and generally require higher-order thinking.

On the grade 4 ELA test, there are eleven constructed-response items. One requires a student to read one or two passages and then write a composition in response to a prompt that includes information from the text in the response. The composition is scored on a 12-point model based on Louisiana’s new writing rubric for the dimensions of Content, Style, Sentence Formation, Usage, Mechanics, and Spelling (dimensions 1–6). The other ten constructed-response items require short answers, scored 0–2 points.

On the Mathematics test, the constructed-response items may require students to demonstrate their grasp of a concept, their analysis of information, their evaluation of a principle, or their application of a skill. Students may also be asked to construct or interpret a chart or graph, map, timeline, or other graphic. The mathematics items are scored on a 0–4 point scale.

On the Science and Social Studies tests, the constructed-response items include those requiring short answers, scored 0–2 points, and extended constructed-response items requiring more in-depth answers, scored 0–4 points. The content-area sections of the guide present detailed information about the characteristics of the items.

## Administration Schedule

The LEAP tests are administered in March (Phase 1) and April (Phase 2). Tables showing the number of sessions and number of questions for each session are provided in the content-area sections of this guide.

The Phase 1 English Language Arts and Mathematics tests are administered in one day. The Phase 2 English Language Arts, Mathematics, Science, and Social Studies tests each are administered in one day. An overview of the content areas and testing times for LEAP are shown in the following tables. The suggested times are provided to assist in planning.

**Table 3: Phase 1 Components of the LEAP**

Tests	Testing Time
ELA: Writing	75 minutes (grade 4) 90 minutes (grade 8)
Mathematics: Constructed Response	60 minutes (grades 4 and 8)

**Table 4: Phase 2 Components of the LEAP**

<b>Tests</b>	<b>Suggested Testing Time</b>
ELA: Reading and Responding	60 minutes (grade 4) 90 minutes (grade 8)
ELA: Using Information Resources	40 minutes (grades 4 and 8)
ELA: Proofreading	20 minutes (grades 4 and 8)
Mathematics: Multiple Choice—No Calculator	80 minutes (grade 4) 75 minutes (grade 8)
Mathematics: Multiple Choice—Calculator	50 minutes (grade 4) 75 minutes (grade 8)
Science: Multiple Choice	60 minutes (grades 4 and 8)
Science: Short Answer Questions	30 minutes (grades 4 and 8)
Science: Task	60 minutes (grades 4 and 8)
Social Studies: Multiple Choice, Session 1	40 minutes (grade 4) 45 minutes (grade 8)
Social Studies: Multiple Choice, Session 2	40 minutes (grade 4) 45 minutes (grade 8)
Social Studies: Constructed Response	60 minutes (grade 4 and 8)

### **Achievement Levels**

Student performance on LEAP is reported in terms of achievement level: *Advanced*, *Mastery*, *Basic*, *Approaching Basic*, or *Unsatisfactory*.

Louisiana’s general policy definitions for the five achievement levels are provided below.

**Advanced:** *A student at this level has demonstrated superior performance beyond the level of mastery.*

**Mastery:** *A student at this level has demonstrated competency over challenging subject matter and is well prepared for the next level of schooling.*

**Basic:** *A student at this level has demonstrated only the fundamental knowledge and skills needed for the next level of schooling.*

**Approaching Basic:** *A student at this level has only partially demonstrated the fundamental knowledge and skills needed for the next level of schooling.*

**Unsatisfactory:** *A student at this level has not demonstrated the fundamental knowledge and skills needed for the next level of schooling.*

## Test Accommodations

Accommodations are available to qualifying students who are classified as IDEA Special Education, Section 504, and Limited English Proficient (LEP). Test accommodations should not be different from or in addition to the accommodations provided in the classroom during instruction and as indicated on the student's Individualized Education Program (IEP), Section 504 Individual Accommodation Plan (IAP), or LEP accommodation plan. Testing and instructional accommodations must be based on each student's needs as documented in the student's IEP, IAP, or LEP accommodation plan.

For students with disabilities, test accommodations are provided to minimize the effects of a disability to ensure that a student can demonstrate the degree of achievement he or she actually possesses. An *accommodation* is a change in the setting of the test administration, the timing, scheduling, presentation format, and/or method of response to the assessment. Not all students with disabilities will need test accommodations, but many will need them to provide a valid and accurate measure of their abilities. The goal in using accommodations is to give students with disabilities an equal opportunity in assessment, not to give students with disabilities an unfair advantage over other students or to subvert or invalidate the purpose of the tests. The accommodation should allow the test score to reflect a student's proficiency in the area tested, without the interference of his or her disability.

Students classified as Limited English Proficient (LEP) may receive LEP accommodations if they are used regularly in the student's classroom instruction and assessment. LEP accommodations are provided for these students to aid them in accessing the content without subverting or invalidating the purpose of the tests.

Since accommodations used during state assessments must be an ongoing part of classroom instruction and assessment, it is crucial that general educators be knowledgeable about accommodations, use them routinely in the classroom, and be prepared to implement the use of approved accommodations during state assessments. For a list of approved test accommodations that may be used for students with disabilities or LEP students and suggestions for implementing accommodations during assessment, see Appendix C.

## What additional LEAP resources are available?

The Louisiana Department of Education has developed several resources to assist educators as they prepare students for LEAP. The following materials are available on the LDOE website, [www.louisianaschools.net](http://www.louisianaschools.net):

- Content Standards  
([http://www.doe.state.la.us/curriculum/content\\_standards.html](http://www.doe.state.la.us/curriculum/content_standards.html))
- Grade-Level Expectations (GLEs)  
(<http://www.doe.state.la.us/topics/gle.html>)
- Transitional Comprehensive Curriculum  
([http://www.doe.state.la.us/topics/comprehensive\\_curriculum.html](http://www.doe.state.la.us/topics/comprehensive_curriculum.html))
- Transitional Practice Tests for grades 3–8  
([http://www.doe.state.la.us/topics/trans\\_assessments.html](http://www.doe.state.la.us/topics/trans_assessments.html))
- Enhanced Assessment of the Grade-Level Expectations (EAGLE)  
(<https://www.louisianaeagle.org/pma/orca2/eagle.htm>)
- Released Writing Prompts for grades 4 and 8  
([http://www.doe.state.la.us/topics/trans\\_assessments.html](http://www.doe.state.la.us/topics/trans_assessments.html))
- Released Item Documents for grades 4, 8, 10, and 11  
([http://www.louisianaschools.net/topics/released\\_test\\_items.html](http://www.louisianaschools.net/topics/released_test_items.html))  
([http://www.louisianaschools.net/topics/released\\_test\\_items\\_10\\_11.html](http://www.louisianaschools.net/topics/released_test_items_10_11.html))
- Practice Assessment/Strengthen Skills (PASS)  
(<http://www.louisianapass.org/>)

## Chapter 1: LEAP English Language Arts, Grade 4

This section describes the overall design of the LEAP English Language Arts (ELA) test to be administered to students in grade 4. Test specifications, scoring rubrics, and sample test questions are provided to explain how the standards and benchmarks for English language arts are assessed.

### Test Structure and Item Types

The ELA test consists of four sessions, which are administered in two phases, each phase in a single day:

Phase 1:

- Writing

Phase 2:

- Reading and Responding
- Using Information Resources
- Proofreading

Students are allowed as much time as they need to complete each session, but suggested times are provided in the *Test Administration Manual*, which explains the procedures for allowing students additional time to complete a session of the test.

### Writing

To better prepare our students for the Common Core State Standards, the writing prompts on the transitional assessments will focus on a key instructional shift—writing grounded in textual evidence. Instead of responding to a "stand alone" writing prompt, students will be expected to read one or two passages and then write a composition that includes evidence from the text(s) in the response. This session of the test measures the content of Standards 2 and 3.

The Writing test is **untimed**, but students should be given a minimum of 75 minutes to read the passage(s), plan and write their composition, and check their work. Students are given a Writer's Checklist and are provided with dictionaries and thesauruses. A copy of the Writer's Checklist is located in Appendix D.

### Reading and Responding

This session consists of four reading passages (including at least one fiction, one nonfiction, and one poem). It includes a variety of multiple-choice and short-answer questions that measure the content of standards 1, 6, and 7. All reading passages are complete and authentic, either previously published work, fully developed excerpts from longer published works, or well-developed text written for the test. Excerpts from longer works may be used if they are self-contained.

**Fiction passages** (approximately 450–1,000 words) may include short stories, folktales, legends, or myths. In grade 4, passages may include illustrations.

**Nonfiction passages** (approximately 450–850 words) may include newspaper and magazine articles, autobiographies, biographies, editorials, encyclopedia articles, letters to the editor, and speeches. If appropriate, the nonfiction passage may include a visual (for example, pictures, graphs, tables, flow charts).

The lengths of two passages (one fiction and one nonfiction) fall within the respective ranges noted above. The poem and the fourth passage may be shorter than 450 words.

The reading level of each piece is grade-appropriate. Long passages are measured with 6 multiple-choice and 2 short-answer questions; short passages are measured with 4 multiple-choice and 2 short-answer questions.

The Reading and Responding session consists of 20 multiple-choice and 8 short-answer questions that are distributed across Standards 1, 6, and 7.

### **Using Information Resources**

This session assesses Standard 5. Students are provided four to six reference sources to use to answer 5 multiple-choice and 2 short-answer questions. These reference sources may include sources such as:

- articles (from encyclopedias, magazines, newspapers, textbooks)
- parts of books (tables of contents, indexes, glossaries)
- visual aids (maps, graphs, tables, charts, illustrations, schedules, diagrams)
- computer information (such as a picture of a page from a Web site)

All of the information resources are realistic, grade-appropriate materials that a fourth grader might find in a library and use in preparing a project or report. All materials are related to a specific topic. With the reference materials, students receive a written description of a task, such as gathering information and planning to write a report. Students are directed to skim through the resources to locate and select information.

### **Proofreading**

This session assesses standard 3. Students read a text of about 100–150 words that includes mistakes in sentence formation, usage, mechanics, and spelling. The text may be a letter, a narrative, an editorial, or an expository piece. It will include eight numbered, underlined parts. Students answer multiple-choice questions that require choosing the best way to write each underlined part (either by correcting the mistake or by indicating that the underlined part is written correctly as is).

Proofreading consists of 8 multiple-choice questions.



**Table 1.1: English Language Arts Test Specifications, Grade 4**

Content Standard	Points	<i>Subtest</i>			
		Writing	Using Information Resources	Reading and Responding	Proofreading
1. Read, comprehend, and respond	10	—	—	10	—
2. Write competently	8	8	—	—	—
3. Use conventions of language	12	4	—	—	8
4. Apply speaking/listening skills	N/A	—	—	—	—
5. Locate, select, and synthesize information	9	—	9	—	—
6. Read, analyze, and respond to literature	8	—	—	8	—
7. Apply reasoning and problem-solving skills	18	—	—	18	—
<b>Total</b>	<b>65</b>	<b>12</b>	<b>9</b>	<b>36</b>	<b>8</b>
<b>No. of items</b>	<b>44</b>	<b>1</b>	<b>7</b>	<b>28</b>	<b>8</b>

The ELA test design remains constant from year to year.

## Scoring the English Language Arts Sessions

### Multiple-Choice Items

Each multiple-choice question has four response options (A, B, C, and D) and is worth one point each. Correct answers receive a score of 1; incorrect answers receive a score of 0.

### Written Composition

In the Writing section of the assessment, there is a writing prompt that requires a student to read one or two passages and then write a composition that includes evidence from the text in the response. Student compositions are scored using two rubrics: one for Content and one for Style. There are two Content rubrics; one is used to score student compositions that respond to prompts with one passage; the other is for prompts with two passages. The Content and Style Rubrics can be found on pages 5 through 7.

The Content Rubric considers how well students present their central idea; the development of that idea, including the appropriate and accurate use of evidence from the passage(s); and the organization of their ideas. The Style Rubric considers word choice; sentence fluency, which includes sentence structure and sentence variety; and voice, the individual personality of the writing.

The written response to the writing prompt is also scored for the conventions of writing (Sentence Formation, Usage, Mechanics, and Spelling). All other written responses (short-answer items) for the ELA, Mathematics, Science, and Social Studies assessments are scored for content only.

A 12-point rubric is used to score writing. The dimensions and point values of the writing rubric are:

Content	4 points (on a 1-to-4-point scale)
Style	4 points (on a 1-to-4-point scale)
Sentence Formation	1 point (on a 0-to-1-point scale)
Usage	1 point (on a 0-to-1-point scale)
Mechanics	1 point (on a 0-to-1-point scale)
Spelling	1 point (on a 0-to-1-point scale)

Legibility contributes to the scorers' ease of understanding what the student has written. Any legible composition will be scored, regardless of penmanship. Students may write in print or cursive. Compositions will be considered **on topic** if the scorer can determine that the student attempted to respond to the prompt.

## CONTENT (One Passage): Central Idea, Development, and Organization

**Key Questions:** Does the writer stay focused and respond to all parts of the task? Does the writer’s use of the text show an understanding of the passage and the writing task? Does the organizational structure strengthen the writer’s ideas and make the composition easier to understand?

Score Point	4 Consistent, though not necessarily perfect, control; many strengths present	3 Reasonable control; some strengths and some weaknesses	2 Inconsistent control; the weaknesses outweigh the strengths	1 Little or no control; minimal attempt
CENTRAL IDEA	<ul style="list-style-type: none"> <li>sharply focused central idea</li> <li>shows a complete understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>clear central idea</li> <li>shows a general understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>vague central idea</li> <li>shows a partial understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>unclear or absent central idea</li> <li>shows a lack of understanding of the task</li> </ul>
USE OF THE PASSAGE AND DEVELOPMENT	<b>A composition without evidence from the passage cannot receive a score higher than a 2 in Content.</b>			
	<ul style="list-style-type: none"> <li>includes ample, well-chosen evidence from the passage to support central idea</li> <li>Evidence and ideas are developed thoroughly.</li> <li>Details are specific, relevant, and accurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes sufficient and appropriate evidence from the passage to support central idea</li> <li>Evidence and ideas are developed adequately (may be uneven).</li> <li>Details are, for the most part, relevant and accurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes insufficient or no evidence from the passage, <b>OR</b> only summarizes or paraphrases passage information</li> <li>Evidence and ideas are not developed adequately (list-like).</li> <li>Some information may be irrelevant or inaccurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes minimal or no evidence from the passage and/or the evidence shows a misunderstanding of the passage</li> <li>minimal/no development</li> <li>Information is irrelevant, inaccurate, minimal, confusing.</li> </ul>
ORGANIZATION	<ul style="list-style-type: none"> <li>Evidence of planning and logical order allows reader to easily move through the composition.</li> <li>Clear beginning, middle, and ending contribute sense of wholeness.</li> <li>effective transitions</li> </ul>	<ul style="list-style-type: none"> <li>Logical order allows reader to move through the composition.</li> <li>has a beginning and an ending</li> <li>transitions</li> </ul>	<ul style="list-style-type: none"> <li>attempt at organization</li> <li>digressions, repetition</li> <li>weak beginning and ending</li> <li>may lack transitions</li> </ul>	<ul style="list-style-type: none"> <li>random order</li> <li>no beginning or ending</li> <li>difficult for the reader to move through the response</li> </ul>

## CONTENT (Two Passages): Central Idea, Development, and Organization

*Key Questions: Does the writer stay focused and respond to all parts of the task? Does the writer’s use of the text show an understanding of the passages and the writing task? Does the organizational structure strengthen the writer’s ideas and make the composition easier to understand?*

Score Point	4 Consistent, though not necessarily perfect, control; many strengths present	3 Reasonable control; some strengths and some weaknesses	2 Inconsistent control; the weaknesses outweigh the strengths	1 Little or no control; minimal attempt
CENTRAL IDEA	<ul style="list-style-type: none"> <li>sharply focused central idea</li> <li>shows a complete understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>clear central idea</li> <li>shows a general understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>vague central idea</li> <li>shows a partial understanding of the task</li> </ul>	<ul style="list-style-type: none"> <li>unclear or absent central idea</li> <li>shows a lack of understanding of the task</li> </ul>
USE OF THE PASSAGE(S) AND DEVELOPMENT	<b>A composition that addresses only one of the two passages cannot receive a score higher than a 3 in Content. A score of 4 cannot be assigned unless both passages have been addressed.</b>			
	<ul style="list-style-type: none"> <li>includes ample, well-chosen evidence from the passages to support central idea</li> <li>Evidence and ideas are developed thoroughly.</li> <li>Details are specific, relevant, and accurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes sufficient and appropriate evidence from at least one of the passages to support central idea</li> <li>Evidence and ideas are developed adequately (may be uneven).</li> <li>Details are, for the most part, relevant and accurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes insufficient or no evidence from the passage(s), <b>OR</b> only summarizes or paraphrases passage information</li> <li>Evidence and ideas are not developed adequately (list-like).</li> <li>Some information may be irrelevant or inaccurate.</li> </ul>	<ul style="list-style-type: none"> <li>includes minimal or no evidence from the passage(s) and/or the evidence shows a misunderstanding of the passage</li> <li>minimal/no development</li> <li>Information is irrelevant, inaccurate, minimal, confusing.</li> </ul>
ORGANIZATION	<ul style="list-style-type: none"> <li>Evidence of planning and logical order allows reader to easily move through the composition.</li> <li>Clear beginning, middle, and ending contribute sense of wholeness.</li> <li>effective transitions</li> </ul>	<ul style="list-style-type: none"> <li>Logical order allows reader to move through the composition.</li> <li>has a beginning and an ending</li> <li>transitions</li> </ul>	<ul style="list-style-type: none"> <li>attempt at organization</li> <li>digressions, repetition</li> <li>weak beginning and ending</li> <li>may lack transitions</li> </ul>	<ul style="list-style-type: none"> <li>random order</li> <li>no beginning or ending</li> <li>difficult for the reader to move through the response</li> </ul>

## STYLE: Word Choice, Sentence Fluency, and Voice

*Key Questions: Would you keep reading this composition if it were longer? Do the words, phrases, and sentences strengthen the content and allow the reader to move through the writing with ease?*

Score Point	4 Consistent, though not necessarily perfect, control; many strengths present	3 Reasonable control; some strengths and some weaknesses	2 Inconsistent control; the weaknesses outweigh the strengths	1 Little or no control; minimal attempt
<b>WORD CHOICE</b>	<ul style="list-style-type: none"> <li>precise</li> <li>effective</li> <li>vivid words and phrases appropriate to the task</li> </ul>	<ul style="list-style-type: none"> <li>clear but less specific</li> <li>includes some interesting words and phrases appropriate to the task</li> </ul>	<ul style="list-style-type: none"> <li>generic</li> <li>limited</li> <li>repetitive</li> <li>overused</li> </ul>	<ul style="list-style-type: none"> <li>functional</li> <li>simple (below grade level)</li> <li>may be inappropriate to the task</li> </ul>
<b>SENTENCE FLUENCY</b>	<ul style="list-style-type: none"> <li>fluid, very easy to follow, because of variety in length, structure, and beginnings</li> </ul>	<ul style="list-style-type: none"> <li>generally varied in length and structure</li> <li>Most sentences have varied beginnings.</li> </ul>	<ul style="list-style-type: none"> <li>little or no variety in length and structure</li> <li>Awkward sentences may affect the fluidity of the reading.</li> <li>same beginnings</li> </ul>	<ul style="list-style-type: none"> <li>simple sentences</li> <li>no variety</li> <li>Construction makes the response difficult to read.</li> </ul>
<b>VOICE (individual personality of the writing)</b>	<ul style="list-style-type: none"> <li>compelling and engaging</li> </ul>	<ul style="list-style-type: none"> <li>clear, but may not be particularly compelling</li> </ul>	<ul style="list-style-type: none"> <li>weak and/or inconsistent voice</li> </ul>	<ul style="list-style-type: none"> <li>no voice</li> <li>Response is too brief to provide an adequate example of style; minimal attempt.</li> </ul>

The dimensions of Sentence Formation, Usage, Mechanics, and Spelling are scored with either a + (acceptable), which receives 1 point, or – (unacceptable), which receives 0 points.

**Sentence Formation:** Desirable features are completeness and construction of a variety of patterns.

+	The response exhibits <b>acceptable</b> control of sentence formation. Most sentences are correct; there are few, if any, run-on sentences or fragments. Additionally, there is a variety of sentence patterns, indicating that the writer can construct more than one type of sentence competently.
–	The response exhibits <b>unacceptable</b> control of sentence formation. There are run-on sentences, fragments, and/or poorly constructed sentences that indicate that the writer does not have adequate skill in sentence formation. There may be evidence of control of only one type of sentence pattern (usually simple).

**Usage:** Features are agreement, standard inflections, and word meaning.

+	The response exhibits <b>acceptable</b> control of usage. Subject-verb agreement, verb tenses, forms of adjectives and adverbs, and word meaning are generally correct. If errors are present, they do not appear to be part of a pattern of usage errors.
–	The response exhibits <b>unacceptable</b> control of usage. There are errors in subject-verb agreement, verb tenses, forms of adjectives and adverbs, and/or word meaning. The pattern of errors is evidence of a lack of control of the features of usage.

**Mechanics:** Features are punctuation and capitalization.

+	The response exhibits <b>acceptable</b> control of mechanics. Punctuation and capitalization are generally correct. If errors are present, they do not appear to be part of a pattern of mechanics errors.
–	The response exhibits <b>unacceptable</b> control of mechanics. There are errors in punctuation and capitalization. The pattern of errors is evidence of a lack of control of the features of mechanics.

**Spelling:**

+	The response exhibits <b>acceptable</b> control of spelling. The majority of grade-appropriate words are spelled correctly. There is no pattern of spelling errors.
–	The response exhibits <b>unacceptable</b> control of spelling. There are errors in spelling grade-appropriate words. There is a pattern of spelling errors.

In some cases, a composition may not be scorable. For example, if it is illegible or if it includes only copied text from the given passage(s), it will not be scored in any dimension and will receive a score of zero. A paper may be off-topic and cannot be scored for Content or Style, but it may be scored for Sentence Formation, Usage, Mechanics, and Spelling. Such a paper could receive a maximum of 4 of 12 points.

## Additional Scoring Criteria for Writing

To avoid double jeopardy during scoring, **one word** will constitute **only one error**. In situations in which it is difficult to determine to which dimension the error should be assigned, the scorer will take into account priority, context clues, and error patterns that are evident in the paper.

- Priority is given to the more serious grammatical errors.
- Context clues may indicate the writer's intention.
- Error patterns already evident in the paper indicate a skill weakness in that dimension.

### Sentence Formation:

- If a sentence with omissions, extra words, or wrong words can be corrected by changing **one word**, the error should count as a **usage** error.

*Example:* When it's no school, I play all day.

- If a sentence requires the rearrangement, omission, or addition of **more than one word**, the error should count as a **sentence formation** error.

*Example:* I saw those boys fighting while driving my car.

- Nonparallel structure, often in a series, is a **sentence formation** error.

*Example:* We will live better lives, coping with our sorrows, and how to be joyful of our happiness.

- In grades that are not responsible for mastery of colons, a sentence that contains a series that should have been preceded by a colon would count as a **sentence formation** error. The alternate correct construction would be another sentence.

*Example:* Janet is a good librarian because of all three of these reasons she is helpful, she is smart and she is courteous.

- If a sentence fragment is deliberately presented for effect, the error is **not counted** as an error.

*Example:* What a break!

- A **pattern of awkward syntax** (word order) should be considered a **sentence formation** error.

### Quotations:

- All **spelling** and **grammar** errors that appear in a direct quotation are assumed to be the errors of the speaker, not the writer. They are **not counted in any dimension**. Errors in **mechanics** that appear in a direct quotation **do count**.

*Example:* “You ain't got no reason ta be here Manny!” shouted the foreman.

- Direct quotations **should not** be preceded by **that**. Indirect quotations **should** be preceded by **that**. These count as errors in **mechanics**.

*Example:* Then Mom said that, “We cannot go along.” After we returned, she said we are in trouble.

### Mechanics, Usage, and Spelling:

Usage and mechanics errors count *each time* they occur in a composition. However, spelling errors count only **once**, even if a word is misspelled in more than one way.

- If a sentence begins with a capital letter but is **not** preceded by a period, the error counts as a **mechanics** error.  
*Example:* Martha went to the well and looked inside Far below, something was sparkling in the water.
- If a sentence begins with a lowercase letter but is preceded by a period, the error counts as a **mechanics** error.  
*Example:* Teddy is the youngest in the family. he is my only nephew.
- Use of double comparatives or double negatives is a common **usage** error.  
*Example:* I'm even more better at soccer than at football. None of them are not my friend.
- Use of the wrong preposition is a common **usage** error.  
*Example:* He went for the house.
- In addition to *TV*, both *T.V.* and *tv* are **acceptable** and **not mechanics** errors. Interchanging *will* with *would* and *can* with *could* is **acceptable** and **not a usage** error. Use of *so they* instead of *so that they* is **acceptable** and **not a usage** error.
- Agreement errors of compound pronouns or collective nouns with possessives are **usage** errors.  
*Examples: Correct:* people's lives, everyone's hope, everybody's house, their lives
- Agreement errors with collectives, phrases, and conjunctions are **usage** errors.  
*Example: Incorrect:* None of the teachers are good role models or a hero.
- A word may be both a **usage** and a **spelling** error; it may not be possible from **context clues** to determine whether the error is in spelling or in usage. In such instances, the error should be counted in **usage only**.  
*Example:* She allway comes to work on time.
- If a misused word in a sentence is a real word, it is a **usage** error. If it is not a real word, it is a **spelling** error.  
*Example:* We all went to the skating ring. (**usage**) We joined my parnets and were reddy to leave. (**spelling**)
- An error in which a **homonym** takes the place of the correct word is counted as a **spelling** error.  
*Example:* Martin gave him a peace of his chocolate bar.
- Some words, although they are not real homonyms, are so phonetically similar that they are frequently misspelled. Context clues should indicate whether the skill weakness is **spelling** or **usage** (wrong word).  
*Example:* I would rather have a vacation then a raise! (**spelling**) She was late for her piano listens. (**usage**)
- A word may be either a **spelling** or a **mechanics** error. Use either **context clues** or **error patterns** to determine which dimension would be most appropriate.  
*Example:* All the hero's aren't in the movies. (**spelling**)
- A word may be either a **usage** or a **mechanics** error. Use either **context clues** or **error patterns** to determine which dimension would be most appropriate.



*Example:* Were going to Disneyland on our vacation. (**mechanics**)

- In a series, a comma before *and* is optional; both ways are considered **correct**.  
*Example:* The birds, cats and dogs . . . The birds, cats, and dogs . . .
- In some series, the placement of the comma **is not optional because it affects the sense** of the sentence.  
*Example:* The pet shop was filled with birds, cats and dogs (kenneled), and fish of every color, shape and size.
- A word at the end of a line that is not broken at the end of a syllable or is broken and has only one syllable is a **mechanics** error.  
*Example:* I worked at the National Foundation for the Blind.

**Other Issues:**

- **Jargon** that is in common use in contemporary speech is permitted in on-demand compositions.  
*Example:* After he cut the lights, we locked the door and left the house.
- **Dialect** is counted as a usage error unless it is in a direct quotation.  
*Example:* I'm very happy y'all are reading my test and I hope y'all pass me.

Students must produce a **composition** that addresses the writing prompt to fulfill the requirements of the writing session. Plays, poems, lyrics, and drawings are **not** acceptable.

Because the purpose of writing assessments is to determine how well students can demonstrate and maintain writing skills in an original on-demand composition, the rules of **standard written English** apply and override foreign language, regional, ethnic, and colloquial speech patterns.

For each administration of LEAP, a student's writing response is scored by at least two readers, whose scores are averaged for each dimension.

**Table 1.2: Example of Scores for the Written Composition**

Dimension	Reader 1	Reader 2	Average
Content	3	4	3.5
Style	2	2	2.0
<i>Subtotal</i>			5.5
Sentence Formation	1	0	0.5
Usage	1	1	1.0
Mechanics	0	1	0.5
Spelling	1	1	1.0
<i>Subtotal</i>			3.0
<b>Total score</b>			<b>8.5 (of 12)</b>

## Short-Answer Items

The short-answer questions in the grade 4 ELA test are scored on a 0- to 2-point scale. The following is a general scoring rubric for 2-point questions. All responses to short-answer items are hand scored with item-specific scoring rubrics, which are included with the sample items in this guide.

**Table 1.3: General Scoring Guide (Rubric)—Short-Answer Items**

<b>Score Level</b>	<b>Description of Score Level</b>
<b>2</b>	<ul style="list-style-type: none"><li>• The student’s response provides a complete and correct answer.</li></ul>
<b>1</b>	<ul style="list-style-type: none"><li>• The student’s response is partially correct.</li><li>• The student’s response demonstrates limited awareness or contains errors.</li></ul>
<b>0</b>	<ul style="list-style-type: none"><li>• The student’s response is totally incorrect, irrelevant, too minimal to evaluate, or blank.</li></ul>

## STANDARDS AND BENCHMARKS ASSESSED

This section explains which benchmarks are assessed and how they will be assessed. The information is organized by test sessions and, when appropriate, includes the following for each session: standards assessed; benchmarks assessed, or the text of all benchmarks eligible for LEAP; and any assessment limits, which include benchmarks that are excluded from LEAP and any special restrictions on test content.

### Explanation of Codes

Standards 1, 6, and 7 relate to reading comprehension skills.

Standards 2 and 3 relate to writing processes and conventions of language.

Standard 4 relates to speaking and listening skills, which are **not** assessed on LEAP.

Standard 5 relates to research skills.

English language arts codes are arranged by content area, standard number, grade cluster (E, M, H), and benchmark number. The first part of the code is always English language arts. The second part indicates the standard number. The third part indicates the grade cluster and benchmark number.

**Table 1.4: Examples of English Language Arts Codes**

<b>Code</b>	<b>Translation</b>
ELA-1-E4	English Language Arts, standard 1, elementary, benchmark 4
ELA-4-M1	English Language Arts, standard 4, middle school, benchmark 1
ELA-3-H3	English Language Arts, standard 3, high school, benchmark 3

## Writing

The Writing session measures standards 2 and 3.

<b>Standard 2:</b> <i>Students write competently for a variety of purposes and audiences.</i>
<b>Benchmarks Assessed</b>
ELA-2-E1 drawing, dictating, and writing compositions that clearly state or imply a central idea with supporting details in a logical, sequential order (beginning, middle, end)
ELA-2-E2 focusing on language (vocabulary), concepts, and ideas that show an awareness of the intended audience and/or purpose (for example, classroom, real-life, workplace) in developing compositions
ELA-2-E3 creating written texts using the writing process
ELA-2-E4 using narration, description, exposition, and persuasion to develop compositions (for example, stories, letters, poems, logs)
ELA-2-E6 writing as a response to texts and life experiences (for example, journals, letters, lists)

For the Writing session, students compose a response to a writing topic, referred to as a writing prompt. ELA-2-E1, ELA-2-E2, ELA-2-E3, ELA-2-E4, and ELA-2-E6 are assessed through the written composition.

<b>Standard 3:</b> <i>Students communicate using standard English grammar, usage, sentence structure, punctuation, capitalization, spelling, and handwriting.</i>
<b>Benchmarks Assessed</b>
ELA-3-E2 demonstrating use of punctuation (for example, comma, apostrophe, period, question mark, exclamation mark), capitalization, and abbreviations in final drafts of writing assignments
ELA-3-E3 demonstrating standard English structure and usage by writing clear, coherent sentences
ELA-3-E4 using knowledge of the parts of speech to make choices for writing
ELA-3-E5 spelling accurately using strategies (for example, letter-sound correspondence, hearing and recording sounds in sequence, spelling patterns, pronunciation) and resources (for example, glossary, dictionary) when necessary

Compositions are scored for the conventions of standard English. The content parameters for conventions grade 4 students are expected to know are specified on the following page.

## **Content Parameters**

### *Punctuation*

- use of end punctuation (with sentences and with abbreviated titles, such as *Mr.*)
- use of commas in a series of terms, in dates, between city and state, after the salutation, and after the closing of a friendly letter
- use of apostrophes with contractions and possessives

### *Capitalization*

- capitalization of the first word of a sentence, the pronoun *I*, days, months, and holidays, names of people, titles of respect, and titles of books, movies, songs, etc.

### *Sentence Structure*

- use of complete sentences (avoiding fragments and run-on sentences)

### *Usage*

- subject-verb agreement
- use of verb tenses
- comparative and superlative adjectives and adverbs
- use of pronoun case
- usage of nouns, verbs, pronouns, adjectives, and adverbs

### *Spelling*

- grade-appropriate words
- high-frequency words
- color words
- days of the week
- common abbreviations
- grade-appropriate spelling patterns

## Reading and Responding

The Reading and Responding session assesses reading comprehension skills specified in standards 1, 6, and 7 with four reading passages.

**Standard 1:** *Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.*

### Benchmarks Assessed

ELA-1-E1 gaining meaning from print and building vocabulary using a full range of strategies (for example, self-monitoring and correcting, searching, cross-checking), evidenced by reading behaviors using phonemic awareness, phonics, sentence structure, and meaning

ELA-1-E4 recognizing story elements (for example, setting, plot, character, theme) and literary devices (for example, dialogue, simile, personification) within a selection

ELA-1-E5 reading, comprehending, and responding to written, spoken, and visual texts in extended passages (for example, range for fiction passages—450–1,000 words; range for nonfiction—450–850 words)

Questions measuring benchmark ELA-1-E1 assess **gaining meaning** from word clues or context clues but not **building vocabulary**. Items assess understanding the meaning of a word from context. Clues to proper meaning are found in the sentence itself or in surrounding sentences.

Questions measuring ELA-1-E4 assess story elements but not literary devices. Story elements include plot, setting, main characters, theme, and problem resolution.

ELA-1-E5 may be measured with questions that involve an illustration or picture.

These benchmarks may be assessed with multiple-choice and short-answer questions related to the reading passages.

**Standard 6:** *Students read, analyze, and respond to literature as a record of life experiences.*

### Benchmarks Assessed

ELA-6-E1 recognizing and responding to United States and world literature that represents the experiences and traditions of diverse ethnic groups

ELA-6-E2 recognizing and responding to a variety of classic and contemporary fiction and nonfiction literature from many genres (for example, folktales, legends, myths, biography, autobiography, poetry, short stories)

ELA-6-E3 identifying and distinguishing key differences of various genres

To allow for assessment of these benchmarks, the four reading passages represent a variety of literary genres. At least one represents American literature, reflecting the experiences and traditions of ethnic group(s) within the United States. Questions that measure ELA-6-E3 may require students to identify characteristics of the passages as well as the genre of a passage. All three benchmarks may be measured by multiple-choice or short-answer questions related to the passages.

**Standard 7:** *Students apply reasoning and problem-solving skills to their reading, writing, speaking, listening, viewing, and visually representing.*

**Benchmarks Assessed**

ELA-7-E1 using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

ELA-7-E3 recognizing an author’s purpose (reason for writing) and viewpoint (perspective)

ELA-7-E4 using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

Questions that measure standard 7 focus primarily on assessment of reading comprehension and higher-order thinking skills. All three benchmarks may be measured by multiple-choice or short-answer questions related to the passages.

## Using Information Resources

The Using Information Resources session measures standard 5, research skills, by using a set of reference sources.

**Standard 5:** *Students locate, select, and synthesize information from a variety of texts, media, references, and technological sources to acquire and communicate knowledge.*

### **Benchmarks Assessed**

ELA-5-E1 recognizing and using organizational features of printed text, other media, and electronic information (for example, parts of a text, alphabetizing, captions, legends, pull-down menus, keyword searches, icons, passwords, entry menu features)

ELA-5-E2 locating and evaluating information sources (for example, print materials, databases, CD-ROM references, Internet information, electronic reference works, community and government data, television and radio resources, audio and visual materials)

ELA-5-E3 locating, gathering, and selecting information using graphic organizers, simple outlining, note taking, and summarizing to produce texts and graphics

ELA-5-E5 giving credit for borrowed information by telling or listing sources

ELA-5-E6 recognizing and using graphic organizers (for example, charts/graphs, tables/schedules, diagrams/maps)

ELA-5-E1 is measured with questions that assess the ability to use organizational features to locate information in a variety of sources. Questions measuring ELA-5-E2 assess the ability to determine the best source of information. Items that measure ELA-5-E3 focus on the skills of outlining and filling in parts of a graphic organizer. ELA-5-E5 is assessed with questions that involve identifying parts of a bibliographic entry. Items that measure ELA-5-E6 involve locating information in graphic organizers.

These benchmarks may be assessed with multiple-choice and short-answer questions.



## Proofreading

The Proofreading session assesses standard 3, proofreading skills, with the use of a rough draft of a letter or report.

**Standard 3:** *Students communicate using standard English grammar, usage, sentence structure, punctuation, capitalization, spelling, and handwriting.*

### **Benchmarks Assessed**

ELA-3-E2 demonstrating use of punctuation (for example, comma, apostrophe, period, question mark, exclamation mark), capitalization, and abbreviations in final drafts of writing assignments

ELA-3-E3 demonstrating standard English structure and usage by writing clear, coherent sentences

ELA-3-E4 using knowledge of the parts of speech to make choices for writing

ELA-3-E5 spelling accurately using strategies (for example, letter-sound correspondence, hearing and recording sounds in sequence, spelling patterns, pronunciation) and resources (for example, glossary, dictionary) when necessary

All questions in the Proofreading session measure the use of the conventions of standard English. ELA-3-E5 is assessed with questions that require students to recognize the correct spelling of grade-appropriate words. Students may not use dictionaries for this test session. The content parameters for fourth grade are shown on page 1-15.

These benchmarks are measured with 8 multiple-choice questions.

## Sample Test Items: Grade 4 English Language Arts

### Writing

Below is a sample passage-based writing prompt like those used in a grade 4 LEAP Transitional English Language Arts test.

**Read the passage about Moroccan markets. As you read the passage, imagine an adventure someone could have finding an unusual treasure in a Moroccan market. Then use the passage to help you to write a well-organized story of at least three paragraphs.**

#### Moroccan Market

Morocco is a country in northern Africa bordered by the Atlantic Ocean and the Mediterranean Sea. One of the most interesting things about this country is its markets. What makes these markets so special? Let's find out!

The markets can be any size, but most are very large, open-air markets. That means they are not in a mall or shopping center. They are outdoors where shoppers can feel the wind blowing and the sun shining. Sometimes birds fly into the market or animals walk in and "shop" among the people. Some big markets are made up of so many narrow streets that it feels like walking through a maze.

A Moroccan market has many surprises for shoppers. It is filled with interesting and unusual sights and sounds. Storytellers wander through the market entertaining people with delightful tales. Musicians play drums and sing African music. Acrobats delight the crowds with their tumbling and extraordinary balancing acts. Snake charmers play flutes to make their snakes dance, and trained monkeys perform for the shoppers!

There are many treasures to be found in a Moroccan market. Some people shop for old, mysterious lamps, beautiful locked boxes, or statues made of metal. Others look for unusual rugs, jewelry, or clothes. Some buy food and spices that can only be found in Morocco.

At a Moroccan market there are no price tags. Shoppers choose how much they want to pay for something through a process called *bartering*. If both the shop owner and shopper agree on a price, they will make the trade. This way both the shop owner and shopper are happy.

A Moroccan market is truly a special place. Shoppers never know what to expect at each turn in the maze of a Moroccan market. One thing is certain: shoppers cannot help but have an adventure they will remember.

## Writing Topic

Think about an adventure someone could have in a Moroccan market. Think about what he or she might see and do.

**Write a story for your teacher about an adventure someone has in a Moroccan market. Use details from the passage to help you tell your story.**

**As you write, follow the suggestions below.**

- Your story should have at least three paragraphs.
- Be sure your story has a beginning, a middle, and an ending.
- Use details from the passage and include enough information so your teacher will understand what happened in your story.
- Be sure to write clearly.
- Check your writing for correct spelling, punctuation, and grammar.

### **Description:**

*This prompt measures a student's ability to write a story. Other prompts may ask students to explain or describe something or convince someone of their position.*

## Reading and Responding

Following are reading passages and questions that have been used on grade 4 LEAP assessments. The samples are from the four types of passages that appear on tests: long and short fiction and nonfiction passages and poetry. Test items in the Reading and Responding session measure the following standards:

- **ELA Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.
- **ELA Standard 6:** Students read, analyze, and respond to literature as a record of life experiences.
- **ELA Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

## Short Passage

**Read this story about Milton Hershey and how he succeeded in his life, and then answer the questions that follow.**

### **When I Was a Kid**

by Lynda DeWitt

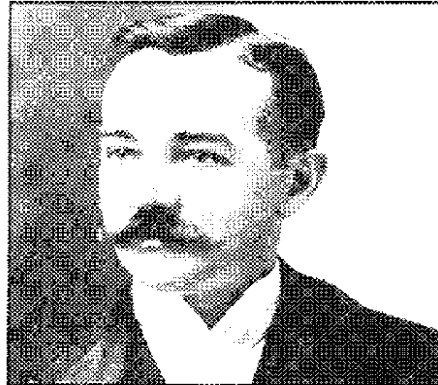
**As a boy Milton Hershey went to work as a candymaker. The rest is sweet history.**

The summer of 1863 was a frightening time for the Hershey family and others in southern Pennsylvania where they lived. The Civil War was raging; for three long days soldiers fought a fierce battle near the town of Gettysburg. Milton Hershey was only 5 years old at the time. He, his younger sister, Sarena, and their parents could hear cannons booming nearby. People were terrified that the fighting would come even closer, so many buried their valuables in their yards. Milton did too. He'd earned pennies for doing errands. Like most children, he loved candy, and he'd been saving his coins to buy some.

After the deadly battle finally ended and the Confederate Army had retreated, Milton went to dig up his coins. But he couldn't remember where he'd hidden them. He dug up half the garden before finding his own buried treasure.

Milton was born on September 13, 1857, in Hockersville, Pennsylvania. His parents were poor, and they moved frequently. During his childhood Milton attended seven different schools. Some were cold and badly equipped. He was a poor student and left school after receiving a fourth-grade education.

Tragedy struck the family when Milton was 9 years old. Sarena died of scarlet fever, a serious disease that was common among children at that time. The loss was sad for Milton, and it devastated his parents. After Sarena died, Milton's father moved away from home. He remained involved in Milton's life, though.



#### **WHEN MILTON GREW UP . . .**

He started the Hershey Chocolate Company in 1894. In 1900 the company began selling milk chocolate candy bars, a new kind of candy in the United States.

With profits from his business he opened a school for orphaned boys. Now the school provides a home and an education for boys and girls. He and his wife, Catherine, also established the town of Hershey, Pennsylvania.

It was common at the time for teens to apprentice, or learn a trade by working at a shop or factory. At age 14, Milton apprenticed at a confectionary, or candymaker's shop. He mixed ingredients for candies, cakes, and ice cream. He especially liked to make candy. But he also made mistakes. One night after roasting peanuts for fudge, he went to the theater next door to attend a performance. During the show he began to smell burning peanuts. All of a sudden he realized that he'd forgotten to take the peanuts off the stove. Rushing back to the confectionary, he saw peanuts everywhere! They had flown all over the shop.

Milton spent four years working there before he moved to Philadelphia and opened a candy shop. It took many years and a series of unsuccessful shops before Milton gained sweet success with his own chocolate company.

### Sample Multiple-Choice Items

1. Which of these contributed to Hershey's success?
  - A. a good education
  - B. working hard at his job
  - C. being well known in town
  - D. his parents' encouragement

**Correct response: B**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

2. Which word **best** describes Hershey after his chocolate company became successful?
- A. boastful
  - B. forgetful
  - C. generous
  - D. worried

**Correct response: C**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E4:** recognizing story elements (for example, setting, plot, character, theme) and literary devices (for example, simile, dialogue, personification) within a selection

3. Read this sentence. “The loss was sad for Milton, and it devastated his parents.” What does devastated mean?
- A. surprised
  - B. disappointed
  - C. greatly upset
  - D. suddenly angered

**Correct response: C**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E1:** gaining meaning from print and building vocabulary using a full range of strategies (for example, self-monitoring and correcting, searching, cross-checking), evidenced by reading behaviors using phonemic awareness, phonics, sentence structure, and meaning

4. You can tell that this passage is a biography because it
- A. has interesting characters.
  - B. takes place a long time ago.
  - C. tells facts about a real person's life.
  - D. has a beginning, a middle, and an end.

**Correct response: C**

**Standard 6:** Students read, analyze, and respond to literature as a record of life experiences.  
**Benchmark ELA-6-E3:** identifying and distinguishing key differences of various genres

**Sample Short-Answer Items**

5. According to the passage, what were **two** difficulties Milton Hershey had in his life?

**Scoring Rubric:**

Score	Description
2	The student's response is complete. It clearly states at least two text-based examples of difficulties from Hershey's life.
1	The student's response is partial. It <ul style="list-style-type: none"> <li>• states one text-based example of a difficulty from Hershey's life</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• demonstrates a limited awareness and/or may contain errors.</li> </ul>
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Exemplary responses:**

- He was poor.
- His family moved a lot.
- His sister died.
- He was young during the Civil War (people were terrified).
- He was not a good student.
- He attended seven different schools.
- His father moved away from home.
- Other text-based response.

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts



6. The passage says that Milton Hershey opened a school for orphaned boys with the money he made from his business. Describe one experience that Hershey had while growing up, and state why that experience probably caused him to open this school.

**Scoring Rubric:**

Score	Description
2	The student’s response is complete. It <ul style="list-style-type: none"> <li>• clearly describes a childhood experience that would cause Hershey to open a school for orphaned boys</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• gives an explanation of why this would cause him to open the school for orphaned boys.</li> </ul>
1	The student’s response is partial. It <ul style="list-style-type: none"> <li>• identifies a childhood experience that would cause Hershey to open a school for orphaned boys</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• gives an vague explanation of why Hershey opened a school for orphaned boys</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• demonstrates a limited awareness and/or may contain errors.</li> </ul>
0	The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.

**Exemplary Responses:**

- He was poor when he was a child, so he wanted to help poor boys. (He knew what they felt like.)
- He went to school only through the fourth grade. He probably wanted poor boys to be able to continue their education (because he could not continue his and knew what that felt like).
- Other text-based response.

**Standard 7:** Students apply reasoning and problem-solving skills to their reading, writing, speaking, listening, viewing, visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

**Young chimpanzees need their mothers during the first few years of life. Read about how chimpanzee mothers care for their babies, then answer questions that follow.**

## **Chimpanzee Childhood**

*by Richard Wrangham*



1 Mother is far and away the most important figure in the life of a young chimpanzee. Brothers and sisters can be good playmates, but since babies normally are born six years apart, by the time the new baby is three, the older offspring often is on its own. . . .

The baby is born in a tree, on a bed of twigs and leaves where Mother has been resting for a day. No one else knows about the arrival, not even the older sister or brother. The baby is very weak at first, barely able to hold on. Mother has to climb slowly, cradling it awkwardly. First-time mothers do not always know how to make a baby comfortable, and sometimes they hurt the baby by squeezing too hard when they are only trying to help.

A few hours after leaving the birth nest, the baby starts meeting other chimpanzees. Everyone is interested in the new arrival, but the mother is very

cautious about letting anyone near. When she sees a big male, she crouches low with her baby beneath her, grunting softly at the male and bobbing her head. He gently reaches out to touch her, as if to say, “Don’t worry. I won’t bother you.” . . .

Most of the time, Mother keeps her little family away from the other chimpanzees. She carries her baby between food trees, sometimes followed by the next youngest offspring. . . .

For a young chimpanzee, being alone with Mother often is boring because she spends longer gathering food than the young one does. The offspring may sit staring into space or pick the wings off an unfortunate butterfly. Sometimes there are better playthings. A favorite game is to climb up a slender sapling until it starts to bend—then hold on tight as it comes crashing to the forest floor. Of course, the best times come when the group meets

another family. All the youngsters like to play chase games: One will wave a stick temptingly just out of the other's reach and then run off with it when the playmate tries to grab it. When the pursuer catches the tease, they wrestle and tickle each other, laughing madly. Young males tend to get carried away; they always seem to end up in a fight, and the mothers have to break it up.

Given the choice, young females prefer quieter games, such as carrying tiny babies about. Some girls are lucky enough to have an infant sister or brother. Others get to play with babies only when they meet another family. Still, if her mother doesn't want to stay with the baby's family, the young female might try to

persuade her by following the baby herself.

• • •

Life isn't always easy. For several weeks during the dry season, the infant may go to bed hungry every night. Mother's milk is a comfort in the early years, but by the age of five or six, Mother will gently push away the young one's face when he or she snuggles onto her lap to nurse. If the young one is repeatedly turned away, he or she will whimper, tug on Mother's arm, scream, slap the ground, hit the bushes, and finally crash off in a rage. Mother and child always make it up, however, and at the end of the day, they crawl into a fresh leaf bed and lie side by side in comfort and peace.

### Sample Multiple-Choice Items

1. In the first paragraph, the word offspring means
  - A. parent.
  - B. child.
  - C. animal.
  - D. adult.

**Correct response: B**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E1:** gaining meaning from print and building vocabulary using a full range of strategies (for example, self-monitoring and correcting, searching, cross-checking), evidenced by reading behaviors using phonemic awareness, phonics, sentence structure, and meaning

2. What happens soon after a baby chimpanzee leaves the birth nest?
- A. It leaves its mother.
  - B. It meets other chimpanzees.
  - C. It hunts for food.
  - D. It climbs small trees.

**Correct response: B**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E5:** reading, comprehending, and responding to written, spoken, and visual texts in extended passages (for example, range for fiction passages, 450–1,000 words; range for nonfiction, 450–850 words)

3. What was the author’s **main** purpose in writing this passage?
- A. to compare baby chimpanzees to young people
  - B. to tell why chimpanzees make good pets
  - C. to tell how chimpanzees have fun
  - D. to explain how chimpanzees are raised

**Correct response: D**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E3:** recognizing an author’s purpose (reason for writing) and viewpoint (perspective)

4. According to the passage, a mother chimpanzee will push her young one away
- A. when the young one nurses for the first time.
  - B. if a dry season lasts for many weeks.
  - C. if the young one tries to nurse when it gets older.
  - D. when the mother wants to be with another family.

**Correct response: C**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

### Sample Short-Answer Items

5. Identify **two** things in the passage that show what a mother chimpanzee does soon after her baby is born.

### Scoring Rubric:

Score	Description
2	The student's response is complete. It identifies two things in the passage that show what a mother chimpanzee does soon after a baby is born.
1	The student's response is partial. It <ul style="list-style-type: none"><li>identifies one thing in the passage that shows what a mother chimpanzee does soon after a baby is born</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>demonstrates a limited awareness and/or may contain errors.</li></ul>
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

### Exemplary responses:

*Things that a mother chimpanzee does soon after her baby is born:*

- She climbs very slowly while holding the baby (cradling the baby).
- She tries to make the baby comfortable.
- She may keep the baby away from other chimpanzees.
- She carries the baby between food trees.
- She protects the baby from male chimpanzees by crouching low, grunting softly, and bobbing her head (which keeps other chimpanzees away from the baby).
- She takes the baby to meet others.
- She may squeeze the baby too hard while trying to help.

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

6. Based on information in the passage, identify one way male and female chimpanzees are **alike** and one way they are **different**.

**Scoring Rubric:**

Score	Description
2	The student's response is complete. It identifies <ul style="list-style-type: none"> <li>• one way male and female chimpanzees are alike</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>• one way male and female chimpanzees are different.</li> </ul>
1	The student's response is partial. It either <ul style="list-style-type: none"> <li>• identifies one way male and female chimpanzees are alike</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• identifies one way male and female chimpanzees are different</li> </ul> <b>OR</b> <ul style="list-style-type: none"> <li>• demonstrates a limited awareness and/or may contain errors.</li> </ul>
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Exemplary responses:**

*How male and female chimpanzees are alike:*

- They may pick the wings off a butterfly if they are bored.
- They enjoy climbing trees.
- They like to meet other families.
- They like to play chase games.
- They wrestle with each other when they catch each other after a chase.
- They nurse from their mother.

*How male and female chimpanzees are different:*

- Males get carried away after a chase game and end up in a fight.
- Females prefer carrying tiny babies.

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

## Poetry

These poems are about the winter sun and the moon. Read these poems and then answer the questions that follow.



### **The Winter Sun**

*by Douglas Florian*

The winter sun's a grumpy guy.  
He scarcely gets to see the sky.  
He doesn't speak. His rays are weak.  
His disposition's grim and bleak.  
He hovers near the naked trees,  
His blanket from the sky's big freeze,  
And barely dares to lift his head  
Before he's ordered back to bed.

### **The Moon's the North Wind's Cookie**

*by Vachel Lindsay*

*What the Little Girl Said*

The Moon's the North Wind's cookie,  
He bites it day by day,

**3** Until there's but a rim of scraps

**4** That crumble all away.

The South Wind is a baker  
He kneads clouds in his den,  
And bakes a crisp new moon that...greedy  
North...Wind...eats...again!

### Sample Multiple-Choice Items

1. In “The Winter Sun,” why is the winter sun “a grumpy guy”?
- A. No one will talk to him.
  - B. He does not see the sky for long.
  - C. The cold weather bothers him.
  - D. He cannot come outside at all.

**Correct answer: B**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

2. In line 3 of “The Moon’s the North Wind’s Cookie,” the “rim of scraps” **most likely** describes the
- A. size of the full moon.
  - B. stars around the moon.
  - C. clouds that cover the moon.
  - D. shape of a crescent moon.

**Correct answer: D**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E4:** recognizing story elements (for example, setting, plot, character, theme) and literary devices (for example, simile, dialogue, personification) within a selection



3. Both poems can **best** be described as
- A. playful descriptions of nature.
  - B. serious lessons about life.
  - C. true information about the world.
  - D. happy stories about everyday life.

**Correct answer: A**

**Standard 6:** Students read, analyze, and respond to literature as a record of life experiences.

**Benchmark ELA-6-E2:** recognizing and responding to a variety of classic and contemporary fiction and nonfiction literature from many genres (for example, folktales, legends, myths, biography, autobiography, poetry, short stories)

4. In “The Moon’s the North Wind’s Cookie,” the speaker **mostly**
- A. describes the weather
  - B. explains how the wind feels.
  - C. pretends to be the moon.
  - D. tells how the moon changes.

**Correct answer: D**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E3:** recognizing an author’s purpose (reason for writing), and viewpoint (perspective)

### Sample Short-Answer Item

5. Identify **two** ways the South Wind is like a baker in “The Moon’s the North Wind’s Cookie.”

### Scoring Rubric:

Score	Description
2	The student’s response is complete. It identifies two ways the South Wind is like a baker.
1	The student’s response is partial. It either <ul style="list-style-type: none"><li>• identifies one way the South Wind is like a baker</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• demonstrates a limited awareness and/or may contain errors.</li></ul>
0	The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.

### Exemplary responses:

*Ways the South Wind is like a baker:*

- He kneads clouds in his den (clouds are like his dough).
- He bakes a crisp new moon.
- (In place of *knead*, response might include the terms such as *make* or *work with*.)

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

## Long Fiction

Anna and Caleb’s lives are happy except for one thing—they want a mother. Then one day their father tells them he had placed an advertisement for a wife. Read the passage carefully, and then answer questions XX through XX.

### *Sarah, Plain and Tall*

by Patricia MacLachlan

Papa leaned back in the chair. “I’ve placed an advertisement in the newspapers. For help.”

“You mean a housekeeper?” I asked, surprised.

Caleb and I looked at each other and burst out laughing, remembering Hilly, our old housekeeper. She was round and slow and shuffling. She snored in a high whistle at night, like a teakettle, and let the fire go out.

“No,” said Papa slowly, “Not a housekeeper.” He paused. “A wife.”

Caleb stared at Papa. “A wife? You mean a mother?”

Nick slid his face onto Papa’s lap and Papa stroked his ears.

“That, too,” said Papa. “Like Maggie.”

Matthew, our neighbor to the south, had written to ask for a wife and mother for his children. And Maggie had come from Tennessee. Her hair was the color of turnips and she laughed.

Papa reached into his pocket and unfolded a letter written on white paper. “And I have received an answer.” Papa read to us:

Dear Mr. Jacob Witting,

I am Sarah Wheaton from Maine as you will see from my letter. I am answering your advertisement. I have never been married, though I have been asked. I have lived with an older brother, William, who is about to be married. His wife-to-be is young and energetic.

I have always loved to live by the sea, but at this time I feel a move is necessary. And the truth is, the sea is as far east as I can go. My choice, as you can see, is limited. This should not be taken as an insult. I am strong and I work hard and I am willing to travel. But I am not mild mannered. If you should still care to

write, I would be interested in your children and about where you live. And you.

Very truly yours,  
Sarah Elisabeth Wheaton

P.S. Do you have opinions on cats? I have one.

No one spoke when Papa finished the letter. He kept looking at it in his hands, reading it over to himself. Finally I turned my head a bit to sneak a look at Caleb. He was smiling. I smiled, too.

“One thing,” I said in the quiet of the room.

“What’s that?” asked Papa, looking up.

I put my arm around Caleb.

“Ask her if she sings,” I said.

Caleb and Papa and I wrote letters to Sarah, and before the ice and snow had melted from the fields, we all received answers. Mine came first.

Dear Anna,

Yes, I can braid hair and I can make stew and bake bread, though I prefer to build bookshelves and paint.

My favorite colors are the colors of the sea, blue and gray and green, depending on the weather. My brother William is a fisherman, and he tells me that when he is in the middle of a fog-bound sea the water is a color for which there is no name. He catches flounder and sea bass and bluefish. Sometimes he sees whales. And birds, too, of course. I am enclosing a book of sea birds so you will see what William and I see every day.

Very truly yours,  
Sarah Elisabeth Wheaton

Caleb read and read the letter so many times that the ink began to run and the folds tore. He read the book about sea birds over and over.

“Do you think she’ll come?” asked Caleb. “And will she stay? What if she thinks we are loud and pesky?”

“You are loud and pesky,” I told him. But I was worried, too. Sarah loved the sea, I could tell. Maybe she wouldn’t leave there after all to come where there were fields and grass and sky and not much else.

“What if she comes and doesn’t like our house?” Caleb asked. “I told her it was small. Maybe I shouldn’t have told her it was small.”

“Hush, Caleb. Hush.”

Caleb’s letter came soon after, with a picture of a cat drawn on the envelope.

Dear Caleb,

My cat’s name is Seal because she is gray like the seals that swim offshore in Maine. She is glad that Lottie and Nick send their greetings. She likes dogs most of the time. She says their footprints are much larger than hers (which she is enclosing in return).

Your house sounds lovely, even though it is far out in the country with no close neighbors. My house is tall and the shingles are gray because of the salt from the sea. There are roses nearby.

Yes, I do like small rooms sometimes. Yes, I can keep a fire going at night. I do not know if I snore. Seal has never told me.

Very truly yours,  
Sarah Elisabeth

“Did you really ask her about fires and snoring?” I asked, amazed.

“I wished to know,” Caleb said.

He kept the letter with him, reading it in the barn and in the fields and by the cow pond. And always in bed at night.

One morning, early, Papa and Caleb and I were cleaning out the horse stalls and putting down new bedding. Papa stopped suddenly and leaned on his pitchfork.

“Sarah has said she will come for a month’s time if we wish her to,” he said, his voice loud in the dark barn. “To see how it is. Just to see.”

Caleb stood by the stall door and folded his arms across his chest.

“I think,” he began. Then, “I think,” he said slowly, “that it would be good—to say yes,” he finished in a rush.

Papa looked at me.

“I say yes,” I told him grinning.

“Yes,” said Papa. “Then yes it is.”

And the three of us, all smiling, went to work again.

The next day Papa went to town to mail his letter to Sarah. It was rainy for days, and the clouds followed. The house was cool and damp and quiet. Once I set four places at the table, then caught myself and put the extra plate away. Three lambs were born, one with a black face. And then Papa’s letter came. It was very short.

Dear Jacob,

I will come by train. I will wear a yellow bonnet. I am plain and tall.

Sarah

“What’s that?” asked Caleb excitedly, peering over Papa’s shoulder. He pointed. “There, written at the bottom of the letter.”

Papa read it to himself. Then he smiled holding up the letter for us to see.

*Tell them I sing* was all it said.

### Sample Multiple-Choice Items

1. Papa got the idea to advertise for a wife
- A. from his children.
  - B. from the newspaper.
  - C. from the housekeeper.
  - D. from his neighbor.

**Correct response: D**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

2. Who are Nick and Lottie?
- A. the family's neighbors
  - B. the family's dogs
  - C. Sarah's brother and his wife
  - D. Sarah's cats

**Correct response: B**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

3. Why is Ann amazed that Caleb asked Sarah about snoring and fires?
- A. She was going to tell Sarah not to answer those questions.
  - B. She already knew the answers to those questions.
  - C. She thinks their neighbor should have asked those questions.
  - D. She thinks those are rude questions to ask.

**Correct response: D**

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E1:** using comprehension strategies (for example, sequencing, predicting, drawing conclusions, comparing and contrasting, making inferences, determining main ideas) to interpret oral, written, and visual texts

4. What does the word pesky mean when Caleb and Anna talk about being "loud and pesky"?
- A. annoying
  - B. energetic
  - C. sloppy
  - D. boring

**Correct response: A**

**Standard 1:** Students read, comprehend, and respond to a range of materials, using a variety of strategies for different purposes.

**Benchmark ELA-1-E1:** gaining meaning from print and building vocabulary using a full range of strategies (for example, self-monitoring and correcting, searching, cross-checking), evidenced by reading behaviors using phonemic awareness, phonics, sentence structure, and meaning

### Sample Short-Answer Items

5. List **two** things that Sarah will no longer see around her when she comes to live on a prairie farm.

### Scoring Rubric:

Score	Description
2	The student's response is complete. It lists two text-based things Sarah will no longer see.
1	The student's response is partial. It either <ul style="list-style-type: none"><li>• lists one text-based thing Sarah will no longer see</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• demonstrates a limited awareness and/or may contain errors.</li></ul>
0	The student's response is incorrect or irrelevant, too brief to evaluate, or blank.

### Exemplary responses:

- the sea
- the fog on the sea
- the fish her brother catches in the sea
- sea birds
- her brother's tall house with gray shingles
- other text-based answers

**Standard 7:** Students apply reasoning and problem-solving skills to their reading, writing, speaking, listening, viewing, and visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations

6. What gift did Sarah send Anna, and why was it special?

**Scoring Rubric:**

Score	Description
2	The student's response is complete. It <ul style="list-style-type: none"><li>• identifies the gift</li></ul> <b>AND</b> <ul style="list-style-type: none"><li>• explains why it is special.</li></ul>
1	The student's response is partial. It either <ul style="list-style-type: none"><li>• identifies the gift</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• explains why it is special</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• demonstrates a limited awareness and/or may contain errors.</li></ul>
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Exemplary responses:**

- The gift was a book about sea birds.
- It is something that is special to Sarah. It shows that she wants to share what is important to her with Anna.

**Standard 7:** Students apply reasoning and problem-solving skills to reading, writing, speaking, listening, viewing, visually representing.

**Benchmark ELA-7-E4:** using basic reasoning skills to distinguish fact from opinion, skim and scan for facts, determine cause and effect, generate inquiry, and make connections with real-life situations



## Using Information Resources

Following is a set of information resources and questions used on grade 4 LEAP assessments. The grade 4 assessment focuses primarily on measuring student ability to **locate** information.

**Introduction:** In this session of the test you are asked to look at some reference materials and then use the materials to answer the questions that follow.

**Research Topic:** Discovering Louisiana

Suppose you want to find out more about Louisiana for a family vacation or a report you are writing. Four different sources of information about Louisiana are included in this test session. The information sources and the page numbers where you can find them are listed below.

1. *Louisiana Tour Guide* from the Louisiana Travel Promotion Association
  - a. Map of Louisiana (page XX)
  - b. Table of Contents (page XX)
  - c. State Symbols/Climate (page XX)

2. Internet Web Site Information  
LouisianaTravel.com (page XX)

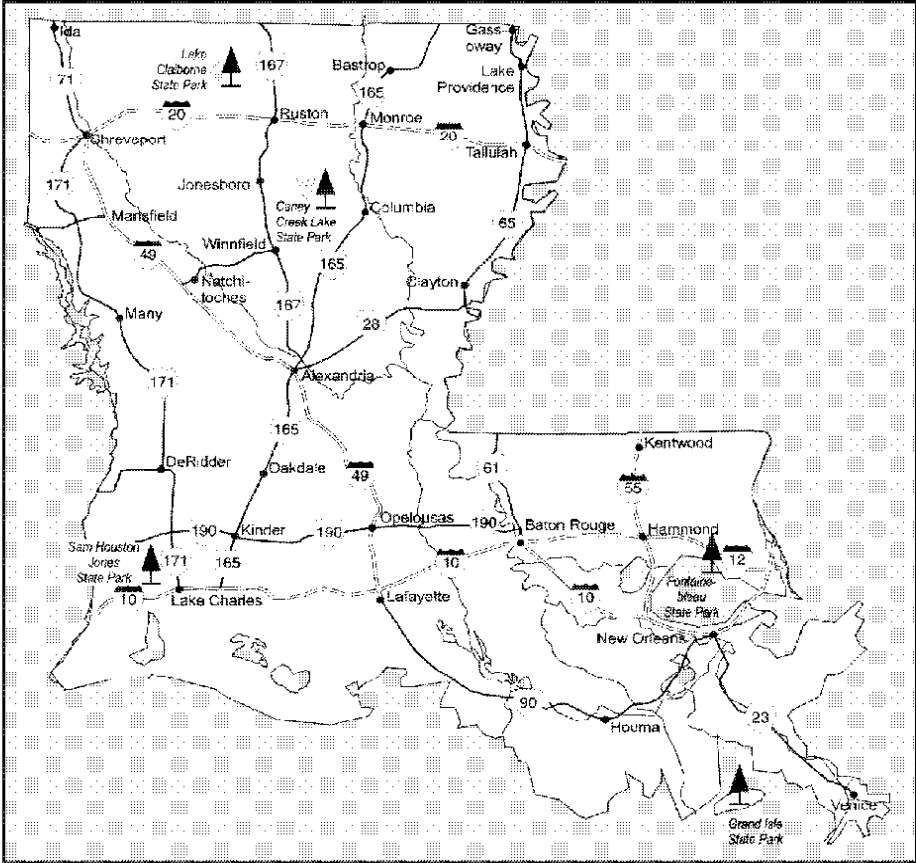
3. *World Book Encyclopedia*  
Louisiana Fact Sheet (page XX)

4. Index from Social Studies Textbook (page XX)

**Directions:** Skim pages XX through XX to become familiar with the information contained in these sources. Remember that these are reference sources, so you should not read every word in each source. Once you have skimmed the sources, answer the questions on pages XX and XX. Use the information sources to answer the questions. As you work through the questions, go back and read the parts that will give you the information you need.

1. *Louisiana Tour Guide* from the Louisiana Travel Promotion Association  
a. *Map of Louisiana*


# Discovering



*Louisiana*

1. *Louisiana Tour Guide* from the Louisiana Travel Promotion Association  
 b. *Table of Contents*

# Table of Contents

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1. *Louisiana Tour Guide* from the Louisiana Travel Promotion Association  
 c. **State Symbols/Climate**

# State Symbols

State Insect: *Honeybee*  
 State Bird: *Brown Pelican*  
 State Dog: *Catahoula Leopard Dog* or  
*Catahoula Hound*  
 State Tree: *Bald Cypress*  
 State Nickname: *Pelican State*  
 State Songs: *"Give Me Louisiana"* and *"You  
 Are My Sunshine"*



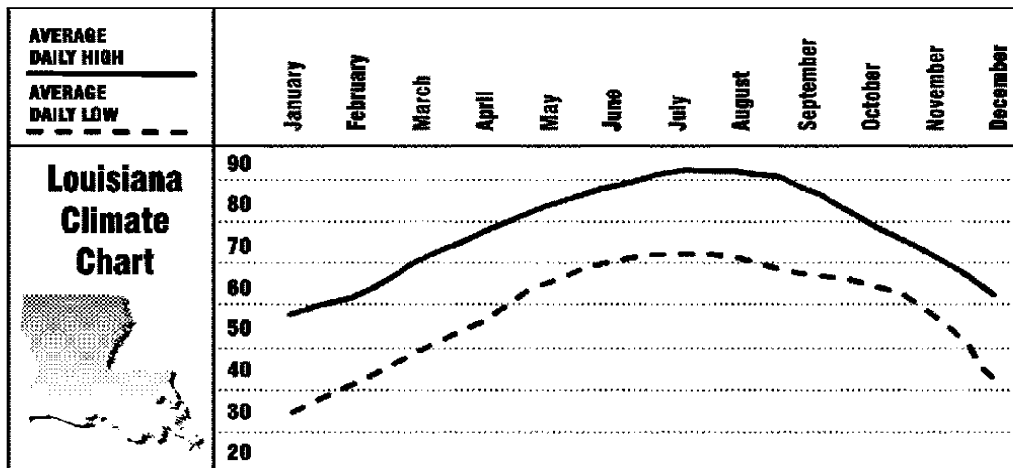
State Flower: *Magnolia*

# Climate

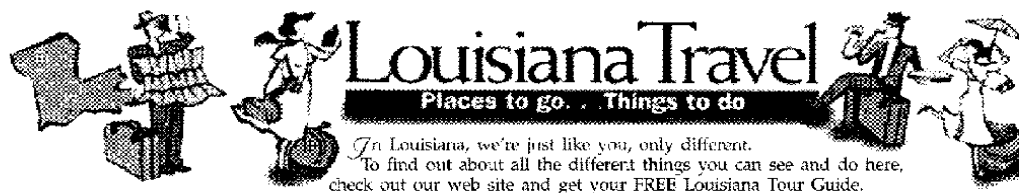
Louisiana's subtropical weather is as diverse as its people. Spring and fall are simply paradise here, and winters can be downright balmy. Cool drinks and cool clothing are recommended June through August.

Bring shorts in the summer, a coat in winter, and an umbrella just in case. Snow rarely falls in the southern sections, with only light snowfall recorded in the northern regions.








Whatever the temperature, you'll find Louisiana has the perfect climate for fun year-round.



2. Internet Web Site Information  
*LouisianaTravel.com*



*Louisiana*  
Click here for your  
Free Tour Guide and  
Highway Map

-  REGIONAL GUIDE
-  CALENDAR OF EVENTS
-  OUTDOORS
-  GENERAL INFORMATION
-  SEARCH
-  SIGHTS AND SOUNDS
-  HOME
- FESTIVALS GUIDE**
  - MARDI GRAS**
  - KIDS GUIDE**



**The Big Scoop on "LITTLE LOU"**

"Little Lou" is a rollerblading cayenne pepper who stars in a special brochure just for kids all about the great things they can do in Louisiana. By her own admission, "Little Lou" is petite for a cayenne pepper but very BIG on fun. From fairs and festivals to outdoor activities, attractions, adventure and excitement centers, your kids will be big on Louisiana fun too. So click here and share "Little Lou's" cruise through Louisiana for the younger set. Then as you plan your Louisiana family vacation, you won't miss any "musts."

**What's on LouisianaTravel.com**

### 3. World Book Encyclopedia Louisiana Fact Sheet

## Louisiana Facts in brief



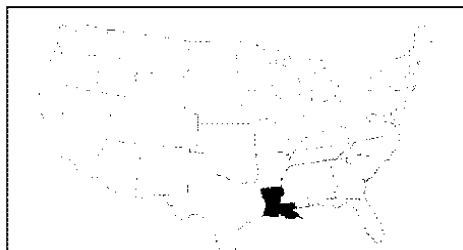
State Flag

The state flag, adopted in 1912, bears a mother pelican in a nest with three young pelicans. The design represents the state as the protector of its people and resources.

### Government

**Statehood:** April 30, 1812, the 18th state.  
**State capital:** Baton Rouge  
**State government**  
 Governor: 4-year term  
 State senators: 39;  
 4-year terms  
 State representatives: 105;  
 4-year terms  
 Parishes: 64

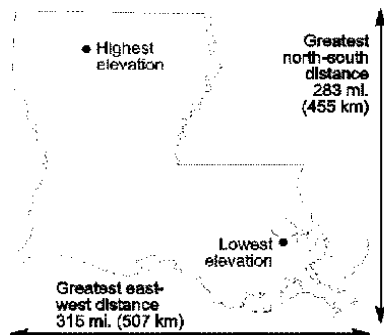
**Federal Government**  
 United States senators: 2  
 United States representatives: 7  
 Electoral votes: 9



Louisiana (black) ranks 31st in size among all the states and sixth in size among the Southern States (grey).

### Land

**Area:** 47,752 sq. mi. (123,677 km<sup>2</sup>), including 3,230 sq. mi. (8,366 km<sup>2</sup>) of inland water but excluding 1,016 sq. mi. (2,631 km<sup>2</sup>) of Gulf of Mexico coastal water.  
**Elevation:** *Highest*—Driskill Mountain, 535 ft. (163 m) above sea level. *Lowest*—5 ft. (1.5 m) below sea level at New Orleans.



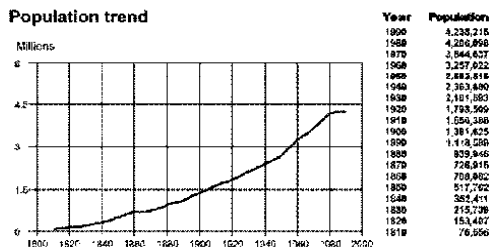
### People

**Population:** 4,238,216 (1990 census)  
**Rank among the states:** 21st  
**Density:** 89 persons per sq. mi. (34 per km<sup>2</sup>), U.S. average 69 per sq. mi. (27 per km<sup>2</sup>)  
**Distribution:** 69 per cent urban, 31 per cent rural  
**Largest cities in Louisiana**

New Orleans	498,938	Metairie*	149,428
Baton Rouge	219,531	Lafayette	94,440
Shreveport	198,525	Kenner	72,033

\*Unincorporated place.

### Population trend



### Economy

#### Chief products

**Agriculture:** soybeans, beef, cattle, cotton, milk, rice, sugar cane, corn.  
**Manufacturing:** chemicals, petroleum products, transportation equipment, paper products, food products.  
**Mining:** natural gas, petroleum.

#### Economic Activities

Category	Per cent of gross state product*	Number of employed workers
Mining	15	54,500
Community, social, & personal services	15	344,900
Wholesale & retail trade	14	365,500
Finance, insurance, & real estate	14	78,700
Manufacturing	14	174,000
Transportation, communication, & utilities	11	106,100
Government	10	312,200
Construction	5	80,200
Agriculture	2	52,600
Total	100	1,568,700

\*Gross state product the total value of goods and services produced in a year.

### Important Dates

- 1541** Hernando de Soto led a Spanish expedition into the lower Mississippi River area.
- 1682** René-Robert Cavalier, Sieur de La Salle, claimed the Mississippi River Valley for France.
- 1699** The royal French colony of Louisiana was founded.
- 1803** The United States purchased Louisiana from France.
- 1812** Louisiana became the 18th state on April 30.
- 1861** Louisiana seceded from the Union.
- 1868** Louisiana was readmitted to the Union.
- 1879** The mouth of the Mississippi River was deepened so that large ocean ships could reach New Orleans.
- 1901** Oil was discovered near Jennings and White Castle.
- 1963** The Mississippi River-Gulf Outlet, a short-cut for shippers between New Orleans and the sea, opened.
- 1975** A new state constitution went into effect.

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## 4. Index from Social Studies Textbook

# INDEX

*Page references for illustrations are set in italic type. An italic m indicates a map. Page references set in boldface type indicate the pages on which vocabulary terms are defined.*

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All items in the Using Information Resources session measure benchmarks of **standard 5**: Students locate, select, and synthesize information from a variety of texts, media, references, and technological sources to acquire and communicate knowledge.

**Sample Multiple-Choice Items**

1. Which month is the average daily low temperature closest to the average daily high temperature?
  - A. September
  - B. November
  - C. December
  - D. January

**Correct response: B**

**Benchmark ELA-5-E6:** recognizing and using graphic organizers (for example, charts/graphs, tables/schedules, diagrams/maps)

2. Which index entry from the social studies textbook has a map in it?
  - A. Appalachian Mountains
  - B. Bayou
  - C. Cancer, Tropic of
  - D. Capital resources

**Correct response: C**

**Benchmark ELA-5-E1:** recognizing and using organizational features of printed text, other media, and electronic information (for example, parts of a text, alphabetizing, captions, legends, pull-down menus, keyword searches, icons, passwords, entry menu features)



3. Which resource has the best information on the location of Louisiana in the United States?
- A. *Louisiana Tour Guide* pages on State Symbols/Climate
  - B. Internet Web site information for Louisiana Travel.com
  - C. Louisiana fact sheet from the *World Book Encyclopedia*
  - D. Index from the social studies textbook

**Correct response: C**

**Benchmark ELA-5-E2:** locating and evaluating information sources (for example, print materials, databases, CD-ROM references, Internet information, electronic reference works, community and government data, television and radio resources, audio and visual materials)

4. Suppose you were planning your report on Louisiana. You want to make an outline. Which resource uses headings that would be **best** for your outline?
- A. the table of contents
  - B. the map of Louisiana
  - C. the Internet Web site information
  - D. the index

**Correct response: A**

**Benchmark ELA-5-E3:** locating, gathering, and selecting information using graphic organizers, simple outlining, note taking, and summarizing to produce texts and graphics

### Sample Short-Answer Item

5. Complete the following outline on what Louisiana's climate is like. Some of the outline has been done for you.
- I. Louisiana's year-round climate
    - A. Winter temperatures are mild.
    - B. \_\_\_\_\_
    - C. \_\_\_\_\_
    - D. Fall temperatures are very comfortable.

### Scoring Rubric:

Score	Description
2	The student's response is complete. It correctly fills in both parts of the outline.
1	The student's response is partial. It either <ul style="list-style-type: none"><li>• correctly fills in one part of the outline</li></ul> <b>OR</b> <ul style="list-style-type: none"><li>• demonstrates a limited awareness and/or may contain errors.</li></ul>
0	The student's response is incorrect or irrelevant, too brief to evaluate, or blank.

### Exemplary Responses:

- I. Louisiana's year-round climate
  - A. Winter temperatures are mild.
  - B. *Spring temperatures are very comfortable.*
  - C. *Summer temperatures are hot.*
  - D. Fall temperatures are very comfortable.

**Benchmark ELA-5-E3:** locating, gathering, and selecting information using graphic organizers, simple outlining, note taking, and summarizing to produce texts and graphics

## Proofreading

Following are a proofreading passage and four multiple-choice items that appeared on a grade 4 LEAP assessment. On the actual test, this session includes eight multiple-choice items.

126 Maple Avenue  
Oakwood, LA 70019  
January 5, 2005

Dear Mr Allen,  
1

I thought that I would write to tell you how much fun I had on the class trip to your farm last week.

We really enjoyed the tours of the egg barn and the catfish hatchery. They  
was extra interesting! I still have questions about how the eggs and fish get to the  
2  
cities. Maybe you can answer my questions in March on our next trip.

Thank you again for the tour and your time with my friends and me. Me and  
3  
my mom and dad would like to visit some weekend.  
3

Yours truly  
4  
Evie Smith

All items in the Proofreading session measure benchmarks of **standard 3**: Students communicate using standard English grammar, usage, sentence structure, punctuation, capitalization, spelling, and handwriting.

1. How should you correct the error in number 1?

- A. change **Dear** to **Deer**
- B. change **Mr** to **Mr.**
- C. change **Allen,** to **Allen**
- D. There is no error.

**Correct response: B**

**Benchmark ELA 3-E2:** demonstrating use of punctuation (for example, comma, apostrophe, period, question mark, exclamation mark), capitalization, and abbreviations in final drafts of writing assignments

2. How should you correct the error in number 2?

- A. change **was** to **were**
- B. change **extra** to **extera**
- C. change **interesting!** to **interesting?**
- D. There is no error.

**Correct response: A**

**Benchmark ELA 3-E3:** demonstrating standard English structure and usage by writing clear, coherent sentences

3. How should you correct the error in number 3?

- A. change **Me and my mom and dad** to **My mom and dad and me**
- B. change **Me and my mom and dad** to **My mom, dad, and I**
- C. change **Me and my mom and dad** to **Me and my Mom and Dad**
- D. There is no error.

**Correct response: B**

**Benchmark ELA 3-E4:** using knowledge of the parts of speech to make choices for writing

4. How should you correct the error in number 4?

- A. change **Yours** to **yours**
- B. change **truly** to **Truly**
- C. change **truly** to **truly,**
- D. There is no error.

**Correct response: C**

**Benchmark ELA 3-E2:** demonstrating use of punctuation (for example, comma, apostrophe, period, question mark, exclamation mark), capitalization, and abbreviations in final drafts of writing assignments

## Chapter 2: LEAP Mathematics, Grade 4

This section describes the overall design of the LEAP Mathematics test to be administered to students in grade 4. Test specifications, sample test questions, and scoring rubrics are provided so that teachers may align classroom practices with the state assessment.

### Test Structure

**The Mathematics test consists of three subtests which are administered in two phases, each phase in a single day:**

Phase 1:

- Constructed Response: a 3-item session that **allows** the use of calculators

Phase 2:

- Multiple Choice: a 36-item session that **does not** allow the use of calculators
- Multiple Choice: a 24-item session that **allows** the use of calculators

The suggested testing times for the Grade 4 LEAP Mathematics test listed in Table 2.1 are estimates only. The Mathematics test is **untimed**.

**Table 2.1: Suggested Testing Times**

Phase	Subtest Description	Number of Items	Testing Time
1	Constructed Response, calculator	3	60 minutes
2	Multiple Choice, no calculator	36	80 minutes
2	Multiple Choice, calculator	24	50 minutes
TOTAL		63	190 minutes

Information about additional time needed to read test directions to students and accomplish other activities related to test administration is included in the *LEAP Test Administration Manual*.

The Mathematics test is composed of criterion-referenced test (CRT) items. These items measure Louisiana GLEs that more closely match the Common Core State Standards (CCSS) focus areas.

### Item Types and Scoring Information

The test has sixty (60) multiple-choice items and three constructed-response items.

The multiple-choice items consist of an interrogatory stem and four answer options. These items assess a student's knowledge and conceptual understanding, and responses are scored 1 if correct and 0 if incorrect.

The constructed-response items, which involve a number of separate steps and application of multiple skills, are designed to assess one or more of the GLEs. The response format is open-ended and may include numerical answers, short written answers, and other types of constructed response (e.g., use measurements to calculate perimeter and area of rectangular objects in U.S. and metric units). Students may be required to explain in writing how they arrived at their answers. These items are scored, according to an item-specific rubric, on a scale of 0 to 4 points.

### General Scoring Rubric for Grade 4 LEAP Mathematics Constructed-Response Items

4	<ul style="list-style-type: none"> <li>• The response demonstrates in-depth understanding of the relevant content and/or procedures.</li> <li>• The student completes all important components of the task accurately and communicates ideas effectively.</li> <li>• Where appropriate, the student offers insightful interpretations and/or extensions.</li> <li>• Where appropriate, the student uses more sophisticated reasoning and/or efficient procedures.</li> </ul>
3	<ul style="list-style-type: none"> <li>• The response demonstrates understanding of major concepts and/or processes, although less important ideas or details may be overlooked or misunderstood.</li> <li>• The student completes most important aspects of the task accurately and communicates clearly.</li> <li>• The student’s logic and reasoning may contain minor flaws.</li> </ul>
2	<ul style="list-style-type: none"> <li>• The student completes some parts of the task successfully.</li> <li>• The response demonstrates gaps in conceptual understanding.</li> </ul>
1	<ul style="list-style-type: none"> <li>• The student completes only a small portion of the tasks and/or shows minimal understanding of the concepts and/or processes.</li> </ul>
0	<ul style="list-style-type: none"> <li>• The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.</li> </ul>

### Description of the Mathematics Test and GLEs Assessed

The Mathematics test was developed specifically for Louisiana. Committees of Louisiana educators reviewed all items for content and alignment with Louisiana’s GLEs. Separate committees reviewed the items for potential bias and sensitive material.

The Mathematics test is **untimed**. Suggested times are estimates for scheduling sessions and assisting students in managing their time.

Students are given a Mathematics Reference Sheet to consult as a reference. Calculators may be used on two parts of the test.

As Louisiana students and teachers transition to the CCSS ([http://www.doe.state.la.us/topics/common\\_core.html](http://www.doe.state.la.us/topics/common_core.html)) and PARCC assessments ([http://www.doe.state.la.us/topics/common\\_core\\_assessments.html](http://www.doe.state.la.us/topics/common_core_assessments.html)), the Mathematics test will include only items measuring GLEs aligned to the CCSS. Table 2.2 provides a list of GLEs eligible for assessment during the transition. The table identifies the GLEs and the corresponding CCSS alignment. Some grade 4 GLEs align to CCSS at other grade levels but

will continue to be taught and tested in grade 4 to decrease the possibility that the transition will create curricular gaps.

**Table 2.2: GLE Content To Be Taught and Tested in 2012-13 and 2013-14**

GLE #	Grade-Level Expectation Text	Aligned CCSS #
1	Read and write place value in word, standard, and expanded form through 1,000,000	4.NBT.1 4.NBT.2
2	Read, write, compare, and order whole numbers using place value concepts, standard notation, and models through 1,000,000	4.NBT.1 4.NBT.2
4	Know all basic facts for multiplication and division through $12 \times 12$ and $144 \div 12$ , and recognize factors of composite numbers less than 50	4.OA.4
5	Read, write, and relate decimals through hundredths and connect them with corresponding decimal fractions	4.NF.6
6	Model, read, write, compare, order, and represent fractions with denominators through twelfths using region and set models	4.NF.2
7	Give decimal equivalents of halves, fourths, and tenths	4.NF.6
9	Estimate fractional amounts through twelfths, using pictures, models, and diagrams	Retained <sup>1</sup>
10	Solve multiplication and division number sentences including interpreting remainders	Retained <sup>1</sup>
11	Multiply 3-digit by 1-digit numbers, 2-digit by 2-digit numbers, and divide 3-digit numbers by 1-digit numbers, with and without remainders	4.NBT.5 4.NBT.6
15	Write number sentences or formulas containing a variable to represent real-life problems	Retained
17	Use manipulatives to represent the distributive property of multiplication over addition to explain multiplying numbers	4.NBT.5
19	Solve one-step equations with whole number solutions	Retained <sup>1</sup>
22	Select and use the appropriate standard units of measure, abbreviations, and tools to measure length and perimeter (i.e., in., cm, ft., yd., mile, m, km), area (i.e., square inch, square foot, square centimeter), capacity (i.e., fl. oz., cup, pt., qt., gal., l, ml), weight/mass (i.e., oz., lb., g, kg, ton), and volume (i.e., cubic cm, cubic in.)	4.MD.1 4.MD.3
25	Use estimates and measurements to calculate perimeter and area of rectangular objects (including squares) in U.S. (including square feet) and metric units	4.MD.3
27	Use unit conversions within the same system to solve real-life problems (e.g., 60 sec. = 1 min., 12 objects = 1 dozen, 12 in. = 1 ft., 100 cm = 1 m, 1 pt. = 2 cups)	4.MD.1 4.MD.2
32	Draw, identify, and classify angles that are acute, right, and obtuse	4.G.1
36	Analyze, describe, interpret, and construct various types of charts and graphs using appropriate titles, axis labels, scales, and legends	4.MD.2 4.MD.4
43	Identify missing elements in a number pattern	Retained <sup>1</sup>

<sup>1</sup> This GLE was moved to another grade but will be taught and tested in this grade to decrease the possibility that the transition will create curricular gaps.



## Reporting Categories

To be more reflective of the focus areas of the CCSS at each grade, the GLEs available for assessment have been grouped into the Reporting Categories shown in Table 2.3. During the transition, the Reporting Categories replace the mathematics strands (e.g., Number and Number Relations, Algebra, etc.) for assessment purposes.

**Table 2.3: Grade 4 Mathematics Reporting Categories**

Reporting Category	GLEs Covered
Number and Operations	1, 2, 4, 10, 11, 15, 17, 19, 43
Fractions	5, 6, 7, 9
Measurement, Data, and Geometry	22, 25, 27, 32, 36

## Mathematics Test Specifications

Table 2.4 provides test specifications for the multiple-choice subtests of the grade 4 LEAP Mathematics assessment. The values in the table are approximations due to slight variations in the content across test forms at grade 4.

**Table 2.4: Grade 4 Mathematics Test Specifications**

Reporting Category	% of Total Points
Number and Operations	55
Fractions	30
Measurement, Data, and Geometry	15
<b>Total</b>	<b>100</b>

Sixty 1-point MC items plus three 4-point constructed-response items equals a 72-point test.

## **Calculator Recommendations and Restrictions**

It is recommended that a calculator be made available to **each** student for instructional and assessment purposes. As with all instructional materials, each individual district and school should determine which calculator best supports its mathematics curriculum and instructional program.

### **Calculators recommended for instruction and assessment:**

- K–4 students: four-function calculator
- 5–8 students: scientific calculator
- 9–12 students: scientific calculator with graphing capabilities

### **Calculators not permitted on statewide assessment:**

- handheld or laptop computers
- pocket organizers
- calculators with Computer Algebra Systems (CAS) or other symbolic manipulation capabilities
- calculators with paper tape
- calculators that talk or make noise
- calculators with QWERTY (typewriter-style) keypads
- electronic writing pads or pen input devices

## Sample Test Items: Grade 4 Mathematics

### Sample Mathematics Constructed-Response Items and Scoring Rubrics

Questions 1 and 2 show sample constructed-response items. Each item involves a number of separate steps and the application of multiple skills. The constructed-response items are designed to assess one or more of the GLEs. The items are scored using an item-specific rubric on a scale of 0 to 4 points.

1. Hahn, Rashid, and Joe picked up litter at Arliss Park. The table below shows what each student removed.

	Cans	Papers	Boxes	Total
Hahn	3	11	2	?
Rashid	5	?	?	18
Joe	?	7	5	15

- A. How many cans did Joe remove?

\_\_\_\_\_

- B. Write a number sentence using the letter  $n$  to represent the number of cans Joe removed.

\_\_\_\_\_

- C. Rashid removed the same number of papers as Joe removed cans. How many **boxes** did Rashid remove? Show your work.

\_\_\_\_\_

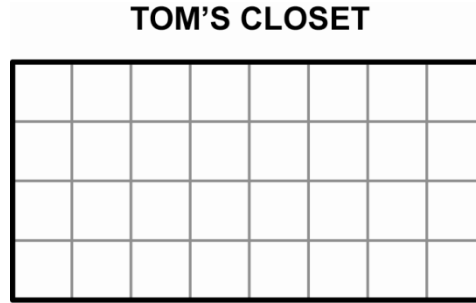
- D. Use one of the following symbols ( $=$ ,  $<$ ,  $>$ ) to describe the relationship between the total number of items that Hahn and Rashid found.

\_\_\_\_\_

*Match to GLE: This item measures GLE 15: Write number sentences or formulas containing a variable to represent real-life problems and GLE 19: Solve one-step equations with whole number solutions.*

<b>Scoring Rubric</b>	
<b>4</b>	The student's response earns 4 points.
<b>3</b>	The student's response earns 3 or 3 ½ points.
<b>2</b>	The student's response earns 2 or 2 ½ points.
<b>1</b>	The student's response earns ½ to 1 ½ points. <b>OR</b> The student's response demonstrates minimal understanding of variables and mathematical symbols.
<b>0</b>	The student's response is incorrect, irrelevant to the skill or concept being measured, too brief to evaluate, or blank.
<b>Points Assigned:</b>	
<p><i>Part A (1 point):</i></p> <ul style="list-style-type: none"> <li>1 point for the correct answer of 3</li> </ul> <p><i>Part B (1 point):</i></p> <ul style="list-style-type: none"> <li>1 point for writing a correct number sentence (<math>n + 7 + 5 = 15</math> or <math>15 - 5 - 7 = n</math>, or <math>n + 12 = 15</math>)</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>½ point for correct number sentence with no indication of an unknown (<math>3 + 7 + 5 = 15</math>)</li> </ul> <p><i>Part C (1 point):</i></p> <ul style="list-style-type: none"> <li>1 point for giving the correct answer of 10 boxes (or answers consistent with an incorrect answer to part A) with correct process (<math>18 - 5 - 3 = 10</math> or <math>18 - 8 = 10</math> or <math>10 + 5 + 3 = 18</math>)</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>½ point for an incorrect answer using a correct process with arithmetic error(s) <b>OR</b> for a correct answer (or answer consistent with an incorrect answer to part A) with no process</li> </ul> <p><i>Part D (1 point):</i></p> <ul style="list-style-type: none"> <li>1 point for correct number sentence (<math>16 &lt; 18</math> or <math>18 &gt; 16</math>)</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>½ point for correctly comparing the wrong people or for <math>18 \neq 16</math></li> </ul>	

2. Tom drew the diagram below to show the size of his closet.



Each square on the grid Tom used is 1 foot long and 1 foot wide.

- A.** What is the area in square feet of Tom's closet?
- B.** What is the perimeter in feet of Tom's closet?
- C.** What is the perimeter in inches of Tom's closet? Explain how you found your answer.

*Match to GLE: This item measures GLE 25: Use estimates and measurements to calculate perimeter and area of rectangular objects (including squares) in U.S. (including square feet) and metric units and GLE 27: Use unit conversions within the same system to solve real-life problems (e.g., 60 sec. = 1 min., 12 objects = 1 dozen, 12 in. = 1 ft., 100 cm = 1 m, 1 pt. = 2 cups).*

<b>Scoring Rubric</b>	
<b>4</b>	The student's response earns 4 points.
<b>3</b>	The student's response earns 3 points.
<b>2</b>	The student's response earns 2 points.
<b>1</b>	The student's response earns 1 point.
<b>0</b>	The student's response is incorrect or irrelevant to the skill or concept being measured or is blank.
<b>Sample Answer:</b>	
<p>A. 32 square feet</p> <p>B. 24 feet</p> <p>C. 288 inches. I know there are 12 inches in 1 foot, so I multiplied 24 feet by 12 inches, and <math>24 \times 12 = 288</math> inches.</p>	
<b>Points Assigned:</b>	
<p>1 point for each of the following:</p> <ul style="list-style-type: none"> <li>- Correctly determining the area of the closet.</li> <li>- Correctly determining the perimeter of the closet.</li> <li>- Correctly determining the perimeter of the closet in inches.</li> <li>- Providing a valid mathematical explanation of how the perimeter of the closet in inches was determined.</li> </ul>	

### Sample Multiple-Choice Items

Questions 3 through 24 are sample multiple-choice items, arranged by GLE. The items test students' ability to solve math problems. Most items are provided in context and require students to use information from stories, graphs, or tables to solve a problem. Items may assess some of the skills of a GLE, while other items may measure all of the skills of the GLE.

3. Last season, a total of six hundred forty-two thousand one hundred forty people went to a baseball team's games. Which number shows another way to correctly write the number of people who went to the baseball team's games?
- A. 642,104
  - B. 642,114
  - C. 642,140
  - D. 640,214

**Correct response: C**

*Match to GLE: This item measures GLE 1: Read and write place value in word, standard, and expanded form through 1,000,000.*

4. Richard saved 1,812 pennies. Which expression shows another way to represent 1,812?
- A. 1 thousand + 7 hundreds + 1 ten + 12 ones
  - B. 10 thousands + 8 hundreds + 1 ten + 2 ones
  - C. 1 hundred + 8 tens + 12 ones
  - D. 1 thousand + 7 hundreds + 10 tens + 12 ones

**Correct response: D**

*Match to GLE: This item measures GLE 2: Read, write, compare, and order whole numbers using place value concepts, standard notation, and models through 1,000,000.*

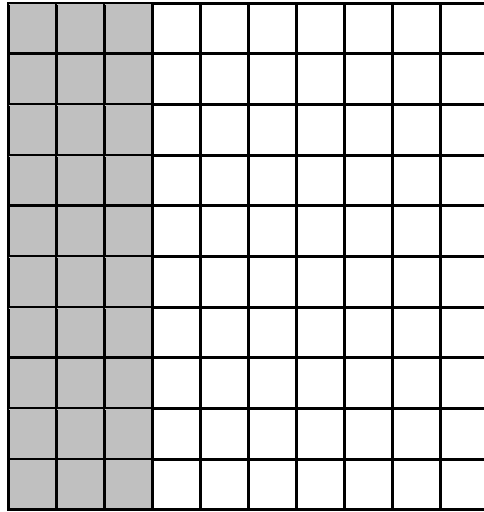
5. A gardener buys 9 packages of plants. Each package has 12 plants in it. How many total plants did the gardener buy?
- A. 92
  - B. 98
  - C. 101
  - D. 108

**Correct response: D**

*Match to GLE: This item measures GLE 4: Know all basic facts for multiplication and division through  $12 \times 12$  and  $144 \div 12$ , and recognize factors of composite numbers less than 50.*



6. Ms. Carew asked what part of this hundred block is shaded.



Whitney says that  $\frac{3}{10}$  is shaded.

Adam says that 0.3 is shaded.

Sally says that 0.30 is shaded.

Colea says that 0.03 is shaded.

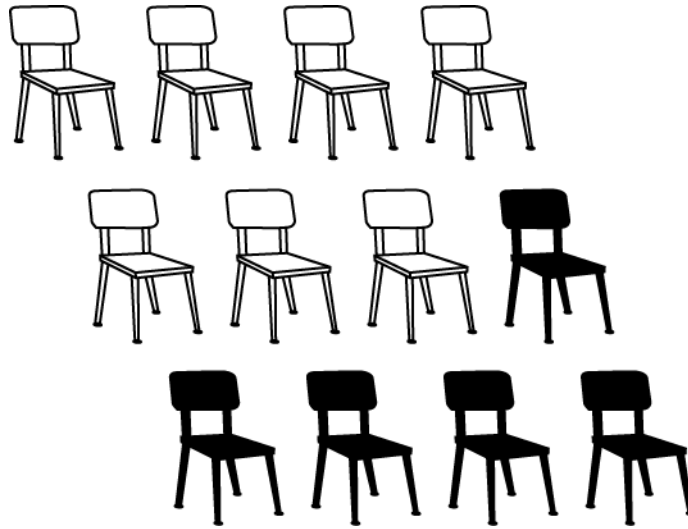
Who is **wrong**?

- A. Whitney
- B. Adam
- C. Sally
- D. Colea

**Correct response: D**

*Match to GLE: This item measures GLE 5: Read, write, and relate decimals through hundredths and connect them with corresponding decimal fractions and GLE 6: Model, read, write, compare, order, and represent fractions with denominators through twelfths using region and set models.*

7. The 12 chairs shown below are in a classroom.



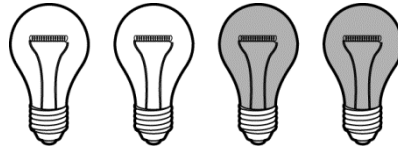
What fraction of the chairs are white?

- A.  $\frac{5}{12}$
- B.  $\frac{5}{7}$
- C.  $\frac{7}{12}$
- D.  $\frac{7}{5}$

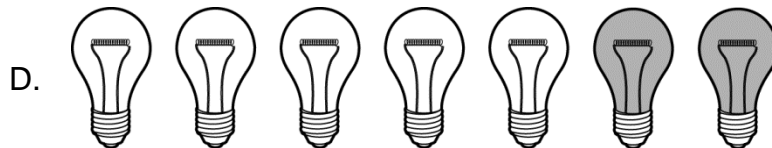
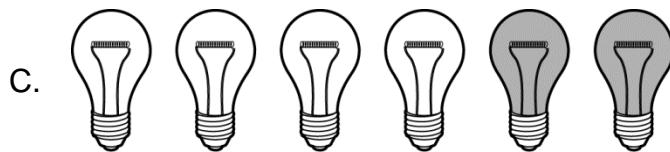
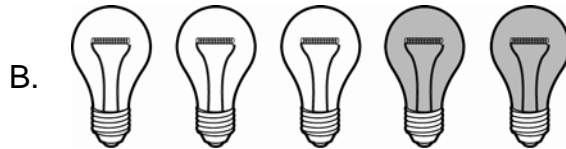
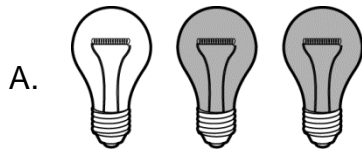
**Correct response: C**

*Match to GLE: This item measures GLE 6: Model, read, write, compare, order, and represent fractions with denominators through twelfths using region and set models.*

8. Kelly turned on the lights in his living room to see which bulbs were burned out, as shown below.



A **greater** fraction of light bulbs was burned out in Kelly's kitchen than in his living room. Which model could represent the light bulbs in Kelly's kitchen?



**Correct response: A**

*Match to GLE: This item measures GLE 6: Model, read, write, compare, order, and represent fractions with denominators through twelfths using region and set models.*

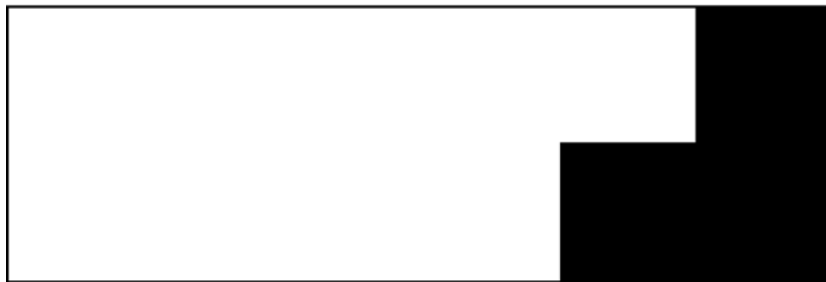
9. Kevin's mother told him to buy **seven-tenths** of a pound of hamburger. Each package is marked to show its weight. Kevin should buy the package marked
- A. 7.10 pounds.
  - B. 1.70 pounds.
  - C. 0.7 pound.
  - D. 0.1 pound.

**Correct response: C**

*Match to GLE: This item measures GLE 7: Give decimal equivalents of halves, fourths, and tenths.*

10. A diagram of Seth's vegetable garden is shown below. He shaded the area in which he planted strawberries.

**Seth's Garden**



In what fraction of his garden did Seth plant strawberries?

- A.  $\frac{1}{12}$
- B.  $\frac{1}{6}$
- C.  $\frac{1}{4}$
- D.  $\frac{1}{3}$

**Correct response: C**

*Match to GLE: This item measures GLE 9: Estimate fractional amounts through twelfths, using pictures, models, and diagrams.*

11. Patty collected 26 eggs from her chickens to put them in egg cartons. Each carton holds 6 eggs. She filled as many empty cartons with eggs as possible and put the remaining eggs in the refrigerator. How many eggs did Patty put in the refrigerator?
- A. 0
  - B. 2
  - C. 4
  - D. 5

**Correct response: B**

*Match to GLE: This item measures GLE 10: Solve multiplication and division number sentences including interpreting remainders.*

12. Curt has 108 books. He puts 8 books on each shelf in his office. The rest of the books he puts on his desk. The number sentence below can be used to help find the number of books Curt puts on his desk.

$$108 \div 8 = \square$$

How many books is Curt putting on his desk?

- A. 0 books
- B. 4 books
- C. 5 books
- D. 13 books

**Correct response: B**

*Match to GLE: This item measures GLE 10: Solve multiplication and division number sentences including interpreting remainders.*

13. Each page on a website has 16 pictures on it. The website has 14 different pages. How many total pictures are on the website?
- A. 30
  - B. 80
  - C. 124
  - D. 224

**Correct response: D**

*Match to GLE: This item measures GLE 11: Multiply 3-digit by 1-digit numbers, 2-digit by 2-digit numbers, and divide 3-digit numbers by 1-digit numbers, with and without remainders.*

14. Amanda earns \$8 per hour at her job. Last week, she earned a total of \$288. How many hours did she work last week?
- A. 28
  - B. 31
  - C. 36
  - D. 40

**Correct response: C**

*Match to GLE: This item measures GLE 11: Multiply 3-digit by 1-digit numbers, 2-digit by 2-digit numbers, and divide 3-digit numbers by 1-digit numbers, with and without remainders.*

15. Tim wants to make 16 cards for his friends. If  $t$  stands for the time that Tim will spend making each card, which number sentence can you use to find out how long it is going to take Tim to make the 16 cards?

A.  $t + 16 = \square$

B.  $t - 16 = \square$

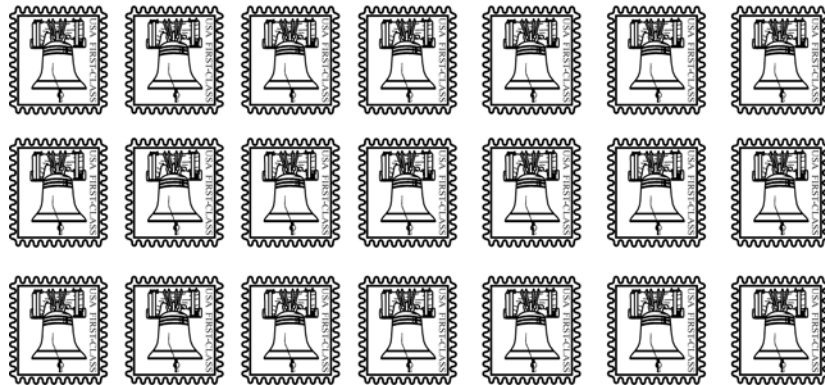
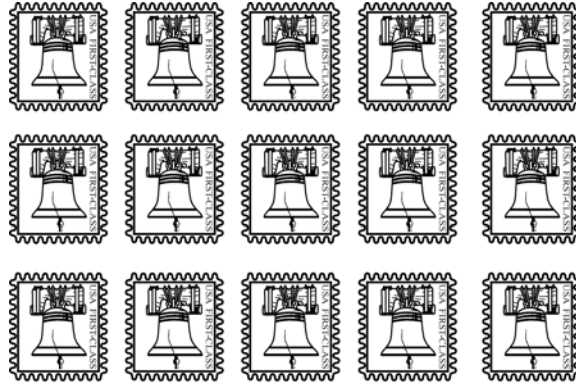
C.  $t \times 16 = \square$

D.  $t \div 16 = \square$

**Correct response: C**

*Match to GLE: This item measures GLE 15: Write number sentences or formulas containing a variable to represent real-life problems.*

16. The stamps on one page in Jeremy's stamp album are shown below.



Which of the following is equivalent to the number of stamps on the page of Jeremy's stamp album shown above?

- A.  $(3 \times 5) + 7$
- B.  $(3 \times 7) + 5$
- C.  $3 \times (5 + 7)$
- D.  $3 \times (5 \times 7)$

**Correct response: C**

*Match to GLE: This item measures GLE 17: Use manipulatives to represent the distributive property of multiplication over addition to explain multiplying numbers.*



17. Parents and students attended Back-to-School night in the school auditorium. In the front of the auditorium, there are 76 chairs arranged equally in 4 rows. How many chairs are in each row?

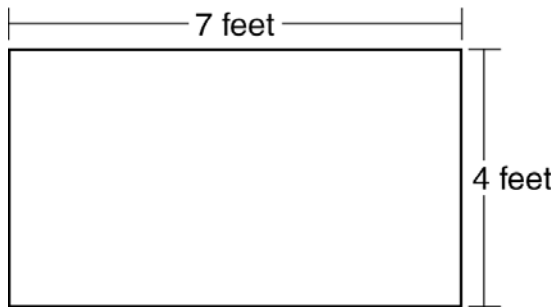
$$4 \times \square = 76$$

- A. 12
- B. 15
- C. 18
- D. 19

**Correct response: D**

*Match to GLE: This item measures GLE 19: Solve one-step equations with whole number solutions.*

18. The measurements of the tent floor that Tran and his brother will share are shown below.



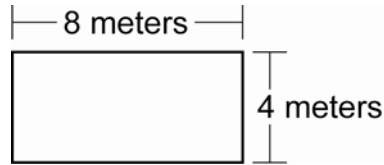
What is the area of the floor?

- A. 11 sq. ft.
- B. 14 sq. ft.
- C. 22 sq. ft.
- D. 28 sq. ft.

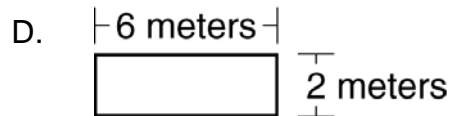
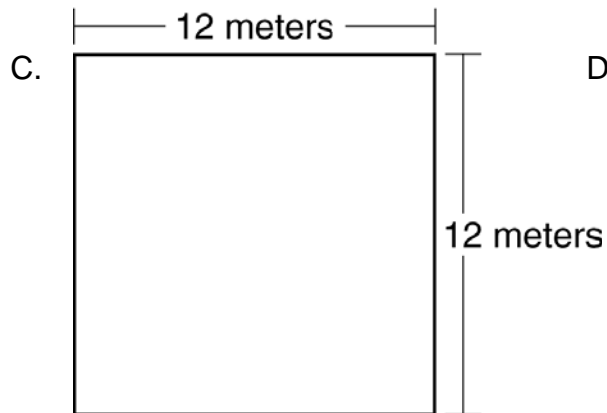
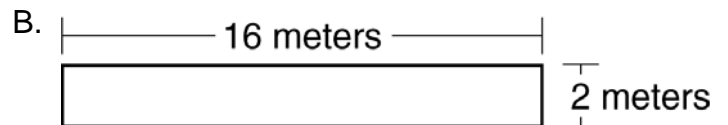
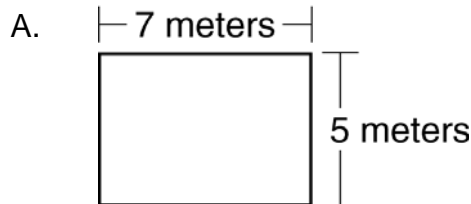
**Correct response: D**

*Match to GLE: This item measures GLE 22: Select and use the appropriate standard units of measure, abbreviations, and tools to measure length and perimeter (i.e., in., cm, ft., yd., mile, m, km), area (i.e., square inch, square foot, square centimeter), capacity (i.e., fl. oz., cup, pt., qt., gal., l, ml), weight/mass (i.e., oz., lb., g, kg, ton), and volume (i.e., cubic cm, cubic in.).*

19. Tameka has a garden in the shape of a rectangle. A model of her garden is shown below



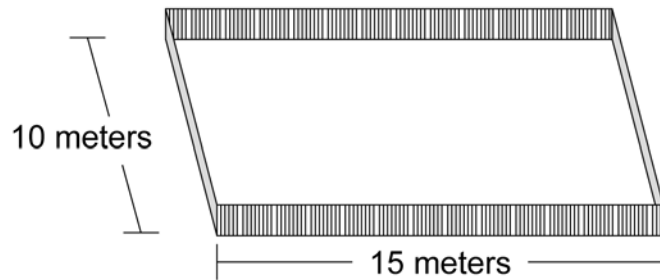
Eli also has a garden in the shape of a rectangle. His garden has the same area as Tameka's garden. Which rectangle could model Eli's garden?



**Correct response: B**

*Match to GLE: This item measures GLE 22: Select and use the appropriate standard units of measure, abbreviations, and tools to measure length and perimeter (i.e., in., cm, ft., yd., mile, m, km), area (i.e., square inch, square foot, square centimeter), capacity (i.e., fl. oz., cup, pt., qt., gal., l, ml), weight/mass (i.e., oz., lb., g, kg, ton), and volume (i.e., cubic cm, cubic in.).*

Use the diagram below to answer question 20.

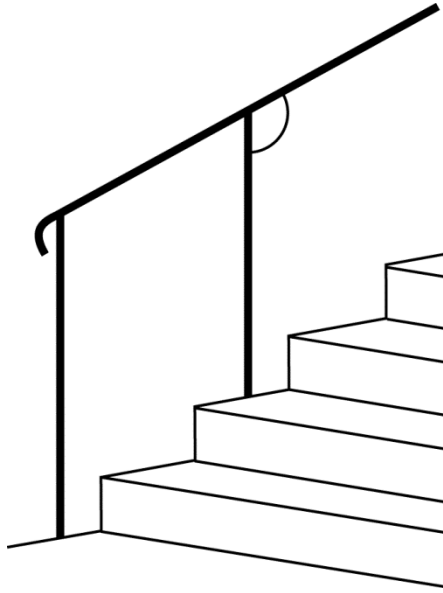


20. Mr. Rollins put a fence all the way around his rectangular yard for his dog. What is the perimeter of his yard?
- A. 25 meters
  - B. 50 meters
  - C. 150 meters
  - D. 250 meters

**Correct response: B**

*Match to GLE: This item measures GLE 22: Select and use the appropriate standard units of measure, abbreviations, and tools to measure length and perimeter (i.e., in., cm, ft., yd., mile, m, km), area (i.e., square inch, square foot, square centimeter), capacity (i.e., fl. oz., cup, pt., qt., gal., l, ml), weight/mass (i.e., oz., lb., g, kg, ton), and volume (i.e., cubic cm, cubic in.).*

21. One part of a railing is shown below.



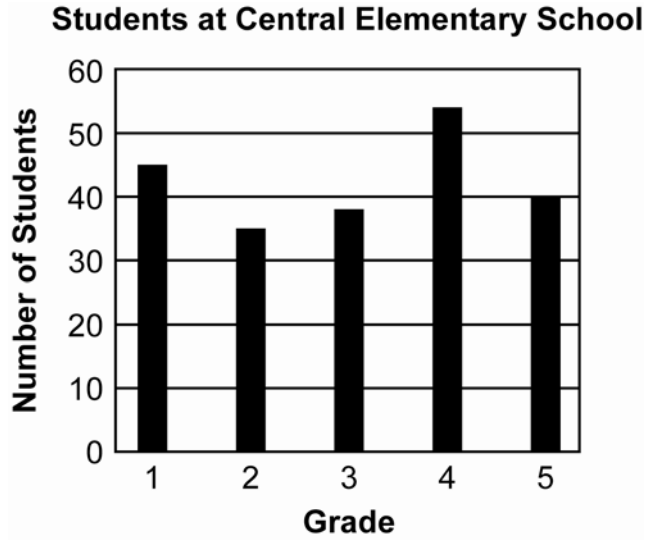
Which word **best** describes the marked angle of the railing?

- A. Acute
- B. Obtuse
- C. Right
- D. Straight

**Correct response: B**

*Match to GLE: This item measures GLE 32: Draw, identify, and classify angles that are acute, right, and obtuse.*

22. Jerome made the graph below.



Which question can be answered using the graph Jerome made?

- A. Which grade has the greatest number of girls?
- B. Which grade will have the most students next year?
- C. How many more students are in grade 5 than in grade 2?
- D. How many classrooms are at Central Elementary School?

**Correct response: C**

*Match to GLE: This item measures GLE 36: Analyze, describe, interpret, and construct various types of charts and graphs using appropriate titles, axis labels, scales, and legends.*

23. Bettina noticed that the numbers on the front of the floats in the parade followed the pattern shown below. What number was on the 4th float?

1, 3, 7, , 21, 31

- A. 9
- B. 11
- C. 13
- D. 14

**Correct response: C**

*Match to GLE: This item measures GLE 43: Identify missing elements in a number pattern.*

24. Megan is increasing the number of minutes she exercises each day according to the pattern shown below.

**Number of Minutes of Exercise**

Monday	Tuesday	Wednesday	Thursday
2	4	8	16

How many minutes should she exercise on Friday?

- A. 18
- B. 20
- C. 24
- D. 32

**Correct response: D**

*Match to GLE: This item measures GLE 43: Identify missing elements in a number pattern.*





## Chapter 3: LEAP Science, Grade 4

This chapter provides specifications for the Science test for grade 4 LEAP. It describes the contents and format of the test, provides the number and types of items, and explains how the strands, standards, benchmarks, and dimensions for Science are assessed.

### Test Structure

The Science test consists of three sessions and is administered in one day. Students are allowed as much time as they need to complete each session, but suggested times are provided in the *Test Administration Manual*; it explains the procedures for allowing students additional time to complete a session of the test.

**Session 1:** 40 multiple-choice items

**Session 2:** 4 short-answer items

**Session 3:** 1 comprehensive science task with 3 short-answer items and 1 extended constructed-response item

### Item Types

The Science test includes multiple-choice items, short-answer items scored with an item-specific 2-point rubric, and 1 extended constructed-response item scored with an item-specific 4-point rubric.

In Session 1, the multiple-choice items assess all five science strands. Each multiple-choice item consists of a stem and four answer options (A, B, C, and D).

In Session 2, independent short-answer items assess the four content strands.

In Session 3, the 3 short-answer items are inquiry-based, and the extended constructed-response item relates to the science content of the task.

**Note:** Science is composed of five strands—Science as Inquiry, Physical Science, Life Science, Earth and Space Science, and Science and the Environment. Of these, Science as Inquiry describes the inquiry processes, which are applied to each of the four strands that explore the content of science.

Any of the Science test items may include stimulus material, for example:

- data tables or graphs presenting data to be read or interpreted;
- charts, illustrations, or graphic organizers;
- descriptions and details of science investigations; and/or
- maps showing geographical features.

## Test Description

The grade 4 LEAP Science test assesses all five science strands:

- Science as Inquiry
- Physical Science
- Life Science
- Earth and Space Science
- Science and the Environment

The test items reflect the benchmarks and focus on both the *why* and the implications of phenomena in science, rather than focus on the *what* and the specific facts or details.

The **multiple-choice items** focus on important science concepts and the process of inquiry and allow students to show their breadth of understanding.

The **2-point short-answer items** address the unifying concepts and processes of science. These items allow students to reflect on a science concept, demonstrate their understanding, and make meaning from a given set of data. The wording of the items is direct and specific. Items that require multiple examples or reasons clearly state the exact number rather than a minimum (for example, “Give at least *two* reasons . . .”).

The **comprehensive science task** integrates the Science as Inquiry strand with at least one content strand (such as Science and the Environment). Students are provided a science manipulative and are required to observe, use, and react to the material. Students are also expected to make scientific conclusions based on this experience. Separate card stock manipulatives are provided. The types of test items that accompany the science task may include data tables for students to complete or interpret. Students may be required to record data and observations about the manipulative.

The reading level is minimized to the extent possible (except for necessary terms) so that students’ reading ability does not interfere with their ability to demonstrate their science knowledge and skills.

## Scoring the Science Sessions

Each multiple-choice item has four response options (A, B, C, and D) and is scored right/wrong. Correct answers receive a score of 1; incorrect answers receive a score of 0.

Science has seven 2-point short-answer items and one 4-point extended constructed-response item. The specific rubric for each of these items is developed from the general scoring rubrics for LEAP, GEE, and *i*LEAP.

**Table 3.1: General Scoring Rubric—Short-Answer Items**

<b>Score Level</b>	<b>Description of Score Level</b>
<b>2</b>	<ul style="list-style-type: none"><li>• The student's response provides a complete and correct answer.</li></ul>
<b>1</b>	<ul style="list-style-type: none"><li>• The student's response is partially correct.</li><li>• The student's response demonstrates limited awareness or contains errors.</li></ul>
<b>0</b>	<ul style="list-style-type: none"><li>• The student's response is totally incorrect, irrelevant, too minimal to evaluate, or blank.</li></ul>

**Table 3.2: General Scoring Rubric—Extended Constructed-Response Items**

<b>Score Level</b>	<b>Description of Score Level</b>
<b>4</b>	<ul style="list-style-type: none"><li>• The response demonstrates in-depth understanding of the relevant content and/or procedures.</li><li>• The student completes all important components of the task accurately and communicates ideas effectively.</li><li>• Where appropriate, the student offers insightful interpretations and/or extensions.</li><li>• Where appropriate, the student chooses more sophisticated reasoning and/or efficient procedures.</li></ul>
<b>3</b>	<ul style="list-style-type: none"><li>• The response demonstrates understanding of major concepts and/or processes, although less important ideas or details may be overlooked or misunderstood.</li><li>• The student completes the most important aspects of the task accurately and communicates clearly.</li><li>• The student's logic and reasoning may contain minor flaws.</li></ul>
<b>2</b>	<ul style="list-style-type: none"><li>• The student completes some parts of the task successfully.</li><li>• The response demonstrates gaps in conceptual understanding.</li></ul>
<b>1</b>	<ul style="list-style-type: none"><li>• The student completes only a small portion of the task and/or shows minimal understanding of the concepts or processes.</li></ul>
<b>0</b>	<ul style="list-style-type: none"><li>• The student's response is totally incorrect, irrelevant, too brief to evaluate, or blank.</li></ul>

## Science Test Specifications, Grade 4

**Table 3.3: Number of Multiple-Choice, Short-Answer, and Extended Constructed-Response Items by Strand**

Strand	Multiple-Choice (1 point)	Short-Answer (2 points)	ECR Items (4 points)	Score Points
1. Science as Inquiry	8	0		8
2. Physical Science	8	1		10
3. Life Science	8	1		10
4. Earth and Space Science	8	1		10
5. Science and the Environment	8	1		10
<b>Comprehensive Science Task</b>				
1. Science as Inquiry <u>Dimension 1</u> (Questioning, Planning, Doing, and Recording)		1		2
1. Science as Inquiry <u>Dimension 2</u> (Interpreting and Communicating)		2		4
2. Physical Science			1 (in one of the four strands)	4
3. Life Science				
4. Earth and Space Science				
5. Science and the Environment				
<b>Total Score Points</b>	<b>40</b>	<b>14</b>	<b>4</b>	<b>58</b>

## STRANDS, STANDARDS, BENCHMARKS, AND DIMENSIONS ASSESSED

Each of the five science strands is associated with a single standard. The *strand* name serves as a label referring to the full text of its associated *standard*. Each strand has several benchmarks that describe what students should know and be able to do in the context of the strands of science. This section lists the benchmarks that are assessed and explains how they are assessed.

**Strand SI: Science as Inquiry**

**Standard:** The students will *do* science by engaging in partial and full inquiries that are within their developmental capabilities.

**Strand PS: Physical Science**

**Standard:** Students will develop an understanding of the characteristics and interrelationships of matter and energy in the physical world.

**Strand LS: Life Science**

**Standard:** The students will become aware of the characteristics and life cycles of organisms and understand their relationships to each other and to their environment.

**Strand ESS: Earth and Space Science**

**Standard:** The students will develop an understanding of the properties of earth materials, the structure of Earth's system, Earth's history, and Earth's place in the universe.

**Strand SE: Science and the Environment**

**Standard:** In learning environmental science, students will develop an appreciation of the natural environment, learn the importance of environmental quality, and acquire a sense of stewardship. As consumers and citizens, they will be able to recognize how our personal, professional, and political actions affect the natural world.

These strands, standards, and benchmarks are further explained by indicating levels of thinking called *dimensions*.

The dimensions of science were developed to explain the level of thinking expected in the assessment of each science benchmark. Some benchmarks are assessed at a level that requires the students to demonstrate scientific knowledge and understanding, which is dimension 1. The next level requires an explanation of scientific knowledge and understanding, which is dimension 2. The most complex level requires the application of scientific knowledge and understanding, which is dimension 3.

The dimensions of science indicate levels of complexity of thought, not necessarily levels of difficulty. A benchmark assessed at the level of dimension 1 may be more difficult than a benchmark assessed at the level of dimension 3 because of the difficulty of the content itself.

The dimensions indicate what students are expected to be able to do with the concepts, processes, and ideas for each strand. The two dimensions for the Science as Inquiry strand are different from the dimensions for the content strands. These two unique dimensions help define the skills and habits of mind students exhibit when they actively engage with materials and consider new ideas or evidence.

Strand	Strand Dimensions
<b>Science as Inquiry (SI)</b>	1. Questioning, Planning, Doing, and Recording 2. Interpreting and Communicating
<b>Physical Science (PS)</b> <b>Life Science (LS)</b> <b>Earth and Space Science (ESS)</b> <b>Science and the Environment (SE)</b>	1. Understanding Essential Content and Concepts 2. Explaining, Reflecting, and Connecting 3. Applying and Using Knowledge and Technology

This section provides the following information:

**Strand:** This information is organized according to the five strands of science:

- Science as Inquiry
- Physical Science
- Life Science
- Earth and Space Science
- Science and the Environment

**Benchmarks Assessed:** the text of all benchmarks eligible for LEAP

**Dimensions:** The dimensions indicate what students are expected to be able to do with the concepts and processes for each strand and benchmark.

**Key Concepts:** important concepts that may be assessed

### Explanation of Benchmark Codes

Benchmarks are grouped by strand and thematic category. For example:

*Strand:* Physical Science

- Categories:*
- A. Properties of Objects and Materials
  - B. Position and Motion of Objects
  - C. Forms of Energy

Benchmarks are coded by strand, grade cluster (E, M, H), and benchmark number. The first term in the code refers to the strand. The second term refers to the grade cluster, and the third term refers to the category and benchmark number. Categories are indicated by letters.

**Table 3.4: Examples of Science Codes**

<b>Code</b>	<b>Translation</b>
SI-E-A5	SI strand, elementary level, category A, benchmark 5
PS-M-B4	PS strand, middle school level, category B, benchmark 4
SE-H-A6	SE strand, high school level, category A, benchmark 6

For most grade clusters, strands are divided into categories, or major topical areas. However, the SE strand has no categories for prekindergarten through 4 and 5 through 8.

## Science as Inquiry

Inquiry is an integral component of scientific literacy because it actively involves students in the process of science. Students become better problem-solvers and decision-makers while using the tools, techniques, and habits of mind characteristic of scientific inquiry. Decision-making includes recognition of the impact of actions and accountability for one's choices.

Dimension 1: Questioning, Planning, Doing, and Recording	
Benchmarks Assessed	
SI-E-A1	asking appropriate questions about organisms and events in the environment
SI-E-A2	planning and/or designing and conducting a scientific investigation
SI-E-A4	employing equipment and tools to gather data and extend the sensory observations
SI-E-A7	utilizing safety procedures during experiments
SI-E-B1	categorizing questions into what is known, what is not known, and what questions need to be explained
SI-E-B2	using appropriate experiments depending on the questions to be explored
SI-E-B3	choosing appropriate equipment and tools to conduct an experiment

### Specifically, students may be required to:

- construct knowledge and explanations
- formulate questions
- design plausible means of gathering data or evidence related to their questions
- design and carry out scientific investigations
- use appropriate tools, technology, and techniques
- gather data to address the questions they formulated
- recognize the variety of types of information that constitute evidence
- recognize the inherent bias and limitations of each source of information
- keep clear, concise records of appropriate data and observations



## Dimension 2: Interpreting and Communicating

### Benchmarks Assessed

SI-E-A3	communicating that observations are made with one's senses
SI-E-A5	using data, including numbers and graphs, to explain observations and experiments
SI-E-A6	communicating observations and experiments in oral and written formats
SI-E-B4	developing explanations by using observations and experiments
SI-E-B5	presenting the results of experiments
SI-E-B6	reviewing and asking questions about the results of investigations

### Specifically, students may be required to:

- think critically and logically about relationships between different pieces of evidence
- develop and modify predictions, models, and explanations
- make meaning of observations, natural phenomena, and everyday occurrences
- share the results of scientific investigations through oral and written formats

### Key Concepts:

These concepts describe important content emphasis regarding the knowledge and skills eligible for assessment of each strand.

To experience the key concepts of Science as Inquiry, students must do the following:

- Identify questions that can guide a scientific investigation.
- Identify which questions can or cannot be answered based on a given scenario.
- Identify which senses are used to make observations.
- Identify the best way to gather data in an investigation.
- Identify correct procedures in an investigation and how to make the investigation better.
- Identify the correct setup in an investigation.
- Identify which tools are used to observe objects and conduct investigations.
- Identify correct safety tools and procedures.
- Select the appropriate tools and units of measurement to answer questions.
- Using a graph, chart, and/or tables—read, interpret, and make predictions based on information given.
- Identify examples of scientific discoveries that have affected society (their world).
- Select appropriate reasons for repeating experiments/investigations.

## Physical Science

Physical Science focuses on the study of materials and their interactions with other forms of matter and energy. Because students are constantly exposed to different forms of matter and energy in the world, there are rich opportunities to draw on concrete experiences and observations to provide the foundation for more abstract concepts and ideas.

### Dimension 1: Understanding Essential Content and Concepts

#### Benchmarks Assessed

PS-E-A1	observing, describing, and classifying objects by properties (size, weight, shape, color, texture, and temperature)
PS-E-A2	measuring properties of objects using appropriate materials, tools, and technology
PS-E-A3	observing and describing objects by the properties of the materials from which they are made (paper, wood, metal)
PS-E-B1	observing and describing the position of an object relative to another object or the background
PS-E-C1	experimenting and communicating how vibrations of objects produce sound and how changing the rate of vibration varies the pitch
PS-E-C2	investigating and describing how light travels and what happens when light strikes an object (reflection, refraction, and absorption)
PS-E-C3	investigating and describing different ways heat can be produced and moved from one object to another by conduction
PS-E-C4	investigating and describing how electricity travels in a circuit

#### Specifically, students may be required to:

- demonstrate knowledge and understanding of
  - properties of matter*
  - physical interactions of matter*
  - the transfer of energy*
- recognize and discuss patterns of behavior among materials

## Dimension 2: Explaining, Reflecting, and Connecting

### Benchmarks Assessed

PS-E-A4	describing the properties of the different states of matter and identifying the conditions that cause matter to change states
PS-E-B2	exploring and recognizing that the position and motion of objects can be changed by pushing or pulling (force) over time
PS-E-B4	investigating and describing how the motion of an object is related to the strength of the force (pushing or pulling) and the mass of the object.
PS-E-C5	investigating and communicating that magnetism and gravity can exert forces on objects without touching the objects
PS-E-C7	exploring and describing the uses of energy at school, home, and play

### Specifically, students may be required to:

- think critically and logically about the relationships between evidence and Physical Science concepts
- recognize similarities or differences
- recognize patterns of change
- recognize relations within systems or between form and function
- unify concepts and processes to explain natural phenomena, observations, and ideas

## Dimension 3: Applying and Using Knowledge and Technology

### Benchmarks Assessed

PS-E-A5	creating mixtures and separating them based on differences in properties (salt, sand)
PS-E-B3	describing an object's motion by tracing and measuring its position over time
PS-E-C6	exploring and describing simple energy transformations

### Specifically, students may be required to:

- generalize findings about Physical Science concepts
- solve contextualized problems
- apply data to new situations
- critically evaluate new ideas
- propose, analyze, and critique explanations for observed phenomena
- use technology and scientific information to investigate and solve problems
- use technology and scientific information to communicate their findings and ideas

## **Key Concepts:**

These concepts describe important content emphasis regarding the knowledge and skills eligible for assessment of each strand.

To experience the key concepts of Physical Science, students must do the following:

- Use U.S. system and metric units to determine linear, volume, and weight/mass measurements.
- Identify or describe the behavior of light in refraction (for example, through a prism, in water), reflection (for example, mirror), and absorption (for example, compare black and white).
- Identify the three states of matter and describe how molecules move through each state (for example, water). Explain how water changes from solid to liquid to gas.
- Identify insulators and conductors of heat and describe how heat is conducted.
- Using experimentation, compare and classify objects by physical property (for example, density, shape, magnetism, conduction, base material).
- Compare and differentiate between the weight and mass of objects.
- Recognize how electricity flows through an open and a closed system.
- Identify a force that causes an object to move; determine the direction and amount of movement (for example, push, pull, air pressure).
- Identify forms of energy; describe basic energy transformations (for example, from light to heat, from potential to kinetic) and actions that produce heat energy (friction).
- Identify how an energy source powers an object.
- Understand sound (vibration) production and transmission; determine how to change pitch and volume using common objects.
- Explain gravity and its effects on objects (for example, holds humans to Earth's surface, objects of various masses falling at same rate).
- Identify appropriate tools and techniques for separating mixtures.
- Observe and describe changes in the position of an object over time in relation to a fixed position (frame of reference).
- Use mathematics to determine the rate of motion of an object or to interpret data and graphs of changes in position over time.

## Life Science

Life Science focuses on the study of living organisms—structure and function, characteristics, behavior, and interaction. The concept of species survival, through natural selection and adaptation, drives the study of organisms, including their form and function, roles in an ecosystem, and evolutionary relationships to other organisms.

### Dimension 1: Understanding Essential Content and Concepts

#### Benchmarks Assessed

- LS-E-A1 identifying the needs of plants and animals, based on age-appropriate recorded observations
- LS-E-A2 distinguishing between living and nonliving things
- LS-E-A3 locating and comparing major plant and animal structures and their functions
- LS-E-A5 locating major human body organs and describing their functions
- LS-E-A6 recognizing the food groups necessary to maintain a healthy body

#### Specifically, students may be required to:

- develop an understanding of the characteristics and relationships of organisms and their environments
- develop an understanding of the principles and concepts that explain characteristics of plants and animals (for example, systems interactions, form and function)

### Dimension 2: Explaining, Reflecting, and Connecting

#### Benchmarks Assessed

- LS-E-A4 recognizing that there is great diversity among organisms
- LS-E-B1 observing and describing the life cycles of some plants and animals
- LS-E-B2 observing, comparing, and grouping plants and animals according to likenesses and/or differences
- LS-E-B3 observing and recording how the offspring of plants and animals are similar to their parents
- LS-E-C2 describing how the features of some plants and animals enable them to live in specific habitats
- LS-E-C3 observing animals and plants and describing interaction or interdependence

#### Specifically, students may be required to:

- think critically and logically about the relationships between evidence and Life Science concepts
- recognize the importance of and relationships between separate ideas, facts, and phenomena
- recognize similarities or differences
- recognize patterns of change or constancy
- recognize relations within systems or between form and function
- unify concepts and processes to explain natural phenomena, observations, and ideas

<b>Dimension 3: Applying and Using Knowledge and Technology</b>
<b>Benchmarks Assessed</b>
LS-E-B4 observing, recording, and graphing student growth over time using a variety of quantitative measures (height, weight, linear measure of feet and hands, etc.) LS-E-C1 examining the habitats of plants and animals and determining how basic needs are met within each habitat

**Specifically, students may be required to:**

- use scientific knowledge and understanding to generalize findings and Life Science concepts
- solve contextualized problems
- apply data to new situations
- critically evaluate new ideas
- propose, recognize, analyze, and critique explanations for observed phenomena
- use technology and scientific information to investigate and solve problems
- communicate findings and ideas

**Key Concepts:**

These concepts describe important content emphasis regarding the knowledge and skills eligible for assessment of each strand.

To experience the key concepts of Life Science, students must do the following:

- Describe functions and the major components of the circulatory, skeletal, urinary, digestive, and respiratory systems.
- Identify the functions of plant and animal structures.
- Identify how plant and animal features (characteristics) protect them from predators and

help them to survive.

- Group/compare/classify plants and animals based on common characteristics.
- Identify a well-balanced meal that includes all food groups.
- Sequence stages in the life cycles of various organisms (butterfly, frog).
- Determine an appropriate habitat for a common animal.
- Describe how the increase or decrease of a population of organisms affects other organisms within the same habitat.
- Explain interactions or relationships among plants and animals.
- Identify similarities and differences among parents and their offspring and traits most likely to be inherited.
- Explain the benefits of regular exercise and nutrients such as proteins, carbohydrates, and fats to the human body.
- Compare living (biotic) to nonliving (abiotic).

## Earth and Space Science

Earth and Space Science focuses on the properties, structure, and interactions of the subsystems of Earth, solar system, and universe. The study of Earth and Space Science provides a rich opportunity for students to demonstrate their understanding of how concrete and observable phenomena are influenced by more abstract conditions or changes.

### Dimension 1: Understanding Essential Content and Concepts

#### Benchmarks Assessed

ESS-E-A1 understanding that earth materials are rocks, minerals, and soils  
ESS-E-A5 observing and communicating that rocks are composed of various substances  
ESS-E-A6 observing and describing variations in soil  
ESS-E-B1 observing and describing the characteristics of objects in the sky  
ESS-E-B5 understanding that the Sun, a star, is a source of heat and light energy and identifying its effects upon Earth

#### Specifically, students may be required to:

- develop an understanding of the properties of earth materials
- develop an understanding of the structure of Earth's systems, Earth's history, and Earth's place in the universe
- develop an understanding of the structure, order, and origin of the universe

### Dimension 2: Explaining, Reflecting, and Connecting

#### Benchmarks Assessed

ESS-E-A2 understanding that approximately three-fourths of Earth's surface is covered with water and how this condition affects weather patterns and climates  
ESS-E-A3 investigating, observing, and describing how water changes from one form to another and interacts with the atmosphere  
ESS-E-B2 demonstrating how the relationship of Earth, the Moon, and the Sun causes eclipses and moon phases  
ESS-E-B3 observing and recording the changing appearances and positions of the Moon in the sky at night and determining the monthly pattern of lunar change



**Specifically, students may be required to:**

- think critically and logically about the relationships between evidence and Earth and Space Science concepts
- recognize the importance of and relationships between separate ideas, facts, and phenomena
- recognize similarities or differences
- recognize patterns of change or constancy
- recognize relations within systems or between form and function
- unify concepts and processes to explain natural phenomena, observations, and ideas

Dimension 3: Applying and Using Knowledge and Technology
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Benchmarks Assessed
---------------------

- |  |
|--|
| ESS-E-A4 investigating, observing, measuring, and describing changes in daily weather patterns and phenomena   |
| ESS-E-A7 investigating fossils and describing how they provide evidence about plants and animals that lived long ago and the environment in which they lived |
| ESS-E-B4 modeling changes that occur because of the rotation of Earth (alternation of night and day) and the revolution of Earth around the Sun              |
| ESS-E-B6 understanding that knowledge of Earth as well as of the universe is gained through space exploration  |

**Specifically, students may be required to:**

- use scientific knowledge and understanding to generalize findings and Earth and Space Science concepts
- solve contextualized problems
- apply data to new situations
- critically evaluate new ideas
- propose, recognize, analyze, and critique explanations for observed phenomena
- use technology and scientific information to investigate and solve problems
- communicate findings and ideas

**Key Concepts:**

These concepts describe important content emphasis regarding the knowledge and skills eligible for assessment of each strand.

To experience the key concepts of Earth and Space Science, students must do the following:

- Identify and compare bodies of water found on Earth (for example, oceans, lakes, rivers, streams).
- Identify components of Earth's crust.
- Differentiate among earth materials, such as rocks, minerals, and soils.
- Classify rocks and minerals and use a hardness test, or scale, to determine hardness of a mineral.
- Describe characteristics, components, and layering of soils.
- Explain what we learn from fossils found in soil and rock.
- Identify examples of evaporation, condensation, precipitation, and runoff; understand the water cycle.
- Read a weather map, recognize weather patterns, and identify the functions of basic weather instruments.
- Analyze and describe Earth processes, such as weathering and erosion.
- Predict the effects of Earth processes on land forms and classify such change processes as gradual (slow) or rapid.
- Compare the visible objects in the night sky, such as the Moon, stars, and meteors.
- Describe the position of Earth, the Moon, and the Sun during a solar eclipse.
- Identify the moon phases and recognize the 28-day pattern.
- Describe why the Sun appears to move across the sky and why the Sun is important to Earth systems.
- Distinguish between Earth's revolution around the Sun and Earth's rotation on its axis.
- Identify the relationship among Earth's tilt, revolution, and the seasons.
- Describe characteristics of the planets in our solar system.
- Identify why humans explore space, the basic needs of humans in space, and technology used or developed during space exploration.
- Compare weather patterns and climates as they relate to bodies of water, landforms, and geographic positions on Earth.

## Science and the Environment

Science and the Environment focuses on the interactions among the living and nonliving components of the natural world, as well as the consequences of change. The study of Science and the Environment provides an opportunity for direct investigation of cause-and-effect relationships among organisms and resources, as well as an understanding and appreciation of the unique capability of humans to have a dramatic impact on their environment.

### Dimension 1: Understanding Essential Content and Concepts

#### Benchmark Assessed

SE-E-A1 understanding that an ecosystem is made of living and nonliving components

#### Specifically, students may be required to:

- know and understand the interrelationships among the biological, chemical, geological, and physical aspects of the environment

### Dimension 2: Explaining, Reflecting, and Connecting

#### Benchmarks Assessed

SE-E-A2 understanding the components of a food chain

SE-E-A4 understanding that the original sources of all material goods are natural resources and that the conserving and recycling of natural resources is a form of stewardship

SE-E-A5 understanding that most plant and animal species are threatened or endangered today due to habitat loss or change

#### Specifically, students may be required to:

- think critically and logically about the relationships between evidence and Environmental Science concepts
- recognize the importance of and relationships between separate ideas, facts, and phenomena
- recognize similarities or differences
- recognize patterns of change or constancy
- recognize relations within systems or between form and function
- unify concepts and processes to explain natural phenomena, observations, and ideas

## Dimension 3: Applying and Using Knowledge and Technology

### Benchmark Assessed

SE-E-A3 identifying ways in which humans have altered their environment, both in positive and negative ways, either for themselves or for other living things

#### Specifically, students may be required to:

- use scientific knowledge and understanding to generalize findings and Environmental Science concepts
- solve contextualized problems
- apply data to new situations
- critically evaluate new ideas
- propose, recognize, analyze, and critique explanations for observed phenomena
- use technology and scientific information to investigate and solve problems
- communicate findings and ideas

#### Key Concepts:

These concepts describe important content emphasis regarding the knowledge and skills eligible for assessment of each strand.

To experience the key concepts of Science and the Environment, students must do the following:

- Identify living (biotic) and nonliving (abiotic) components of an ecosystem.
- Identify the direction of energy transfer in food chains and food webs.
- Identify common natural resources and classify resources as renewable or non-renewable.
- Determine natural resources used in common products.
- Describe the value of recycling, reducing, and reusing in conserving natural resources.
- Discuss how human actions can alter the environment (water and air pollution).
- Identify the effects of habitat change on organisms.
- Identify endangered and recovered Louisiana species.
- Identify or describe activities that preserve or assist in the recovery of a habitat or species.
- Explain why humans have a responsibility to take care of the environment.

- Classify organisms as herbivores, carnivores, decomposers, scavengers, producers, consumers.
- Identify the effects of an oil spill and identify cleanup procedures.

## Sample Test Items: Grade 4 Science

### Sample Science Multiple-Choice Items

Items 1 through 21 are sample multiple-choice items, arranged by strand and benchmark. Items may assess some of the skills of a benchmark, while other items may measure all of the skills of the benchmark.

#### Science as Inquiry

**Benchmark SI-E-A3:** communicating that observations are made with one's senses

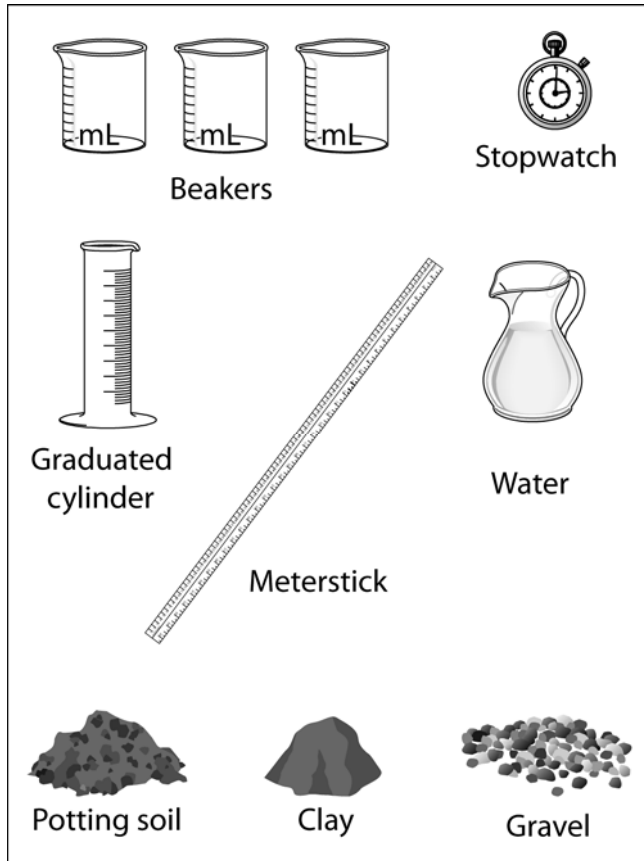
1. Mrs. Henderson's class has five small covered boxes. One contains perfume; another contains dried onions. There is also a box of pine needles, a box of lemon pieces, and a box with a paper towel wetted with vanilla flavoring. Which should they do to get the best information about what is in each box?
  - A. Shake the boxes.
  - B. Smell the boxes.
  - C. Listen to the boxes.
  - D. Weigh the boxes.

**Correct response: B**

## Science as Inquiry

**Benchmark SI-E-A7:** utilizing safety procedures during experiments

**Use the pictures below to answer question 2.**



2. Mark is using these materials to compare how water flows through three different soils. Which safety rules should he follow while doing the experiment?
- A. fire safety rules
  - B. glassware safety rules
  - C. electrical safety rules
  - D. plant safety rules

**Correct response: B**

**Science as Inquiry**

**Benchmark SI-E-B6:** reviewing and asking questions about the results of investigations

**Use the information and data table below to answer question 3.**

The students at Hoover Elementary did a survey of the eye colors of all the fourth graders at their school. The results are shown in the data table below.

Hoover Elementary School Fourth-Grade Eye Colors

	Blue	Brown	Green
Ms. Musso's class	9	7	1
Mr. Broussard's class	2	10	4

3. What does the chart show about Hoover Elementary School?
- A. Brown is the most common eye color in each fourth-grade class.
  - B. Green is the least common eye color in both fourth-grade classes.
  - C. Brown is the most common eye color in the fourth grade.
  - D. Blue eyes are more common in boys than in girls in the fourth grade.

**Correct response: C**



**Physical Science**

**Benchmark PS-E-A4:** describing the properties of the different states of matter and identifying the conditions that cause matter to change states

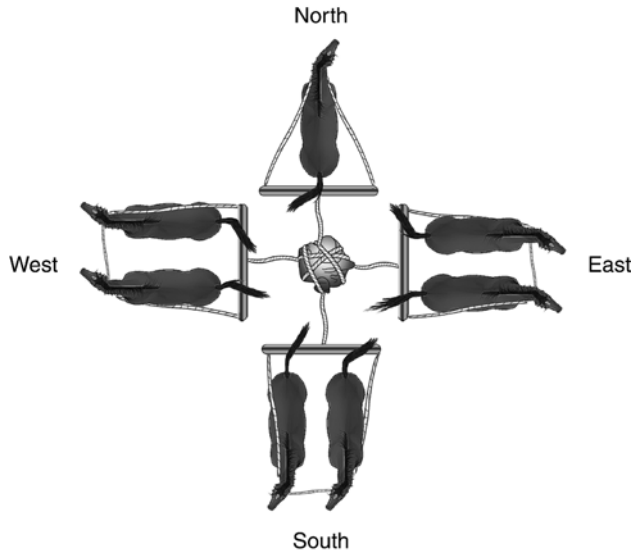
4. Which of the following is an example of matter changing state?
- A. heating a pan of water until the water is all gone
  - B. putting a soft-drink can in the refrigerator to cool it
  - C. heating soup on the stove until it is hot to your tongue
  - D. transferring sugar into a storage container

**Correct response: A**

**Physical Science**

**Benchmark PS-E-B2:** exploring and recognizing that the position and motion of objects can be changed by pushing or pulling (force) over time

**Use the pictures below to answer question 5.**



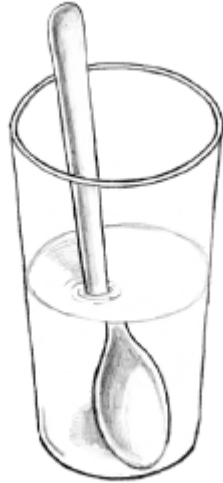
5. If each horse is pulling with the same force, in which direction will the rock move?
- A. north
  - B. east
  - C. south
  - D. west

**Correct response: C**

**Physical Science**

**Benchmark PS-E-C2:** investigating and describing how light travels and what happens when light strikes an object (reflection, refraction, and absorption)

**Use the picture below to answer question 6.**



6. The spoon appears to be broken where it enters the water because
- A. the light is reflected by the water.
  - B. the light is absorbed by the water.
  - C. the light is bent by the water.
  - D. the light is dissolved by the water.

**Correct response: C**

**Physical Science**

**Benchmark PS-E-C5:** investigating and communicating that magnetism and gravity can exert forces on objects without touching the objects

7. Which type of force requires contact between two objects for one to push or pull the other?
- A. frictional forces slowing down a rolling soccer ball
  - B. the magnetic force pulling paper clips to a powerful electromagnet
  - C. the magnetic force pushing two magnets apart
  - D. the force of gravity acting on raindrops that fall to Earth

**Correct response: A**

## Physical Science

**Benchmark PS-E-C5:** investigating and communicating that magnetism and gravity can exert forces on objects without touching the objects.

8. Jeannie put her soccer ball on the ground on the side of a hill. What force acted on the soccer ball to make it roll down the hill?
- A. gravity
  - B. electricity
  - C. friction
  - D. magnetism

**Correct response: A**

## Life Science

**Benchmark LS-E-A2:** distinguishing between living and nonliving things

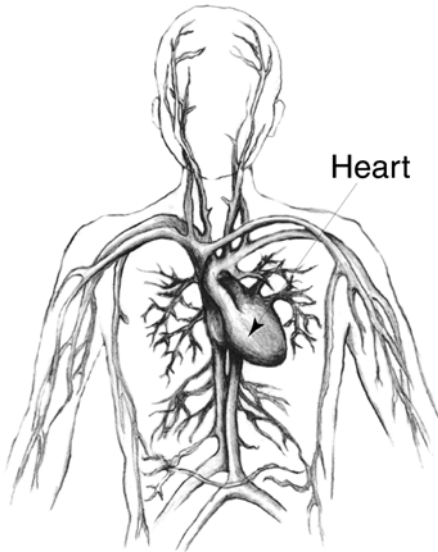
9. On a field trip in a wooded area, you see a small, strange object. You wonder whether it is a live animal. The **best** way to find out is to observe the object to see if it
- A. has an odor.
  - B. has separate parts.
  - C. can make a noise and has a lifelike color.
  - D. carries out basic life functions.

**Correct response: D**

**Life Science**

**Benchmark LS-E-A5:** locating major human body organs and describing their functions

**Use the picture below to answer question 10.**



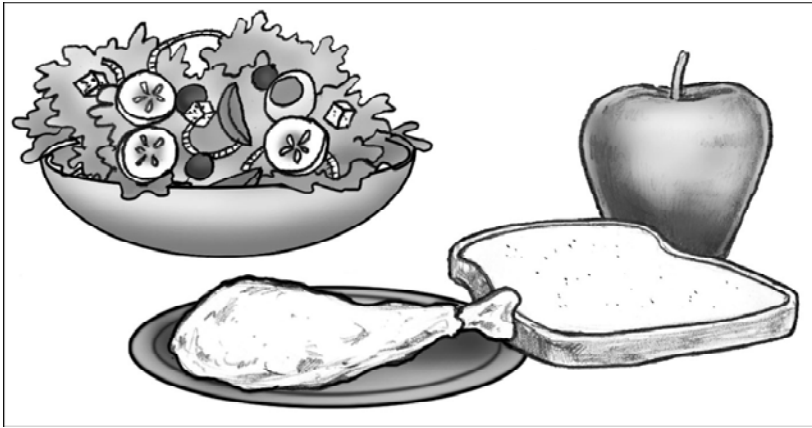
- 10.** What does the heart do for the body?
- A. It takes oxygen in from the environment.
  - B. It turns food into energy.
  - C. It removes waste from the blood.
  - D. It moves blood through the body.

**Correct response: D**

**Life Science**

**Benchmark LS-E-A6:** recognizing the food groups necessary to maintain a healthy body

**Use the picture below to answer question 11.**



**11.** What could you add to this to make it a more balanced meal?













- A. a glass of milk
- B. a banana
- C. a pork chop
- D. a muffin

**Correct response: A**

## Life Science

**Benchmark LS-E-B2:** observing, comparing, and grouping plants and animals according to likenesses and/or differences

12. Which group of living things shares the **most** characteristics?

- A.     
Cat Dog Rabbit
- B.     
Fish Crab Crayfish
- C.     
Bird Butterfly Bat
- D.     
Spider Grasshopper Worm

**Correct response: A**

## Earth and Space Science

**Benchmark ESS-E-A1:** understanding that Earth materials are rocks, minerals, and soils

13. A rock sample will **most likely** contain

- A. plants.
- B. minerals.
- C. water.
- D. wood.

**Correct response: B**

## Earth and Space Science

**Benchmark ESS-E-B1:** observing and describing the characteristics of objects in the sky

**14.** Which object in the sky is a satellite of the planet Earth?

- A. Sun
- B. Moon
- C. Mars
- D. Saturn

**Correct response: B**

### **Earth and Space Science**

**Benchmark ESS-E-B4:** modeling changes that occur because of the rotation of Earth (alternation of night and day) and the revolution of Earth around the Sun

**15.** Why do the Sun and Moon appear to move across the sky?

- A. The rotation of the solar system makes the Sun and Moon seem to move.
- B. The rotation of Earth makes the Sun and Moon seem to move.
- C. The Sun and Moon revolve around Earth.
- D. Earth revolves around the Sun and the Moon.

**Correct response: B**

### **Earth and Space Science**

**Benchmark ESS-E-B4:** modeling changes that occur because of the rotation of Earth (alternation of night and day) and the revolution of Earth around the Sun

**16.** You are getting up to go to school in Louisiana; a student on the other side of Earth is getting ready for bed. What is the reason for this?

- A. Earth revolves around the Sun.
- B. Earth rotates on its axis.
- C. The Sun rotates on its axis.
- D. The Moon revolves around Earth.

**Correct response: B**



### Science and the Environment

**Benchmark SE-E-A1:** understanding that an ecosystem is made of living and nonliving components

17. Which of these is a nonliving thing?
- A. a mushroom
  - B. a tree
  - C. a worm
  - D. a river

**Correct response: D**

### Science and the Environment

**Benchmark SE-E-A4:** understanding that the original sources of all material goods are natural resources and that the conserving and recycling of natural resources is a form of stewardship

18. Carmine's mother drinks four cans of soft drink each day. After drinking the soft drinks, Carmine's mother should
- A. throw the cans in the trash.
  - B. send the cans to a landfill.
  - C. take the cans to be recycled.
  - D. crush the cans before putting them in the trash.

**Correct response: C**

### Science and the Environment

**Benchmark SE-E-A5:** understanding that most plant and animal species are threatened or endangered today due to habitat loss or change

19. A wetland was drained to build a mall. Two years later, there were no more toads in that area. Why did the toads disappear?
- A. The toads were destroyed by the construction equipment.
  - B. The toads died because toads cannot breathe out of water.
  - C. The toads were frightened and went into the woods.
  - D. The toads got their food from the wetland ecosystem.

**Correct response: D**

### Science and the Environment

**Benchmark SE-E-A3:** identifying ways in which humans have altered their environment, both in positive and negative ways, either for themselves or for other living things

20. What is one way people are helping the environment?
- A. They are planting trees to replace the ones that are cut.
  - B. They are building more roads so more people can see natural areas.
  - C. They are building more dumps to hold the trash we create.
  - D. They are using their cars more to get to places faster.

**Correct response: A**

### Science and the Environment

**Benchmark SE-E-A1:** understanding that an “ecosystem” is made of living and nonliving components

**Use the picture below to answer question 21.**



21. Which of these lists **only** living parts of this ecosystem?
- A. fox, tree, grass
  - B. sun, stream, cloud
  - C. cloud, grass, rock
  - D. stream, cloud, fox

**Correct response: A**

## Sample Science Short-Answer Items

Items 22 through 25 show sample short-answer items. Each item involves several steps and the application of multiple skills. The short-answer items are designed to assess one of the benchmarks. The items are scored using an item-specific rubric on a scale of 0 to 2 points.

### Life Science

**Benchmark LS-E-A3:** locating and comparing major plant and animal structures and their functions

**22.**

- A.** Draw one flowering plant you would find near your school. Label **one** part of that plant.



- B.** What is the function of the part you labeled in your drawing?

### Scoring Rubric:

Score	Description
2	The student draws a plant and correctly labels one part of the plant (may include root, stem, leaf, or flower) and correctly states the function of the labeled part. Response contains no errors.
1	The student correctly draws and labels a plant <b>OR</b> states the function of a part. Response contains minor errors or omissions.
0	The student's response is incorrect, too brief to evaluate, or blank.

### Scoring notes:

The roots hold the plant in the soil and take in nutrients.

The stem supports the plant and conducts food and water to the leaves.

The leaves produce food (photosynthesis).

The flower produces seeds and attracts insects for pollination.

**Physical Science**

**Benchmark PS-E-B4:** investigating and describing how the motion of an object is related to the strength of the force (pushing or pulling) and the mass of the object

**Use the picture below of Sharon pulling a wagon on a level sidewalk to answer question 23, parts A and B.**



**23.**

- A.** How would the movement of the wagon be affected if she pulled harder on the wagon?
- B.** How would the movement of the wagon be affected if her little brother were sitting in the wagon?

**Scoring Rubric:**

<b>Score</b>	<b>Description</b>
<b>2</b>	The student answers part A and part B without any errors.
<b>1</b>	The student answers part A <b>OR</b> part B. Response may contain minor errors and omissions.
<b>0</b>	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Scoring notes:**

*Part A:* The wagon would move faster.

*Part B:* One of the following:

- The wagon would move slower.
- It will take more force to move the wagon.
- It will be harder to move the wagon.

**Life Science**

**Benchmark LS-E-B2:** observing, comparing, and grouping plants and animals according to likenesses and/or differences

**Use the pictures below to answer question 24, parts A and B.**



bat



bird

- 24.** Some people think that bats and birds are alike. Other people say they are very different. Look at the two pictures.

<p><b>A.</b> Tell <b>one</b> way bats and birds are the same.</p>	<p><b>B.</b> Tell one way bats and birds are different.</p>
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**Scoring Rubric:**

Score	Description
2	The student lists one way birds and bats are similar and one way they are different. There are no errors.
1	The students lists one way birds and bats are similar or one way they are different or gives relevant information in part A and part B that may contain errors.
0	The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.

**Scoring notes:**

*Similarities:*

- Both have wings.
- Both fly.
- Both eat insects for food.
- Both are living things.

*Differences:*

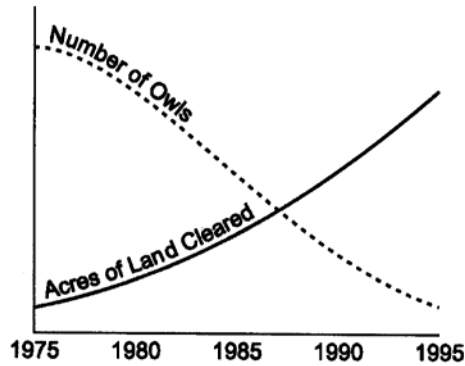
- Birds have feathers (bats do not).
- Bats use sound for navigation; birds use sight.
- Bats are mammals (birds are not).

**Note:** Implication, shown above in parentheses, is fine and counts for score.

## Science and the Environment

**Benchmark SE-E-A5:** understanding that most plant and animal species are threatened or endangered today due to habitat loss or change

Use the graph below to answer question 25, parts A and B.



25. The graph above shows the owl population in a large forested area over a 20-year period. The graph also shows the acres of forest that were cleared for lumber over the same time period.
- A. Why did the owl population change?
  - B. What could have been done to prevent the change in the owl population?

**Scoring Rubric:**

<b>Score</b>	<b>Description</b>
<b>2</b>	The student suggests why the owl population changed and what could be done to prevent the loss of owls. There are no errors.
<b>1</b>	The student answers either part A or part B of the question. <b>OR</b> The student gives two answers for one part of the question.
<b>0</b>	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Scoring notes:**

*Part A:* The owl population changed because of loss of habitat. When the acres of land were cleared for lumber, the owl habitat (food and home) was destroyed.

*Part B:* If all trees had not been cut—or if some land had been left for habitat preservation—the owl population would not have decreased so rapidly. Plant new trees as replacement habitat or cut part of the forest, leaving some for habitat. Run a conservation campaign, put up signs, have a rally, write laws.

## Sample Science Task

Items 26 through 29 show a sample science task, which includes 3 inquiry-based short-answer questions and 1 extended constructed-response question. Each item may involve separate steps and the application of multiple skills. The constructed-response items are designed to assess one benchmark. The short-answer items are scored using an item-specific rubric on a scale of 0 to 2 points. The extended constructed-response item is scored using an item-specific rubric on a scale of 0 to 4 points.

**Task Description:** Pond Community







**Materials Needed:** Pond Community Data Sheet

For this task you will consider different organisms. Look at the Pond Community Data Sheet. Then use it to answer the following four questions.

A reduced-size copy of the material provided for the science task (the Pond Community Data Sheet) follows.



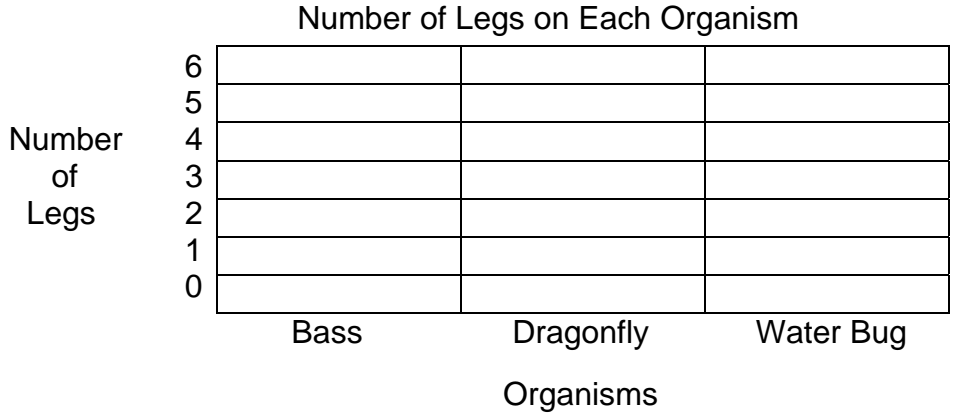
# Pond Community Data Sheet

Name of Organism	Illustration	Antennae	Number of Legs	What They Eat	Color
Water plants		no	0	nothing— they make their own food	green
Dragonfly		yes	6	snails	brown
Bass		no	0	bluegill fish	gray- green
Snail		yes	0	water plants	gray
Water bug		yes	6	snails	black
Bluegill fish		no	0	dragonflies	blue- green

**Science as Inquiry**

**Benchmark SI-E-A5:** using data, including numbers and graphs, to explain observations and experiments

- 26. Construct a bar graph showing the number of legs on the bass, dragonfly, and water bug.



**Scoring Rubric:**

Score	Description
2	The student correctly completes graph for three organisms. Response contains no errors.
1	The student correctly completes the graph for one or two of the organisms.
0	The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.

**Scoring notes:**

- *Score 2* (3 correct organisms, correct bar graph)
- *Score 1* (2 correct organisms, correct graph) **OR** (1 correct organism, correct graph) **OR** (3 correct organisms, indicate number of legs)

**Note:** For the bass, shading a number-of-legs bar less than the level of .5 is acceptable. More than the level of .5 is not acceptable.

### Science as Inquiry

**Benchmark SI-E-A4:** employing equipment and tools to gather data and extend the sensory observations

27. List the organisms from your Data Sheet that have antennae.

#### Scoring Rubric:

Score	Description
2	The student correctly lists dragonfly, snail, and water bug. Response contains no errors.
1	The student lists one or two of the following: dragonfly, snail, or water bug.
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

### Science as Inquiry

**Benchmark SI-E-A5:** using data, including numbers and graphs, to explain observations and experiments

28. Give **two** reasons why the dragonfly and water bug are similar.

1.

2.

#### Scoring Rubric:

Score	Description
2	The student's response includes <b>two</b> of the following reasons: <ul style="list-style-type: none"><li>• both live in the water</li><li>• both have antennae</li><li>• both have six legs</li><li>• both eat snails</li></ul> Response contains no errors.
1	The student's response gives <b>one</b> of the above reasons.
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

### Life Science

**Benchmark LS-E-C1:** examining the habitats of plants and animals and determining how basic needs are met within each habitat

Here is a food chain for a pond.



29. What would happen to the largemouth bass if all the algae were removed from the pond? Describe what would happen to all **four** parts of this food chain.

**Scoring Rubric:**

Score	Description
4	The student correctly responds to all four parts of the question by: <ul style="list-style-type: none"><li>• stating that the bass will die/go hungry/have no food;</li><li>• explaining the relationship between the algae and insects;</li><li>• explaining the relationship between the insects and bluegills; and</li><li>• explaining the relationship between the bluegills and bass.</li></ul> Response contains no errors.
3	The student correctly responds to all four parts of the question, but the response contains minor errors or misconceptions. <b>OR</b> The student correctly responds to three parts of the question.
2	The student correctly responds to two parts of the question. Response may contain major errors or misconceptions
1	The student correctly responds to one part of the question, or response shows evidence of minimal understanding of food chains.
0	The student's response is incorrect, irrelevant, too brief to evaluate, or blank.

**Scoring notes:**

*Sample answer:* The bass will all die. If there are no algae for the insects to eat, the insects will die. If there are no insects, the bluegills will die. If all the bluegills die, the bass will starve.

**Note:** As written, the above response would receive 4 points if the first sentence were omitted. The fate of the bass is covered in the last statement.

## Benchmark Statements, across Grades

K–4	5–8	9–12
<p style="text-align: center;"><b>SCIENCE AS INQUIRY</b></p> <p>In grades K–4, what students know and are able to do includes:</p> <p><b>A. THE ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY</b></p> <p>SI-E-A1 asking appropriate questions about organisms and events in the environment</p> <p>SI-E-A2 planning and/or designing and conducting a scientific investigation</p> <p>SI-E-A3 communicating that observations are made with one's senses</p> <p>SI-E-A4 employing equipment and tools to gather data and extend the sensory observations</p> <p>SI-E-A5 using data, including numbers and graphs, to explain observations and experiments</p> <p>SI-E-A6 communicating observations and experiments in oral and written formats</p> <p>SI-E-A7 utilizing safety procedures during experiments</p>	<p style="text-align: center;"><b>SCIENCE AS INQUIRY</b></p> <p>As students in grades 5–8 extend their knowledge, what they know and are able to do includes:</p> <p><b>A. THE ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY</b></p> <p>SI-M-A1 identifying questions that can be used to design a scientific investigation</p> <p>SI-M-A2 designing and conducting a scientific investigation</p> <p>SI-M-A3 using mathematics and appropriate tools and techniques to gather, analyze, and interpret data</p> <p>SI-M-A4 developing descriptions, explanations, and graphs using data</p> <p>SI-M-A5 developing models and predictions using the relationships between data and explanations</p> <p>SI-M-A6 comparing alternative explanations and predictions</p> <p>SI-M-A7 communicating scientific procedures, information, and explanations</p> <p>SI-M-A8 utilizing safety procedures during scientific investigations</p>	<p style="text-align: center;"><b>SCIENCE AS INQUIRY</b></p> <p>As students in grades 9–12 extend and refine their knowledge, what they know and are able to do includes:</p> <p><b>A. THE ABILITIES NECESSARY TO DO SCIENTIFIC INQUIRY</b></p> <p>SI-H-A1 identifying questions and concepts that guide scientific investigations</p> <p>SI-H-A2 designing and conducting scientific investigations</p> <p>SI-H-A3 using technology and mathematics to improve investigations and communications</p> <p>SI-H-A4 formulating and revising scientific explanations and models using logic and evidence</p> <p>SI-H-A5 recognizing and analyzing alternative explanations and models</p> <p>SI-H-A6 communicating and defending a scientific argument</p> <p>SI-H-A7 utilizing science safety procedures during scientific investigations</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p><b>B. UNDERSTANDING SCIENTIFIC INQUIRY</b></p> <p>SI-E-B1 categorizing questions into what is known, what is not known, and what questions need to be explained</p> <p>SI-E-B2 using appropriate experiments depending on the questions to be explored</p> <p>SI-E-B3 choosing appropriate equipment and tools to conduct an experiment</p> <p>SI-E-B4 developing explanations by using observations and experiments</p> <p>SI-E-B5 presenting the results of experiments</p> <p>SI-E-B6 reviewing and asking questions about the results of investigations</p>	<p><b>B. UNDERSTANDING SCIENTIFIC INQUIRY</b></p> <p>SI-M-B1 recognizing that different kinds of questions guide different kinds of scientific investigations</p> <p>SI-M-B2 communicating that current scientific knowledge guides scientific investigations</p> <p>SI-M-B3 understanding that mathematics, technology, and scientific techniques used in an experiment can limit or enhance the accuracy of scientific knowledge</p> <p>SI-M-B4 using data and logical arguments to propose, modify, or elaborate on principles and models</p> <p>SI-M-B5 understanding that scientific knowledge is enhanced through peer review, alternative explanations, and constructive criticism</p> <p>SI-M-B6 communicating that scientific investigations can result in new ideas, new methods or procedures, and new technologies</p> <p>SI-M-B7 understanding that scientific development/technology is driven by societal needs and funding</p>	<p><b>B. UNDERSTANDING SCIENTIFIC INQUIRY</b></p> <p>SI-H-B1 communicating that scientists usually base their investigations on existing models, explanations, and theories</p> <p>SI-H-B2 communicating that scientists conduct investigations for a variety of reasons, such as exploration of new areas, discovery of new aspects of the natural world, confirmation of prior investigations, evaluation of current theories, and comparison of models and theories</p> <p>SI-H-B3 communicating that scientists rely on technology to enhance the gathering and manipulation of data</p> <p>SI-H-B4 analyzing a proposed explanation of scientific evidence according to the following criteria: follow a logical structure, follow rules of evidence, allow for questions and modifications, and is based on historical and current scientific knowledge</p> <p>SI-H-B5 communicating that the results of scientific inquiry, new knowledge, and methods emerge from different types of investigations and public communication among scientists</p>

K–4	5–8	9–12
<p align="center"><b>PHYSICAL SCIENCE</b></p> <p><b>A. PROPERTIES OF OBJECTS AND MATERIALS</b></p> <p>PS-E-A1 observing, describing, and classifying objects by properties (size, weight, shape, color, texture, and temperature)</p> <p>PS-E-A2 measuring properties of objects using appropriate materials, tools, and technology</p> <p>PS-E-A3 observing and describing the objects by the properties of the materials from which they are made (paper, wood, metal)</p> <p>PS-E-A4 describing the properties of the different states of matter and identifying the conditions that cause matter to change states</p> <p>PS-E-A5 creating mixtures and separating them based on differences in properties (salt, sand)</p> <p><b>B. POSITION AND MOTION OF OBJECTS</b></p> <p>PS-E-B1 observing and describing the position of an object relative to another object or the background</p>	<p align="center"><b>PHYSICAL SCIENCE</b></p> <p><b>A. PROPERTIES AND CHANGES OF PROPERTIES IN MATTER</b></p> <p>PS-M-A1 investigating, measuring, and communicating the properties of different substances which are independent of the amount of the substance</p> <p>PS-M-A2 understanding that all matter is made up of particles called atoms and that atoms of different elements are different</p> <p>PS-M-A3 grouping substances according to similar properties and/or behaviors</p> <p>PS-M-A4 understanding that atoms and molecules are perpetually in motion</p> <p>PS-M-A5 investigating the relationships among temperature, molecular motion, phase changes, and physical properties of matter</p> <p>PS-M-A6 investigating chemical reactions between different substances to discover that new substances formed may have new physical properties and do have new chemical properties</p>	<p align="center"><b>PHYSICAL SCIENCE</b></p> <p><b>A. MEASUREMENT AND SYMBOLIC REPRESENTATION</b></p> <p>PS-H-A1 manipulating and analyzing quantitative data using the SI system</p> <p>PS-H-A2 understanding the language of chemistry (formulas, equations, symbols) and its relationship to molecules, atoms, ions, and subatomic particles</p> <p><b>B. ATOMIC STRUCTURE</b></p> <p>PS-H-B1 describing the structure of the atom and identifying and characterizing the particles that compose it (including the structure and properties of isotopes)</p> <p>PS-H-B2 describing the nature and importance of radioactive isotopes and nuclear reactions (fission, fusion, radioactive decay)</p> <p>PS-H-B3 understanding that an atom's electron configuration, particularly that of the outermost electrons, determines the chemical properties of that atom</p> <p><b>C. THE STRUCTURE AND PROPERTIES OF MATTER</b></p> <p>PS-H-C1 distinguishing among elements, compounds, and/or mixtures</p>



K-4	5-8	9-12
<p>PS-E-B2 exploring and recognizing that the position and motion of objects can be changed by pushing or pulling (force) over time</p> <p>PS-E-B3 describing an object's motion by tracing and measuring its position over time</p> <p>PS-E-B4 investigating and describing how the motion of an object is related to the strength of the force (pushing or pulling) and the mass of the object</p> <p><b>C. FORMS OF ENERGY</b></p> <p>PS-E-C1 experimenting and communicating how vibrations of objects produce sound and how changing the rate of vibration varies the pitch</p> <p>PS-E-C2 investigating and describing how light travels and what happens when light strikes an object (reflection, refraction, and absorption)</p> <p>PS-E-C3 investigating and describing different ways heat can be produced and moved from one object to another by conduction</p> <p>PS-E-C4 investigating and describing how electricity travels in a circuit</p>	<p>PS-M-A7 understanding that during a chemical reaction in a closed system, the mass of the products is equal to that of the reactants</p> <p>PS-M-A8 discovering and recording how factors such as temperature influence chemical reactions</p> <p>PS-M-A9 identifying elements and compounds found in common foods, clothing, household materials, and automobiles</p> <p><b>B. MOTIONS AND FORCES</b></p> <p>PS-M-B1 describing and graphing the motions of objects</p> <p>PS-M-B2 recognizing different forces and describing their effects (gravity, electrical, magnetic)</p> <p>PS-M-B3 understanding that, when an object is not being subjected to a force, it will continue to move at a constant speed and in a straight line</p> <p>PS-M-B4 describing how forces acting on an object will reinforce or cancel one another, depending upon their direction and magnitude</p> <p>PS-M-B5 understanding that unbalanced forces will cause changes in the speed or direction of an object's motion</p>	<p>PS-H-C2 discovering the patterns of physical and chemical properties found on the periodic table of the elements</p> <p>PS-H-C3 understanding that physical properties of substances reflect the nature of interactions among its particles</p> <p>PS-H-C4 separating mixtures based upon the physical properties of their components</p> <p>PS-H-C5 understanding that chemical bonds are formed between atoms when the outermost electrons are transferred or shared to produce ionic and covalent compounds</p> <p>PS-H-C6 recognizing that carbon atoms can bond to one another in chains, rings, and branching networks to form a variety of structures</p> <p>PS-H-C7 using the kinetic theory to describe the behavior of atoms and molecules during phase changes and to describe the behavior of matter in its different phases</p> <p><b>D. CHEMICAL REACTIONS</b></p> <p>PS-H-D1 observing and describing changes in matter and citing evidence of chemical change</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p>PS-E-C5 investigating and communicating that magnetism and gravity can exert forces on objects without touching the objects</p> <p>PS-E-C6 exploring and describing simple energy transformations</p> <p>PS-E-C7 exploring and describing the uses of energy at school, home, and play</p>	<p><b>C. TRANSFORMATIONS OF ENERGY</b></p> <p>PS-M-C1 identifying and comparing the characteristics of different types of energy</p> <p>PS-M-C2 understanding the different kinds of energy transformations and the fact that energy can be neither destroyed nor created</p> <p>PS-M-C3 understanding that the Sun is a major source of energy and that energy arrives at Earth’s surface as light with a range of wavelengths</p> <p>PS-M-C4 observing and describing the interactions of light and matter (reflection, refraction, absorption, transmission, scattering)</p> <p>PS-M-C5 investigating and describing the movement of heat and the effects of heat in objects and systems</p> <p>PS-M-C6 describing the types of energy that can be involved, converted, or released in electrical circuits</p> <p>PS-M-C7 understanding that energy is involved in chemical reactions</p> <p>PS-M-C8 comparing the uses of different energy resources and their effects upon the environment</p>	<p>PS-H-D2 comparing, contrasting, and measuring the pH of acids and bases using a variety of indicators</p> <p>PS-H-D3 writing balanced equations to represent a variety of chemical reactions (acid/base, oxidation/reduction, etc.)</p> <p>PS-H-D4 analyzing the factors that affect the rate and equilibrium of a chemical reaction</p> <p>PS-H-D5 applying the law of conservation of matter to chemical reactions</p> <p>PS-H-D6 comparing and contrasting the energy changes that accompany changes in matter</p> <p>PS-H-D7 identifying important chemical reactions that occur in living systems, the home, industry, and the environment</p> <p><b>E. FORCES AND MOTION</b></p> <p>PS-H-E1 recognizing the characteristics and relative strengths of the forces of nature (gravitational, electrical, magnetic, nuclear)</p> <p>PS-H-E2 understanding the relationship of displacement, time, rate of motion, and rate of change of motion; representing rate and changes of motion mathematically and graphically</p>

K-4	5-8	9-12
		<p>PS-H-E3 understanding effects of forces on changes in motion as explained by Newtonian mechanics</p> <p>PS-H-E4 illustrating how frame of reference affects our ability to judge motion</p> <p><b>F. ENERGY</b></p> <p>PS-H-F1 describing and representing relationships among energy, work, power, and efficiency</p> <p>PS-H-F2 applying the universal law of conservation of matter, energy, and momentum, and recognizing their implications</p> <p><b>G. INTERACTIONS OF ENERGY AND MATTER</b></p> <p>PS-H-G1 giving examples of the transport of energy through wave action</p> <p>PS-H-G2 analyzing the relationship and interaction of magnetic and electrical fields and the forces they produce</p> <p>PS-H-G3 characterizing and differentiating electromagnetic and mechanical waves and their effects on objects as well as humans</p> <p>PS-H-G4 explaining the possible hazards of exposure to various forms and amounts of energy</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p style="text-align: center;"><b>LIFE SCIENCE</b></p> <p><b>A. CHARACTERISTICS OF ORGANISMS</b></p> <p>LS-E-A1 identifying the needs of plants and animals, based on age-appropriate recorded observations</p> <p>LS-E-A2 distinguishing between living and nonliving things</p> <p>LS-E-A3 locating and comparing major plant and animal structures and their functions</p> <p>LS-E-A4 recognizing that there is great diversity among organisms</p> <p>LS-E-A5 locating major human body organs and describing their functions</p> <p>LS-E-A6 recognizing the food groups necessary to maintain a healthy body</p> <p><b>B. LIFE CYCLES OF ORGANISMS</b></p> <p>LS-E-B1 observing and describing the life cycles of some plants and animals</p> <p>LS-E-B2 observing, comparing, and grouping plants and animals according to likenesses and/or differences</p> <p>LS-E-B3 observing and recording how the offspring of plants and animals are similar to their parents</p>	<p style="text-align: center;"><b>LIFE SCIENCE</b></p> <p><b>A. STRUCTURE AND FUNCTION IN LIVING SYSTEMS</b></p> <p>LS-M-A1 describing the observable components and functions of a cell, such as the cell membrane, nucleus, and movement of molecules into and out of cells</p> <p>LS-M-A2 comparing and contrasting the basic structures and functions of different plant and animal cells</p> <p>LS-M-A3 observing and analyzing the growth and development of selected organisms, including a seed plant, an insect with complete metamorphosis, and an amphibian</p> <p>LS-M-A4 describing the basic processes of photosynthesis and respiration and their importance to life</p> <p>LS-M-A5 investigating human body systems and their functions (including circulatory, digestive, skeletal, respiratory)</p> <p>LS-M-A6 describing how the human body changes with age and listing factors that affect the length and quality of life</p> <p>LS-M-A7 describing communicable and noncommunicable diseases</p>	<p style="text-align: center;"><b>LIFE SCIENCE</b></p> <p><b>A. THE CELL</b></p> <p>LS-H-A1 observing cells, identifying organelles, relating structure to function, and differentiating among cell types</p> <p>LS-H-A2 demonstrating a knowledge of cellular transport</p> <p>LS-H-A3 investigating cell differentiation and describing stages of embryological development in representative organisms</p> <p><b>B. THE MOLECULAR BASIS OF HEREDITY</b></p> <p>LS-H-B1 explaining the relationship among chromosomes, DNA, genes, RNA, and proteins</p> <p>LS-H-B2 comparing and contrasting mitosis and meiosis</p> <p>LS-H-B3 describing the transmission of traits from parent to offspring and the influence of environmental factors on gene expression</p> <p>LS-H-B4 exploring advances in biotechnology and identifying possible positive and negative effects</p>

K–4	5–8	9–12
<p>LS-E-B4 observing, recording, and graphing student growth over time using a variety of quantitative measures (height, weight, linear measure of feet and hands, etc.)</p> <p><b>C. ORGANISMS AND THEIR ENVIRONMENTS</b></p> <p>LS-E-C1 examining the habitats of plants and animals and determining how basic needs are met within each habitat</p> <p>LS-E-C2 describing how the features of some plants and animals enable them to live in specific habitats</p> <p>LS-E-C3 observing animals and plants and describing interaction or interdependence</p>	<p><b>B. REPRODUCTION AND HEREDITY</b></p> <p>LS-M-B1 describing the importance of body cell division (mitosis) and sex cell production (meiosis)</p> <p>LS-M-B2 describing the role of chromosomes and genes in heredity</p> <p>LS-M-B3 describing how heredity allows parents to pass certain traits to offspring</p> <p><b>C. POPULATIONS AND ECOSYSTEMS</b></p> <p>LS-M-C1 constructing and using classification systems based on the structure of organisms</p> <p>LS-M-C2 modeling and interpreting food chains and food webs</p> <p>LS-M-C3 investigating major ecosystems and recognizing physical properties and organisms within each</p> <p>LS-M-C4 explaining the interaction and interdependence of nonliving and living components within ecosystems</p> <p><b>D. ADAPTATIONS OF ORGANISMS</b></p> <p>LS-M-D1 describing the importance of plant and animal adaptation, including local examples</p>	<p><b>C. BIOLOGICAL EVOLUTION</b></p> <p>LS-H-C1 exploring experimental evidence that supports the theory of the origin of life</p> <p>LS-H-C2 recognizing the evidence for evolution</p> <p>LS-H-C3 discussing the patterns, mechanisms, and rate of evolution</p> <p>LS-H-C4 classifying organisms</p> <p>LS-H-C5 distinguishing among the kingdoms</p> <p>LS-H-C6 comparing and contrasting life cycles of organisms</p> <p>LS-H-C7 comparing viruses to cells</p> <p><b>D. INTERDEPENDENCE OF ORGANISMS</b></p> <p>LS-H-D1 illustrating the biogeochemical cycles and explaining their importance</p> <p>LS-H-D2 describing trophic levels and energy flows</p> <p>LS-H-D3 investigating population dynamics</p> <p>LS-H-D4 exploring how humans have impacted ecosystems and the need for societies to plan for the future</p>

K-4	5-8	9-12
	<p>LS-M-D2 explaining how some members of a species survive under changed environmental conditions</p>	<p><b>E. MATTER, ENERGY, AND ORGANIZATION OF LIVING SYSTEMS</b></p> <p>LS-H-E1 comparing and contrasting photosynthesis and cellular respiration; emphasizing their relationships</p> <p>LS-H-E2 recognizing the importance of the ATP cycle in energy usage within the cell</p> <p>LS-H-E3 differentiating among levels of biological organization</p> <p><b>F. SYSTEMS AND THE BEHAVIOR OF ORGANISMS</b></p> <p>LS-H-F1 identifying the structure and functions of organ systems</p> <p>LS-H-F2 identifying mechanisms involved in homeostasis</p> <p>LS-H-F3 recognizing that behavior is the response of an organism to internal changes and/or external stimuli</p> <p>LS-H-F4 recognizing that behavior patterns have adaptive value</p> <p><b>G. PERSONAL AND COMMUNITY HEALTH</b></p> <p>LS-H-G1 relating fitness and health to longevity</p> <p>LS-H-G2 contrasting how organisms cause disease</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p style="text-align: center;"><b>EARTH AND SPACE SCIENCE</b></p> <p><b>A. PROPERTIES OF EARTH MATERIALS</b></p> <p>ESS-E-A1 understanding that earth materials are rocks, minerals, and soils</p> <p>ESS-E-A2 understanding that approximately three-fourths of Earth’s surface is covered with water and how this condition affects weather patterns and climates</p> <p>ESS-E-A3 investigating, observing, and describing how water changes from one form to another and interacts with the atmosphere</p> <p>ESS-E-A4 investigating, observing, measuring, and describing changes in daily weather patterns and phenomena</p>	<p style="text-align: center;"><b>EARTH AND SPACE SCIENCE</b></p> <p><b>A. STRUCTURE OF EARTH</b></p> <p>ESS-M-A1 understanding that Earth is layered by density with an inner and outer core, a mantle, and a thin outer crust</p> <p>ESS-M-A2 understanding that Earth’s crust and solid upper mantle are dividing plates that move in response to convection currents (energy transfers) in the mantle</p> <p>ESS-M-A3 investigating the characteristics of earthquakes and volcanoes and identifying zones where they may occur</p> <p>ESS-M-A4 investigating how soils are formed from weathered rock and decomposed organic material</p>	<p>LS-H-G3 explaining the role of the immune system in fighting disease</p> <p>LS-H-G4 exploring current research on the major diseases with regard to cause, symptoms, treatment, prevention, and cure</p> <p>LS-H-G5 researching technology used in prevention, diagnosis, and treatment of diseases/ disorders</p> <p style="text-align: center;"><b>EARTH AND SPACE SCIENCE</b></p> <p><b>A. ENERGY IN EARTH’S SYSTEM</b></p> <p>ESS-H-A1 investigating the methods of energy transfer and identifying the Sun as the major source of energy for most of Earth’s systems</p> <p>ESS-H-A2 modeling the seasonal changes in the relative position and appearance of the Sun and inferring the consequences with respect to Earth’s temperature</p> <p>ESS-H-A3 explaining fission and fusion in relation to Earth’s internal and external heat sources</p>

K–4	5–8	9–12
<p>ESS-E-A5 observing and communicating that rocks are composed of various substances</p> <p>ESS-E-A6 observing and describing variations in soil</p> <p>ESS-E-A7 investigating fossils and describing how they provide evidence about plants and animals that lived long ago and the environment in which they lived</p> <p><b>B. OBJECTS IN THE SKY</b></p> <p>ESS-E-B1 observing and describing the characteristics of objects in the sky</p> <p>ESS-E-B2 demonstrating how the relationship of Earth, the Moon, and the Sun causes eclipses and moon phases</p> <p>ESS-E-B3 observing and recording the changing appearances and positions of the Moon in the sky at night and determining the monthly pattern of lunar change</p> <p>ESS-E-B4 modeling changes that occur because of the rotation of Earth (alternation of night and day) and the revolution of Earth around the Sun</p> <p>ESS-E-B5 understanding that the Sun, a star, is a source of heat and light energy and identifying its effects upon Earth</p>	<p>ESS-M-A5 identifying the characteristics and uses of minerals and rocks and recognizing that rocks are mixtures of minerals</p> <p>ESS-M-A6 explaining the processes involved in the rock cycle</p> <p>ESS-M-A7 modeling how landforms result from the interaction of constructive and destructive forces</p> <p>ESS-M-A8 identifying the man-made and natural causes of coastal erosion and the steps taken to combat it</p> <p>ESS-M-A9 compare and contrast topographic features of the ocean floor to those formed above sea level</p> <p>ESS-M-A10 explaining (illustrating) how water circulates—on and through the crust, in the oceans, and in the atmosphere—in the water cycle</p> <p>ESS-M-A11 understanding that the atmosphere interacts with the hydrosphere to affect weather and climate conditions</p> <p>ESS-M-A12 predicting weather patterns through use of a weather map</p> <p><b>B. EARTH HISTORY</b></p> <p>ESS-M-B1 investigating how fossils show the development of life over time</p>	<p>ESS-H-A4 explaining how decay of radioactive isotopes and the gravitational energy from Earth’s original formation generates Earth’s internal heat</p> <p>ESS-H-A5 demonstrating how the Sun’s radiant energy causes convection currents within the atmosphere and the oceans</p> <p>ESS-H-A6 describing the energy transfer from the Sun to Earth and its atmosphere as it relates to the development of weather and climate patterns</p> <p>ESS-H-A7 modeling the transfer of Earth’s internal heat by way of convection currents in the mantle which powers the movement of the lithospheric plates</p> <p><b>B. GEOCHEMICAL CYCLES</b></p> <p>ESS-H-B1 illustrating how stable chemical atoms or elements are recycled through the solid earth, oceans, atmosphere, and organisms</p> <p>ESS-H-B2 demonstrating Earth’s internal and external energy sources as forces in moving chemical atoms or elements</p>



K–4	5–8	9–12
<p>ESS-E-B6 understanding that knowledge of Earth as well as of the universe is gained through space exploration</p>	<p>ESS-M-B2 devising a model that demonstrates supporting evidence that Earth has existed for a vast period of time</p> <p>ESS-M-B3 understanding that the Earth processes, such as erosion and weathering, that affect Earth today are similar to those which occurred in the past</p> <p><b>C. EARTH IN THE SOLAR SYSTEM</b></p> <p>ESS-M-C1 identifying the characteristics of the Sun and other stars</p> <p>ESS-M-C2 comparing and contrasting the celestial bodies in our solar system</p> <p>ESS-M-C3 investigating the force of gravity and the ways gravity governs motion in the solar system and objects on Earth</p> <p>ESS-M-C4 modeling the motions of the Earth-Moon-Sun system to explain day and night, a year, eclipses, moon phases, and tides</p> <p>ESS-M-C5 modeling the position of Earth in relationship to other objects in the solar system</p> <p>ESS-M-C6 modeling and describing how radiant energy from the Sun affects phenomena on the Earth’s surface, such as winds, ocean currents, and the water cycle</p>	<p><b>C. THE ORIGIN AND EVOLUTION OF THE EARTH SYSTEM</b></p> <p>ESS-H-C1 explaining the formation of the solar system from a nebular cloud of dust and gas</p> <p>ESS-H-C2 estimating the age of Earth by using dating techniques</p> <p>ESS-H-C3 communicating the geologic development of Louisiana</p> <p>ESS-H-C4 examining fossil evidence as it relates to the evolution of life and the resulting changes in the amount of oxygen in the atmosphere</p> <p>ESS-H-C5 explaining that natural processes and changes in Earth’s system may take place in a matter of seconds or develop over billions of years</p> <p><b>D. THE ORIGIN AND EVOLUTION OF THE UNIVERSE</b></p> <p>ESS-H-D1 identifying scientific evidence that supports the latest theory of the age and origin of the universe</p> <p>ESS-H-D2 describing the organization of the known universe</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p style="text-align: center;"><b>SCIENCE AND THE ENVIRONMENT</b></p> <p>SE-E-A1 understanding that an ecosystem is made of living and non-living components</p> <p>SE-E-A2 understanding the components of a food chain</p> <p>SE-E-A3 identifying ways in which humans have altered their environment, both in positive and negative ways, either for themselves or for other living things</p> <p>SE-E-A4 understanding that the original sources of all material goods are natural resources and that the conserving and recycling of natural resources is a form of stewardship</p>	<p>ESS-M-C7 modeling and explaining how seasons result from variations in amount of the Sun’s energy hitting the surface due to the tilt of Earth’s rotation on its axis and the length of the day</p> <p>ESS-M-C8 understanding that space exploration is an active area of scientific and technological research and development</p> <p style="text-align: center;"><b>SCIENCE AND THE ENVIRONMENT</b></p> <p>SE-M-A1 demonstrating knowledge that an ecosystem includes living and nonliving factors and that humans are an integral part of ecosystems</p> <p>SE-M-A2 demonstrating an understanding of how carrying capacity and limiting factors affect plant and animal populations</p> <p>SE-M-A3 defining the concept of pollutant and describing the effects of various pollutants on ecosystems</p> <p>SE-M-A4 understanding that human actions can create risks and consequences in the environment</p>	<p>ESS-H-D3 comparing and contrasting the Sun with other stars</p> <p>ESS-H-D4 identifying the elements found in the Sun and other stars by investigating the spectra</p> <p>ESS-H-D5 describing the role of hydrogen in the formation of all the natural elements</p> <p>ESS-H-D6 demonstrating the laws of motion for orbiting bodies</p> <p>ESS-H-D7 describing the impact of technology on the study of Earth, the solar system, and the universe</p> <p style="text-align: center;"><b>SCIENCE AND THE ENVIRONMENT</b></p> <p><b>A. ECOLOGICAL SYSTEMS AND INTERACTIONS</b></p> <p>SE-H-A1 demonstrating an understanding of the functions of Earth’s major ecological systems</p> <p>SE-H-A2 investigating the flow of energy in ecological systems</p> <p>SE-H-A3 describing how habitat, carrying capacity, and limiting factors influence plant and animal populations (including humans)</p>

<b>K–4</b>	<b>5–8</b>	<b>9–12</b>
<p>SE-E-A5 understanding that most plant and animal species are threatened or endangered today due to habitat loss or change</p>	<p>SE-M-A5 tracing the flow of energy through an ecosystem and demonstrating a knowledge of the roles of producers, consumers, and decomposers in the ecosystem</p> <p>SE-E-A6 distinguishing between renewable and nonrenewable resources and understanding that nonrenewable natural resources are not replenished through the natural cycles and thus are strictly limited in quantity</p> <p>SE-M-A7 demonstrating knowledge of the natural cycles, such as the carbon cycle, nitrogen cycle, water cycle, and oxygen cycle</p> <p>SE-M-A8 investigating and analyzing how technology affects the physical, chemical, and biological factors in an ecosystem</p> <p>SE-M-A9 demonstrating relationships of characteristics of soil types to agricultural practices and productivity</p> <p>SE-M-A10 identifying types of soil erosion and preventive measures</p>	<p>SE-H-A4 understanding that change is a fundamental characteristic of every ecosystem and that ecosystems have varying capacities for change and recovery</p> <p>SE-H-A5 describing the dynamic interactions between divisions of the biosphere</p> <p>SE-H-A6 describing and explaining Earth’s biochemical and geochemical cycles and their relationship to ecosystem stability</p> <p>SE-H-A7 comparing and contrasting the dynamic interaction within the biosphere</p> <p>SE-H-A8 analyzing evidence that plant and animal species have evolved physical, biochemical, and/or behavioral adaptations to their environments</p> <p>SE-H-A9 demonstrating an understanding of influencing factors of biodiversity</p> <p>SE-H-A10 explaining that all species represent a vital link in a complex web of interaction</p> <p>SE-H-A11 understanding how pollutants can affect living systems</p>

K-4	5-8	9-12
		<p><b>B. RESOURCES AND RESOURCE MANAGEMENT</b></p> <p>SE-H-B1 explaining the relationships between renewable and nonrenewable resources</p> <p>SE-H-B2 comparing and contrasting conserving and preserving resources</p> <p>SE-H-B3 recognizing that population size and geographic and economic factors result in the inequitable distribution of Earth's resources</p> <p>SE-H-B4 comparing and contrasting long and short-term consequences of resource management</p> <p>SE-H-B5 analyzing resource management</p> <p>SE-H-B6 recognizing that sustainable development is a process of change in which resource use, investment direction, technological development, and institutional change meet society's present as well as future needs</p>

K-4	5-8	9-12
		<p><b>C. ENVIRONMENTAL AWARENESS AND PROTECTION</b></p> <p>SE-H-C1 evaluating the dynamic interaction of land, water, and air and its relationship to living things in maintaining a healthy environment</p> <p>SE-H-C2 evaluating the relationships between quality of life and environmental quality</p> <p>SE-H-C3 investigating and communicating how environmental policy is formed by the interaction of social, economic, technological, and political considerations</p> <p>SE-H-C4 demonstrating that environmental decisions include analyses that incorporate ecological, health, social, and economic factors</p> <p>SE-H-C5 analyzing how public support affects the creation and enforcement of environmental laws and regulations</p> <p><b>D. PERSONAL CHOICES AND RESPONSIBLE ACTIONS</b></p> <p>SE-H-D1 demonstrating the effects of personal choices and actions on the natural environment</p>

K-4	5-8	9-12
		<p>SE-H-D2 analyzing how individuals are capable of reducing and reversing their impact on the environment through thinking, planning, education, collaboration, and action</p> <p>SE-H-D3 demonstrating that the most important factor in prevention and control of pollution is education</p> <p>SE-H-D4 demonstrating a knowledge that environmental issues should be a local and global concern</p> <p>SE-H-D5 recognizing that the development of accountability toward the environment is essential for sustainability</p> <p>SE-H-D6 developing an awareness of personal responsibility as stewards of the local and global environment</p>

## Louisiana Educational Assessment Program Science Achievement Level Descriptors: Grade 4

**Note:** These descriptors have been modified slightly from the 2000 publication to match the condensed descriptors on the updated 2006 Individual Student Reports.

Achievement Level	Descriptors
<b>Advanced</b>	<p>Students scoring at this level generally exhibit the ability to</p> <ul style="list-style-type: none"> <li>• design and carry out scientific investigations by selecting and using appropriate tools, technology, and techniques/methods;</li> <li>• formulate appropriate questions that demonstrate critical thinking and a broad base of scientific knowledge;</li> <li>• interpret relationships and make inferences based on data and apply to new situations;</li> <li>• organize data in graphic form, evaluate validity of data, and draw/justify conclusions based on data;</li> <li>• develop, elaborate, and modify predictions, models, and explanations;</li> <li>• use/apply concepts about properties of objects/materials, position/motion of objects, and forms of energy to new ideas/situations;</li> <li>• use/apply concepts about characteristics, life cycles, and environments of organisms to recognize and analyze observed phenomena;</li> <li>• use/apply concepts about properties of Earth materials, weather, and objects in the night sky to predict/justify patterns and relationships; and</li> <li>• use/apply concepts about interrelationships among the human, biological, chemical, and physical aspects of the environment.</li> </ul>
<b>Mastery</b>	<p>Students scoring at this level generally exhibit the ability to</p> <ul style="list-style-type: none"> <li>• design and carry out scientific investigations using appropriate methods, tools, technology, and techniques;</li> <li>• formulate appropriate questions demonstrating a broad base of scientific knowledge;</li> <li>• identify relationships based on data and apply to new situations;</li> <li>• organize data in a graphic form, draw conclusions, justify conclusions, and make predictions based on data;</li> <li>• explain and connect concepts about properties of objects/materials, position/motion of objects, and formation of energy;</li> <li>• explain and connect concepts about characteristics, life cycles, and environments of organisms;</li> <li>• explain and connect concepts about properties of Earth materials, weather, and objects in the night sky; and</li> <li>• explain and connect concepts about the interrelationships among the human, biological, chemical, and physical aspects of the environment.</li> </ul>

<p><b>Basic</b></p>	<p>Students scoring at this level generally exhibit the ability to</p> <ul style="list-style-type: none"> <li>• perform simple scientific tasks when given clear, sequential directions;</li> <li>• recognize questions that are appropriate to investigation;</li> <li>• organize and present data in a graphic form and draw conclusions based on data;</li> <li>• demonstrate basic knowledge/understanding about properties of objects, motion of objects, and forms of energy as they apply to their everyday life;</li> <li>• demonstrate basic knowledge/understanding about characteristics, life cycles, and environments of organisms and relationships;</li> <li>• demonstrate knowledge/understanding about basic concepts of properties of Earth materials, weather, and objects in the night sky; and</li> <li>• demonstrate knowledge/understanding about basic components of an ecosystem and recognize how change impacts the system.</li> </ul>
<p><b>Approaching Basic</b></p>	<p>Students scoring at this level generally exhibit the ability to</p> <ul style="list-style-type: none"> <li>• perform portions of simple scientific tasks when given clear, sequential directions;</li> <li>• read/interpret some data in a graphic form;</li> <li>• respond to simple directed questions;</li> <li>• exhibit partial understanding of properties of objects, motion of objects, and forms of energy as they apply to their everyday life;</li> <li>• exhibit partial understanding of characteristics, life cycles, and environments of organisms and relationships;</li> <li>• exhibit partial understanding of basic concepts of properties of Earth materials, weather, and objects in the night sky; and</li> <li>• exhibit partial understanding of basic components of ecosystems and recognize how change impacts systems.</li> </ul>
<p><b>Unsatisfactory</b></p>	<p>Students scoring at this level have not demonstrated the fundamental knowledge and skills needed for the next level of schooling. Students at this level generally have not exhibited the ability to</p> <ul style="list-style-type: none"> <li>• perform portions of simple scientific tasks when given clear, sequential directions;</li> <li>• read/interpret some data in a graphic form;</li> <li>• respond to simple directed questions;</li> <li>• exhibit partial understanding of properties of objects, motion of objects, and forms of energy as they apply to their everyday life;</li> <li>• exhibit partial understanding of characteristics, life cycles, and environments of organisms and relationships;</li> <li>• exhibit partial understanding of basic concepts of properties of Earth materials, weather, and objects in the night sky; and</li> <li>• exhibit partial understanding of basic components of ecosystems and recognize how change impacts systems.</li> </ul>





## Chapter 4: LEAP Social Studies, Grade 4

This chapter provides specifications for the Social Studies test for grade 4 LEAP. It describes the content and the format of the test, provides the number and types of items, and explains how the standards and benchmarks for Social Studies are assessed.

### Test Structure

The Social Studies test consists of three sessions and is administered in one day. Students are allowed as much time as they need to complete each session, but suggested times are provided. The *Test Administration Manual* explains the procedures for allowing students additional time to complete a session of the test.

**Session 1:** 25 multiple-choice items

**Session 2:** 25 multiple-choice items

**Session 3:** 4 constructed-response items

### Item Types

The multiple-choice items consist of a stem and four answer options. They measure all Social Studies strands: Geography, Civics, Economics, and History.

The constructed-response items require students to construct or interpret a chart, graph, map, timeline, or other graphic representation, or to supply a written answer.

### Test Description

Each constructed-response item assesses a different Social Studies strand. The constructed-response items require higher-order thinking (for example, grasp of a concept, analysis of information, or application of a skill).

Both multiple-choice and constructed-response items may use stimulus material, for example:

- a map or illustration of a globe
- a table or graph presenting numerical data to be read or interpreted
- a timeline, chart, illustration, photograph, or graphic organizer
- an excerpt or article from a newspaper or magazine
- an excerpt from a primary source
- an excerpt from a secondary source

The reading level of test items is minimized to the extent possible (except for necessary social studies terms) so that students’ reading ability does not interfere with their ability to demonstrate their Social Studies knowledge and skills.

## Scoring the Social Studies Sessions

Each multiple-choice item has four response options (A, B, C, and D) and is scored right/wrong. Correct answers receive a score of 1; incorrect answers receive a score of 0.

Each constructed-response item is scored using a 4-point scoring rubric. The specific rubric for each item is developed from the general 4-point scoring rubric for LEAP and GEE.

This general rubric (scoring guide) explains the scale that is used to score constructed-response items. Each score level description presents the general characteristics of a response that would earn the associated rating (0, 1, 2, 3, or 4). For the actual test, an item-specific rubric is developed for each constructed-response item.

**Table 4.1: General Scoring Rubric—Constructed-Response Items**

Score Level	Description of Score Level
4	<ul style="list-style-type: none"> <li>• The response demonstrates in-depth understanding of the relevant content and/or procedures.</li> <li>• The student completes all important components of the task accurately and communicates ideas effectively.</li> <li>• Where appropriate, the student offers insightful interpretations and/or extensions.</li> <li>• Where appropriate, the student chooses more sophisticated reasoning and/or efficient procedures.</li> </ul>
3	<ul style="list-style-type: none"> <li>• The response demonstrates understanding of major concepts and/or processes, although less important ideas or details may be overlooked or misunderstood.</li> <li>• The student completes the most important aspects of the task accurately and communicates clearly.</li> <li>• The student’s logic and reasoning may contain minor flaws.</li> </ul>
2	<ul style="list-style-type: none"> <li>• The student completes some parts of the task successfully.</li> <li>• The response demonstrates gaps in conceptual understanding.</li> </ul>
1	<ul style="list-style-type: none"> <li>• The student completes only a small portion of the task and/or shows minimal understanding of the concepts and/or processes.</li> </ul>
0	<ul style="list-style-type: none"> <li>• The student’s response is incorrect, irrelevant, too brief to evaluate, or blank.</li> </ul>

## Social Studies Test Specifications, Grade 4

**Table 4.2: Number of Multiple-Choice Items in Strands/Categories**

<b>Strands/Categories</b>	<b>Items</b>	<b>% of Total Points</b>
<b>GEOGRAPHY</b> A. The World in Spatial Terms B. Places and Regions C. Physical and Human Systems D. Environment and Society	<b>18</b>	<b>36</b>
<b>CIVICS</b> A. Structure and Purposes of Government B. Foundations of the American Political System C. International Relationships D. Roles of the Citizen	<b>10</b>	<b>20</b>
<b>ECONOMICS</b> A. Fundamental Economic Concepts B. Individuals, Households, Businesses, and Governments C. The Economy as a Whole	<b>7</b>	<b>14</b>
<b>HISTORY</b> A. Historical Thinking Skills B. Families and Communities C. Louisiana and United States History D. World History	<b>15</b>	<b>30</b>
<b>TOTAL</b>	<b>50</b>	<b>100</b>

## STRANDS, STANDARDS, AND BENCHMARKS ASSESSED

This section presents the strands, standards, and benchmarks assessed on the grade 4 LEAP Social Studies assessment. The section includes the text of the benchmark, followed by a list of key concepts explaining what students **may** be expected to know and be able to do to demonstrate the content knowledge and skills described in each benchmark.

The information is organized by the four social studies strands: Geography, Civics, Economics, and History. Each strand is further organized by categories. Benchmarks are organized into three or four thematic categories within each strand. These categories (for example, Places and Regions, or Historical Thinking Skills) provide further content definition by highlighting the underlying themes within the domain of each strand.

### **Strand G: Geography—Physical and Cultural Systems**

**Standard:** Students develop a spatial understanding of Earth’s surface and the processes that shape it, the connections between people and places, and the relationship between man and his environment.

### **Strand C: Civics—Citizenship and Government**

**Standard:** Students develop an understanding of the structure and purposes of government, the foundations of the American democratic system, and the role of the United States in the world, while learning about the rights and responsibilities of citizenship.

### **Strand E: Economics—Interdependence and Decision Making**

**Standard:** Students develop an understanding of fundamental economic concepts as they apply to the interdependence and decision making of individuals, households, businesses, and governments in the United States and the world.

### **Strand H: History—Time, Continuity, and Change**

**Standard:** Students develop a sense of historical time and historical perspective as they study the history of their community, state, nation, and world.

The following information is presented for each category:

**Benchmarks Assessed:** the text of all benchmarks eligible for LEAP

**Assessment Limits:**

- benchmarks that are excluded from LEAP
- special restrictions on test content
- content barred from testing of an assessed benchmark
- content emphasis for LEAP

**Key Concepts:** important concepts and related skills that may be assessed

## Explanation of Codes

The benchmarks in each grade level are grouped by strand and thematic category. For example:

- Strand:* Geography
- Categories:* A. The World in Spatial Terms  
B. Places and Regions  
C. Physical and Human Systems  
D. Environment and Society

Benchmarks are coded by strand, standard, category, and grade cluster (E, M, H). The first term in the code always refers to the strand. The second term gives the standard number and category. The third term indicates the grade cluster and benchmark number.

**Table 4.3: Examples of Social Studies Codes**

Code	Translation
G-1B-E1	Geography – standard 1, category B – elementary, benchmark 1
H-1A-H3	History – standard 1, category A – high school, benchmark 3

## Strand G: Geography

A. The World in Spatial Terms	
Benchmarks Assessed	
G-1A-E1	identifying and describing the characteristics and uses of geographic representations, such as various types of maps, globes, graphs, diagrams, photographs, and satellite-produced images
G-1A-E2	locating and interpreting geographic features and places on maps and globes
G-1A-E3	constructing maps, graphs, charts, and diagrams to describe geographical information and to solve problems

### Assessment Limits:

- For benchmark G-1A-E1, *satellite-produced images* do not appear on the test.
- Any illustration of a globe is a side view, not a top-down view.
- No rulers are provided for the test. To estimate distances between places on a map, students are expected to use an independent gauge of the map's distance scale (for example, the length of their index finger between the first and second knuckle).
- Any information students may need to draw or complete a map is provided in stimulus material. Students are not required to recall information about a geographic location in order to draw or complete a map.

### Key Concepts:

- Locate or identify a place on a map showing grid lines.
- Describe the characteristics and uses of various types of maps, for example:
  - political*
  - physical*
  - elevation/topographic*
  - population, population density*
  - natural resource*
  - precipitation, climate*
- Use a map key/legend, symbols, distance scale, and boundaries to interpret a map.
- Use a compass rose and cardinal or intermediate directions to interpret a map.
- Identify all U.S. states by shape and position on a map.
- Locate major geographic features (for example, mountain ranges), places (for example, major cities), bodies of water (for example, Atlantic Ocean, Gulf of Mexico, Great Lakes), or waterways (for example, Mississippi River) on a map of Louisiana or of the United States.

- Locate places on a map or representation of a globe, for example:
  - hemispheres*
  - continents*
  - the United States*
  - major landforms (for example, Rocky Mountains, Appalachian Mountains, Grand Canyon)*
  - major bodies of water or waterways (for example, the four oceans, Gulf of Mexico, Mississippi River, Great Lakes)*
  - Equator, North Pole, South Pole*
- Draw, complete, or add features to a map (including such map elements as a title, compass rose, legend, or scale), based on information given in narrative form.
- Show the location of a specified place by entering it on a labeled grid (for example, “the library is located at [grid point] E-3”).
- Construct a chart or diagram to display geographical information in an organized way.
- Construct a bar graph, line graph, circle/pie graph, or pictograph to represent given geographical data.

## B. Places and Regions

### Benchmarks Assessed

- |         |   |
|---------|---|
| G-1B-E1 | describing and comparing the physical characteristics of places, including landforms, bodies of water, soils, vegetation, and climate   |
| G-1B-E2 | identifying and describing the human characteristics of places, including population distributions and culture  |
| G-1B-E3 | describing how the physical and human characteristics of places change over time  |
| G-1B-E4 | defining and differentiating regions by using physical characteristics, such as climate and landforms, and by using human characteristics, such as economic activity and language |

### Assessment Limits:

- G-1B-E1 and G-1B-E2 are particularly well suited for constructed-response items.
- Students are not required to recall the specific terrain, climate, or vegetation of any region outside the United States.
- Test items for G-1B-E1 do not test types of soil.
- Test items for G-1B-E2 are limited to population density and human characteristics noted under the *Key Concepts* below. Other aspects of culture are reserved for testing under category C, benchmark G-1C-E4.



- Test items for G-1B-E3 do not address population migration (see G-1C-E3) or physical processes that shape Earth’s surface (see G-1C-E1).
- Regarding economic activity, G-1B-E4 focuses on distinguishing among regions, not on analyzing given distributions of economic activities (see G-1C-E5).

**Key Concepts:**

- Identify examples or compare the distinguishing characteristics of various landforms, for example:
  - continents*
  - islands*
  - plateaus, plains, hills, and mountains*
  - deserts*
  - swamps, marshes, and wetlands*
- Identify or compare the distinguishing characteristics of various bodies of water (for example, lakes, oceans, seas, gulfs) and waterways/rivers.
- Identify or compare the distinguishing characteristics of various climates (for example, tropical, temperate, cold, arid), and various forms of vegetation (for example, cactus, cypress trees, grasslands).
- Describe or compare mountainous areas, hilly areas, plains, swamps, and deserts.
- Compare northern vs. southern regions in terms of vegetation and climate.
- Identify the best place for human settlement based on a map showing physical characteristics of an area.
- Identify or describe the distribution of population in a region or larger area based on given information (population density).
- Identify, describe, or compare human characteristics of a particular place, based on given information.
- Describe how certain physical and human characteristics (for example, clothing, jobs, shelter, methods of transportation, and tools) have changed since colonial times.
- Explain physical and human developments in a region since it was first settled, based on given information.
- Recognize English as the major language of the United States and identify French and Spanish as secondary languages in certain regions of the country.
- Identify, describe or compare the population density or the physical, economic, and other human characteristics of the local region and U.S. regions, for example:
  - Northeast*
  - Southeast*
  - Midwest*
  - Northwest/Rocky Mountain states*
  - Southwest*
  - Pacific/West Coast*

## C. Physical and Human Systems

### Benchmarks Assessed

G-1C-E1	describing how physical processes help to shape features and patterns on Earth's surface
G-1C-E2	describing and comparing the types of settlement and patterns of land use in local communities, the United States, and world regions
G-1C-E3	describing and explaining the characteristics, distribution, and migration of human population
G-1C-E4	identifying and comparing the cultural characteristics of different regions and people
G-1C-E5	locating and explaining the spatial distribution of economic activities
G-1C-E6	identifying and describing types of territorial units, such as parishes or counties, states, and countries

### Assessment Limits:

- Under G-1C-E1, *physical processes* exclude natural disasters, which are assessed under G-1D-E3.
- For G-1C-E3, test items are restricted to analysis of population characteristics or general principles underlying human migration. Aspects of population distribution are assessed under benchmark G-1B-E3. Test items requiring knowledge of specific historical migrations are assessed under History benchmark H-1C-E3.

### Key Concepts:

- Regions of the U.S. (see *Key Concepts* in Geography category B).
- Identify physical processes that change Earth's surface suddenly or over time, for example:
  - ice age, glaciers*
  - water currents*
  - volcanic eruptions*
  - earthquakes*
- Describe the physical processes that created the Grand Canyon, Great Lakes, and Hawaiian Islands.
- Identify the effects on Earth's surface of a particular physical process (for example, erosion, faults, new islands from volcanic eruptions).
- Identify how land use affected human migration and settlement patterns, for example:
  - urban vs. rural settlements*
  - migration to urban and suburban centers*
  - westward expansion*

- Identify or compare features of urban, suburban, and rural communities.
- Compare city life to rural life.
- Identify geographical/physical reasons for regional variations in land use, for example:
  - farming*
  - mining*
  - drilling for oil and gas*
  - fishing*
- Identify reasons why people move from place to place, for example:
  - find work*
  - seek new opportunities*
  - better their lives*
  - escape religious persecution*
  - escape political oppression*
  - flee severe geographical conditions, such as drought or famine*
- Identify or analyze characteristics of the human population in a given area, for example:
  - cultural diversity*
  - population size*
  - population growth*
- Identify, describe, or compare the cultural identities of various U.S. regions (for example, how clothing of people in the Southwest differs from clothing in the Northeast).
- Describe or compare cultural characteristics (for example, shelter, food, dress, celebrations, language, or music) of any region, based on given information.
- Explain how a region is influenced by past events and the heritage of its people.
- Identify the economic activities of Louisiana or the local region (that is, how people earn their living).
- Identify the relationship between geography and economic activities in Louisiana.
- Identify the importance of specific industries to various regions in Louisiana and the United States.
- Differentiate between territorial units:
  - towns/cities*
  - parishes/counties*
  - states*
  - nations/countries*

## D. Environment and Society

### Benchmarks Assessed

G-1D-E1	identifying and explaining ways in which people depend upon and modify the physical environment
G-1D-E2	describing how humans adapt to variations in the physical environment
G-1D-E3	describing the locations, causes, and effects of natural disasters on the environment and society
G-1D-E4	describing the use, distribution, and importance of natural resources

### Assessment Limits:

- G-1D-E1 and G-1D-E2 are particularly well suited to constructed-response items.
- Under G-1D-E3, causes and effects of natural disasters are not tested. Items may require students to know areas of the U.S. prone to certain natural disasters. (Items on earthquakes and volcanoes do not duplicate ideas assessed in G-1C-E1.)
- Under G-1D-E4, distribution of natural resources is not tested, except as represented on a map. Items stress the use and importance of natural resources.

### Key Concepts:

- Explain ways in which people depend on the physical environment to satisfy basic needs.
- Identify or explain ways in which humans modify the physical environment to meet basic needs or achieve certain purposes, for example:
  - clearing land for urban development*
  - building roads to improve access to an area*
  - irrigating land, draining swamps*
  - clearing land/cutting down forests*
  - building roads, canals, tunnels, levees, or flood walls*
  - building up coastal areas*
  - mining natural resources*
- Identify or explain positive and negative consequences of human modifications to Earth's surface and the physical environment.
- Identify natural disasters and recognize those common in the local region, for example:
  - floods*
  - hurricanes*
  - earthquakes*
  - forest fires*
  - volcanoes*
  - tornadoes*
- Identify areas prone to certain natural disasters, for example:

—hurricanes in the Gulf of Mexico  
—tornadoes in the Midwest  
—earthquakes in California  
—volcanoes in Hawaii/the Pacific Northwest (for example, Mount St. Helens)

- Identify examples of natural resources and their uses, for example:
  - trees/forests (lumber, paper)
  - fresh water (drinking)
  - seawater (salt)
  - coal, natural gas, oil (electricity, heat)
  - minerals in Earth (aluminum)
  - plants, roots, herbs (medicines, dyes)
- Describe natural resources found in the local region (for example, sugar cane, trees, oil, cotton, rice, soybeans).
- Describe the importance of specific natural resources to human survival and human endeavors.
- Interpret a map to describe the distribution of natural resources in a given area.

## Strand C: Civics

### A. Structure and Purposes of Government

#### Benchmarks Assessed

C-1A-E2	explaining the necessity and basic purposes of government
C-1A-E3	comparing limited governments to unlimited governments
C-1A-E4	identifying and describing some of the major responsibilities of local, state, and national governments
C-1A-E5	identifying key members of government at the local, state, and national levels and describing their powers and the limits on their powers
C-1A-E6	explaining how officials in government acquire the authority to exercise political power
C-1A-E7	explaining the purposes and importance of rules and laws

#### Assessment Limits:

- Benchmark C-1A-E1 (describing government in terms of the people and groups who make, apply, and enforce rules and laws in the home, school, community, and nation) is not assessed on LEAP.
- Test items on powers and limits of government officials are restricted to the list of key officials in the *Key Concepts* below.

#### Key Concepts:

- Identify the necessity or basic purposes of government in such terms as establishing order, providing security, managing conflict, and providing services.
- Identify ways that government helps meet the basic needs of society, for example:
  - providing education*
  - supplying social welfare*
  - building and maintaining roads*
  - providing and maintaining public facilities (post office, hospitals, schools, libraries)*
- Distinguish between *limited government* wherein powers of leading government officials are limited (for example, by a constitution) and *unlimited government* wherein there is little or no control over the ruler's power (for example, as in a dictatorship).
- Identify major responsibilities of local, state, and national government (for example, national defense, levying taxes, building roads or state highways).
- Identify the three branches of the federal government—legislative, executive, judiciary—and describe their primary functions.
- Identify key government positions at the local, state, and national levels, their respective

powers, and limits on their powers.

- Identify the term of office for president and vice president of the United States.
- Identify the term of office for the governor of Louisiana.
- Compare or contrast the roles of key government officials.
- Explain how government officials at the local, state, and national levels are elected.
- Distinguish between *election* and *appointment*.
- Define *rules* and *laws*.
- Explain the need/purpose/importance of having rules in the school, community, and society at large (for example, to provide order and safety).
- Explain the importance of obeying rules or laws and the consequences of violating them.
- Propose rules for a given situation and explain why the rules would be important.

<b>B. Foundations of the American Political System</b>
<b>Benchmark Assessed</b>
C-1B-E1 identifying basic principles of American constitutional democracy and explaining how the constitutions of the United States and Louisiana reflect these principles

**Assessment Limits:**

- Benchmark C-1B-E2 (discussing the importance of citizens' sharing and supporting the principles of American constitutional democracy) is not directly assessed. Themes relevant to this benchmark may be assessed under Civics category D.

**Key Concepts:**

- Define *democracy*.
- Explain basic freedoms (for example, freedom of speech, religion, press, assembly, and petition).
- Identify or discuss specific basic freedoms guaranteed by the Bill of Rights.
- Identify the U.S. Constitution as the supreme law of the land.
- Identify or discuss specific principles of the U.S. Constitution.
- Explain how laws and rules are based on the U.S. Constitution.
- Describe how the Constitution reflects basic principles of American democracy.
- Recognize that Louisiana has a constitution patterned after the U.S. Constitution.

<b>C. International Relationships</b>
<b>Benchmark Assessed</b>
C-1C-E1 explaining that the world is divided into different nations and describing the major ways that these nations interact

**Assessment Limits:**

- Test items may require students to understand that each nation has its own land, people, government, and laws. However, except for democracy, various *forms* of government are not assessed in this or any other category at grade 4.
- Test items should emphasize trade and diplomacy as modes of international interaction, but may also refer to methods of resolving problems (for example, treaties).

**Key Concepts:**

- Explain the concept of a *nation* with reference to countries, governments, and people.
- Identify major ways that nations interact (for example, trade, diplomacy).
- Identify the function of treaties between nations.
- Define *diplomacy* in terms of representatives of countries meeting to try to resolve differences or solve problems peacefully.
- Identify the role of the United Nations (UN) in international peacekeeping.

<b>D. Roles of the Citizen</b>
<b>Benchmarks Assessed</b>
C-1D-E1 explaining the meaning of citizenship and the means by which individuals become citizens of the United States
C-1D-E2 describing the rights and responsibilities of citizenship in a democratic society
C-1D-E3 identifying and discussing civic traits that are important to the preservation and improvement of American constitutional democracy
C-1D-E4 describing the many ways that citizens can participate in and contribute to their communities and to American society
C-1D-E5 discussing issues related to citizenship and public service

**Assessment Limits:**

- Multiple-choice test items reflect matters of fact or core democratic principles. Care is exercised to avoid subjective bias in response choices.
- For C-1D-E1, test items do not use the term *naturalization*.
- For C-1D-E2, test items focus on rights and responsibilities of citizenship in any



democratic society. The Bill of Rights may be cited, but only in terms of its function as a source of our basic rights. This restriction avoids content overlap with C-1B-E1 (see Civics category B).

- Assessment items may incorporate themes from C-1B-E2 (importance of citizens' sharing and supporting the principles of American constitutional democracy).
- Benchmarks C-1D-E1 and C-1D-E2 are assessed only with multiple-choice items.
- Benchmarks C-1D-E3, C-1D-E4, and C-1D-E5 are assessed only with constructed-response items.
- Multiple-choice items for this category do not include stimulus material.
- Constructed-response items may include stimulus material, such as a picture, illustration, or an excerpt from a political speech/address or essay.

### **Key Concepts:**

- Define citizen and citizenship.
- Identify the means by which individuals become U.S. citizens (for example, by birth, by being born of American parents abroad, by process of naturalization).
- Identify the rights and responsibilities of citizenship in a democratic society (for example, the right to hold public office; the responsibility to vote in elections, pay taxes, or serve on a jury).
- Describe qualities of good citizenship and civic traits important to the preservation and improvement of American constitutional democracy, for example:
  - participating in public/community service*
  - respecting others' basic rights*
  - working cooperatively with elected leaders*
  - participating in the democratic process*
- Describe ways in which individuals can participate in and contribute to their communities and American society, or exemplify qualities of good citizenship, for example:
  - being an informed citizen*
  - participating in community service*
  - displaying expressions of patriotism*
  - serving in the military*
- Describe actions individuals or groups may take to improve their community.
- Discuss ideas related to citizenship and public service (for example, the importance of leadership and participation, human rights issues, helping the less fortunate, or practicing compassion towards others).
- Discuss an excerpt from a speech, address, or essay related to the benchmarks in category D.

## Strand E: Economics

### A. Fundamental Economic Concepts

#### Benchmarks Assessed

E-1A-E1	recognizing that limited resources require people to make decisions
E-1A-E2	identifying what is gained and lost when individuals or groups make decisions
E-1A-E3	demonstrating how economic wants affect decisions about using goods and services
E-1A-E4	discussing and determining the process for making economic decisions
E-1A-E5	explaining the relationships among producers and consumers
E-1A-E6	describing how natural resources, human resources, and capital (human-made) resources have been used and are combined in the production of goods and services
E-1A-E7	describing how specialization affects productivity and contributes to the need for interdependence among producers and consumers
E-1A-E8	determining how the development of skills and knowledge relates to career opportunity and economic well-being
E-1A-E9	identifying different methods for the distribution of goods and services, including the concept of markets
E-1A-E10	identifying some of the economic institutions, such as households and banks, that make up the economy
E-1A-E11	explaining and demonstrating why people participate in voluntary exchanges and how money helps in the process

#### Assessment Limits:

- Students should be able to *apply*, but are not required to know the following terms and concepts: *productive resources*, *division of labor*, *specialization*, *productivity*, *economic wants*, *opportunity cost*, or *economic institution*.
- Benchmarks E-1A-E5, E-1A-E6, E-1A-E7, E-1A-E10, and E-1A-E11 are assessed only by multiple-choice items.

#### Key Concepts:

- Identify examples of *scarcity* (limited resources) at the individual or societal level.
- Demonstrate that limited resources require choices and decisions.
- Explain what is gained and what is lost in a given choice made by an individual or group.

- Identify examples of *goods* and *services* and explain the differences between goods and services.
- Explain how *economic wants*, or desires that can be satisfied by consuming a good or service, affect individual or group decisions about allocating limited resources.
- Explain or analyze *trade-offs*, or getting a little more of something in exchange for a little less of something else.
- Identify what is gained and what is given up in choosing one of several alternatives (for example, skating with friends vs. bowling with parents).
- Weigh the factors involved in a choice or decision (for example, discuss the choices and decisions involved in developing a personal budget).
- Identify examples of resources used to produce things, including *natural resources* (for example, coal), *human resources* (for example, workers), and *capital resources* (for example, machines).
- Identify various ways in which resources are used (for example, use of trees to produce wood for building, wood products, and heat).
- Describe the particular combination of natural, human, and capital resources needed to produce a given good or given service.
- Describe the roles of *producers* and *consumers*.
- Recognize that a person may be a producer or consumer in different contexts.
- Explain or analyze the interdependence of producers and consumers.
- Identify the effects of division of labor and specialization in a given context, such as a simple assembly line (for example, greater labor productivity/output per hour, interdependence of producers and consumers, and the need for teamwork).
- Describe the benefits of increasing one's skills/knowledge and the various ways to do so.
- Explain that banks, governments, businesses, and households make up the economy as economic institutions.
- Explain why people engage in voluntary exchange/barter/direct trading (for example, because each expects to be better off after the exchange).
- Explain the advantages of using money over bartering (for example, eliminates the need to find a person with matching wants; money is a good that can be used to buy all goods).
- Describe the basic concept of a market (for example, exchange of goods and services between buyers and sellers).
- Identify ways of transporting goods (for example, trucking, shipping, pipeline).

## B. Individuals, Households, Businesses, and Governments

### Benchmarks Assessed

E-1B-E1	describing how prices are determined by the interactions of buyers and sellers
E-1B-E2	explaining how the changes in prices affect incentives to produce, consume, and save
E-1B-E3	identifying and explaining economic concepts, such as profit, as an incentive for people to take economic risk
E-1B-E4	explaining why some goods and services are provided by the government through taxing, charging user fees, and borrowing
E-1B-E5	identifying the major goods and services produced in the local community and state

### Assessment Limits:

- For E-1B-E2, test items are restricted to incentives to produce and consume; incentives to save are not assessed.
- For E-1B-E4, test items focus on the government’s provision of paying for goods and services with taxation, vs. user fees. Items do not require students to explore the concept of government borrowing.
- For E-1B-E5, test items address only goods and services for which Louisiana is a major producer. Goods and services of specific local communities are not assessed.
- Students should be able to *apply*, but are not required to recognize or use, the following terms: *economic risk*, *incentive*, or *the common good*.
- E-1B-E3 may be assessed with either multiple-choice or constructed-response items; other benchmarks in this category are assessed only as multiple-choice items.

### Key Concepts:

- Describe the elementary principles of *supply* and *demand*.
- Analyze a diagram or situation demonstrating the principles of supply and demand.
- Explain that producers produce more of the things many consumers need or want to buy and less of things fewer people need or want.
- Indicate what will most likely happen if the price of a product goes up (for example, quantity demanded will decrease).
- Describe how competition can affect the price of goods.
- Explain how a rise or a fall in prices affects personal, family, or government budgets.
- Explain why a decrease in price is an incentive for people to buy more, and for producers to produce less.
- Explain why an increase in price gives people an incentive to buy less, and for producers

to produce more.

- Use the term *risk* in describing the chance of losing or gaining from an investment.
- Analyze a given scenario to explain the concept of profit (or reward) as an incentive for people to invest and risk money or labor.
- Identify government services provided for purposes of the common good (for example, national defense, public radio or television, public water and sewers).
- Explain why some services are provided by the government through taxation (for example, schools, fire and police departments, public streets).
- Explain why other government services are provided through charging user fees (for example, road tolls, entrance fees to national parks or museums).
- Identify major goods (for example, cotton, soybeans, rice, sweet potatoes, sugar cane, crawfish, timber, paper, natural gas, and oil) and services (for example, tourism) produced in Louisiana.

## Strand H: History

### A. Historical Thinking Skills

#### Benchmarks Assessed

H-1A-E1	demonstrating an understanding of the concepts of time and chronology
H-1A-E2	recognizing that people in different times and places view the world differently
H-1A-E3	identifying and using primary and secondary historical sources to learn about the past

#### Assessment Limits:

- All benchmarks in category A may be assessed. Generally, however, they are not *directly* assessed with multiple-choice items. Although the skills in category A may be needed to answer a multiple-choice item, the item usually is keyed to a benchmark in one of the other History categories.
- H-1A-E1 and H-1A-E2 may be the principal focus of a constructed-response item and may be keyed as such. These items are accompanied by stimulus material.
- If a constructed-response item applies concepts of time and chronology to a strand other than History (for example, to Geography in regard to changes in Earth’s surface over time), the item is keyed to a benchmark in the relevant strand rather than to H-1A-E1.
- If a test item includes primary or secondary source material in order to assess a benchmark in a different category, the question is keyed to the respective benchmark rather than to H-1A-E3 (for example, to a Civics benchmark measured by an excerpt from the Declaration of Independence).
- Students are not required to analyze political cartoons on grade 4 LEAP.

#### Key Concepts:

- Develop or complete a timeline based on information given in a passage.
- Interpret data presented in a timeline.
- Discuss historical events in chronological order based on information in a timeline or given text.
- Describe the past in contrast to the present.
- Explain change or continuity over time (for example, explain how a society has changed over a given period of time based on information in stimulus material).
- Describe the point of view of a person or group in a historical context, drawing on given stimulus material.

- Describe the point of view of a historical figure or group, drawing on given stimulus material (for example, views expressed in Martin Luther King Jr.’s “I Have a Dream” speech; early American settlers’ view of their new world).
- Contrast the viewpoints of two figures living in different historical time periods.
- Contrast the viewpoints of people living in an earlier time to the perspective of people today.
- Use information in a map, table, or graph to describe historical factors or trends.
- Interpret historical information in a map, table, or graph (including applying necessary mathematical skills):
  - primary and secondary source material*
  - documents core to U.S. democracy*
  - journal, diary, or autobiography*
  - encyclopedia*
  - almanac*
  - newspaper or magazine article*
  - charts and graphs*
  - famous speeches and addresses*
  - biography*
  - other reference books*
  - historical fiction*
  - pictures and illustrations*

## B. Families and Communities

### Benchmarks Assessed

- |         |   |
|---------|---|
| H-1B-E1 | describing and comparing family life in the present and the past                              |
| H-1B-E2 | relating the history of the local community and comparing it to other communities of long ago |

### Assessment Limits:

- For H-1B-E2, test items treat the concept *local community* in broadest terms because individual Louisiana communities differ too much to require all students to make specific comparisons with communities of long ago. The only exception would be items with stimulus material that provides all necessary information about a local community.

### Key Concepts:

- Describe family life at a given time in history (for example, early America).
- Compare present-day family life with family life in a past time (for example, homes, jobs, schooling, dress, customs, housekeeping, recreation, transportation, or communication).
- Describe changes in community life, comparing a given time in history to the present in rural, urban, and suburban areas.
- Describe changes in a community’s appearance over time, based on a visual stimulus.
- Explain how technology has changed present-day family or community life compared to earlier times.

## C. Louisiana and United States History

### Benchmarks Assessed

H-1C-E1	describing the people, events, and ideas that were significant to the growth and development of our state and nation
H-1C-E2	identifying the development of democratic principles and discussing how these principles have been exemplified by historic figures, events, and symbols
H-1C-E3	describing the causes and nature of various movements of large groups of people into and within Louisiana and the United States throughout history
H-1C-E4	recognizing how folklore and other cultural elements have contributed to our local, state, and national heritage

### Assessment Limits:

- For H-1C-E2, test items focus on historical figures and events that exemplify democratic principles or the symbolic expression of democratic principles to avoid duplicating assessment of Civics benchmarks C-1B-E1, C-1D-E2, or C-1D-E3.
- For H-1C-E3, test items do not duplicate assessment of Geography benchmark G-1C-E3.
- The term *migration* is understood to include both voluntary and forced movements of people throughout history.

### Key Concepts:

- Identify or describe major early explorers and explorations (for example, Columbus, de Soto, La Salle, Lewis and Clark expedition).
- Identify or describe early settlers in America (for example, Pilgrims).
- Identify early settlers in Louisiana (for example, French, Spanish, Acadians).
- Identify or describe American leaders who were significant in the growth of the nation (for example, George Washington, Thomas Jefferson, Abraham Lincoln).
- Identify people who were influential in the development of Louisiana (for example, Bienville, Iberville).
- Describe the importance of events and ideas significant to our nation's development (for example, Revolutionary War, intent of the Declaration of Independence, pioneers heading west).
- Describe the importance of events and ideas significant to Louisiana's development (for example, Louisiana Purchase, statehood).
- Interpret a timeline about people, events, or ideas significant to the growth and development of Louisiana or the nation.



- Describe the influence of various ethnic groups in our national or state heritage, for example:
  - influence of Native American Indian culture in our national heritage*
  - influence of African American history and culture in our national heritage*
  - influence of the French and Spanish history and culture in Louisiana*
  - influence of Cajun and Creole culture in Louisiana*
- Construct a timeline from given historical information.
- Identify an excerpt from a document, speech, or address significant to the development of the nation.
- Identify the author/speaker of a particular document, speech, or address (for example, Preamble to the U.S. Constitution, King’s “I Have a Dream” speech).
- Describe American democratic principles as exemplified by major historic events, for example:
  - the Pilgrims’ flight from persecution and desire for religious freedom*
  - the colonists’ fight for independence from Great Britain*
  - the civil rights movement*
- Describe democratic principles as exemplified by early leaders (for example, Jefferson, Lincoln) and civil rights leaders (for example, Martin Luther King Jr., Rosa Parks).
- Identify major symbols of American democracy and what they represent, for example:
  - U.S. flag*
  - American bald eagle*
  - Statue of Liberty, Liberty Bell, Capitol building*
  - national capital, national anthem*
- Identify reasons for major historical migrations to America and Louisiana, for example:
  - why early explorers and settlers traveled to the new world*
  - why the Thirteen Colonies were located on the East Coast*
  - migration of Acadians to avoid swearing allegiance to Great Britain*
  - the forced relocation of American Indian tribes*
  - why and in what way Africans were first brought to America*
  - the gold rush as a reason for westward expansion*
  - the migration of Europeans to America (for example, Irish escaping the potato famine, Germans seeking job opportunities, Polish escaping religious persecution)*
- Identify cultural elements that have contributed to our state and national heritage (for example, Mardi Gras, jazz, Cajun and Creole cooking, *Evangeline/Longfellow*).

## D. World History

### Benchmark Assessed

H-1D-E2 describing the social and economic impact of major scientific and technological advancements

#### Assessment Limits:

- Benchmark H-1D-E1 (identifying the characteristics and historical development of selected societies throughout the world) is not assessed on grade 4 LEAP due to the breadth of eligible content.
- Benchmark H-1D-E3 (discussing the impact of significant contributions made by historic figures from different regions of the world) is not assessed on grade 4 LEAP due to the breadth of eligible content. Statewide testing of *selected* societies or *selected* world figures could result in bias against students who have not been exposed to relevant curricular content.
- For H-1D-E2, test items may ask students to identify a given scientific or technological advance or describe its impact or significance, but not to name the scientist or inventor to whom the advance is attributed nor give the date of an invention.

#### Key Concepts:

- Identify or describe major advances in medical science that have improved people's lives (for example, polio vaccine, heart surgery).
- Identify or describe inventions that have affected people's lives or altered our view of the world (for example, telephone, radio, television, steam engine/steamboat, automobile, airplane, printing press, cotton gin, telescope, computer; space technology).
- Describe the impact of a particular scientific or technological advance.
- Compare or contrast life before and after a particular technological advance.
- Place major scientific or technological advances in chronological order.

## Sample Test Items: Grade 4 Social Studies

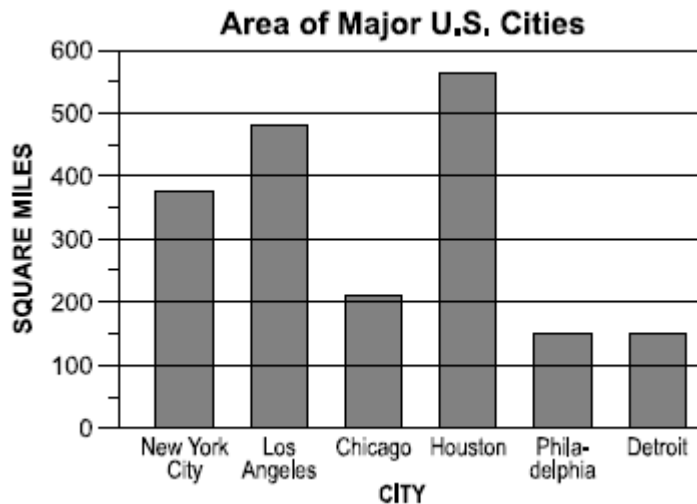
### Multiple-Choice Items

Questions 1 through 24 are sample multiple-choice items, arranged by strand and benchmark. The items test students' ability to correctly answer questions in Geography, Civics, Economics, and History. Some items may assess Social Studies content knowledge, while other may assess the application of Social Studies skills or concepts.

### Geography

**Benchmark G-1A-E1:** identifying and describing the characteristics and uses of geographic representations, such as various types of maps, globes, graphs, diagrams, photographs, and satellite-produced images

Use the bar graph below to answer question 1.



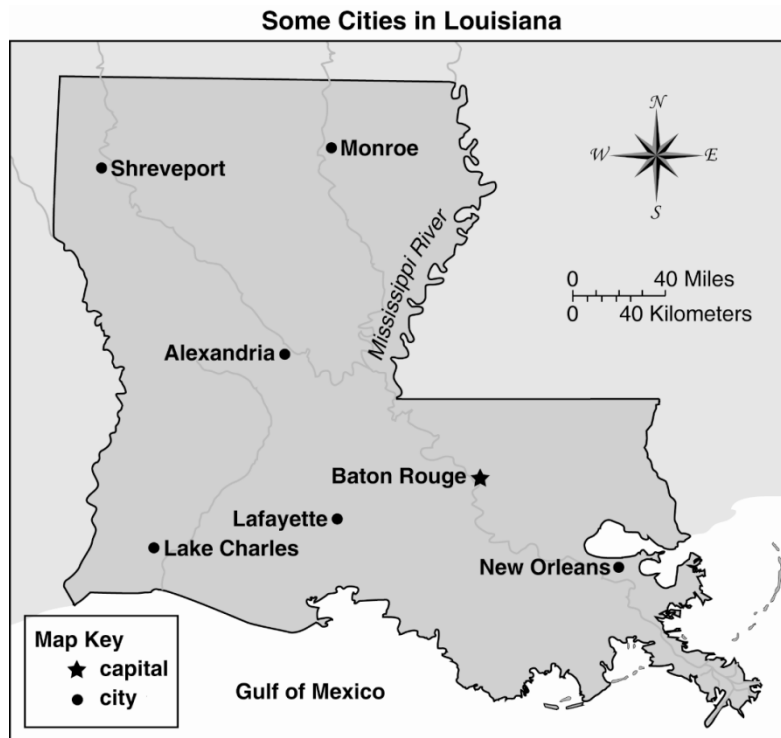
1. The area of Los Angeles is about
- A. the same as the area of Houston.
  - B. two times the area of Chicago.
  - C. equal to the area of New York City.
  - D. four times the size of Philadelphia.

**Correct response: B**

## Geography

**Benchmark G-1A-E2:** locating and interpreting geographic features and places on maps and globes

Use the map below to answer question 2.



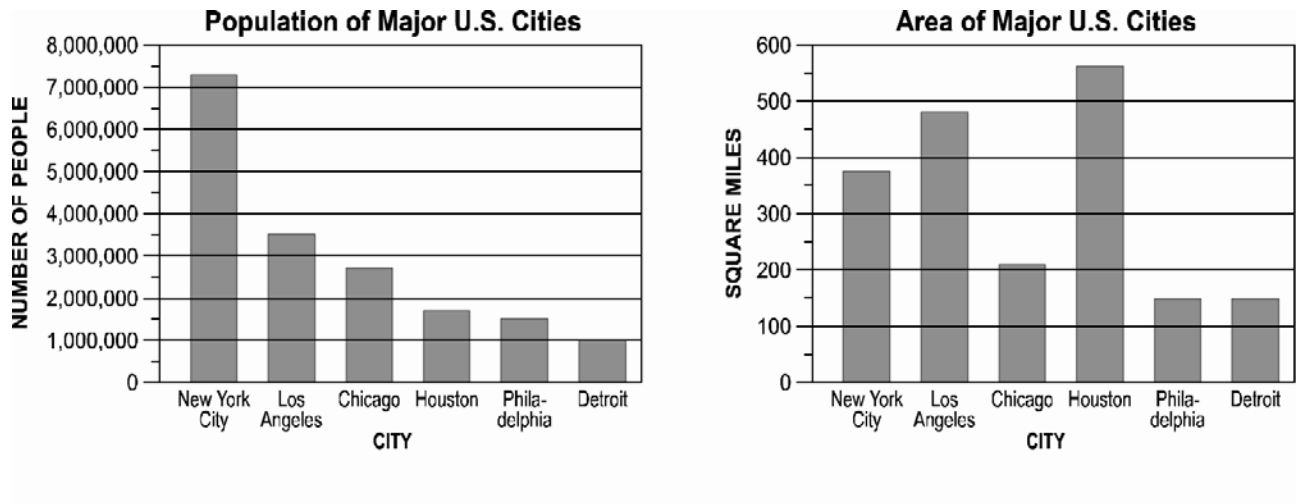
2. If you were traveling from Shreveport to Baton Rouge, in what direction would you be going?
- A. northeast
  - B. northwest
  - C. southeast
  - D. southwest

**Correct response: C**

## Geography

**Benchmark G-1A-E3:** constructing maps, graphs, charts, and diagrams to describe geographical information and to solve problems

Use the bar graphs below to answer question 3.



3. The population of New York City is about
- A. two times the population of the next largest city.
  - B. three times the population of the next largest city.
  - C. five times the population of the next largest city.
  - D. ten times the population of the next largest city.

**Correct response: A**

## Geography

**Benchmark G-1D-E2:** describing how humans adapt to variations in the physical environment

Use the picture below to answer question 4.



4. One way people make it easier to live in the area shown in the picture is to
- A. wear heavy clothing.
  - B. grow plants that use a lot of water.
  - C. build houses that help keep them cool.
  - D. rely on rainfall as their main source of water.

**Correct response: C**

## Civics

**Benchmark C-1B-E1:** identifying basic principles of American constitutional democracy and explaining how the constitutions of the United States and Louisiana reflect these principles

5. Which document explained how the government of the United States was to be set up and what the government could and could not do?
- A. the Declaration of Independence
  - B. the Constitution of the United States
  - C. the Gettysburg Address
  - D. the Emancipation Proclamation

**Correct response: B**

## Civics

**Benchmark C-1B-E1:** identifying basic principles of American constitutional democracy and explaining how the constitutions of the United States and Louisiana reflect these principles

6. The Bill of Rights gives Americans freedom of the press. What does this freedom mean?
- A. All newspapers should be free for anyone who wants them.
  - B. The government cannot say what should be printed in newspapers.
  - C. Printing presses should be available for everyone to use for free.
  - D. The government cannot stop anyone from giving speeches.

**Correct response: B**

## Civics

**Benchmark C-1C-E1:** explaining that the world is divided into different nations and describing the major ways that these nations interact

7. A conflict has broken out between two countries. One of the countries threatens to attack the other country. What organization would **most likely** work to resolve the conflict between these two countries?
- A. Republican Party
  - B. Supreme Court
  - C. House of Representatives
  - D. United Nations

**Correct response: D**

## Civics

**Benchmark C-1D-E1:** explaining the meaning of citizenship and the means by which individuals become citizens of the United States

8. Five years ago, 9-year-old Yuri lived in Russia. Then he and his family moved to the United States and became legal residents. How can Yuri and his family become citizens of the United States?
- A. by passing a citizenship test and taking an oath
  - B. by having a senator make them citizens
  - C. by asking a congressperson to declare them citizens
  - D. by writing a letter to the president asking to be declared citizens

**Correct response: A**

## Civics

**Benchmark C-1D-E2:** describing the rights and responsibilities of citizenship in a democratic society

9. Americans are able to criticize their government without fear of punishment because they have a right to
- A. a fair trial.
  - B. assemble peacefully.
  - C. practice any religion.
  - D. free speech.

**Correct response: D**

## Civics

**Benchmark C-1D-E2:** describing the rights and responsibilities of citizenship in a democratic society

10. How can Carmen **best** be a responsible citizen in her classroom?
- A. by interrupting when someone is talking
  - B. by writing notes to her friend during class
  - C. by listening to her classmates' opinions during class
  - D. by playing jokes on other students in class

**Correct response: C**



**Economics**

**Benchmark E-1A-E1:** recognizing that limited resources require people to make decisions

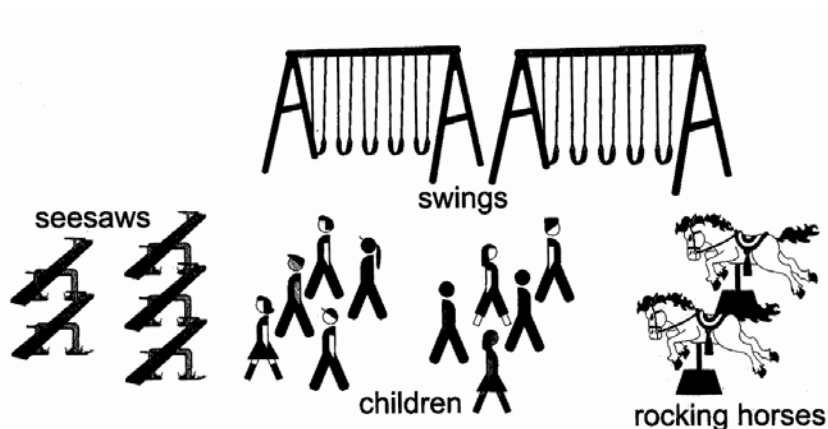
11. Alice has invited nine friends to her birthday party. Alice has the following snacks and treats for herself and her guests. Which of these items is scarce?
- A. 11 chocolate cupcakes and 12 vanilla cupcakes
  - B. 8 ice cream cones
  - C. 10 red balloons and 10 blue balloons
  - D. 10 goody bags

**Correct response: B**

**Economics**

**Benchmark E-1A-E1:** recognizing that limited resources require people to make decisions

**Use the picture below to answer question 12.**



12. There are 10 children at the playground. They all want to play on the same kind of playground equipment at the same time. Which is scarce at the playground?
- A. children
  - B. rocking horses
  - C. swings
  - D. seesaws

**Correct response: B**

## Economics

**Benchmark E-1A-E3:** demonstrating how economic wants affect decisions about using goods and services

13. Miss Miller is a nurse at the local hospital. She takes care of newborn babies and their mothers. Miss Miller provides a
- A. service.
  - B. good.
  - C. natural resource.
  - D. capital resource.

**Correct response: A**

## Economics

**Benchmark E-1A-E5:** Explaining the relationships among producers and consumers

**Use the information and picture below to answer question 14.**



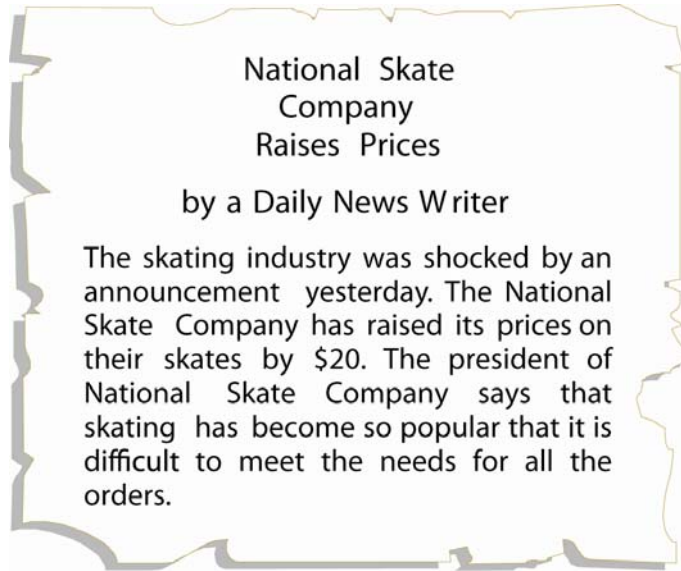
14. The picture shows a bakery that makes and sells bread. Which of these **best** describes the role of the woman carrying the shoulder bag?
- A. seller
  - B. worker
  - C. producer
  - D. consumer

**Correct response: D**

## Economics

**Benchmark E-1A-E5:** explaining the relationships among producers and consumers

**Use the newspaper article below to answer question 15.**



15. Why was National Skate Company able to increase the prices of their skates?
- A. Consumers wanted the company to redesign all their skates.
  - B. The company had a greater supply than demand for their skates.
  - C. The company had a greater demand than supply for their skates.
  - D. The company needed to make other profitable goods.

**Correct response: C**

## Economics

**Benchmark E-1A-E8:** determining how the development of skills and knowledge relates to career opportunity and economic well-being

16. Oprah and Phyllis were students at the same school. Phyllis chose to drop out of high school. Oprah chose to graduate from high school. Neither had ever worked before. Oprah and Phyllis applied for the same job at a store, and Oprah got the job. What is the **most likely** reason Oprah was hired?
- A. It is a national law that high school dropouts cannot get a job.
  - B. Oprah had more knowledge and skills than Phyllis had.
  - C. Phyllis had a poor work record.
  - D. Oprah had worked at the store before.

**Correct response: B**

## Economics

**Benchmark E-1B-E5:** identifying major goods and services produced in the local economy and state

**Use the information below to answer question 17.**

### Louisiana's Natural Resources

Louisiana has many natural resources below Earth. Petroleum comes down below the surface of Earth in the form of crude oil. Crude oil is made into gasoline. Natural gas, sulfur, salt, and oil are other natural resources found in Louisiana.

Shrimp, crab, oysters, crawfish, and fish are all seafood that come from Louisiana waters. Agricultural resources are very important to Louisiana. A long growing season, rich soil, and plenty of rainfall provide for the valuable forests.

The fur industry is dependent upon Louisiana's marshes. Mink, raccoon, muskrat, and nutria provide the industry with needed furs.

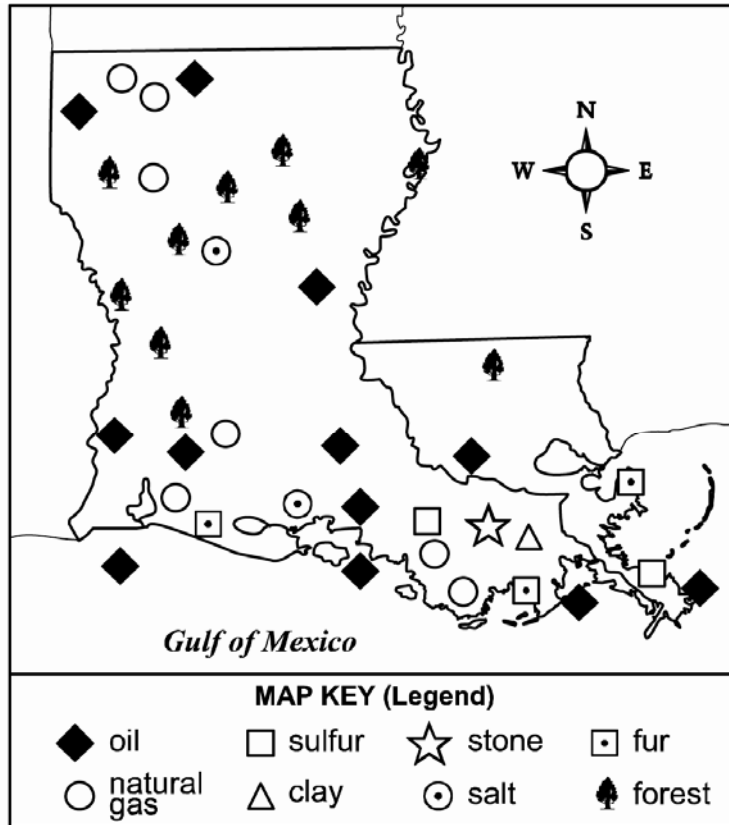
17. Three of Louisiana's important natural resources are
- A. petroleum, coal, and iron
  - B. petroleum, coal, and seafood
  - C. petroleum, seafood, and forests
  - D. petroleum, mink, and iron

**Correct response: C**

**Economics**

**Benchmark E-1B-E5:** identifying major goods and services produced in the local community and state

**Use the map below to answer question 18.**



From *Discovering Louisiana*, published by Ladle.

**18.** Where is fur mostly found in Louisiana?

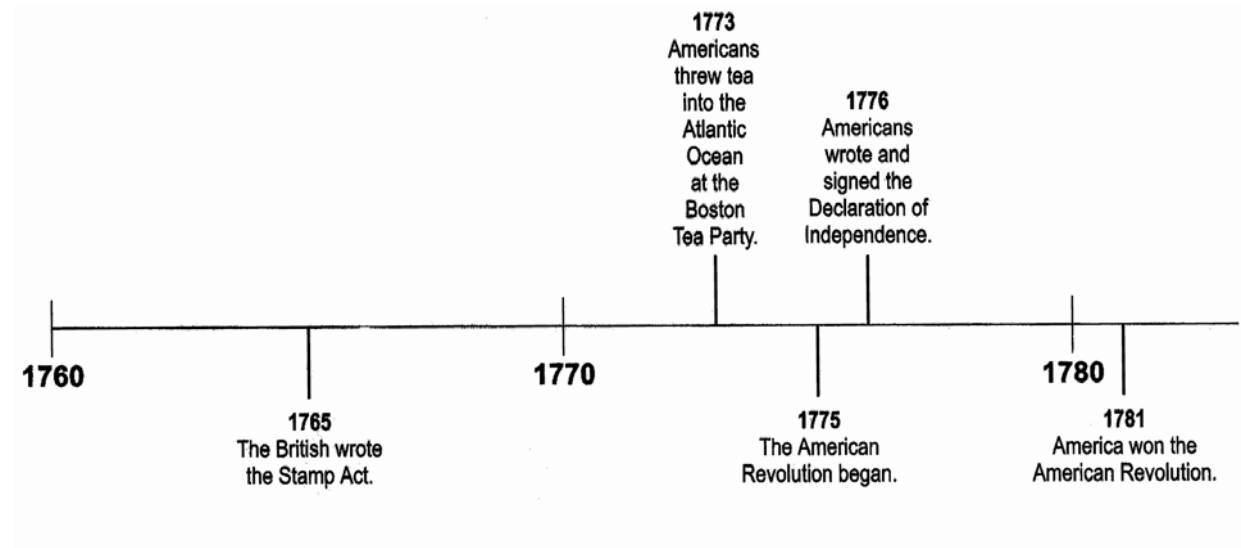
- A. north
- B. south
- C. east
- D. west

**Correct response: B**

## History

**Benchmark H-1A-E1:** demonstrating an understanding of the concepts of time and chronology

Use the timeline below to answer question 19.



19. What event **most likely** occurred after 1781?
- A. The United States became an independent country.
  - B. The United States lost the Revolutionary War.
  - C. The British won the Revolutionary War.
  - D. The British took over more land in North America.

**Correct response: A**

## History

**Benchmark H-1C-E1:** describing the people, events, and ideas that were significant to the growth and development of our state and nation

Use the map below to answer question 20.



20. What was a result of the Louisiana Purchase?
- A. The land owned by Great Britain doubled in size.
  - B. The land owned by the United States doubled in size.
  - C. The land owned by Spain doubled in size.
  - D. The land owned by France doubled in size.

**Correct response: B**

**History**

**Benchmark H-1C-E1:** describing the people, events, and ideas that were significant to the growth and development of our state and nation

**Use the quotation below to answer question 21.**

“We hold these Truths to be self-evident, that all Men are created equal, that they are endowed . . . with certain unalienable Rights. . . .”

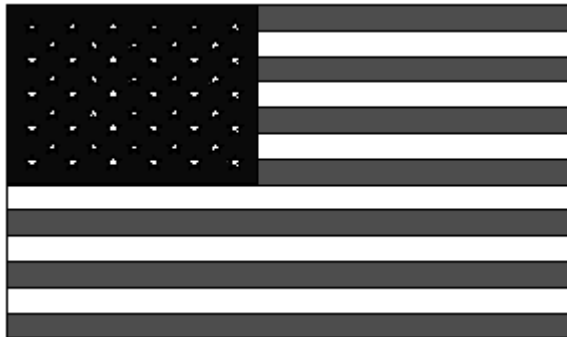
- 21.** The quotation in the box above comes from the
- A. Constitution of the United States.
  - B. Declaration of Independence.
  - C. Mayflower Compact.
  - D. Bill of Rights.

**Correct response: B**

**History**

**Benchmark H-1C-E2:** identifying the development of democratic principles and discussing how these principles have been exemplified by historic figures, events, and symbols

**Use the picture below to answer question 22.**



- 22.** What do the stars on the United States flag represent?
- A. the number of generals in the Revolutionary War
  - B. the number of states in the United States
  - C. the number of senators in Congress
  - D. the number of major cities in the United States

**Correct response: B**



## History

**Benchmark H-1C-E2:** identifying the development of democratic principles and discussing how these principles have been exemplified by historic figures, events, and symbols

Use the picture below to answer question 23.



**23.** Why is the Capitol building a symbol of our national government?

- A. It is where laws are made.
- B. The president lives there.
- C. The Supreme Court meets there.
- D. It is the national library.

**Correct response: A**

## History

**Benchmark H-1D-E2:** describing the social and economic impact of major scientific and technological advancements

**24.** Which of the following types of communication are listed in the order in which they were invented?

- A. telegraph, telephone, newspaper
- B. telephone, newspaper, telegraph
- C. newspaper, telegraph, telephone
- D. telegraph, newspaper, telephone

**Correct response: C**

## Constructed-Response Items

Questions 25 through 28 are sample constructed-response items. Each item contains multiple parts and involves the application of social studies knowledge, skills, and/or concepts. The constructed-response items are scored using an item-specific rubric on a scale of 0 to 4.

### Geography

**Benchmark G-1B-E4:** defining and differentiating regions by using physical characteristics, such as climate and landforms, and by using human characteristics, such as economic activity and language

**Use the information below and the map on the next page to answer question 25.**

#### Louisiana Agriculture

Strawberries are sweet red fruits that Louisiana farmers sell to many other states. Ponchatoula is called the Strawberry Capital. The Strawberry Festival is held in Ponchatoula each year.

Sweet potatoes are potatoes that grow underground like a root. They are also called yams. Opelousas is the Yam Capital. The Yambilee is a festival celebrated each year in Opelousas.

Sugar cane does not grow from a seed, but instead from a cane stalk planted in the ground. After the tall thin stalk is harvested, it is refined into sugar and syrup. Sugar cane grows well in the area near New Iberia. The Sugar Cane Festival is held in New Iberia each year.

Rice is also grown in Louisiana. The field must be flooded for the rice to grow. The Rice Festival is held in Crowley each year.

- 25.**
- A.** Explain why agriculture festivals are held each year in some towns and cities in Louisiana.
  - B.** **Draw** and **label** symbols for strawberries, sweet potatoes, sugar cane, and rice in the map key (legend) below.
  - C.** Then **locate** and **draw** your symbols in the correct places on the map on the next page to show where these crops are grown.



**Scoring Rubric:**

<b>Score</b>	<b>Description</b>
<b>4</b>	The student's response earns 10 points.
<b>3</b>	The student's response earns 8 or 9 points.
<b>2</b>	The student's response earns 4 to 7 points.
<b>1</b>	The student's response earns 1 to 3 points.
<b>0</b>	The student's response is incorrect, irrelevant to the skill/concept being measured, too brief to evaluate, or blank.

**Scoring notes:**

*Part A:* 2 points for a thorough explanation, or 1 point for a general or vague explanation

*Part B:* 1 point for every correctly labeled symbol (maximum 4 points)

*Part C:* 1 point for every correctly located symbol (maximum 4 points)

*Possible answer to Part A (not inclusive):*

Festivals are held to sell the crops that are grown locally, to celebrate the harvest, to encourage tourists to visit the area and spend money, to celebrate the culture of the area, to honor the farmers who grow the crops, to build community pride and spirit.

*Correct locations of symbols on the map in Part B:*

Strawberries—Ponchatoula  
Sweet potatoes—Opelousas  
Sugar cane—New Iberia  
Rice—Crowley

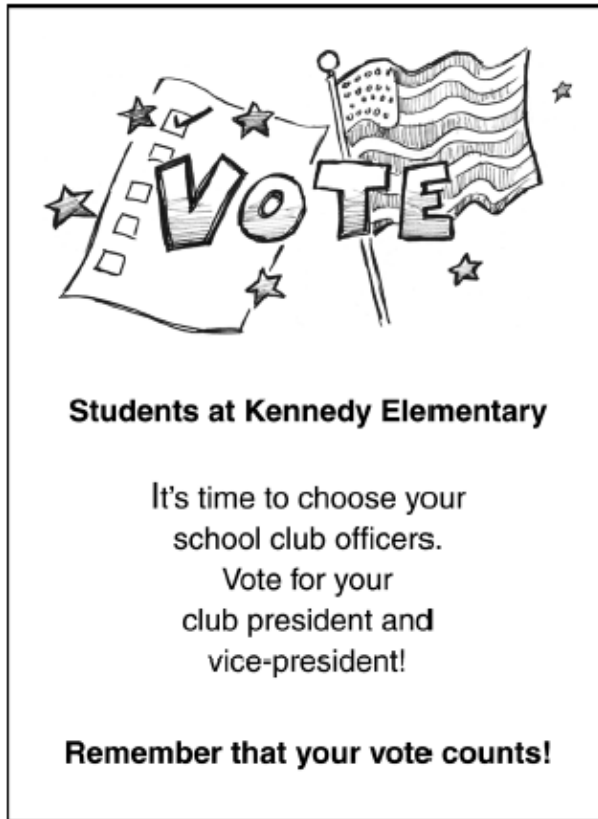
**Note:** For part B, students must draw and label symbols in the key. Words or symbols alone do not receive credit.

If a student leaves part B blank (or answers it incorrectly), credit can still be given in part C for locations on the map that are accurately labeled with symbols and words that indicate what the symbols represent.

## Civics

**Benchmark C-1A-E6:** explaining how officials in government acquire the authority to exercise political power

Use the picture and information below to answer question 26.



26. Kennedy Elementary School is deciding whether students should vote for the club president and vice-president, or whether the teachers and principal should choose the club president and vice-president.
- A. Describe **one** reason it might be best to have students vote for the person they want to be club president and vice-president.
  - B. Describe **one** reason it might be best to have the school principal and teachers choose the club president and vice-president.
  - C. Describe **one** reason it is good for a student to serve as a leader of his or her school club.
  - D. Voting and serving in the school club are two ways students can help make their school a better place. Describe **one other** way students can help make their school a better place.

**Scoring Rubric:**

Maximum points to be awarded per section: part A—2 points, part B—1 point, and part C—1 point.

Score	Description
4	The student’s response: <ul style="list-style-type: none"><li>• accurately describes <b>one</b> benefit of having student elect the club president <u>and</u> <b>one</b> benefit of having the school principal/teachers choose in the club president in part A,</li><li>• accurately describes <b>one</b> benefit to students of serving as leaders in their school club in part B, <i>and</i></li><li>• gives <b>one other</b> correct way students can help make their school a better place in part C.</li></ul>
3	The student’s response provides a total of three correct answers in parts A, B, <b>and/or</b> C. The response is general and may contain minor inaccuracies, or the student’s logic and/or reasoning is flawed.
2	The student’s response provides a total of two correct answers in parts A, B, <b>and/or</b> C. The response is limited and may contain inaccuracies or gaps in conceptual understanding.
1	The student’s response provides one correct answer in either part A, B, <b>or</b> C. The response is minimal and may contain major inaccuracies.
0	The student’s response is incorrect, irrelevant to the skill/concept being measured, too brief to evaluate, or blank.

**Possible Responses (not inclusive):**

*Part A:*

Elected

- Students should have the right to select their own leaders.
- Electing representatives is a basic right of people in a democracy.
- School leaders may select someone students don’t want/don’t agree with.
- Election gives students a chance to practice/gain experience with voting and being a good citizen

Appointed

- The principal and teachers may have an easier time working with/less disagreements with people they choose.
- Students may elect people who are not appropriate/skilled, etc.
- The principal and teachers may be better judges of who would make the best school club officers.

*Part B:*

- help their school/make a difference
- gain new skills/experiences
- may be able to make changes she/he wants
- experience may help students gain jobs/entry into colleges after graduation
- meet new people
- gain esteem/respect of students and school staff

*Part C:*

- keep school clean
- follow rules (examples of specific rules are acceptable)
- participate in school events
- help others
- make suggestions for change
- hold fundraisers
- start clubs

**Economics**

**Benchmark E-1A-E1:** recognizing that limited resources require people to make decisions

Use the newspaper headline below to answer question 27.

Hurricanes Destroy Offshore Oil Production in Louisiana

27.   **A.**   Based on the information in the headline, what will **most likely** happen to the amount of oil produced in Louisiana?
- B.**   What will **most likely** happen to the price of gasoline?
- C.**   Give **one** reason why this would most likely happen to the price.
- D.**   Explain how the destruction of offshore oil production could affect a family’s personal budget.

**Scoring Rubric:**

Score	Description
4	The student’s response: <ul style="list-style-type: none"><li>• accurately states that the amount of oil production in Louisiana will probably decrease in part A,</li><li>• correctly states that the price of gasoline will probably increase in part B,</li><li>• gives one valid reason why this increase would probably happen in part C, <i>and</i></li><li>• explains one effect that the destruction of offshore oil production would have on a family’s personal budget in part D.</li></ul>
3	The student’s response contains a total of three correct answers in parts A, B, C, <b>and/or</b> D. The response is general and may contain minor inaccuracies, or the student’s logic and/or reasoning is flawed.
2	The student’s response contains a total of two correct answers in parts A, B, C, <b>and/or</b> D. The response is limited and may contain inaccuracies or gaps in conceptual understanding.
1	The student’s response provides a total of one correct answer in part A, B, C, <b>or</b> D. The response is minimal and may contain major inaccuracies.
0	The student’s response is incorrect, irrelevant to the skill/concept being measured, too brief to evaluate, or blank.

**Scoring notes:**

Maximum points to be awarded per section: part A—1 point, part B—1 point, part C—1 point, part D—1 point. In order to get a score of 4, parts C and D must be accurate and clear.



**Possible Responses (not inclusive):**

*Part A:* The amount of oil produced in Louisiana will probably go down (decrease).

*Part B:* The price of gas will probably go up (increase).

*Part C:* Since the supply will go down, but the demand is high, the price will most likely /probably go up.

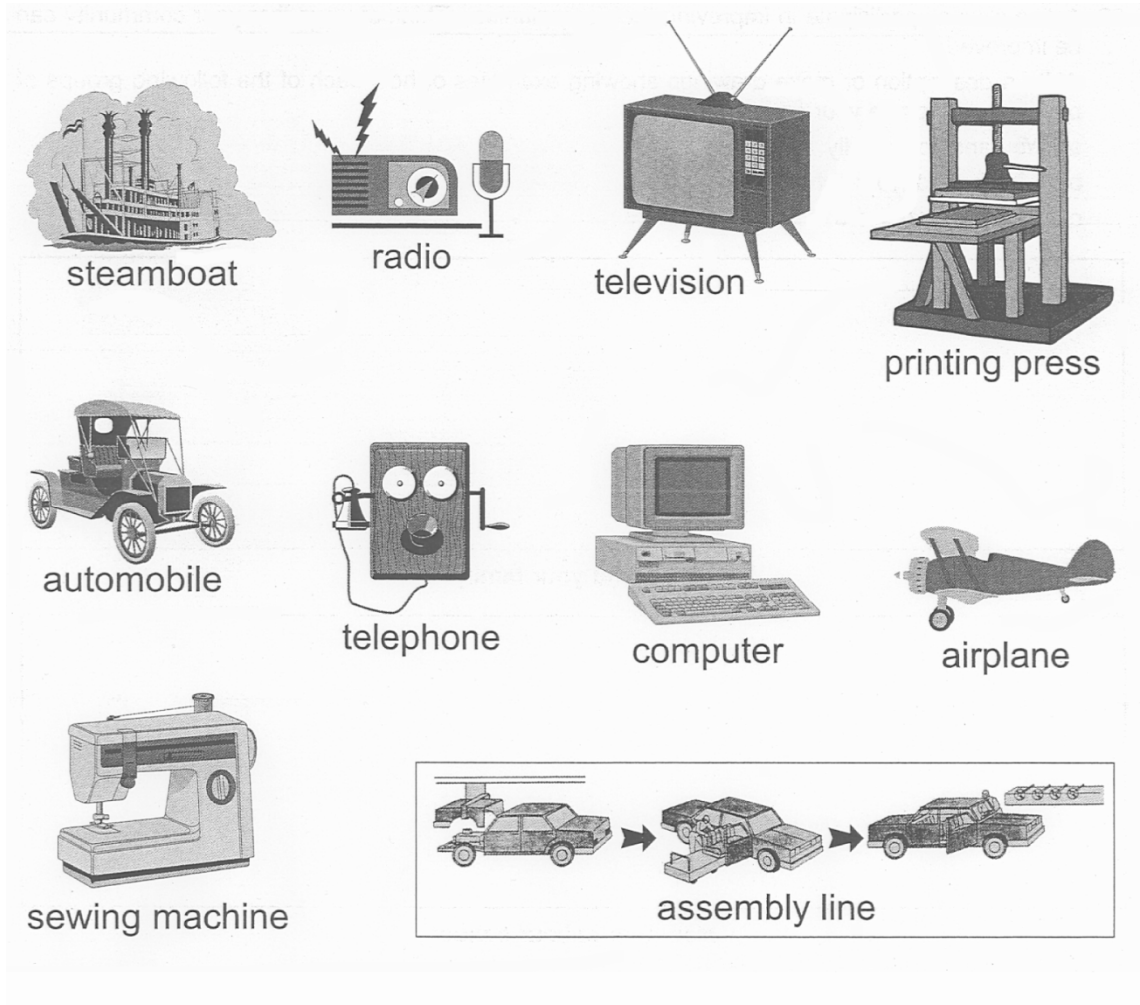
*Part D:*

- Families will have to adjust their budgets to pay more for gas.
- Families may start carpooling.
- Any appropriate answer that applies to budget changes.

## History

**Benchmark H-1B-E2:** relating the history of the local community and comparing it to other communities of long ago

Use the pictures and information below to answer question 28.



- 28.** These inventions improved transportation, communication, and the way goods are made. These inventions also changed, and continue to change, the way people live.
- A.** Study the pictures above. Identify whether each invention improved either transportation, communication, **or** the way goods are made. Then put the name of each invention under the correct heading in the chart on the next page.
- B.** Circle one of the inventions in your chart. Then explain how this invention changed the way people live.



Transportation	Communication	Way Goods Are Made

**Scoring Rubric:**

Score	Description
4	The student's response earns 12 points.
3	The student's response earns 9 to 11 points.
2	The student's response earns 6 to 8 points.
1	The student's response earns 1 to 5 points.
0	The student's response is incorrect, irrelevant to the skill/concept being measured, too brief to evaluate, or blank.

**Scoring notes:**

*Part A:* 1 point for each correct placement on chart (total 10)

*Part B:* 2 points for general explanation, or 1 point for limited explanation

**Correct chart:**

Transportation	Communication	Way Goods Are Made
steamboat automobile airplane	radio telephone television computer* printing press*	sewing machine assembly line computer* printing press*

**\*Note:** Computer and printing press may be placed under Communication **OR** Way Goods Are Made (if placed under both, only count once). Some goods are designed by computer **and** computers are used to program machines to make goods. The printing press improved communication **and** improved the way newspapers, magazines, and books were made.

## Standards and Benchmarks, across Grades

### GEOGRAPHY: Physical and Cultural Systems

#### A. THE WORLD IN SPATIAL TERMS

K–4	5–8	9–12
<p><b>G-1A-E1</b> identifying and describing the characteristics and uses of geographic representations, such as various types of maps, globes, graphs, diagrams, photographs, and satellite-produced images</p>	<p><b>G-1A-M1</b> identifying and describing the characteristics, functions, and applications of various types of maps and other geographic representations, tools, and technologies</p> <p><b>G-1A-M2</b> interpreting and developing maps, globes, graphs, charts, models, and databases to analyze spatial distributions and patterns</p>	<p><b>G-1A-H1</b> using geographic representations, tools, and technologies to explain, analyze, and solve geographic problems</p>
<p><b>G-1A-E2</b> locating and interpreting geographic features and places on maps and globes</p> <p><b>G-1A-E3</b> constructing maps, graphs, charts, and diagrams to describe geographical information and to solve problems</p>	<p><b>G-1A-M3</b> organizing and displaying information about the location of geographic features and places by using mental mapping skills</p>	<p><b>G-1A-H2</b> organizing geographic information and answering complex questions by formulating mental maps of places and regions</p>

## GEOGRAPHY: Physical and Cultural Systems

### B. PLACES AND REGIONS

K–4	5–8	9–12
<p><b>G-1B-E1</b> describing and comparing the physical characteristics of places, including land forms, bodies of water, soils, vegetation, and climate</p> <p><b>G-1B-E2</b> identifying and describing the human characteristics of places, including population distributions and culture</p>	<p><b>G-1B-M1</b> explaining and analyzing both the physical and human phenomena associated with specific places, including precipitation and settlement patterns</p>	<p><b>G-1B-H1</b> determining how location and social, cultural, and economic processes affect the features and significance of places</p>
<p><b>G-1B-E3</b> describing how the physical and human characteristics of places change over time</p>	<p><b>G-1B-M2</b> identifying and describing significant physical features that have influenced historical events</p>	<p><b>G-1B-H2</b> analyzing the ways in which physical and human characteristics of places and regions have affected historic events</p>
<p><b>G-1B-E4</b> defining and differentiating regions by using physical characteristics, such as climate and landforms, and by using human characteristics, such as economic activity and language</p>	<p><b>G-1B-M3</b> identifying criteria used to define regions and explaining how and why regions change</p>	<p><b>G-1B-H3</b> analyzing the various ways in which physical and human regions are structured and interconnected</p>
	<p><b>G-1B-M4</b> describing and explaining how personal interests, culture, and technology affect people's perceptions and uses of places and regions</p>	<p><b>G-1B-H4</b> explaining and evaluating the regions to cultural identity</p>

## GEOGRAPHY: Physical and Cultural Systems

### C. PHYSICAL AND HUMAN SYSTEMS

K–4	5–8	9–12
<p><b>G-1C-E1</b> describing how physical processes help to shape features and patterns on Earth’s surface</p>	<p><b>G-1C-M1</b> predicting and explaining how physical features help to shape patterns and arrangements in the physical environment</p>	<p><b>G-1C-H1</b> analyzing the ways in which Earth’s dynamic and interactive physical processes affect different regions of the world</p>
<p><b>G-1C-E2</b> describing and comparing the types of settlement and patterns of land use in local communities, the United States, and world regions</p>	<p><b>G-1C-M2</b> identifying key demographic concepts and using these concepts to analyze the population characteristics of a country or region</p> <p><b>G-1C-M3</b> describing the characteristics and patterns of human settlement in different regions of the world and analyzing the impact of urbanization</p>	<p><b>G-1C-H2</b> determining the economic, political, and social factors that contribute to human migration and settlement patterns and evaluating their impact on physical and human systems</p>
<p><b>G-1C-E3</b> describing and explaining the characteristics, distribution, and migration of human population</p>	<p><b>G-1C-M4</b> analyzing types, patterns, and effects of human migration over time</p>	<p><b>G-1C-H3</b> analyzing trends in world population numbers and patterns and predicting their consequences</p>
<p><b>G-1C-E4</b> identifying and comparing the cultural characteristics of different regions and people</p>	<p><b>G-1C-M5</b> tracing local and worldwide patterns of cultural diffusion and analyzing their causes and effects</p>	<p><b>G-1C-H4</b> analyzing the characteristics, distribution, and interrelationships of the world’s cultures</p>
<p><b>G-1C-E5</b> locating and explaining the spatial distribution of economic activities</p>	<p><b>G-1C-M6</b> comparing historical and contemporary patterns of economic interdependence</p>	<p><b>G-1C-H5</b> describing and evaluating spatial distribution of economic systems and how economic systems affect regions</p>
<p><b>G-1C-E6</b> identifying and describing types of territorial units, such as parishes or counties, states, and countries</p>	<p><b>G-1C-M7</b> explaining how cooperation and conflict among people contribute to the political divisions on Earth’s surface</p>	<p><b>G-1C-H6</b> analyzing how cooperation, conflict, and self-interests impact social, political, and economic entities on Earth</p>

# GEOGRAPHY: Physical and Cultural Systems

## D. ENVIRONMENT AND SOCIETY

K-4	5-8	9-12
<p><b>G-1D-E1</b> identifying and explaining ways in which people depend upon and modify the physical environment</p>	<p><b>G-1D-M1</b> analyzing and evaluating the effects of human actions upon the physical environment</p>	<p><b>G-1D-H1</b> describing and evaluating the ways in which technology has expanded the human capability to modify the physical environment</p>
<p><b>G-1D-E2</b> describing how humans adapt to variations in the physical environment</p> <p><b>G-1D-E3</b> describing the locations, causes, and effects of natural disasters on the environment and society</p>	<p><b>G-1D-M2</b> explaining and giving examples of how characteristics of different physical environments affect human activities</p>	<p><b>G-1D-H2</b> examining the challenges placed on human systems by the physical environment and formulating strategies to deal with these challenges</p>
<p><b>G-1D-E4</b> describing the use, distribution, and importance of natural resources</p>	<p><b>G-1D-M3</b> analyzing the worldwide distribution and utilization of natural resources</p>	<p><b>G-1D-H3</b> analyzing the relationship between natural resources and the exploration, colonization, settlement, and uses of land of different regions of the world</p> <p><b>G-1D-H4</b> evaluating policies and programs related to the use of natural resources</p>
	<p><b>G-1D-M4</b> identifying problems that relate to contemporary geographic issues and researching possible solutions</p>	<p><b>G-1D-H5</b> developing plans to solve local and regional geographic problems related to contemporary issues</p>



## CIVICS: Citizenship and Government

### A. STRUCTURE AND PURPOSES OF GOVERNMENT

K–4	5–8	9–12
<p><b>C-1A-E1</b> describing government in terms of the people and groups who make, apply, and enforce rules and laws in the home, school, community, and nation</p> <p><b>C-1A-E2</b> explaining the necessity and basic purposes of government</p>	<p><b>C-1A-M1</b> explaining major ideas about why governments are necessary and evaluating competing positions on the purposes government should serve</p>	<p><b>C-1A-H1</b> analyzing the necessity and purposes of politics and government and identifying examples of programs that fit within those purposes</p>
<p><b>C-1A-E3</b> comparing limited governments to unlimited governments</p>	<p><b>C-1A-M2</b> describing the essential characteristics of various systems of government</p>	<p><b>C-1A-H2</b> comparing and evaluating the essential characteristics of various systems of government and identifying historical and contemporary examples of each</p>
	<p><b>C-1A-M3</b> explaining how the powers of the government are distributed, shared, and limited by the United States and Louisiana constitutions</p> <p><b>C-1A-M4</b> explaining the purposes of state constitutions and describing the relationship of state constitutions to the federal constitution</p>	<p><b>C-1A-H3</b> explaining and evaluating issues related to the distribution of powers and responsibilities within the federal system</p>
<p><b>C-1A-E4</b> identifying and describing some of the major responsibilities of local, state, and national governments</p>	<p><b>C-1A-M5</b> describing the organization and major responsibilities of local, state, and national governments</p>	<p><b>C-1A-H4</b> explaining the organization and functions of local, state, and national governments and evaluating their relationships</p>
<p><b>C-1A-E5</b> identifying key members of government at the local, state, and national levels and describing their powers and the limits on their powers</p> <p><b>C-1A-E6</b> explaining how officials in government acquire the authority to exercise political power</p>	<p><b>C-1A-M6</b> identifying government leaders and representatives at the local, state, and national levels and explaining their powers and the limits on their powers</p>	

<p><b>C-1A-E7</b> explaining the purposes and importance of rules and laws</p>	<p><b>C-1A-M7</b> explaining the importance of law in the American constitutional system and applying criteria to evaluate rules and laws</p>	<p><b>C-1A-H5</b> evaluating the role and importance of law in the American political system and applying criteria to evaluate laws</p>
	<p><b>C-1A-M8</b> explaining how public policy is formed, debated, and carried out at local, state, and national levels</p> <p><b>C-1A-M9</b> explaining the necessity of taxes and describing the purposes for which tax revenues are used</p> <p><b>C-1A-M10</b> identifying and evaluating different types of taxes</p>	<p><b>C-1A-H6</b> examining the major responsibilities of the national government for domestic and foreign policy</p> <p><b>C-1A-H7</b> explaining how government is financed through taxation</p>

## CIVICS: Citizenship and Government

### B. FOUNDATIONS OF THE AMERICAN POLITICAL SYSTEM

K–4	5–8	9–12
	<p><b>C-1B-M1</b> explaining the essential ideas and historical origins of American constitutional government</p> <p><b>C-1B-M2</b> identifying and describing the historical experiences and the geographic, social, and economic factors that have helped to shape American political culture</p>	<p><b>C-1B-H1</b> analyzing the central ideas and historical origins of American constitutional government and evaluating how this form of government has helped to shape American society</p>
<p><b>C-1B-E1</b> identifying basic principles of American constitutional democracy and explaining how the constitutions of the United States and Louisiana reflect these principles</p> <p><b>C-1B-E2</b> discussing the importance of citizens sharing and supporting the principles of American constitutional democracy</p>	<p><b>C-1B-M3</b> explaining the meaning and importance of basic principles of American constitutional democracy as reflected in core documents</p>	<p><b>C-1B-H2</b> explaining basic democratic beliefs and principles of constitutional democracy in American society and applying them to the analysis of issues of conflicting beliefs and principles</p>
	<p><b>C-1B-M4</b> analyzing the ways in which political and social conflict can be peacefully resolved</p>	<p><b>C-1B-H3</b> analyzing the nature of American political and social conflict</p>
	<p><b>C-1B-M5</b> analyzing democratic processes used to institute change</p>	<p><b>C-1B-H4</b> evaluating issues related to the differences between American ideals and the realities of American social and political life</p>
	<p><b>C-1B-M6</b> analyzing the importance of political parties, campaigns, and elections in the American political system</p>	<p><b>C-1B-H5</b> evaluating the roles of political parties, campaigns, and elections in American politics</p>
		<p><b>C-1B-H6</b> analyzing the historical and contemporary roles of associations and groups in local, state, and national politics</p>

## CIVICS: Citizenship and Government

### C. INTERNATIONAL RELATIONSHIPS

K-4	5-8	9-12
<p><b>C-1C-E1</b> explaining that the world is divided into different nations and describing the major ways that these nations interact</p>	<p><b>C-1C-M1</b> describing how the world is organized politically and explaining the means by which nation-states interact</p>	<p><b>C-1C-H1</b> analyzing how the world is organized politically and evaluating how the interaction of political entities, such as nation-states and international organizations, affects the United States</p>
	<p><b>C-1C-M2</b> explaining the formation, implementation, and impact of United States foreign policy</p> <p><b>C-1C-M3</b> identifying types of foreign policy issues, using current and historical examples</p>	<p><b>C-1C-H2</b> analyzing the major foreign policy positions of the United States and evaluating their consequences</p>
		<p><b>C-1C-H3</b> evaluating the impact of American ideas and actions on the world and analyzing the effects of significant international developments on the United States</p>

## CIVICS: Citizenship and Government

### D. ROLES OF THE CITIZEN

K–4	5–8	9–12
<p><b>C-1D-E1</b> explaining the meaning of citizenship and the means by which individuals become citizens of the United States</p>	<p><b>C-1D-M1</b> explaining the meaning of citizenship and the requirements for citizenship and naturalization in the United States</p>	
<p><b>C-1D-E2</b> describing the rights and responsibilities of citizenship in a democratic society</p>	<p><b>C-1D-M2</b> identifying the rights and responsibilities of citizens and explaining their importance to the individual and to society</p> <p><b>C-1D-M3</b> discussing issues involving the rights and responsibilities of individuals in American society</p>	<p><b>C-1D-H1</b> evaluating and defending positions on issues regarding the personal, political, and economic rights of citizens</p> <p><b>C-1D-H2</b> evaluating and defending positions regarding the personal and civic responsibilities of citizens in American constitutional democracy</p>
<p><b>C-1D-E3</b> identifying and discussing civic traits that are important to the preservation and improvement of American constitutional democracy</p>		
<p><b>C-1D-E4</b> describing the many ways that citizens can participate in and contribute to their communities and to American society</p>	<p><b>C-1D-M4</b> describing the many ways by which citizens can organize, monitor, and help to shape politics and government at local, state, and national levels</p>	<p><b>C-1D-H3</b> explaining and evaluating the various forms of political participation that citizens can use to monitor and shape the formation and implementation of public policy</p>
<p><b>C-1D-E5</b> discussing issues related to citizenship and public service</p>	<p><b>C-1D-M5</b> communicating the importance of knowledge to competent and responsible political participation and leadership</p>	<p><b>C-1D-H4</b> analyzing and evaluating the importance of political leadership, public service, and a knowledgeable citizenry to American constitutional democracy</p>

## ECONOMICS: Interdependence and Decision Making

### A. FUNDAMENTAL ECONOMIC CONCEPTS

K–4	5–8	9–12
<p><b>E-1A-E1</b> recognizing that limited resources require people to make decisions</p> <p><b>E-1A-E2</b> identifying what is gained and lost when individuals or groups make decisions</p> <p><b>E-1A-E3</b> demonstrating how economic wants affect decisions about using goods and services</p> <p><b>E-1A-E4</b> discussing and determining the process for making economic decisions</p>	<p><b>E-1A-M1</b> describing how the scarcity of resources necessitates decision making at both personal and societal levels</p> <p><b>E-1A-M2</b> analyzing consequences of economic decisions in terms of additional benefits and additional costs</p> <p><b>E-1A-M3</b> analyzing the consequences and opportunity cost of economic decisions</p>	<p><b>E-1A-H1</b> analyzing the impact of the scarcity of productive resources and examining the choices and opportunity cost that result</p>
<p><b>E-1A-E5</b> explaining the relationships among producers and consumers</p> <p><b>E-1A-E6</b> describing how natural resources, human resources, and capital resources have been used and are combined in the production of goods and services</p> <p><b>E-1A-E7</b> describing how specialization affects productivity and contributes to the need for interdependence among producers and consumers</p>	<p><b>E-1A-M4</b> analyzing the role of specialization in the economic process</p>	<p><b>E-1A-H2</b> analyzing the roles that production, distribution, and consumption play in economic decisions</p>
<p><b>E-1A-E8</b> determining how the development of skills and knowledge relates to career opportunity and economic well-being</p>	<p><b>E-1A-M5</b> giving examples of how skills and knowledge increase productivity and career opportunities</p>	<p><b>E-1A-H3</b> applying the skills and knowledge necessary in making decisions about career options</p>

<p><b>E-1A-E9</b> identifying different methods for the distribution of goods and services, including the concept of markets</p>	<p><b>E-1A-M6</b> describing the essential differences in the production and allocation of goods and services in traditional, command, and market systems</p>	<p><b>E-1A-H4</b> comparing and evaluating economic systems</p> <p><b>E-1A-H5</b> explaining the basic features of market structures and exchanges</p>
<p><b>E-1A-E10</b> identifying some of the economic institutions, such as households and banks, that make up the economy</p>	<p><b>E-1A-M7</b> describing the various institutions, such as business firms and government agencies, that make up economic systems</p>	<p><b>E-1A-H6</b> analyzing the roles of economic institutions, such as corporations and labor unions, that compose economic systems</p>
<p><b>E-1A-E11</b> explaining and demonstrating why people participate in voluntary exchanges and how money helps in the process</p>	<p><b>E-1A-M8</b> differentiating among various forms of exchange and money</p>	<p><b>E-1A-H7</b> analyzing the roles of money and banking in an economic system</p>
	<p><b>E-1A-M9</b> using economic concepts to help explain historic and contemporary events and developments</p>	<p><b>E-1A-H8</b> applying economic concepts to understand and evaluate historical and contemporary issues</p>

## ECONOMICS: Interdependence and Decision Making

### B. INDIVIDUALS, HOUSEHOLDS, BUSINESSES, AND GOVERNMENTS

K–4	5–8	9–12
<p><b>E-1B-E1</b> describing how prices are determined by the interactions of buyers and sellers</p> <p><b>E-1B-E2</b> explaining how the changes in prices affect incentives to produce, consume, and save</p> <p><b>E-1B-E3</b> identifying and explaining economic concepts, such as profit, as an incentive for people to take economic risk</p>	<p><b>E-1B-M1</b> explaining the role of supply and demand in a competitive market system</p> <p><b>E-1B-M2</b> explaining the factors that affect the production and distribution of goods and services</p>	<p><b>E-1B-H1</b> identifying factors that cause changes in supply and demand</p> <p><b>E-1B-H2</b> analyzing how changes in supply and demand, price, incentives, and profit influence production and distribution in a competitive market system</p>
<p><b>E-1B-E4</b> explaining why some goods and services are provided by the government through taxing, charging user fees, and borrowing</p>	<p><b>E-1B-M3</b> explaining the difference between private and public goods and services</p>	
	<p><b>E-1B-M4</b> identifying the costs and benefits of government policies on competitive markets</p> <p><b>E-1B-M5</b> identifying different types of taxes and user fees and predicting their consequences</p>	<p><b>E-1B-H3</b> analyzing the impact of governmental taxation, spending, and regulation on different groups in a market economy</p>
	<p><b>E-1B-M6</b> determining the reasons for trade between nations, identifying costs and benefits, and recognizing the worldwide interdependence that results</p>	<p><b>E-1B-H4</b> analyzing the causes and consequences of worldwide economic interdependence</p> <p><b>E-1B-H5</b> evaluating the effects of domestic policies on international trade</p>
<p><b>E-1B-E5</b> identifying the major goods and services produced in the local community and state</p>	<p><b>E-1B-M7</b> describing historical and economic factors that have contributed to the development and growth of the national, state, and local economies</p>	<p><b>E-1B-H6</b> analyzing Louisiana’s role in the national and world economies</p>



## ECONOMICS: Interdependence and Decision Making

### C. THE ECONOMY AS A WHOLE

K-4	5-8	9-12
	<p><b>E-1C-M1</b> explaining the meaning of economic indicators that help to describe economies</p>	<p><b>E-1C-H1</b> explaining the meanings of such economic indicators as GDP, per capita GDP, real GDP, CPI, and unemployment rate</p> <p><b>E-1C-H2</b> explaining how interest rates, investments, and inflation/deflation, impact the economy</p>
	<p><b>E-1C-M2</b> describing the influences of inflation, unemployment, and underemployment on different groups of people</p>	<p><b>E-1C-H3</b> analyzing the causes and consequences of unemployment, underemployment, and income distribution in a market economy</p>
		<p><b>E-1C-H4</b> explaining the basic concepts of United States fiscal policy, monetary policy, and regulations and describing their effects on the economy</p>

## HISTORY: Time, Continuity, and Change

### A. HISTORICAL THINKING SKILLS

K–4	5–8	9–12
<p><b>H-1A-E1</b> demonstrating an understanding of the concepts of time and chronology</p>	<p><b>H-1A-M1</b> describing chronological relationships and patterns</p>	<p><b>H-1A-H1</b> applying key concepts, such as chronology and conflict, to explain and analyze patterns of historical change and continuity</p>
<p><b>H-1A-E2</b> recognizing that people in different times and places view the world differently</p>	<p><b>H-1A-M2</b> demonstrating historical perspective through the political, social, and economic context in which an event or idea occurred</p> <p><b>H-1A-M3</b> analyzing the impact that specific individuals, ideas, events, and decisions had on the course of history</p>	<p><b>H-1A-H2</b> explaining and analyzing events, ideas, and issues within a historical context</p>
<p><b>H-1A-E3</b> identifying and using primary and secondary historical sources to learn about the past</p>	<p><b>H-1A-M4</b> analyzing historical data using primary and secondary sources</p>	<p><b>H-1A-H3</b> interpreting and evaluating the historical evidence presented in primary and secondary sources</p>
	<p><b>H-1A-M5</b> identifying issues and problems from the past and evaluating alternative courses of action</p>	<p><b>H-1A-H4</b> utilizing knowledge of facts and concepts drawn from history and methods of historical inquiry to analyze historical and contemporary issues</p>
	<p><b>H-1A-M6</b> conducting research in efforts to answer historical questions</p>	<p><b>H-1A-H5</b> conducting research in efforts to analyze historical questions and issues</p> <p><b>H-1A-H6</b> analyzing cause-effect relationships</p>

## **HISTORY: Time, Continuity, and Change**

### **BENCHMARKS K–4**

#### **B. FAMILIES AND COMMUNITIES**

<b>K–4</b>
<b>H-1B-E1</b> describing and comparing family life in the present and the past
<b>H-1B-E2</b> relating the history of the local community and comparing it to other communities of long ago

#### **C. LOUISIANA AND UNITED STATES HISTORY**

<b>K–4</b>
<b>H-1C-E1</b> describing the people, events, and ideas that were significant to the growth and development of our state and nation
<b>H-1C-E2</b> identifying the development of democratic principles and discussing how these principles have been exemplified by historic figures, events, and symbols
<b>H-1C-E3</b> describing the causes and nature of various movements of large groups of people into and within Louisiana and the United States throughout history
<b>H-1C-E4</b> recognizing how folklore and other cultural elements have contributed to our local, state, and national heritage

#### **D. WORLD HISTORY**

<b>K–4</b>
<b>H-1D-E1</b> identifying the characteristics and historical development of selected societies throughout the world
<b>H-1D-E2</b> describing the social and economic impact of major scientific and technological advancements
<b>H-1D-E3</b> discussing the impact of significant contributions made by historic figures from different regions of the world

# HISTORY: Time, Continuity, and Change

## BENCHMARKS 5–8 AND 9–12

### B. UNITED STATES HISTORY

Eras	5–8	9–12
<p><b>ERA 1:</b> <b>Three Worlds Meet</b> <b>(Beginnings to 1620)</b></p>	<p><b>H-1B-M1</b> identifying and describing characteristics of societies in the Americas, Western Europe and Western Africa that increasingly interacted after 1450</p> <p><b>H-1B-M2</b> explaining the cultural, ecological, and economic results of early European exploration and colonization</p>	<p><b>H-1B-H1</b> analyzing the significant changes that resulted from interactions among the peoples of Europe, Africa, and the Americas</p>
<p><b>ERA 2:</b> <b>Colonization and Settlement</b> <b>(1565–1763)</b></p>	<p><b>H-1B-M3</b> describing the interactions among Native Americans, early Europeans, and Africans in the Americas</p> <p><b>H-1B-M4</b> tracing the emergence of religious freedom and changing political institutions in the English colonies</p> <p><b>H-1B-M5</b> analyzing the impact of European cultural, political, and economic ideas and institutions on life in the Americas</p>	<p><b>H-1B-H2</b> summarizing the process by which the United States was colonized and later became an independent nation</p>
<p><b>ERA 3:</b> <b>Revolution and the New Nation</b> <b>(1754–1820s)</b></p>	<p><b>H-1B-M6</b> explaining the causes and course of the American Revolution and the reasons for the American victory</p> <p><b>H-1B-M7</b> explaining the impact of the American Revolution on the politics, society, and economy of the new nation</p>	<p><b>H-1B-H3</b> analyzing the development of the American constitutional system</p>

	<p><b>H-1B-M8</b> relating the institutions and practices of government established during and after the American Revolution to the foundation of the American political system</p>	
<p><b>ERA 4: Expansion and Reform (1801–1861)</b></p>	<p><b>H-1B-M9</b> describing the territorial expansion of the United States and analyzing the effects on relations with Native Americans and external powers</p> <p><b>H-1B-M10</b> analyzing the changes and regional tensions created by Jacksonian democracy, the industrial revolution, increasing immigration, the rapid expansion of slavery, and the westward movement</p> <p><b>H-1B-M11</b> explaining and giving examples of the reform movements that occurred during the antebellum period and evaluating their impact on American society</p>	<p><b>H-1B-H4</b> tracing territorial expansion and reform movements in the United States</p>
<p><b>ERA 5: Civil War and Reconstruction (1850–1877)</b></p>	<p><b>H-1B-M12</b> describing the causes and course of the Civil War and examining the impact of the war on the American people</p> <p><b>H-1B-M13</b> comparing and evaluating various reconstruction plans of the post-Civil War era</p>	<p><b>H-1B-H5</b> analyzing the origins, major events, and effects of the Civil War and Reconstruction</p>
<p><b>ERA 6: The Development of the Industrial United States (1870–1900)</b></p>	<p><b>H-1B-M14</b> describing the impact of industrialization in the United States</p>	<p><b>H-1B-H6</b> analyzing the development of industrialization and examining its impact on American society</p>

		<p><b>H-1B-H7</b> describing the immigration and internal migration patterns that have occurred in the history of the United States and examining the cultural and social changes that have resulted</p>
<p><b>ERA 7: The Emergence of Modern America (1890–1930)</b></p>	<p><b>H-1B-M15</b> describing the significant economic, political, social, and cultural changes that have occurred in the United States during the 20th century</p> <p><b>H-1B-M16</b> identifying the causes and consequences of major world conflicts involving the United States</p>	<p><b>H-1B-H8</b> evaluating the significance of the Progressive Movement</p> <p><b>H-1B-H9</b> analyzing the rise of the labor and agrarian movements</p> <p><b>H-1B-H10</b> explaining the changing role of the United States in world affairs through World War I</p> <p><b>H-1B-H11</b> analyzing the significant changes that evolved in the United States between World War I and the Great Depression</p>
<p><b>ERA 8: The Great Depression and World War II (1929–1945)</b></p>	<p><b>H-1B-M17</b> describing the impact of the Great Depression and World War II on American society</p>	<p><b>H-1B-H12</b> analyzing the causes, developments, and effects of the Great Depression and the New Deal</p> <p><b>H-1B-H13</b> analyzing the origins, course, and results of World War II</p>
<p><b>ERA 9: Contemporary United States (1945 to the present)</b></p>	<p><b>H-1B-M18</b> discussing significant developments and issues in contemporary United States history</p>	<p><b>H-1B-H14</b> examining and summarizing key developments and issues in foreign and domestic policies during the Cold War era</p> <p><b>H-1B-H15</b> analyzing the economic, political, social, and cultural transformation of the United States since World War II</p>

		<p><b>H-1B-H16</b> explaining the major changes that have resulted as the United States has moved from an industrial to an information society</p> <p><b>H-1B-H17</b> analyzing developments and issues in contemporary American society</p> <p><b>H-1B-H18</b> discussing and demonstrating an understanding of recent developments in foreign and domestic policies</p>
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# HISTORY: Time, Continuity, and Change

## BENCHMARKS 5–8 AND 9–12

### C. WORLD HISTORY

Eras	5–8	9–12
<b>ERA 1: The Beginnings of Society</b>	<b>H-1C-M1</b> describing the earliest human communities  <b>H-1C-M2</b> explaining the emergence of agricultural societies around the world	<b>H-1C-H1</b> analyzing the development of early human communities and civilizations
<b>ERA 2: The Rise of Early Civilizations (4000–1000 B.C.)</b>	<b>H-1C-M3</b> identifying the major characteristics of early civilizations in Mesopotamia, Egypt, and the Indus valley  <b>H-1C-M4</b> tracing the development and expansion of agricultural societies and the emergence of new states  <b>H-1C-M5</b> analyzing the political, social, and cultural consequences of population movements and militarization in Europe and Asia	<b>H-1C-H2</b> making generalizations about the cultural legacies of both the ancient river and the classical civilizations
<b>ERA 3: Classical Traditions, Major Religions, and Giant Empires (1000 B.C.–A.D. 300)</b>	<b>H-1C-M6</b> discussing and giving examples of technological and cultural innovation and change  <b>H-1C-M7</b> describing the classical civilizations and examining their interactions and influences  <b>H-1C-M8</b> describing and comparing the emergence of major religions and large-scale empires in the Mediterranean basin, China, and India	<b>H-1C-H3</b> analyzing the origins, central ideas, and worldwide impact of major religious and philosophical traditions
<b>ERA 4: Expanding Zones of Exchange and Encounter (A.D. 300–1000)</b>	<b>H-1C-M9</b> tracing the expansion of major religions and cultural traditions and examining the impact on civilizations in Europe, Asia, and Africa	<b>H-1C-H4</b> summarizing the developments and contributions of civilizations that flourished in Europe, Asia, Africa, and the Americas



	<p><b>H-1C-M10</b> analyzing the political, social, and cultural developments and changes that resulted from the rise and fall of empires and kingdoms in Europe, Asia, Africa, and the Americas</p>	
<p><b>ERA 5: Intensified Hemispheric Interactions (A.D. 1000–1500)</b></p>	<p><b>H-1C-M11</b> analyzing the cultural and economic impact of the interregional system of communication and trade that developed among the peoples of Europe, Asia, and Africa</p> <p><b>H-1C-M12</b> explaining the developments and events that led to the political, social, cultural, and economic transformation of Europe</p> <p><b>H-1C-M13</b> describing the development and expansion of complex societies and empires in the Americas</p>	<p><b>H-1C-H5</b> analyzing the consequences of the economic and cultural interchange that increasingly developed among the peoples of Europe, Asia, and Africa</p>
<p><b>ERA 6: Emergence of the First Global Age (1450–1770)</b></p>	<p><b>H-1C-M14</b> explaining the political, cultural, and economic developments and trends of major world regions that resulted in the transformation of societies in the fifteenth through the mid-eighteenth centuries</p>	<p><b>H-1C-H6</b> analyzing the impact of transoceanic linking of all major regions of the world</p> <p><b>H-1C-H7</b> analyzing the political, cultural, and economic developments and trends that resulted in the transformation of major world regions</p> <p><b>H-1C-H8</b> explaining how the emergence of territorial empires in Europe, Asia, and Africa unified large areas politically, economically, and culturally</p> <p><b>H-1C-H9</b> tracing the expansion of European power and economic influence in the world and examining the impact of this expansion on societies in Asia and the Americas</p>

<p><b>ERA 7:</b> <b>An Age of Revolutions</b> <b>(1750–1914)</b></p>	<p><b>H-1C-M15</b> determining and discussing the impact of the political, agricultural, and industrial revolutions on societies around the world</p> <p><b>H-1C-M16</b> describing the transformation of world societies that occurred during an era of global trade and Western domination</p>	<p><b>H-1C-H10</b> analyzing the impact that political revolutions and new ideologies had on societies around the world</p> <p><b>H-1C-H11</b> evaluating the economic, political, and social consequences of the agricultural and industrial revolutions on world societies</p> <p><b>H-1C-H12</b> analyzing the patterns of worldwide change that emerged during the era of Western military and economic domination</p>
<p><b>ERA 8:</b> <b>A Half-Century of Crisis and Achievement</b> <b>(1900–1945)</b></p>	<p><b>H-1C-M17</b> identifying the causes and worldwide consequences of major 20th century conflicts</p>	<p><b>H-1C-H13</b> analyzing the causes and international consequences of World War I, the rise and actions of totalitarian systems, World War II, and other early 20th century conflicts</p>
<p><b>ERA 9:</b> <b>The 20th Century Since 1945</b> <b>(1945 to the present)</b></p>	<p><b>H-1C-M18</b> identifying and discussing significant political, economic, social, cultural, and technological trends that have had an impact on the modern world</p>	<p><b>H-1C-H14</b> analyzing the international power shifts and the breakup of colonial empires that occurred in the years following WWII</p> <p><b>H-1C-H15</b> explaining the worldwide significance of major political, economic, social, cultural, and technological developments and trends</p>

## **HISTORY: Time, Continuity, and Change**

### **BENCHMARKS 5–8**

#### **D. LOUISIANA HISTORY**

<b>5–8</b>
<b>H-1D-M1</b> describing the contributions of people, events, movements, and ideas that have been significant in the history of Louisiana
<b>H-1D-M2</b> tracing the development of the various governments that have been established in Louisiana throughout history
<b>H-1D-M3</b> identifying and discussing the major conflicts in Louisiana’s past
<b>H-1D-M4</b> locating and describing Louisiana’s geographic features and examining their impact on people past and present
<b>H-1D-M5</b> tracing the development and growth of Louisiana’s economy throughout its history
<b>H-1D-M6</b> examining folklore and describing how cultural elements have shaped our state and local heritage

## Louisiana Educational Assessment Program Social Studies Achievement Level Descriptors: Grade 4

**Note:** These descriptors have been modified slightly from the 2000 publication to match the condensed descriptors on the updated 2006 Individual Student Reports.

Achievement Level	Descriptors
<b>Advanced</b>	<p>Students scoring at this level generally exhibit the ability to do the following:</p> <ul style="list-style-type: none"> <li>• <b>Geography:</b> interpret major geographic features on maps and globes; classify geographic vocabulary; analyze the connection between people and the environment; compare geographical data; compare the world in spatial terms; and compare processes that shape Earth.</li> <li>• <b>Civics:</b> evaluate the structure and purpose of government; and interpret rights as stated in the U.S. Constitution.</li> <li>• <b>Economics:</b> evaluate the economic factors involved in a choice or a decision; and analyze decisions made by individuals, households, businesses, and governments and their economic outcomes.</li> <li>• <b>History:</b> express the significance of key historical people, events, and documents; use an understanding of historical perspective, time, and chronology to analyze past and current events; interpret both primary and secondary sources; and evaluate the social and economic impact of major scientific and technological advancements.</li> </ul>
<b>Mastery</b>	<p>Students scoring at this level generally exhibit the ability to do the following:</p> <ul style="list-style-type: none"> <li>• <b>Geography:</b> analyze and compare major geographic features on maps and globes; compare the connection between people and the environment; classify geographical data; describe the world in spatial terms; and describe processes that shape Earth.</li> <li>• <b>Civics:</b> explain the branches and responsibilities of government; and explain rights and responsibilities of citizens as stated in the U.S. Constitution.</li> <li>• <b>Economics:</b> apply economic concepts; explain how individuals, households, businesses, and governments are dependent on each another; and demonstrate an understanding of the economic outcomes of decisions made by individuals, households, businesses, and governments.</li> <li>• <b>History:</b> identify and describe key historical people, events, and documents; apply an understanding of historical perspective, time, and chronology; interpret primary and secondary sources; and explain the importance of major scientific and technological advancements.</li> </ul>

<p style="text-align: center;"><b>Basic</b></p>	<p>Students scoring at this level generally exhibit the ability to do the following:</p> <ul style="list-style-type: none"> <li>• <b>Geography:</b> recognize major geographic features on maps and globes; define geographic vocabulary; describe the connection between people and the environment; interpret geographical data; define the world in spatial terms; and define processes that shape Earth.</li> <li>• <b>Civics:</b> identify branches and major responsibilities of government; and list the rights and responsibilities of citizens as stated in the Bill of Rights.</li> <li>• <b>Economics:</b> identify fundamental economic concepts and terms; recognize that the decisions made by individuals, households, businesses, and governments result in economic outcomes.</li> <li>• <b>History:</b> identify and describe important people, events, and documents in American history; demonstrate an understanding of the concepts of historical perspective and time; distinguish between primary and secondary historical sources; and describe some scientific and technological advancements.</li> </ul>
<p style="text-align: center;"><b>Approaching Basic</b></p>	<p>Students scoring at this level generally exhibit the ability to do the following:</p> <ul style="list-style-type: none"> <li>• <b>Geography:</b> identify major geographic features on maps and globes; select words that define geographic vocabulary; explain the connection between people, places, man and the environment; identify geographical data; identify the world in spatial terms; and identify processes that shape Earth.</li> <li>• <b>Civics:</b> recognize that the United States has a government that is divided into branches; and state that citizens have rights and responsibilities.</li> <li>• <b>Economics:</b> identify some fundamental economic concepts and terms.</li> <li>• <b>History:</b> recognize a few of the most important people, events, and documents in American history; demonstrate a limited understanding of the concepts of historical perspective and time; and identify some important scientific and technological advancements.</li> </ul>
<p style="text-align: center;"><b>Unsatisfactory</b></p>	<p>Students scoring at this level have not demonstrated the fundamental knowledge and skills needed for the next level of schooling. Students at this level generally have not exhibited the ability to</p> <ul style="list-style-type: none"> <li>• <b>Geography:</b> identify major geographic features on maps and globes; select words that define geographic vocabulary; explain the connection between people, places, man and the environment; identify geographical data; identify the world in spatial terms; and identify processes that shape Earth.</li> <li>• <b>Civics:</b> recognize that the United States has a government that is divided into branches; and state that citizens have rights and responsibilities.</li> <li>• <b>Economics:</b> identify some fundamental economic concepts and terms.</li> <li>• <b>History:</b> recognize a few of the most important people, events, and documents in American history; demonstrate a limited understanding of the concepts of historical perspective and time; or identify some important scientific and technological advancements.</li> </ul>



# **APPENDICES**





# APPENDIX A

## Glossary

**Accommodations** changes to test format or administration conditions for students with special needs that do not change the construct being measured but do remove construct-irrelevant contributions to test scores that would otherwise exist for these individuals. Louisiana permits accommodations for students with disabilities according to the Individuals with Disability Education Improvement Act of 2004 (IDEA) or the Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, as well as students identified as limited English proficient.

**Accountability** the systematic use of assessment data and other information to assure those inside and outside of the educational system that the performance of students, educators, and schools is progressing

**Achievement levels** expectations for levels of performance. LEAP and iLEAP achievement levels are *Advanced, Mastery, Basic, Approaching Basic, and Unsatisfactory*.

**Assessment** a systematic method of obtaining evidence from tests and other sources, used to draw inferences about characteristics of people or programs for a specific purpose

**Benchmark** a broad statement of process and/or content that is used as a reference to develop curriculum and to assess student progress

**Common Core State Standards (CCSS)** standards adopted by BESE in July 2010, which define the knowledge and skills students should acquire throughout their K-12 education in order to graduate from high school prepared to succeed in their post-secondary pursuits

**Constructed-response item** a test item with directions that instruct students to generate an answer that is stated in writing or explained by a diagram, a chart, or some other evidence of their thinking

**Content standards** a description of what a student should know and be able to do through subject matter, knowledge, and proficiencies gained as a result of his or her education

**Criterion-referenced test (CRT)** an assessment that compares a student's performance to a specific learning objective rather than to the performance of other students

**Cut score** the critical point for separating scores into achievement level groups based on an established set of criteria

**Dimensions of writing** the components of the scoring rubric used to evaluate student responses to a writing prompt. For LEAP, the dimensions of content, style, sentence formation, usage, mechanics, and spelling are scored.

**Grade-Level Expectation (GLE)** a statement that defines what a student should know and be able to do at the end of a given grade level. GLEs add further definition to standards and benchmarks.

**Individual Accommodation Plan (IAP)** a written plan developed at the school level that describes the accommodations for classroom instruction and testing, as well as statewide assessments, for a student who qualifies under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, also referred to as a Section 504 plan

**Individualized Education Program (IEP)** a written plan developed by the IEP team that prescribes the educational program designed to meet the specific needs of a student who meets federal special education guidelines under the Individuals with Disability Education Improvement Act of 2004 (IDEA). This plan includes the accommodations students are to receive in classroom instruction and testing, as well as on statewide assessments.

**Inter-rater reliability** the degree to which different scorers agree on the score to be assigned to a test response

**Item** an individual question or task in an assessment or evaluation instrument

**Key Concepts** descriptions of important content emphasized in the assessment

**LEAP** Louisiana Educational Assessment Program (LEAP), Louisiana's statewide assessments for grades 4 and 8

**LEP** abbreviation for limited English proficiency. The No Child Left Behind Act (NCLB) identifies these students as those who do not speak English as their primary language, have a limited ability to read, speak, write, or understand English and whose difficulties with the English language may be sufficient to deny the individual the ability to meet a state's proficient level of achievement on state assessments.

**Multiple-choice item** a test item that consists of an interrogatory stem with answer choices. Students are required to select the correct answer from several choices. This kind of item is also referred to as a selected-response item.

**NCLB** the federal Elementary and Secondary Education Act of 2001, known as No Child Left Behind

**Partnership for Assessment of Readiness for College and Careers (PARCC)** a consortium of 24 states, including Louisiana, who are developing a common set of assessments in English Language Arts and mathematics that are centered on measuring student progress on the CCSS, which are based on the knowledge and skills necessary for high school graduates to be prepared for college and careers. Louisiana will fully implement the PARCC assessments during the 2014-2015 school year.

**Raw score** a person's observed score on a test, that is, the number correct

**Rubric** a scoring guide for open-ended questions or performance tasks. A scoring rubric contains a description of the requirements for varying levels of success in response to the task.

**Sample test items** examples of the kinds of test items that appear on a test such as LEAP

**Scaled score** derived scores to which raw scores are converted by numerical transformation (e.g., conversion of raw scores to percentile ranks or scaled scores)

**Standard** a broad statement of expectations for student learning

**Standard setting** the process for determining the cut point for each achievement level

**Stimulus material** the part of a test item that provides information needed to complete the item (e.g., illustrations, maps, charts, and graphs)

**Strand** categories within particular content areas. Because strands are interrelated, they should be integrated, rather than taught in isolation. For this reason, a test item may assess more than one strand.

**Test blueprint** a document, usually in the form of a chart, representing the distribution of items for each standard or strand for a content area assessment

**Test specifications** detailed information about an assessment (e.g., test blueprint, test design, item types, test description, test content)

**Writing prompt** the topic and explanation provided to students on the English Language Arts writing test that elicits a response to text (one or two passages)

## APPENDIX B

### LEAP Transitional Assessments Frequently Asked Questions (FAQs)

#### 1. Why is LEAP being revised?

In 2010, the Board of Elementary and Secondary Education (BESE) approved the Common Core State Standards (CCSS) ([http://www.doe.state.la.us/topics/common\\_core.html](http://www.doe.state.la.us/topics/common_core.html)), which will eventually replace the current English language arts (ELA) and mathematics standards/GLEs. After adopting the CCSS, Louisiana became a governing member of a 24-state consortium—the Partnership for Assessment of Readiness for College and Careers (PARCC)—working to develop next-generation assessments that measure the full range of the CCSS. In preparation for the PARCC assessments, which are to be administered starting in the 2014-2015 school year, the Department has created transitional assessments in ELA and mathematics.

#### 2. How does the transitional LEAP differ from previous LEAP assessments?

The mathematics transitional assessments will now only include grade-specific items that measure content common to the GLEs and the CCSS (<http://www.louisianaschools.net/topics/gle.html>).

In the LEAP ELA assessments the current writing prompts will be replaced with a new type of prompt that focuses on a key instructional shift—writing grounded in textual evidence. Instead of responding to a “stand alone” writing prompt, a student will read one or two passages and use the information from the text(s) to support his or her response.

The science and social studies LEAP assessments remain unchanged.

#### 3. Will Writer’s Checklists be provided for the ELA transitional tests?

Yes. There will be three new Writer’s Checklists in the future: one for grade 3; one for grades 5, 6, and 7; and one for grades 4 and 8. The Writer’s Checklists have all been modified to reflect the new rubrics that will be used to score the transitional writing prompts.

#### 4. Will students be allowed to use calculators on the transitional Mathematics test?

Phase 1 includes a constructed-response session that **allows** the use of calculators. Phase 2 includes two multiple-choice sessions. One **allows** the use of calculators; the other **does not**.

#### 5. Will Mathematics Reference Sheets be provided?

Yes. Mathematics Reference Sheets have been designed specifically for each grade.

#### 6. Will the kind of scores provided for LEAP change?

Yes. Mathematics scores will have new reporting categories (See Tables 2.3 and 2.4 on page 2-4 of the *LEAP Assessment Guide* for additional information on mathematics reporting categories).

The score reports for ELA will not change.

**7. Are the LEAP assessments high-stakes for students regarding pupil progression?**

Yes. The LEAP tests are designed to ensure that students have adequate knowledge and skills before they move on to the next grade. For grade 4 and grade 8 students to be promoted to the next grade, they must score *Basic* or above in either English language arts or mathematics and *Approaching Basic* or above in the other subject.

## APPENDIX C

### Testing Special Populations Special Education Students and Students with One or More Disabilities According to Section 504

All special education students are to be tested on LEAP, except those whose IEPs indicate otherwise. All students with one or more disabilities according to Section 504 are to be tested.

A summary of test accommodations that may be used for special education students and for students with disabilities according to Section 504 is given below. All accommodations also must be documented on the IEP or IAP and Verification of Section 504 form for the student to receive them. Full details of allowable accommodations and administration procedures are available in the *LEAP Test Administration Manual* and in *Bulletin 118*.

- **Braille:** Braille test booklets that include all the items in the regular-print edition of the LEAP are available. The test administrator must transfer all braille answers to a scorable answer document.
- **Large Print:** The large-print edition is essentially an enlarged version of the regular-print edition of the test. All test items in the regular-print edition of the answer document are included in the large-print test booklet. Students who use the large-print edition mark their answers on the large-print test booklet, which must be transferred by the test administrator to a scorable answer document.
- **Answers Recorded:** If a student is unable to write due to his or her disability, the test administrator must record the student's exact answers on the scorable answer document.
- **Assistive Technology:** Assistive technology, for example, a computer, tape recorder, calculator, abacus, grip for a pencil, visual magnification device, communication device, mask or marker to maintain place, speech synthesizer, or electronic reader, may be provided.
- **Extended Time:** Every student must be given sufficient time to respond to every test item. Time may be adjusted for certain students, such as those who have short attention spans or who may be unable to concentrate for long periods of time on a given task.
- **Communication Assistance:** If warranted by the student's reading level as documented on the IEP or Section 504 Individual Accommodation Plan (IAP) and Verification of Section 504 form, communication assistance in signing or cuing modality should be provided for **portions** of the test—**with the exception of the English Language Arts Reading and Responding session**.
- **Transferred Answers:** If accommodations provide for a student to record answers in the test booklet or use braille, large-print, or technological assistive devices, the student's responses must be transferred onto a scorable answer document exactly as the student wrote them.
- **Individual/Small Group Administration:** Tests may be administered to a small group (maximum, eight students) or to an individual requiring more attention than can be provided in a larger classroom. If accommodations affect the standard administration of the test (e.g., *Tests Read Aloud*), individual or small group administration **must** be used.

- **Tests Read Aloud:** Students may have **portions** of the tests read to them, **with the exception of the English Language Arts Reading and Responding session.** Although the passages, questions, or multiple choices on this part of the test cannot be read aloud, the **directions** may be read aloud.
- **Other:** Any necessary accommodations may be used, but they must be determined by the IEP team or Section 504 Committee and documented on the student’s IEP or IAP and Verification of Section 504 form and must not breach test security or invalidate the meaning of the test score or the purpose of the test. Examples of other accommodations include highlighting the task or verbs in the test directions or assisting the student in tracking the test items.

## **Information for Deaf and Hard of Hearing Students**

The intent of the accommodations for students who are deaf or hard of hearing is to present the instructions in a manner that will allow them to demonstrate skills that have been acquired. The signing modality routinely used in the students’ regular classrooms should be considered when administering these tests.

### **Physical Setting**

The physical setting should include verification that students’ auditory listening devices are in good repair and are in use during the testing period. Students who depend primarily on lip reading should be seated no more than ten feet from the test administrator.

### **Use of Signs and Fingerspelling**

- Students may have **portions** of the tests signed to them, **with the exception of the English Language Arts Reading and Responding session.** Although the passages, questions, or multiple choices on this session of the test cannot be signed, the **directions** may be signed. Signed administration of tests that measure reading ability makes little sense, since any score so obtained would offer no information about a student’s ability and thus be invalid.
- Test items should be signed exactly as written but **not** when the sign would reveal the answer to the question.
- Fingerspelling must **not** be used to administer items that require students to demonstrate the skill of spelling.

## Information For Limited English Proficient Students

All LEP students are to be tested. LEP students qualify for accommodations **used in their classroom instruction and assessment.**

- **Extended Time:** Every student should be given sufficient time to respond to every test item. Time may be adjusted for students who must process from one language to another.
- **Individual/Small Group Administration:** Tests may be administered to a small group (maximum, eight students) or to an individual requiring more attention than can be provided in a larger classroom. If other selected accommodations affect the standard administration of the test (e.g., *Tests Read Aloud*), individual or small group administration **must** be used.
- **Provision of English/Native Language Word-to-Word Dictionary (No Definitions):** LEP students may use either a standard or electronic English/native language word-to-word dictionary (no definitions) on all sessions of the tests. Students may use an English/native language word-to-word dictionary **with definitions** on **only** the English Language Arts **Writing test.**
- **Tests Read Aloud:** Students may have **portions** of the tests read to them, **with the exception of the English Language Arts Reading and Responding session.** Although the passages, questions, or multiple choices on this session of the test cannot be read aloud, the **directions** may be read aloud.
- **Test Administered by ESL Teacher or by Individual Providing Language Services:** Familiarity with the speech patterns of the ESL teacher or the individual providing language services may help the student better understand the test directions or the portions of the test that are read aloud if the student receives the accommodation *Tests Read Aloud.*



## **Implementing Testing Accommodations— A Planning Checklist for the General Education Teacher**

1. Do you know which accommodations are documented on the students' IEPs or IAPs?
2. Does the student use the accommodations in classroom instruction and assessment?
3. Have special test materials been ordered (large print, braille, transparencies)?
4. Have students eligible for the accommodation *Tests Read Aloud* been assigned individual or small-group administration to prevent interfering with the testing of other students?
5. Are any other students eligible for small-group or individual test administration?
6. Where will small-group or individual testing take place, and who is the person trained to supervise the student(s) there?
7. If needed, have trained readers, scribes, and sign-language interpreters been assigned to individual students?
8. Is necessary special equipment available, and has it been checked for correct operation (e.g., word processor, computer, tape recorder, calculator)?
9. During testing, are you providing all eligible students with the accommodations documented on their IEPs or IAPs and used in classroom instruction and assessment? After testing, did you transfer student responses to scorable answer documents for students using braille, large print, and assistive devices?
10. Did you record the specific accommodations **actually used in testing** on the answer document?
11. Have students who took makeup tests received the needed accommodations?

(Verify numbers 1, 3, 4, 5, 6, 7, 8, and 11 with the School Test Coordinator.)

### **Comments and Cautions**

Whenever possible, attend IEP meetings for students you teach. Information from the general education teacher is necessary to help the IEP team determine which instructional and classroom assessment accommodations enable a student to demonstrate best what he or she knows and can do.

Individual or small-group administration **must** be used if the accommodations will interfere with the testing of other students (e.g., *Tests Read Aloud*).

Immediately following testing, all provided accommodations must be marked on scorable answer documents.

### **Ethical Assessment Practices**

Ethical assessment practices relate to actions between test administrators and students taking the test. Unethical practices include coaching students during testing, editing student work, giving clues, paraphrasing, offering additional information, or any other practice that would give students unapproved assistance or provide advantage.

Accommodations must never compromise the purpose of the test. For example, a test of reading comprehension cannot be read aloud because that destroys the purpose of the test—to measure reading ability. However, part or all of the Science and other content-area tests may be read aloud to students who are to receive the accommodation *Tests Read Aloud*.

Finally, accommodations must not compromise test security or confidentiality. All policies and procedures regarding test security and processing of test materials must be followed. (See your district and the BESE Test Security Policy as well as *Bulletin 118*.)



# APPENDIX D

## Writer's Checklist



**GRADES 4 & 8**

### ENGLISH LANGUAGE ARTS WRITER'S CHECKLIST

As you write your composition, remember these important points.

#### Content:

- Read the directions, the passage(s), and the writing topic carefully and write on **all** parts as directed.
- Present a clear main idea.
- Give enough details to support and develop your main idea.
- Make sure to use well-chosen details from the passage(s) to support your ideas.
- Present your ideas in a logical order and include a clear beginning, middle, and ending.

#### Style:

- Use words that express your meaning well.
- Use a variety of sentence types and lengths to make your writing easy to follow.

#### Sentence Formation:

- Write in complete sentences and use a variety of sentence patterns.

#### Usage:

- Write using appropriate subject-verb agreement, verb tenses, word meanings, and word endings.

#### Mechanics:

- Write using correct punctuation.
- Write using correct capitalization.
- Write using appropriate formatting (e.g., indentations, margins).

#### Spelling:

- Write using correct spelling.



**Remember to print or write neatly.**

### DIRECTIONS FOR WRITING

Follow the steps below to help you write a successful composition.

#### Step 1: Planning and Drafting

- Read the directions, the passage(s), and the writing topic in your test booklet carefully.
- Think about what you will write before you begin.
- Make sure to use well-chosen details from the passage(s) to support your ideas.
- Use the space provided in your rough draft booklet for planning your composition and writing your rough draft.
- Remember that your planning notes and rough draft will not be scored.

#### Step 2: Revising

- Review your composition to make sure you have covered all the points on the Writer's Checklist.
- Reread your rough draft.
- Rearrange ideas or change words to make your meaning clear and improve your composition.
- Write your final draft neatly on the correct page(s) in your test booklet.
- Write your final draft in either print or cursive using a No. 2 pencil.

#### Step 3: Proofreading

- Read your final draft.
- Make any needed corrections.
- Erase or strike through words if necessary.



#### Points to Remember:

- Only the writing on the **Final Draft** pages in your test booklet will be scored.
- Your composition will be scored on (1) development and support of ideas including how you use the information in the passage(s), (2) expression of ideas, (3) correct sentence formation, (4) usage, (5) mechanics, and (6) spelling.

## Mathematics Reference Sheet



### LEAP MATHEMATICS REFERENCE SHEET – GRADE 4

Use the information below to answer questions on the Mathematics test.

1 foot = 12 inches  
1 yard = 3 feet  
1 pound = 16 ounces

1 meter = 1,000 millimeters  
1 meter = 100 centimeters  
1 kilometer = 1,000 meters  
1 liter = 1,000 milliliters  
1 kilogram = 1,000 grams

Rectangle 

Area =  $l \times w$   
Perimeter =  $l + l + w + w$

1 pint = 2 cups  
1 quart = 2 pints  
1 gallon = 4 quarts