LEAP

English Language Arts
Mathematics
Science
Social Studies

Grade 8 Practice Test

January 2011
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This spring, you will take the LEAP test, which will measure your skills in English language arts, mathematics, science, and social studies. It will be given in two phases (the first in March and the second in April). The LEAP test helps determine whether you have the skills and knowledge you need to succeed in the next grade.

This practice test will help you become familiar with what each session of the LEAP test is like, though the practice test has fewer questions. At the end of each session of the practice test, a note tells the number of questions that are on the actual test. Also for the actual test, you will mark all your answers in a separate answer document. For the practice test, you may write your answers in this book and check them against the correct answers, which appear in the back of this book.

You may use the practice test at home or at school. More information about the tests can be found online at www.louisianaschools.net, Testing Information (Districts and Schools).

Want to practice for the tests online?
Sign on to PASS. To get started, go to www.louisianapass.org and type in the password tiger.

On PASS, you will find multiple-choice, short-answer, and essay questions similar to those on the LEAP test. Plus you will get help if you answer questions incorrectly. If you write an answer to an essay question, your essay will be scored and you will get your score in a few days.
English Language Arts
Grade 8
Practice Test
Session 1—Writing

Read the topic in the box below and write a well-organized, multiparagraph composition of about 150–200 words. Be sure to follow the suggestions listed under the box.

Writing Topic

1. The local newspaper is sponsoring a composition contest, and you decide to enter. In your composition, you should explain your response to the following:

   If you could be granted one wish, what would that wish be?

Before you begin to write, think about one wish you would like to come true. It can be a wish for yourself or someone else. What is that wish? Why would you like to have that wish granted?

Now write a multiparagraph composition for the newspaper explaining what you would wish for if you were granted one wish.

- Remember that your audience is the readers of the local newspaper; use appropriate language and explain your ideas clearly.
- Give specific details and explain why you think the way you do so that your readers will understand what you mean.
- Be sure to write neatly and check your composition for correct spelling, punctuation, and grammar.

Use page 7 in this test booklet for notes, brainstorming, and/or writing an outline. Write a rough draft on page 8 of this test booklet. Write your final draft on page 9.

NOTE: On the real test, your teacher will read aloud this page to you. Also, on this session of the test only, you may use a dictionary and thesaurus, along with the Writer’s Checklist.
Use for notes, brainstorming, and/or an outline.
1. Final Draft

NOTE: On the real test, you will have two pages to write your rough draft and two pages for your final draft.
Do you remember building with Legos or Tinker Toys? Building your own bridges can help you understand how natural rock bridges work. The following directions tell you how to build a bridge with books and chairs. Read to find out how and why this can be done and then answer questions 2 through 6.

Rock Bridge

**Purpose:** To demonstrate how natural bridges stand.

**Materials:** books

2 flat chairs the same height

**Procedure:**
- Move the chairs about 12 in. (30 cm) apart.
- Lay one book on each chair with the edge of the books even with the edges of the chairs.
- Stack books on top of each other so that each book extends farther over the edge of the chair.
- Continue stacking the books until one book overlaps the stack from both chairs to form a bridge.

**Results:** No part of the bottom books overlaps the edge of the chair. Each book above the bottom book extends over the chair’s edge until the top book is totally over the edges of the chairs.

**Why?** All objects behave as if their weight is located in one spot called the *center of gravity*. The book bridge balances because the center of gravity of each side of the bridge is over a chair. In nature, natural rock bridges are formed by weathering and erosional processes. These bridges balance because the particles making up the bridge overlap in such a way that they place the center of gravity of the structure over the supporting sides.
For questions 2 through 5, darken the circle beside the correct answer. Mark only one answer for each question.

2. The form of writing in these directions most resembles
   ○ A. a recipe.
   ○ B. an advertisement.
   ○ C. a book review.
   ○ D. a newspaper article.

3. What is the main purpose of the illustration in “Rock Bridge”?
   ○ A. to enhance the reader’s enjoyment
   ○ B. to clarify information in the text
   ○ C. to persuade the reader
   ○ D. to share a point of view different from the text

4. A rock bridge of books demonstrates the way in which
   ○ A. bridges are used.
   ○ B. people utilize earth science.
   ○ C. natural bridges are built.
   ○ D. natural bridges stand.

5. Building the book bridge makes it easier to understand
   ○ A. center of gravity.
   ○ B. weathering.
   ○ C. erosion.
   ○ D. support and distance.

On the lines below, write your answer to question 6.

6. Explain how this passage is different from one that is mainly intended to amuse the reader.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

NOTE: On the real test, you will answer two short-answer questions about a short passage.
This story about unusual creatures and outer space travel has an unexpected ending. Read the story and answer questions 7 through 11.

Every August twenty-third, the great silver spaceship carrying Professor Hugo’s Interplanetary Zoo settled down for its annual six-hour visit.

Before daybreak crowds would form, long lines of children and adults both, waiting with wonderment to see what strange creatures the Professor had brought this year.

In the past they had sometimes been treated to three-legged creatures from Venus, or snakelike horrors from somewhere more distant. This year, as the great round ship settled slowly to earth in the huge tri-city parking area, they watched with awe as the sides slowly slid up to reveal the familiar barred cages.

In them were some wild breed—small, horselike animals that moved with quick, jerking motions and constantly chattered in a high-pitched tongue. The citizens of Earth clustered around. Soon the good Professor himself made an appearance, wearing his rainbow cape and top hat. “Peoples of Earth,” he called into his microphone.

The crowd’s noise died down and he continued. “Peoples of Earth, this year you see a real treat—the little-known horse-spider people of Kaan—brought to you across a million miles of space at great expense. Gather around, see them, listen to them, tell your friends about them. But hurry! My ship can remain here only six hours!”

The crowds slowly filed by, at once horrified and fascinated by these strange creatures that looked like horses but ran up the walls of their cages like spiders.

Ten thousand people filed by the barred cages set into the side of the spaceship. Then Professor Hugo once more took microphone in hand. “We must go now, but we will return next year on this date. And if you enjoyed our Zoo this year, phone your friends in other cities about it. We will land in New York tomorrow, and next week on to London, Paris, Rome, Hong Kong, and Tokyo. Then on to other worlds!”

He waved farewell to them, and as the ship rose from the ground, the Earth peoples agreed that this had been the very best Zoo yet. . . .

Some two months and three planets later, the silver ship of Professor Hugo settled onto the familiar jagged rocks of Kaan, and the horse-spider creatures filed quickly out of their cages. They scurried away in a hundred different directions, seeking their homes among the rocks.

In one, the she-creature was happy to see the return of her mate and offspring. She hurried to embrace them. “It was a long time you were gone. Was it good?”

The he-creature nodded. “The little one enjoyed it especially. We visited eight worlds and saw many things.”

The little one ran up the wall of the cave. “On the place called Earth it was the best. The creatures there wear garments over their skins, and they walk on two legs.”

“But isn’t it dangerous?” asked the she-creature.

“No,” her mate answered. “There are bars to protect us from them. We remain right in the ship. Next time you must come with us. It is well worth the nineteen commocs it costs.”

And the little one nodded. “It was the very best Zoo ever. . . .”
For questions 7 through 10, darken the circle beside the correct answer. Mark only one answer for each question.

7. The setting of this passage is two different
   ○ A. cities.
   ○ B. planets.
   ○ C. continents.
   ○ D. centuries.

8. Which situation most closely resembles this passage?
   ○ A. A smiling toddler plays with a litter of excited puppies.
   ○ B. A large bank provides more than one financial service for its customers.
   ○ C. A popular business enables customers to purchase shares in its company.
   ○ D. Eighth-grade students are able to enroll in the classes that interest them the most.

9. What can the reader tell about the creatures from Kaan?
   ○ A. They are wasteful.
   ○ B. They are intelligent.
   ○ C. They are as graceful as horses.
   ○ D. They are dangerous to humans.

10. The passage says that when Professor Hugo settled on the jagged rocks of Kaan, the horse-spider creatures “scurried away in a hundred different directions.” What does scurried mean?
    ○ A. fluttered
    ○ B. marched
    ○ C. darted
    ○ D. wandered

On the lines below, write your answer to question 11.

11. What real-life lesson might be learned from this passage? Give a detail from the passage to support your answer.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

NOTE: The real test has six multiple-choice and two short-answer questions for the long reading passage. In this session, you will read two additional passages and answer questions about them. You will also write an answer to an extended-response (essay) question comparing two of the passages.
Introduction: In this session, you will look at some reference materials and then use the materials to answer the questions on page 23.

Research Topic: Drums of the World

Suppose you want to write a report about drums as they are used around the world. Five different sources of information about drums are contained in this session of the test. The information sources and the page numbers where you can find them are listed below.

1. Article from a Magazine
   “Drums of the Inuit” (page 15)

2. Excerpt from a Book, Music: An Appreciation
   “Rhythm and Percussion” (page 16)

3. Diagram
   The Orchestra (page 17)

4. Internet Web Site Information
   The Early News Gallery: Burmese or Myanmar Drum (page 18)

5. Excerpts from Books on Drums
   a. Copyright Page (page 19)
   b. Table of Contents (page 20)
   c. Bibliography (page 21)

Note: Model bibliographic entries for different types of documents are on page 22. These show acceptable formats for entries.

Directions: Skim pages 15 through 21 to become familiar with the information in these sources. Remember that these are reference sources, so you should not read every word in each source. Once you have skimmed these sources, answer the questions on page 23. Use the information sources to help you answer the questions. As you work through the questions, go back and read the parts that will give you the information that you need.
Drums of the Inuit

The Inuit, native inhabitants of the Arctic polar region, have made drums for centuries. Traditionally, drum makers stretched the inner membrane of a walrus skin, or other animal hunted by the Inuit, over a round frame of driftwood or bone. The resulting highly resonant qilaut, or frame drum, produced different sounds as it was struck on either the skin, frame, or handle. A medicine man or other designated drummer would strike the drum, and the songs, although varying by occasion and singer, often related Inuit legends and customs. Births and marriages, successful hunts, ceremonies honoring visitors, and the need for physical healing or spiritual guidance were all reasons for a drum dance in the past. These events ranged in size from a few participants to large social gatherings drawing people from great distances.

Today, drum dances are held more to entertain tourists than to mark life events. Drum makers sometimes use nontraditional materials, such as nylon or goatskin, for drum skins. However, the occasional drum dances still serve the same socializing function they did in the past. Succeeding generations of children still learn the drum dance songs and, with them, the old legends and ways of life. The continued use of the qilaut helps the Inuit retain their cultural identity despite the influences of the modern world.
Rhythm and Percussion

Rhythm and percussive sounds are highly emphasized in African music. This rhythmic and percussive emphasis reflects the close link between music and dance in African culture. The rhythmic organization of African music tends to be complex. Usually, several different rhythmic patterns are played simultaneously and repeated over and over. Each instrument goes its own rhythmic way, producing accents that appear to be out of phase with those of the other parts. Dancers may choose any of several rhythmic patterns to dance to. For example, while one dancer follows a bell’s pattern, another may dance to the rattle, while yet another follows the drum.

Percussion ensembles consisting mainly of drums, xylophones, or rattles are widely employed. The instruments of percussion ensembles are carefully chosen to provide contrasts of tone, color, and pitch. The human body itself is often used as a percussion instrument. Handclaps, foot stamps, and thigh or chest slaps are common sounds in African music.
3. Diagram

The Orchestra
4. Internet Web Site Information

The Early News Gallery: Burmese or Myanmar Drum

http://www.newseum.org/virtual/history/hga101.htm

Burmese or Myanmar drum

Asia- The beat drum carries news farther and faster than the human voice. Like language, drums appear all over the world. These, from Asia, announce ceremonies and religious services, call councils together, and alert nearby villages of danger. Drums, gongs and horns are used together to spread that oldest of news stories: a death.

—Drum, Asia, late 19th century
Newseum collection
DRUMS THROUGH THE AGES

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First Printing

THE FOLLOWING EXCERPTS:


From From The Hunter’s Bow; by Beatrice Edgerly. Copyright, 1942, by G. P. Putnam’s Sons, New York. Reprinted by permission of Beatrice Edgerly.

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General
Model Bibliographic Entries

The following sample bibliographic entries are adapted from the *MLA (Modern Language Association) Handbook for Writers of Research Papers*, Sixth Edition. They show acceptable formats for bibliographic entries.

**A Book by a Single Author**


(Author) (Title of work) (City) (Publisher) (Year)

**A Book by More Than One Author**


(Authors) (Title of work) (City) (Publisher) (Year)

**An Encyclopedia Entry**


(Title of article) (Name of encyclopedia) (Year)

**A Magazine Article**


(Author) (Title of article) (Name of publication) (Date of issue) (Page numbers)

**A Book Issued by an Organization Identifying No Author**


(Name of organization) (Title of work) (City) (Publisher) (Year)

**A WWW Site (World Wide Web)**


(Name of Web site) (Sponsor of Web site) (Date accessed) (Web address)
For questions 12 through 15, darken the circle beside the correct answer. Mark only one answer for each question.

12. Which resource provides information about obtaining permission to reproduce parts of a book?
   ○ A. the Web site page
   ○ B. the copyright page
   ○ C. the table of contents
   ○ D. the bibliography

13. According to the diagram labeled The Orchestra, which section has the largest number of instruments played by the fewest musicians?
   ○ A. strings
   ○ B. woodwinds
   ○ C. brass
   ○ D. percussion

14. Which of the following sources offers the most information on the drumming practices of the Native Arctic people?
   ○ A. “Drums of the Inuit”
   ○ B. the table of contents
   ○ C. the bibliography
   ○ D. “Rhythm and Percussion”

15. Which resource would lead you to the most information on the various uses of percussion instruments in Eastern and Western cultures?
   ○ A. the table of contents
   ○ B. “Drums of the Inuit”
   ○ C. The Early News Gallery
   ○ D. The Orchestra diagram

On the lines below, write your answer to question 16.

16. Using information from the Drums through the Ages copyright page, write a bibliographic entry for the book. Use the most appropriate format shown on page 22 as your model.

NOTE: On the real test, this session has five multiple-choice and two short-answer questions.
Colonial Druggists

When people were sick in early America, druggists couldn’t just hand them a bottle of pills. They had to find the ingredients and then make the pills themselves. They even had to guess about the best treatment for the sickness. Medicine was a very, new science.

Mixing all the ingredients into one prescription sometimes take half a day or more for Colonial druggists. They kept a large supply of liquids and powders in the store. They also had to gather roots and plants from the field and forest for much of their ingredients. Then they dried them, boiled them, or ground them to a form they could use.

Colonial druggists didn’t need special training to open a shop in early times. Anyone could prepare medicines and then hope that something in them would help a headache or a cold. The medicines usually were bitter and unpleasant to taste. Even if the ingredients didn’t help the patients still might have claimed to be cured—just so they didn’t have to take the medicine anymore!
Darken the circles for the correct answers to questions 17 through 24. Mark only one answer for each question.

17. How should you correct the error in number 1?
   ○ A. change early America, to Early America,
   ○ B. change America, druggists to American druggists
   ○ C. change America, druggists to America druggists
   ○ D. There is no error.

18. How should you correct the error in number 2?
   ○ A. change themself to themselves
   ○ B. change themself to theirself
   ○ C. change themself to theirseves
   ○ D. There is no error.

19. How should you correct the error in number 3?
   ○ A. change sickness. Medicine to sickness, medicine
   ○ B. change Medicine was to Medicine is
   ○ C. change very, new to very new
   ○ D. There is no error.

20. How should you correct the error in number 4?
   ○ A. change into to in to
   ○ B. change prescription to perscription
   ○ C. change sometimes take to sometimes took
   ○ D. There is no error.

21. How should you correct the error in number 5?
   ○ A. change for to of
   ○ B. change Colonial to colonial
   ○ C. change druggists to druggists'
   ○ D. There is no error.

22. How should you correct the error in number 6?
   ○ A. change roots to routes
   ○ B. change forest to forrest
   ○ C. change much to many
   ○ D. There is no error.

23. How should you correct the error in number 7?
   ○ A. change didn’t to doesn’t
   ○ B. change didn’t to didn’t
   ○ C. change didn’t to don’t
   ○ D. There is no error.

24. How should you correct the error in number 8?
   ○ A. change Even if to Even, if
   ○ B. change help to help,
   ○ C. change patients to patience
   ○ D. There is no error.

Note: This session is the same length as the one on the real test.
NO TEST MATERIAL ON THIS PAGE
Mathematics
Grade 8
Practice Test

NOTE: You will be given a Mathematics Reference Sheet to use for the entire mathematics test.
Session 1—Mathematics (No Calculator)

For questions 1 through 8, darken the circle beside the correct answer. Mark only one answer for each question.

You may NOT use a calculator for this session.

1. Donna brought 3 baseball cards to school on Monday. Every day that week she brought twice as many baseball cards as the day before. How many baseball cards did Donna bring to school on Friday?
   ○ A. 15
   ○ B. 24
   ○ C. 30
   ○ D. 48

2. A farmer’s cornfield has 617 rows of corn. Harvesting the first 50 rows yielded 8 truckloads of corn. Which of the following is the best estimate of the total number of truckloads the farmer will get from the cornfield?
   ○ A. 400 truckloads
   ○ B. 200 truckloads
   ○ C. 100 truckloads
   ○ D. 70 truckloads

3. A straight line segment could not be drawn on the surface of which of the following solids?
   ○ A.
   ○ B.
   ○ C.
   ○ D.
Use the information and graph below to answer question 4.

4. Forty-five students at Riverside Middle School were surveyed about their favorite type of music. The graph below shows the survey results.

If there is a total of 270 students at Riverside School, about how many of them would be expected to prefer jazz music?

○ A. 108
○ B. 90
○ C. 18
○ D. 15

5. A restaurant has small tables ($s$) and large tables ($l$). Small tables seat four people each, and large tables seat eight people each. Which inequality shows the maximum number of people ($p$) that can be seated at the restaurant?

○ A. $p \geq 8l + 4s$
○ B. $p \leq 8l + 4s$
○ C. $p > 8l + 4s$
○ D. $p < 8l + 4s$

6. Which equation represents the data shown in the table?

<table>
<thead>
<tr>
<th>$x$</th>
<th>$y$</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>-2</td>
<td>-1</td>
</tr>
<tr>
<td>-3</td>
<td>-3</td>
</tr>
</tbody>
</table>

○ A. $y = x + 6$
○ B. $y = 3x + 2$
○ C. $y = 2x + 3$
○ D. $y = 4x - 2$
Use the Venn diagram below to answer question 7.

7. If you put the numbers 1 through 12 in the appropriate areas of the Venn diagram, which numbers would be in the shaded area?

- A. 10, 12
- B. 2, 4
- C. 5, 7, 9
- D. 6, 8

Use the figure below to answer question 8.

8. In \( \triangle ABC \), the measure of \( \angle A \) is

- A. 25°.
- B. 40°.
- C. 45°.
- D. 50°.

**NOTE:** On the real test, this session has 30 questions.
9. Sarah’s car gets about 27 miles per gallon and can travel a maximum of 408 miles without refueling. What is the maximum number of gallons of gas that the tank in Sarah’s car can hold?

- A. 13 gallons
- B. 15 gallons
- C. 24 gallons
- D. 27 gallons

10. Gena’s living room has an area of 36 square yards. What is the area of Gena’s living room in square feet?

- A. 36 square feet
- B. 72 square feet
- C. 144 square feet
- D. 324 square feet

11. An electronic device beeps every 21 seconds. Another beeps every 28 seconds. If they both start beeping at the same time, how many seconds will it be before the next time they beep together?

- A. 588 seconds
- B. 196 seconds
- C. 84 seconds
- D. 49 seconds

12. Which figure has exactly one line of symmetry?

- A.
- B.
- C.
- D.
13. What number goes in the box in the following sequence?
   5, 11, 23, $\Box$, 95, 191
   
   - A. 58
   - B. 47
   - C. 46
   - D. 41

Use the table below to answer question 14.

**Math Test Results—Ms. Washington’s Class**

<table>
<thead>
<tr>
<th>Time to Complete Test (in minutes)</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>7</td>
</tr>
<tr>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>32</td>
<td>6</td>
</tr>
<tr>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

14. What is the probability that a student in Ms. Washington’s class completed the test in 30 minutes?
   
   - A. $\frac{1}{20}$
   - B. $\frac{1}{17}$
   - C. $\frac{10}{27}$
   - D. $\frac{10}{30}$

15. Mei’s bank balance was $42.67. Her deposits and withdrawals since then can be represented as + $50, −$15, −$21, + $16.25, + $25. What is her bank balance now?
   
   - A. $55.25$
   - B. $97.92$
   - C. $107.42$
   - D. $127.25$

16. Mary plans to put carpeting in her house. The floor plan shows the part of her house that will be carpeted. How many square feet of carpet does she need?

   - A. 175 square feet
   - B. 200 square feet
   - C. 225 square feet
   - D. 250 square feet

**Note:** On the real test, this session has 30 questions.
17. Leanne goes to college in Louisiana, and her family lives in New York. Last week, Leanne’s mother made four evening telephone calls to her. Listed below are the charges for the telephone calls.

<table>
<thead>
<tr>
<th>Charges</th>
<th>Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.60</td>
<td>4</td>
</tr>
<tr>
<td>$1.50</td>
<td>10</td>
</tr>
<tr>
<td>$1.80</td>
<td>12</td>
</tr>
<tr>
<td>$4.50</td>
<td>30</td>
</tr>
</tbody>
</table>

A. Based on this information, what would be the charge for a 50-minute evening phone call?

B. What is the maximum number of minutes a phone call could last for a charge of less than $5.00? Explain your reasoning.

C. What would be the cost \( (c) \) of an \( n \)-minute phone call to Leanne from her mother? Write your answer in the form of an equation where \( c \) is the cost, and \( n \) is the number of minutes.

NOTE: On the real test, this session is in the answer document and has four questions.
Science
Grade 8
Practice Test
Session 1—Multiple-Choice Questions

For questions 1 through 8, darken the circle beside the correct answer. Mark only one answer for each question.

Use the food web below to answer question 1.

1. Which group is not represented in the food web?

○ A. producers
○ B. primary consumers
○ C. secondary consumers
○ D. decomposers

2. Which definition best defines the term pollutant?

○ A. anything humans add to the atmosphere and oceans
○ B. any substance that is harmful to the environment
○ C. any substance that is a waste product of industry
○ D. a substance that does not break down over time

3. Jerry threw a ball into the air. It followed a curved path and soon fell to the ground because

○ A. air friction stopped the ball.
○ B. gravity changed the ball’s direction.
○ C. the ball was not thrown hard enough.
○ D. the ball was not thrown straight up.

GO ON TO THE NEXT PAGE
4. El Cajon Pass in California is becoming higher than the land around it at a rate of nearly one centimeter each year. Which statement is true about the area?
   - A. Erosion is slower than uplift at El Cajon Pass.
   - B. Plates are separating at El Cajon Pass.
   - C. Mountain building is slower than erosion at El Cajon Pass.
   - D. Erosion and uplift are balanced at El Cajon Pass.

5. Jo Anne took a large beaker of clean water and carefully added one drop of blue food coloring to the edge of the water’s surface. She did not touch or move the beaker. At first, she saw blue streaks as the food coloring sank into the water, but gradually the color of the entire beaker of water became evenly blue. What caused the blue food coloring to be mixed throughout the water?
   - A. Water molecules hitting the food coloring molecules caused the mixing.
   - B. Light shining on the surface of the water caused the mixing.
   - C. A chemical reaction between the water and the food coloring formed a new, light blue compound.
   - D. The water interacted with the food coloring, causing the blue color to fade.

6. Many scientists accept the theory that excess emission of carbon dioxide from cars and industry causes a layer of gas in the upper atmosphere that traps heat. This, in turn, causes the average temperature on Earth to rise. Which observation supports this theory?
   - A. The summer of 1998 was one of the hottest summer seasons on record.
   - B. Carbon dioxide gas from cars and industry is a product of burning that produces heat.
   - C. Carbon dioxide in the upper atmosphere reflects heat radiated from Earth’s surface.
   - D. Radiation on Earth’s surface is increasing because of a hole in the ozone layer.
7. Which statement is the **best** description of a process that happens in the rock cycle?

- A. Rocks on old mountains are gradually weathered away while mountain building and volcanism form new mountains.
- B. Once formed, rocks stay in place until rocks above them are weathered away and they reach the surface.
- C. As sedimentary rocks are buried deep below other rocks, they are changed by heat and pressure, eventually return to the surface, and are weathered again.
- D. Younger sedimentary rocks are always deposited on top of older metamorphic or igneous rocks.

Use the diagrams below of an animal cell and a plant cell to answer question 8.

8. Features of plant cells that clearly make them different from animal cells are

- A. a larger nucleus and fewer chromosomes.
- B. a rigid cell wall and chloroplasts.
- C. more cytoplasm and smaller vacuoles.
- D. a changing size and indefinite shape.

**NOTE:** On the real test, this session has 40 questions.
9. The planets move at different speeds and require different amounts of time to circle the Sun. The following graph shows the number of Earth days it takes for each of the four planets to move around the Sun once.

Using information from the graph, name each planet that has a year that is shorter than a year on Earth. Explain how you arrived at your answer.
10. When a population of mice is infected with parasites, many of the mice die from the parasitic infection, but some mice appear as healthy as they were before being infected. Some people are considering using these parasites to control the mouse population in people’s homes.

Give one advantage and one disadvantage of using these parasites instead of mouse traps or poisons to limit the population of mice.

Advantage:

Disadvantage:
Write your answers to questions 11 through 14 on the lines or in the spaces provided. Be sure to write clearly. These questions have more than one part. Even if you cannot answer all parts, answer as many as you can. On the real test, you may still get points for answering part of a question.

**TASK DESCRIPTION**

When heat moves quickly through a material, the material is said to be a good conductor. When heat moves slowly through a material, the material is called a good insulator. The students in an eighth-grade class were studying how well different materials conduct heat.

They used the following procedure:

1. Students were given three cylinders of equal size and thickness. One was copper, one glass, and one Styrofoam.
2. An equal volume of room-temperature water was measured into each cylinder.
3. The cylinders were sealed with large corks.
4. Thermometers were inserted through holes in the corks.
5. The cylinders were placed in a hot-water bath with a starting temperature of 65°C (about the same as a hot drink).
6. Five minutes later, the students read the temperature of the water in each cylinder. Their results are recorded in table A on the next page.
11. **A.** According to the results in Table A, which material is the **best** conductor of heat?

**B.** How do you know?
Use the diagram and the data table below to answer question 12.

Roy repeated the experiment at home using a Styrofoam cup, but his results differed from those obtained in class. His experimental setup and his results are shown below.

![Diagram of experiment](image)

**TABLE B**
**Roy’s Results**

<table>
<thead>
<tr>
<th>Cup Material</th>
<th>Initial Temperature</th>
<th>Temperature after 5 Minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Styrofoam</td>
<td>22°C</td>
<td>25°C</td>
</tr>
</tbody>
</table>

12. Describe **two** things that could have caused Roy's results to differ from those of the class.

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Use the information and the data table below to answer question 13.

One of the students wanted to see how temperature changed over time inside one of the cylinders. He recorded the temperature inside the glass cylinder every minute for five minutes. His results are shown in the data table below.

<table>
<thead>
<tr>
<th>Time (minutes)</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>1</td>
<td>32</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>44</td>
</tr>
<tr>
<td>4</td>
<td>46</td>
</tr>
<tr>
<td>5</td>
<td>48</td>
</tr>
</tbody>
</table>

13. Use the grid below to create a line graph showing the results noted in the data table above. First, label the axes and plot the six points. Then connect the points to show how temperature changed with time.
14. There are three ways heat is transferred. One of them is conduction. This is how heat moved through the cylinder walls in this experiment. Name and describe the two other types of heat transfer.

NOTE: On the real test, this session is in the answer document. This session is the same length as the one on the real test.
NO TEST MATERIAL
ON THIS PAGE
Social Studies
Grade 8
Practice Test
Use the map below to answer question 1.

Population Density, 1990

1. According to the map, approximately how many people does Louisiana have per square mile?
   - A. 26–50
   - B. 51–100
   - C. 101–200
   - D. 201–500
2. How can a judge ensure that the right of a person to a fair trial is secured?
   - A. by selecting jurors who are not biased about the case
   - B. by selecting the first jurors who arrive at court
   - C. by selecting jurors who already have information about the case
   - D. by selecting jurors who have enough time to hear the case

3. Newspapers have recently reported that some fast-food restaurants and other businesses have offered bonuses to new employees and are paying more than the minimum wage for entry-level work. What is the most likely cause of this situation?
   - A. The businesses want to improve their reputations as good places to work.
   - B. The businesses are making large profits and want to share them with employees.
   - C. The businesses are trying to cut their profit margins and pay lower taxes.
   - D. The businesses cannot find workers because unemployment is low.

---

Use the poem below to answer question 4.

**One-Way Ticket**

I am fed up
With Jim Crow laws.
People who are cruel
And afraid, . . .
I pick up my life
And take it away
On a one-way ticket—
Gone up North,
Gone out West,
Gone!

—Langston Hughes

4. What was the purpose of the “Jim Crow laws” referred to in the poem?
   - A. to guarantee suffrage for African Americans
   - B. to enforce segregation and discrimination
   - C. to regulate the policies of Reconstruction
   - D. to provide land for freed slaves after the Civil War
5. In 1998, California had forty-five representatives in the U.S. House of Representatives while Louisiana had seven. What accounts for the difference in these numbers?
   ○ A. area of the states
   ○ B. population of the states
   ○ C. numbers of counties or parishes in the states
   ○ D. wealth of the states

Use the descriptions below to answer question 6.

- New England
- The Great Plains
- The Sunbelt
- The Great Northwest
- America’s Breadbasket

6. The descriptions above all refer to different
   ○ A. neighborhoods.
   ○ B. urban areas.
   ○ C. regions.
   ○ D. states.

7. The Native Americans of the Poverty Point culture are known for having built large earthen mounds. Archeologists believe these mounds were used for
   ○ A. homes for all of the tribe’s families.
   ○ B. protection from enemies.
   ○ C. farming purposes.
   ○ D. trading centers and religious gatherings.

8. Historically, the oil industry has provided great economic benefits to individuals, businesses, and the state of Louisiana. What has been a major economic cost of this industry to the citizens of Louisiana?
   ○ A. increased population
   ○ B. air and water pollution
   ○ C. better standard of living
   ○ D. higher taxes

**NOTE:** On the real test, sessions 1 and 2 are separate and each has 30 multiple-choice questions.
NO TEST MATERIAL ON THIS PAGE
Write your answers to question 9 on the lines provided. Be sure to write clearly. This question has more than one part. Even if you cannot answer all parts, answer as many as you can. On the real test, you may still get points for answering part of a question.

Use the illustrations below to answer question 9.
9. A. In the mid-1800s, goods were delivered by barge and train. Identify and describe an economic advantage of each type of transportation method.

barge: ____________________________________________________________

_______________________________________________________________

train: __________________________________________________________

_______________________________________________________________

B. You are a railroad builder in the 1800s. Identify and describe one economic factor you would consider when deciding where to build a railroad.

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

C. Describe one way the invention of the steamboat increased the economic activity of river states in the 1800s.

_______________________________________________________________

_______________________________________________________________

NOTE: On the real test, this session is in the answer document and has four constructed-response questions.
**Session 1: Writing**

**Example of a well-written composition by an 8th-grade student:**

Have you ever tried out for something and didn’t make it? Or have you ever said the wrong words at the wrong time? Sometimes you might even wish for a “geni” to make things better. Well, what would you wish for if you had one wish? I know exactly what I would wish for. I would turn back time to February 1, 2001. That was the day of colorguard tryouts. I could have done better.

Thursday, February 1, 2001. That was supposed to be the day when everything was to go my way. That afternoon I was going to try out for colorguard at my school. I rushed the very end of my routine and didn’t make it. My heart was like shattered glass, and I could not put it back together. If I had one wish it would be to turn back time. I would make it February 1, 2001 again. This time I would be more focused and smile bigger. My eyes would lock onto one item and not move. The end of my routine would be picture perfect. Even if I didn’t make it the second time around at least I could say I did better. Maybe if I could just say I tried harder I would feel better. Then again, what will telling myself what I should have done fix?

Basically I wish I had done better for tryouts. I wish that I could turn back time but what’s done is done. I could have smiled more and been more focused. Sitting around and telling myself what I should have done won’t change a thing. Maybe a “geni” and one wish could.

**This writing shows strong skills because:**

- It establishes a purpose and supports it with vivid and precise details (“I rushed the very end of my routine” and “My heart was like shattered glass, and I could not put it back together”).
- It is organized. The writer mentions using a genie to make a wish come true in the beginning and at the end, which creates a framework for the essay.
- The writer’s voice, or personality, comes through clearly (“This time I would be more focused and smile bigger. My eyes would lock onto one item and not move. The end of my routine would be picture perfect.”). By taking us back in time for an imaginary second chance at the color guard tryout, the writer creates for the reader the same sense of frustration he or she feels from not making the tryouts.
- Vocabulary is varied.
- Though there are some spelling errors (“geni” and “colorguard”) and some missing commas (before the coordinating conjunction “but” in “I wish that I could turn back time but...”), usage is correct, and the writer attempted various sentence structures.
**English Language Arts (continued)**

**Session 2: Reading and Responding**

2. A  
3. B  
4. D  
5. A  
6. **Example of a well-written response:**  
   This passage gives straightforward information. It explains how to do something by providing step-by-step instructions. It is different from an amusing passage, which would include something funny, such as a joke, an exaggeration, or something ironic.
7. B  
8. A  
9. B  
10. C  
11. **Some possible responses include:**  
   - Everyone seems strange to people or creatures who are different from them (the people of Earth and the horse-spider creatures each think the other group is very strange).  
   - If someone seems odd to you, you probably seem odd to that person (neither group realizes that the other group is observing it and thinking it strange).  
   - People or creatures who seem different from you may be like you in ways you don’t know about (the horse-spiders also have families, go on trips, use money, go to zoos).  
   - A really good businessman can make money from two groups at once (Professor Hugo is being paid by each group for the privilege of observing the other group).

**Session 3: Using Information Resources**

12. B  
13. D  
14. A  
15. A  

**Session 4: Proofreading**

17. D  
18. A  
19. C  
20. C  
21. B  
22. C  
23. D  
24. B
Mathematics

Session 1: No Calculator
1. D
2. C
3. D
4. B
5. B
6. C
7. D
8. A

Session 2: Calculator
9. B
10. D
11. C
12. A
13. B
14. C
15. B
16. C

Session 3: Calculator
17. Example of a correct response by an 8th-grade student:
   A. The charge for a 50-minute evening phone call would be $7.50
      (50 x 0.15 = 7.50).
   B. The maximum number of minutes a phone call could be for less than $5.00
      would be 33 minutes on the phone. If you multiply the charge per minute,
      which is .15 times 33 minutes, your product would be $4.95. Anything over
      that would be over $5.00.
   C. $c = .15n$
      cost = .15 times the number of minutes
Session 1:
1. D  5. A
2. B  6. C
3. B  7. C

Session 2:
9. Mercury and Venus. They are closer to the Sun and take less time to orbit the Sun. Mercury takes less than 100 Earth days; Venus takes less than 250 Earth days.

10. Advantages include:
    - Mice will spread the parasites to other mice.
    - This method is cheaper.
    - This method is more specific and direct than a trap or poison.

Disadvantages include:
    - Some mice are resistant.
    - Mice that are resistant to parasites will continue to reproduce and pass their genes on to their offspring, which will also be resistant.
    - The parasites may infect pets or people.

Session 3:
11. A. copper
    B. The water in the copper cylinder heated up faster.

12. Some possible responses include:
    - The shape of the containers was not the same.
    - The cup was not the same thickness as the containers used in class.
    - The thermometer was inserted differently.
    - No cork was used.
    - The water level in the cup was not the same (too high/too low).

13. Example of a student’s graph:

14. Example of a correct response by an 8th-grade student:
One other way that heat can be transferred is through convection. This is when warm and cold air are moved around in a circle. Warm air rises up. Then it becomes cooler and moves back down. Then the process is repeated. Another way heat can be transferred is radiation. One example of radiation is the sun. Heat from the sun is moved through ultraviolet rays down to Earth. Other examples of radiation are microwaves and nuclear power plants.
# Social Studies

**Sessions 1 and 2:**

1. B  
2. A  
3. D  
4. B  
5. B  
6. C  
7. D  
8. B

**Session 3:**

**Possible answers may include:**

9. A. barge  
   - cheaper to operate  
   - self-propelled  
   - cheaper to build  
   - cheaper freight rates for shippers

   train  
   - delivered goods faster  
   - could charge more for transport of goods and people since it was more direct, faster, and sometimes more luxurious

B. **One** economic factor to consider:  
   - whether or not a particular railroad route would attract enough passengers and freight to recoup the investment (which would include paying railroad builders, maintenance workers, and train operators, and paying for building materials and fuel)  
   - the proximity of the railroad to competing railroads or other forms of transportation  
   - the proximity of railroad lines to fuel sources or coal mines  
   - the possibility that a state would impose local track size requirements that could make the construction of interstate railroad webs difficult  
   - the cost of building railroads across particular terrains

C. **One** way the steamboat increased economic activity:  
   - transported more goods and people between river cities  
   - allowed for easier transportation of goods and people upstream  
   - increased the need for services (such as hotels and stores) in river cities
ACKNOWLEDGMENTS

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