IV. English Language Arts, Reading Comprehension, Grade 5
Grade 5 English Language Arts
Reading Comprehension Test

The spring 2009 grade 5 MCAS English Language Arts Reading Comprehension test was based on learning standards in the two content strands of the Massachusetts English Language Arts Curriculum Framework (2001) listed below. Specific learning standards for grade 5 are found in the Supplement to the Massachusetts English Language Arts Curriculum Framework (2004). Page numbers for the learning standards appear in parentheses.

- Language (Framework, pages 19–26; Supplement, page 10)
- Reading and Literature (Framework, pages 35–64; Supplement, pages 11–13)

The English Language Arts Curriculum Framework and Supplement are available on the Department website at www.doe.mass.edu/frameworks/current.html.

In test item analysis reports and on the Subject Area Subscore pages of the MCAS School Reports and District Reports, ELA Reading Comprehension test results are reported under two MCAS reporting categories: Language and Reading and Literature, which are identical to the two Framework content strands listed above.

Test Sessions and Content Overview

The MCAS grade 5 ELA Reading Comprehension test included three separate test sessions. Each session included reading passages, followed by multiple-choice and open-response questions. Selected common reading passages and approximately half of the common test items are shown on the following pages as they appeared in test booklets.

Reference Materials and Tools

The use of bilingual word-to-word dictionaries was allowed for current and former limited English proficient students only, during all three ELA Reading Comprehension test sessions. No other reference materials were allowed during any ELA Reading Comprehension test session.

Cross-Reference Information

The table at the conclusion of this chapter indicates each released item’s reporting category and the Framework general standard it assesses. The correct answers for released multiple-choice questions are also displayed in the table.
DIRECTIONS
This session contains one reading selection with eight multiple-choice questions and one open-response question. Mark your answers to these questions in the spaces provided in your Student Answer Booklet.

You may have seen fireflies blinking and flashing on a summer night. As this article explains, fireflies use light to communicate with one another in interesting ways. Read the article about fireflies and answer the questions that follow.

fireflies: the twinkle in nature’s eye
by Terry Krautwurst

1 Blink . . . flash . . . blink blink . . . if you’ve seen fireflies flashing in the night, you know how magical they seem—like tiny, floating lights drifting in air. Well, the truth is, fireflies are magical in many ways. Scientists are still trying to figure them out.

2 There are almost 2,000 different kinds of fireflies. Actually, they’re not flies at all. They’re flying beetles, members of a family called Lampryidae, which means “shining fire.” Not all parts of the world are lucky enough to have them. For instance, there are no fireflies at all in Europe or in very dry places such as the American Southwest. Fireflies live in most other regions of the United States, though. There are about 100 kinds in North America.

NIGHT COURTING
3 Where there are fireflies, there are usually at least five or six different kinds, or species, sharing the same territory. Each kind has its own special pattern of flashing so that males and females of the same species can find each other in the dark.

4 The male pyralis firefly, for instance, always swoops upward as he flashes, making a little J of light. He swoops and flashes about every six seconds.

Male scintillating fireflies fly straight and level, blinking single flashes over and over. Pennsylvania firefly males perch among the treetops and make four or five quick flashes in a row.

5 In fact, all the fireflies you see flying and flashing in the air at night are males. The females stay on the ground or in a low bush.

6 When a female spies a male firefly winking her kind of wink, she waits just the right amount of time for her species and then answers back with the right kind of flash. For instance, a female pyralis firefly flashes back about two seconds after the male. Then the male answers her with his J. She waits again and answers him, and so on.

7 As the fireflies “talk,” the male comes closer and closer. But the two don’t always end up mating. Males that flash faster or brighter than the average firefly may get a Fireflies aren’t flies at all. They’re beetles. Beneath this firefly’s wings is its tiny flashy “light bulb.”
super-bright reaction from the female. But less impressive males may get a cold shoulder—a ho-hum dim blink—or no more talk at all. (Get lost, buddy!)

After mating, the female firefly lays her eggs on damp moss or grass. When the eggs hatch, the little worm-like larvae glow constantly. That’s why they’re called glowworms.

**LIGHT FACTORY**

The light fireflies make is called bioluminescence—light created by a chemical reaction inside a living thing. Some kinds of mushrooms, algae, and other organisms are bioluminescent, too. But the firefly is the world’s most famous living light maker.

How does the light happen? A firefly’s “lantern” is made of two layers inside its abdomen. One layer is a reflector, to make the light brighter. The other layer produces two special chemicals, luciferin and luciferase. When the chemicals combine with oxygen and the insect’s own tissues, they give off energy in the form of—you guessed it—light. Whoa, look at the glow!

**FIREFLY WATCHING**

Fireflies are active in early summer, especially on warm, moist, moonless nights. Watch carefully for the differences between kinds of fireflies. Some kinds come out at dusk. Others don’t come out until it’s completely dark. Some flash yellow, some green, and some orange. Some float slowly just above the ground. Others cruise at eye level or flit among the treetops. Some kinds of fireflies flash for only about 20 minutes a night. Others flash for hours.

If you’re careful not to hurt them, it’s okay to catch fireflies in a jar (poke a few holes in the lid) to get a closer look. Just be sure to let them go the same night, after you’ve finished watching them.

Don’t forget to try “talking” to fireflies, too...

By watching fireflies carefully and imitating their flashes, you can “talk” them into coming closer to you. (Who knows? Maybe they’ll teach you how to glow!)

**what you need**

A small flashlight or a penlight
A grassy lawn or meadow with flashing fireflies

**what to do**

1. Stand quietly and watch the fireflies. The ones flashing while they’re flying and moving around are all males. You want to find a female. Look for a flashing firefly that stays in the same place on the ground, or in a low bush. That’s a female.

2. When you spot her, wait till she flashes again. Does she flash just once or several times? Is the flash long or slow?

3. After you’ve figured out how she flashes, count the number of seconds between her flashes. (Just count slowly, or say “one elephant, two elephant, three elephant,” and so on.)
Now you’re ready to try imitating a female firefly. Sit in the grass and hold your flashlight so it’s pointing into the grass and will make only a small, bug-size light (if the light is too bright, hold a green leaf over it to dim it). Now, turn on the flashlight, imitate the flash you saw, turn it off, and count the same number of seconds you counted between the real female’s flashes. Then repeat the flash, count again, flash again, count again, flash—and so on.

If you’re lucky enough to have figured out the right code, male fireflies will be fooled and start “talking” to you by flashing back and flying closer. Just keep on flashing. Eventually, one will land near your light. Congratulations. You’ve just had your first firefly conversation!

**something else to try:**
If you can’t find a flashing female, try imitating a male instead. Watch and count his flashes just as you did above, but when you use your flashlight, stand instead of sitting, and move the flashlight to mimic the firefly’s movement as it flies. Watch for answering females near the ground.
1. According to the article, which sense does the firefly use to communicate with other fireflies?
   A. sight
   B. taste
   C. smell
   D. hearing

2. According to the article, why would a female firefly blink brightly?
   A. to find a place to lay eggs
   B. to help her see in the dark
   C. to show her interest in a particular male
   D. to scare off enemies that are chasing her

3. According to the article, what is one reason a person might see different patterns of light produced by fireflies?
   A. There are other kinds of insects in the area.
   B. The light of a firefly appears brighter at night.
   C. There is a variety of firefly species in the area.
   D. The colors of light change depending on the time of night.

4. What is the main purpose of the section titled “talking to fireflies”?
   A. to give information about how fireflies create light
   B. to give information about where to find fireflies
   C. to give directions for keeping fireflies as pets
   D. to give directions for communicating with fireflies

5. How is the article mainly organized?
   A. as problems and solutions
   B. by topic with supporting details
   C. by comparing and contrasting ideas
   D. from the most important ideas to the least

6. Which of the following best describes the author’s tone in the article?
   A. joking and humorous
   B. strong and persuasive
   C. serious and questioning
   D. friendly and informative
7. Read the sentence from paragraph 9 in the box below.

Some kinds of mushrooms, algae, and other organisms are bioluminescent, too.

In the sentence, which of the following is the best definition of the word organisms?
A. creatures that scientists study
B. plants that grow in the dark
C. chemical reactions
D. living things

8. Read the text from the section titled “something else to try” in the box below.

... move the flashlight to mimic the firefly’s movement as it flies.

What does mimic mean as it is used in the text?
A. copy
B. capture
C. disguise
D. encourage

Question 9 is an open-response question.

- Read the question carefully.
- Explain your answer.
- Add supporting details.
- Double-check your work.

Write your answer to question 9 in the space provided in your Student Answer Booklet.

9. Based on the article, explain why fireflies might be considered interesting insects. Support your answer with important information from the article.
Caddie's wandering feet took her upstairs to the attic. Here were old boxes from Boston, and a beautiful round-topped trunk, lined with colored paper, with pictures of smiling children decorating the various compartments. And on a low shelf was a row of clocks, waiting for Father's expert hand to mend them. The attic was drafty, but, near the head of the stairs, a big brick chimney came up from the kitchen, and there it was warm. Caddie drew some of the boxes over to the chimney and sat with her back against it, while she looked through them. Most of the things she had seen often enough. There were too many people in the family to allow old things to accumulate, unused. Only two things which she found puzzled and surprised Caddie. She found them in the bottom of one of the boxes, and she knew that she had never seen them before. They were a pair of little red breeches and a pair of small, wooden-soled clogs. Surely they had never belonged either to Warren or to Tom. For some time they puzzled and excited her. Then she put them neatly away in the box, resolved to ask Mother about them as soon as she went downstairs.

Now she turned her attention to the clocks. They had been at the back of her mind all the time. She had been reserving them as a sort of final treat, as she often did with the things she liked best. She picked them up, one by one, and shook them to see if they would start ticking. Among the others stood the circuit rider's clock. Caddie remembered what he had said—it was the "face of a dead friend." Surely it would soon be time for the circuit rider to return, and Father had not yet started work upon the clock. How dreadful it would be, if the circuit rider should return and find his clock unmended! Caddie turned the clock thoughtfully in her hands. She had seen Father mend so many of them! Of course, they were not all alike inside, but she knew how the little screws came out and how the back came off, and then inside you saw all of the fascinating wheels and gimcracks. Why shouldn’t she mend it herself? She was sure that she could. She sat down with her back against the chimney and began to loosen the screws.

1 accumulate — to pile up or collect
2 breeches — pants
3 circuit rider — a judge who travels and hears legal cases in various towns
4 gimcracks — small parts
It was more of a task than she had supposed. But Father’s tools were there on the shelf, and she found a screwdriver of just the size she needed. The back came off, revealing the wheels and springs. Caddie knew enough about clocks to see what was the matter. The circuit rider had wound his clock too tightly, and in some way the spring had caught so that it could not unwind as it should have done. Caddie looked it over carefully. Then she began to loosen the screws which held it in place. She had to loosen several before she found the right ones. Time slipped away unheeded, she was so deeply absorbed in the clock. Her cheeks were flushed and her face, bent low over her work, was curtained by her dangling curls.

And then at last she loosened the right screw! Whizz! bang! the spring flew out with a whirr and hit the low ceiling. Screws and cog wheels flew in every direction. It was like an explosion. The circuit rider’s clock had suddenly flown to pieces! Caddie uttered a cry of despair and looked wildly about her. What would Father say?

There was a low chuckle from the stairway. Caddie followed the sound with startled eyes. Standing on one of the lower steps, so that his eyes were just above the level of the attic floor, stood her father. How long he had been watching her, she had no idea.

“Father,” she wailed, “it went to pieces! The circuit rider’s clock!” Her father leaned against the wall of the staircase and laughed. Caddie had almost never seen him laugh so hard. She, herself, did not know whether to laugh or cry.

“Father,” she repeated, “it went to pieces!”

Still laughing, Mr. Woodlawn came up the stairs.

“Let’s pick up the pieces,” he said. “We’re going to put that clock together, Caddie. I’ve been needing a partner in my clock business for a long time. I don’t know why I never thought of you before!”

“A partner!” gasped Caddie. She began to race about the attic, picking up screws and springs. “A real partner?”

“If you do well,” said her father. “Clara is too busy with Mother, and Tom hasn’t the patience nor the inclination. Yes, Caddie, I believe you’ll be my partner.”

Together they sat on the attic floor and put the circuit rider’s clock in order. Mr. Woodlawn explained and demonstrated, while Caddie’s eager fingers did the work. Together they cleaned and oiled the parts and made the nice adjustments that were required. By the time the work was finished, it was growing dark in the attic.

“Now take that down and show your mother, Caddie,” said Mr. Woodlawn. Together they marched downstairs, one as proud as the other, and Caddie set the circuit rider’s clock in the middle of the dining-room table.
“So you mended Mr. Tanner’s clock, did you, Johnny?” said Mrs. Woodlawn carelessly.

“No, not this time,” said her husband, with a twinkle in his eye. “Caddie did it.”

“Caddie did it?” Mrs. Woodlawn and Clara and the children, who had just come in from school, crowded around to see.

“It runs,” marveled Tom, and Warren uttered an admiring “Golly!”

The circuit rider’s clock no longer looked like the “face of a dead friend.” It appeared to be very much alive and spoke up with a cheerful tick.

Caddie never forgot the lesson she had learned that day in the attic. Wherever she was, all through her long and busy life, clocks ticked about her pleasantly, and, if they didn’t, she knew the reason why.


Read the sentence from paragraph 1 in the box below.

Caddie’s wandering feet took her upstairs to the attic.

What does the word “wandering” suggest about Caddie?
A. She is hiding from her brothers in the attic.
B. She is not in the attic for any particular reason.
C. She is lost and finds herself in the attic by accident.
D. She is not happy that she must spend time in the attic.

What do the descriptions in paragraph 1 suggest about the attic?
A. It is an interesting place to explore.
B. It is where Caddie has her workshop.
C. It is messy and needs to be cleaned up.
D. It is full of items that Caddie has stored.
12 In paragraph 2, why is the circuit rider’s clock most likely referred to as the “face of a dead friend”?
A. because it no longer works
B. because it holds sad memories
C. because it has no hands or numbers
D. because it is different from other clocks

13 In paragraph 3, why are Caddie’s cheeks flushed?
A. She is afraid of the strange things in the attic.
B. She is working very hard to mend the clock.
C. She is embarrassed that she broke the clock.
D. She is excited about her new discoveries in the attic.

14 In paragraph 10, what does Caddie’s reaction to her father’s idea suggest?
A. She is excited to work with him.
B. She wants to keep their agreement secret.
C. She is upset that he found out about the clock.
D. She wishes she could repair the clock by herself.

15 Based on paragraphs 16 and 17, Caddie’s family finds her achievement to be
A. helpful.
B. surprising.
C. unnecessary.
D. entertaining.

16 Read the sentence from paragraph 3 in the box below.
Time slipped away unheeded, she was so deeply absorbed in the clock.

In the sentence, what does the word unheeded mean?
A. sadly
B. slowly
C. unnoticed
D. undecided
Based on the story, describe Caddie’s character traits. Support your answer with important details from the story.
# Grade 5 English Language Arts

## Reading Comprehension

### Spring 2009 Released Items:

### Reporting Categories, Standards, and Correct Answers*

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Page No.</th>
<th>Reporting Category</th>
<th>Standard</th>
<th>Correct Answer (MC)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>Reading and Literature</td>
<td>8</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>42</td>
<td>Reading and Literature</td>
<td>8</td>
<td>C</td>
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<td>Reading and Literature</td>
<td>13</td>
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<td>42</td>
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<td>13</td>
<td>D</td>
</tr>
<tr>
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<td>42</td>
<td>Reading and Literature</td>
<td>13</td>
<td>B</td>
</tr>
<tr>
<td>6</td>
<td>42</td>
<td>Reading and Literature</td>
<td>10</td>
<td>D</td>
</tr>
<tr>
<td>7</td>
<td>43</td>
<td>Language</td>
<td>4</td>
<td>D</td>
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<tr>
<td>8</td>
<td>43</td>
<td>Language</td>
<td>4</td>
<td>A</td>
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<tr>
<td>9</td>
<td>43</td>
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<td>13</td>
<td></td>
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<tr>
<td>10</td>
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<td>15</td>
<td>B</td>
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<tr>
<td>11</td>
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<td>C</td>
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<td>17</td>
<td>48</td>
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<td>12</td>
<td></td>
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</tbody>
</table>

* Answers are provided here for multiple-choice items only. Sample responses and scoring guidelines for open-response items, which are indicated by shaded cells, will be posted to the Department’s website later this year.