

FCAT Sample Test Materials

These sample test materials are designed to help you prepare to answer FCAT questions. These materials introduce you to the kinds of questions you will answer when you take FCAT and include hints for responding to the different kinds of questions. The FCAT reading sample test materials for Grade 10 are composed of the books described below:

- Sample Test and Answer Book**
Includes sample reading passages, a sample test, a sample answer book, and instructions for completing the sample test. (Copies are available for all students in the tested grade.)
- Sample Answer Key**
Includes answers and explanations for the questions in the sample test. (Copies are available for classroom teachers only.)

= This book

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Hints for Taking the FCAT Reading Test

Here are some hints to help you do your best when you take the FCAT reading test. Keep these hints in mind when you answer the sample questions.

- ✓ **Learn how to answer each kind of question. FCAT reading tests have three types of questions: multiple-choice, short-response, and extended-response.**
- ✓ **Read the directions carefully. Ask your teacher to explain any directions you do not understand.**
- ✓ **Read the passages and questions very carefully. You may look back at a passage as often as you like.**
- ✓ **Answer the questions you are sure about first. If a question seems too difficult, skip it and go back to it later.**
- ✓ **Be sure to fill in the answer bubbles correctly. Do not make any stray marks around answer spaces.**
- ✓ **Think positively. Some questions may seem hard, but others will be easy.**
- ✓ **Check each answer to make sure it is the best answer for the question asked.**
- ✓ **Relax. Some people get nervous about tests. It's natural. Just do your best.**

How to Answer the “Read, Think, and Explain” Questions

Answers to the short- and extended-response questions can receive full or partial credit. You should try to answer these questions even if you are not sure of the correct answer. If a portion of the answer is correct, you will get a portion of the points.

- **Allow about 5 minutes to answer the short “Read, Think, and Explain” questions and about 10 to 15 minutes to answer the long ones.**
- **Read the question carefully.**
- **If you do not understand the question, go back and review the passage.**
- **Think carefully and organize your thoughts before starting to write the answers.**
- **Write your answer on the lines provided in the Answer Book.**
- **Remember to include details and information from the passage in your answer.**
- **Use clear, concise language to explain your answer.**
- **Be sure to answer every part of the question.**
- **Reread the answer to make sure it says what you want it to say.**

Directions for Taking the Reading Sample Test

This book contains four reading passages, 14 sample questions, and a Sample Answer Book. It should take about 30 to 45 minutes to read the passages and answer all the questions. You will mark your answers in the Sample Answer Book which begins on page 13. If you don't understand a question, just ask your teacher to explain it to you. Your teacher has the answers to the sample test questions.

Before you begin, remove the Sample Answer Book by tearing along the dotted line.

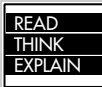
Sample Test Book



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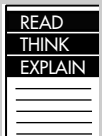
The Tree	Page 2
No Opportunity Gets Eclipsed!	Page 6
Get Serious! Eclipse Research	Page 7
Measuring the Sun's Diameter	Page 8

After you have read each passage, read the questions and then answer them in the Sample Answer Book.



This symbol appears next to questions that require short written answers.
Use about 5 minutes to answer each of these questions.

A complete and correct answer to each of these questions is worth 2 points.
A partially correct answer is worth 1 point.



This symbol appears next to questions that require longer written answers.
Use about 10 to 15 minutes to answer each of these questions.

A complete and correct answer to each of these questions is worth 4 points.
A partially correct answer is worth 1, 2, or 3 points.

Read the story "The Tree" before answering Numbers 1 through 7 in the Sample Answer Book.

THE TREE

BY LINDA MARASCO

IT WAS AT SUPPER THAT FATHER told us about the tree. "Saturday," he said in his authoritative voice, "we move the tree." Everyone stopped and turned to Father. "The tree with the scar," he said. "The one in the back. We'll move it to the front." Everyone was still looking at Father. He broke a piece of bread and dipped it in the moat of gravy around his potatoes.

Joe was the first to speak. He picked up his glass and twisted it in his hands, intently studying the liquid as it swirled. He cleared his throat.

"Eddie and I thought we might take the car over to the station Saturday and put it on the lift. I want to check the left rear tire, and that's the only day we can have the rack."

He looked up from his glass. Father nodded.

Mickey dropped his fork. "I won't be around either," he said. "Mark and I are going out to Freeport."

No one spoke.

"It's the first day off I've had in two weeks," he went on. "It's only fair that . . ." Then he stopped. Everyone was looking at Father.

"All right," he said. "Saturday is my day off, too, but all right." He looked at Diane and me. Diane stared back.

"I'm going to the movies with Fran," she began defensively. "I asked on Tuesday." She took her plate into the kitchen.

Father looked at me.

"What about you?" he asked.

I looked down at my potatoes.

"Joanne and I were going to play tennis."

Diane entered the room, her dark ponytail

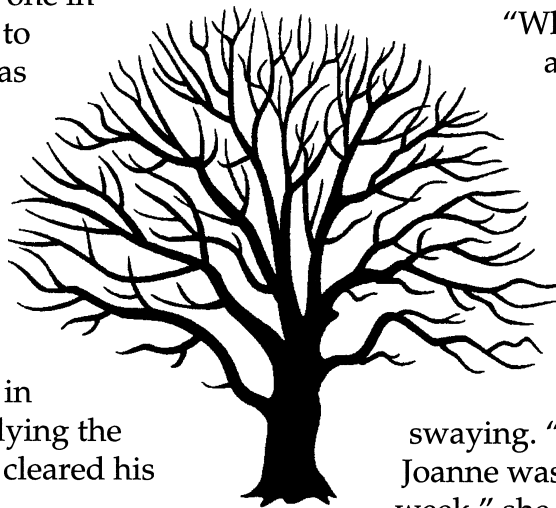
swaying. "I thought you said Joanne was upstate for the week," she said.

I turned around and shot her a look.

"Oh, *that* Joanne!" she said, almost dropping the teapot.

"All right," said Father. "I'll do it myself."

Mickey squirmed in his chair. Nobody went on eating except my father. Mother was the first to break the quiet after she poured herself a cup of tea.



"When I think of that tree . . ." she said as she raised and lowered the tea bag in the cup. "How old is it, Andy? Must be seventeen, eighteen years old. I remember you bought four trees when Joe was about two. Now that I think about it, it was kind of silly—planting them in the sand. There wasn't dirt there then. It's amazing that they grew."

She put down the tea bag and began to stir without looking at the cup. "But they *did* grow," she sighed. She reached for the sugar bowl and unconsciously put a teaspoonful of sugar into the cup.

"And I remember when a car hit the tree. The tree was completely uprooted, and there was a big gash running up the trunk. But the tree was replanted and it grew."

She put another teaspoonful of sugar into the cup. Then she put down her spoon and looked up. "Did I put any sugar in my tea?" she asked.

Father had finished eating. He carefully wiped his mouth and put down his napkin. "Saturday," he said. "Saturday I'll move the tree." The matter was settled.

IT WAS NOT UNTIL SATURDAY that I remembered about the tree. I was lying on my bed reading when I heard

the sound of metal hitting the soil. I went to the back window and looked out at the bent figure of my father digging up the tree. Joe came and stood beside me.

"Some people sure are stubborn," he said.

"Yeah," I answered.

I went back to my bed and plunked myself down to finish my reading. All I could concentrate on was the sound of my father shoveling. I rolled off my bed and went downstairs.

Diane was sitting on the back steps with her head in her hands. Her ponytail was drooping.

"Weren't you going to the movies?" I asked.

"What happened to Joanne?" she answered.

We watched the boys as they came out of the house and went into the garage. Both came out with shovels.

Father neither looked up nor said a word. Diane and I brought the wheelbarrow over as the boys began to shovel.

"Stupid tree," Joe muttered.

Father smiled. The tree would live, I thought.

"The Tree," by Linda Marasco, from *Literary Cavalcade*, Vol. 45, No. 6, March 1993. Copyright © 1993 by Scholastic, Inc. Used by permission.

Turn to page 14 in the Sample Answer Book. Answer Numbers 1 through 7. Base your answers on the story "The Tree."

- 1 What is the main idea of this story?
- A. In this family, the needs of each individual come first.
 - B. In this family, conflicts are resolved through compromise.
 - C. The problems of this family are best solved at supper time.
 - D. The children in this family pull together when they feel they should.
- 2 How do the comments of the mother contribute to the outcome of the story?
- F. The mother diverts a family crisis with her humorous comments.
 - G. The father decides to plant the tree by himself because of her comments.
 - H. Her comments about the children when they were young make them feel good.
 - I. Her comments about the tree's history help the children understand its importance.
- 3 What is the author's purpose in writing this autobiographical story?
- A. to persuade people to take care of trees
 - B. to portray how family members relate to each other
 - C. to encourage teenagers to help their parents more often
 - D. to convince parents that children should make more decisions
- 4

READ
THINK
EXPLAIN

 At the beginning of the story, the father speaks in an "authoritative voice" to tell his four children they will move the tree from the back yard on the following Saturday. Are the father's "voice" and actions authoritative throughout the story? Use details and information from the story to explain your answer.

- 5 Choose the statement that best expresses the author's point of view.
- F. Relationships in a family are never predictable.
 - G. A tree will grow if it receives a family's attention.
 - H. Family interactions are motivated by complex feelings.
 - I. Teenagers in a family have different ways of expressing love.
- 6 Why does Diane say, "Oh, *that* Joanne!" when her sister turns and looks at her?
- A. She wants to tell her family about Joanne.
 - B. She realizes her sister wants to cover up a lie.
 - C. She wants to please her family by saying the right thing.
 - D. She realizes her sister is talking about a different Joanne.
- 7

READ
THINK
EXPLAIN

 What is the main problem and the resolution in the story? Use details and information from the story to explain your answer.

Read the articles “No Opportunity Gets Eclipsed!” and “Get Serious! Eclipse Research” and “Measuring the Sun’s Diameter” before answering Numbers 8 through 14 in the Sample Answer Book.



by Michael Carroll

Many special things happen during an eclipse. Our sun is so bright that under normal conditions we cannot see the delicate crown of light around it called the corona, named after the Latin word for “crown.” During a total solar eclipse, however, when the bright light of the sun is blocked out, we can see the corona in all its glory. It looks like glowing hairs stretching from the sun’s surface and, because of our unsteady atmosphere, appearing to wave back and forth. We can’t look directly at the sun because harmful rays can damage our eyes even during an eclipse. But we can see it through special filters or special telescopes.

We can see even more than just the corona during an eclipse. From its chromosphere¹ the sun throws out gigantic pillars of flame, called *solar prominences*. Normally these flares are lost in the sun’s glare. But during an eclipse the flares can be seen as bright

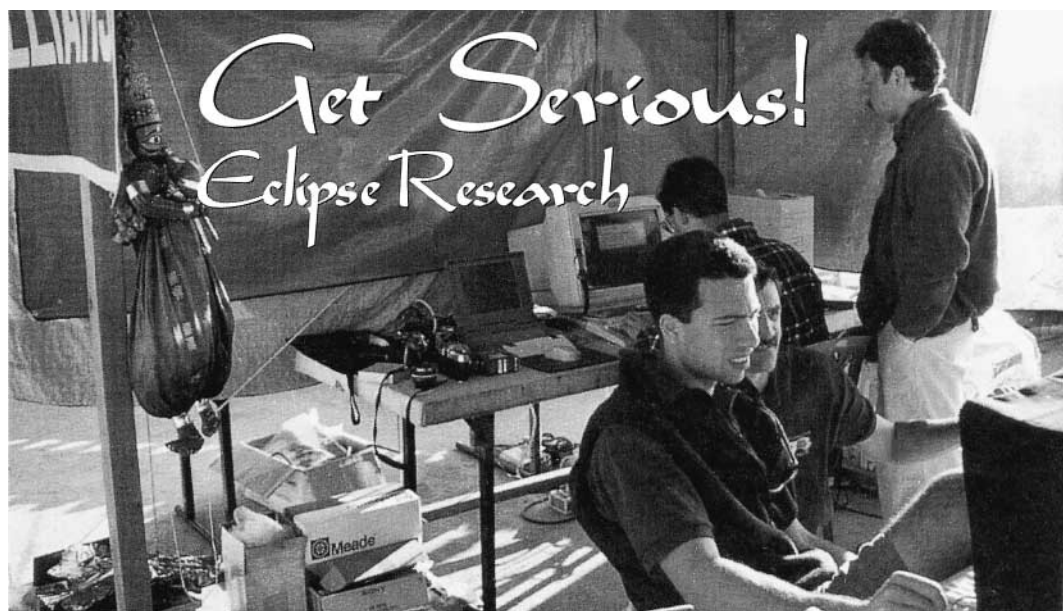


Photographer Dennis di Cicco captured these dramatic images of the sun’s corona (background) and the “sea horse” prominence on the sun’s western limb.

pink spots sticking out of the edge of the sun. Some of these flares are a hundred times longer than the Earth’s diameter!

Scientists also take advantage of eclipses to see other objects that are close to the sun. Comets, asteroids, and even the brighter planets can be seen close to the sun when the sun’s light is blocked by an eclipse. From Jupiter it would be difficult to see Earth, Venus, and Mercury because these planets are so close to the bright sun. Even Mars is usually close to the sun’s bright light. But during an eclipse a person on Jupiter’s moons or in the cloudtops of Jupiter itself could see the bright blue planet that is our home world.

¹ **chromosphere:** the layer of gases beneath the sun’s corona



by Martin Ratcliffe

Sometimes the media hoopla surrounding eclipse events clouds the dedicated science that happens in the shadow of the moon. But there is a legacy of serious study that began with eclipse expeditions a hundred years ago and continues today. One of those expeditions even confirmed Einstein's theory of relativity!

According to Einstein's theory, a light ray passing near a large mass should be bent toward the mass. Einstein predicted that starlight would be deflected by the sun's gravity by an amount double that predicted by Newton's law of gravity. To test the theory, British observers on a 1919 total eclipse expedition in Africa photographed stars close to the sun briefly made visible by the total eclipse. They used the images to determine the positions of the stars in the sky. These positions were compared to the same stars' positions as seen and measured when the sun was not nearby, blocking them from view. Their findings confirmed that Einstein was indeed right.

Today's professional astronomers make careful measurements during eclipses to study the sun's corona and other features. Jay M. Pasachoff of Hopkins Observatory at Williams College in Williamstown, Massachusetts, has carried equipment around the world to study how the corona gets so hot. When the 1991 eclipse path fell across Mauna Kea Observatory in Hawaii, many scientists gathered there to make precise optical studies of motion within the corona with some of the world's finest telescopes and other instruments.

In India in 1995 Arvind Bhatnagar of the Udaipur Solar Observatory and his team took photographs in polarized¹ and unpolarized light from a plane 24,000 meters over Agra to capture streamers extending from the corona. Jagdev Singh of the Indian Institute for Astrophysics and his colleagues used a spectrograph² that observes several locations on the corona at the same time to study motion of its gases. They also looked for signs of waves of gases traveling through the corona by looking for changes in brightness.

¹ **polarized light:** occurs when light passes through a lens, or is reflected by a surface

² **spectrograph:** an optical instrument that separates light radiation into a spectrum and records the spectrum on a photographic plate

Teaming Up

Amateurs are involved in cutting-edge research, too, and sometimes get to collaborate with professional scientists. Kevin Reardon, a solar astronomer formerly at the University of Hawaii, was working with the Soft X-ray Telescope (SXT) onboard Japan's *Yohkoh* satellite and had previously made time-lapse animation of SXT images that revealed small jets, or solar plumes, firing off near the poles of the sun. He knew that amateur astronomer David Slater had photographed solar plumes during an earlier eclipse, so he asked Slater to join him in India for the October 1995 eclipse. Slater made the trip

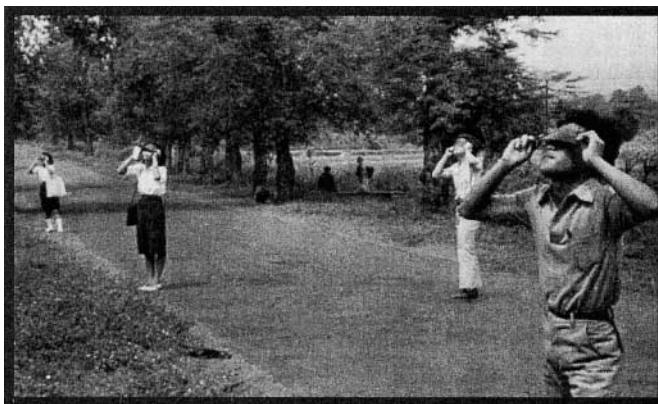
and took high-resolution black-and-white images of the sun's corona through a regular single-lens reflex camera using fine-grain black-and-white film attached to a Celestron C90 spotting scope. Reardon scheduled the SXT on *Yohkoh* simultaneously to image the sun in X-rays. Reardon wanted to compare Slater's 1995 images with his own to see whether the same number of plumes shows up in different wavelengths—white light and X-rays. The resulting information will help astronomers understand what drives the solar wind.³

³ **solar wind:** continuous current of charged particles that streams outward from the sun through the solar system

Measuring the Sun's Diameter

by Martin Ratcliffe

An intriguing question that eclipses can answer is whether the sun's diameter has changed over the centuries. The width of the moon's shadow on the Earth gives a precise measure of the solar diameter. John Parkinson of Sheffield Hallam University in England encouraged hundreds of local school children to straddle the edge of the eclipse track during the 1983 Java eclipse (see photo at right). They were to report if they saw the sun disappear entirely. Their observations, and his study of historic eclipses, led Parkinson to believe the sun's diameter, long-term, is "remarkably constant." It has changed less than a few hundredths of an arcsecond since 1715, the earliest date for which Parkinson was able to obtain accurate measurements. (A hundredth of an arcsecond on the sun is less than 8.5 kilometers.)



"No Opportunity Gets Eclipsed!" by Michael Carroll from *Odyssey's* September 1996 issue: "Eclipse!", text copyright © 1996 by Cobblestone Publishing Company, 7 School St., Peterborough, NH 03458, photographs of the sun copyright © 1991 by Dennis di Cicco. Reprinted by permission of the publisher and Mr. di Cicco.

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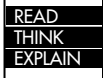
"Measuring the Sun's Diameter" by Martin Ratcliffe from *Odyssey's* September 1996 issue: "Eclipse!", © 1996 by Cobblestone Publishing Company, 7 School St., Peterborough, NH 03458. Reprinted by permission of the publisher. Photograph of school children viewing sun during eclipse copyright © 1983 by John H. Parkinson. Reprinted by permission.

Turn to page 16 in the Sample Answer Book. Answer Numbers 8 through 14. Base your answers on the articles “No Opportunity Gets Eclipsed!” and “Get Serious! Eclipse Research” and “Measuring the Sun’s Diameter.”

- 8 What do these articles show about conducting eclipse research?
- F. Eclipses were studied in 1991, 1995, and again in 1999.
 - G. Eclipses offer important opportunities for scientific investigation.
 - H. Scientists can confirm the existence of gravity on the sun only during an eclipse.
 - I. Scientists can learn about different wavelengths of light on the sun only during an eclipse.
- 9 According to these articles, which statement is most accurate?
- A. Scientists studying eclipses photograph the streamers extending from the corona.
 - B. Scientists studying eclipses gain a better understanding of the sun’s effects on the Earth.
 - C. Scientists study eclipses to help measure the extreme temperatures found in solar winds.
 - D. Scientists study eclipses to complete the scientific record begun by John Parkinson in 1715.
- 10 Scientists take advantage of eclipses to see objects close to the sun because at other times
- F. such objects are farther from the Earth.
 - G. there is not enough sunlight to see such objects.
 - H. the brightness of the sun makes such objects hard to see.
 - I. such objects cannot be seen because they are on the far side of the sun.


11 What do astronomers hope to understand by studying Kevin Reardon's and David Slater's images of plumes from the sun?

- A. the corona
- B. the solar wind
- C. the 1995 eclipse
- D. the Soft X-ray Telescope

12  Compare John Parkinson's research methods and goals to Kevin Reardon's. Support your answer with details and information from the articles.

13 How does the Earth's atmosphere affect the appearance of the sun's corona during a solar eclipse?

- F. The corona appears distorted.
- G. The corona appears weakened.
- H. The corona appears magnified.
- I. The corona appears intensified.

14  You have decided to observe the next solar eclipse. What kind of preparation would you need to make? Support your response with details and information from the articles.



This is the end of the Reading Sample Test.

Until time is called, go back and check your work or answer questions you did not complete. When you have finished, close your Reading Sample Test Book and Sample Answer Book.

Blank Page

Reading Sample Answer Book



Answer all the questions that appear in the Sample Test in this answer book. Answer multiple-choice questions by filling in the bubble for the answer you select. Write your answers to “Read, Think, and Explain” questions on the lines provided.

To remove your Sample Answer Book, carefully tear along the dotted line.

Fold and Tear Carefully Along Dotted Line

7

THINK
EXPLAIN

Now turn to page 6 in your Reading Sample Test.

8 (F) (G) (H) (I)

(A) (B) (C) (D)

(F) (G) (H) (I)

11 (A) (B) (C) (D)

12

THINK
EXPLAIN

13 (F) (G) (H) (I)

