

# What every teacher should know about FCAT

Is there a simple way for every teacher to help students be prepared for FCAT?

*The Question:*

Yes! Incorporate FCAT-like questions into regular lessons, activities, and assessments.

*The Answer:*

## ***FIVE EASY SUGGESTIONS***

- ❶ Use questions that require students to explain their answers.**
- ❷ Have students apply their Reading and Mathematics skills using challenging content from all subject areas.**
- ❸ Use open-ended question formats that are similar to FCAT.**
- ❹ Rate and grade students' work using the FCAT and Florida Writes rubrics. In this way, students can become familiar with what is expected of them on FCAT.**
- ❺ Use and develop questions for class discussions and tests that are of the same cognitive rigor as those on FCAT.**

**❶ Use questions that require students to explain their answers.**

Science example: “What did the scientist discover about sun spots? Use details and information from the assigned reading to explain your answer.”

Social Studies example: “According to the article, why did the United States become involved in the Vietnam conflict? Use details and information from the text book to explain your answer.”

Health example: “Read page 22 from your text book. Write two facts about smoking presented in the text. Then write two opinions about smoking presented in the text.”

Art example: “Describe two characteristics of the geometric figures found in the painting on the board. Be sure to use geometric terms to describe the figures.”

Music example: “Read the two critiques of the concert. How were the two reviewers’ perceptions of the concert similar or different? Use information and details from the critiques to support your answer.”

Literature example: “How are John in the story <title> and the fish in the poem <title> alike? Use details and information from both the story and the poem to explain your answer.”

Any subject: “What is the purpose of the paragraph (section, article, passage)? Use facts or ideas from the article to support your answer.”

**❷ Have students apply their Reading and Mathematics skills using challenging content from all subject areas.**

FCAT test questions use the content areas of the *Sunshine State Standards*: Science, Social Studies, The Arts, School-to-Work, and Health & Physical Education, as well as in Language Arts and Mathematics. Therefore, students should be given opportunities to apply their reading and mathematics skills in content areas other than just traditional mathematics and language arts contexts. After sixth grade, more than half of the text students are required to read and understand on FCAT is informational text (not literature). Table 1 below describes the type of text used on FCAT. See Attachment A for more examples of how all subject areas can be involved in preparing students for FCAT.

<b>Grade Level</b>	<b>Literary Text</b>	<b>Informational Text</b>
3	60%	40%
4	50%	50%
5	50%	50%
6	50%	50%
7	40%	60%

<b>Grade Level</b>	<b>Literary Text</b>	<b>Informational Text</b>
8	40%	60%
9	30%	70%
10	30%	70%

**③ Use open-ended question formats that are similar to FCAT.**

There are three open-ended question formats used on FCAT: extended-response, short-response, and gridded-response. The initials, ER, SR, and GR are often used to refer to these types of questions. Two of these formats (ER and SR) are used only on Grade 4, 8, and 10 Reading, and Grade 5, 8, and 10 Mathematics. FCAT Mathematics tests at Grades 5- 10 also use the gridded-response questions. The actual number of questions of each type varies a little from year to year, but the percentage of questions will be within the range shown in Table 2 below. (Note: In Table 2, MC = Multiple Choice.)

<b>Subject &amp; Grade</b>	<b>Question Format</b>	<b>Percent of Questions</b>
Read. – 4, 8, & 10	MC	85-90%
	ER & SR	10-15%
Reading – 3, 5, 6, 7, & 9	MC	100%
Math – 3 & 4	MC	100%
Math – 5	MC	60-70%
	GR	20-25%
	ER & SR	10-15%
Math – 6, 7, & 9	MC	60-70%
	GR	30-40%
Math – 8 & 10	MC	50-60%
	GR	25-30%
	ER & SR	10-15%

Extended-response (ER) questions: In Reading, students are given an answer space with 14 lines. In Mathematics, students are given a blank workspace in which to show their work

and/or several lines on which to write an explanation. Students must write their answers or show their work in the space provided, but it is not necessary to fill in the space completely.

Short-response (SR) questions: In reading, students are given an answer space with eight lines. In mathematics, students are given a blank workspace in which to show their work or several lines on which to write an explanation. Students must write their answers or show their work in the space provided, but it is not necessary to fill the space completely.

Gridded-response (GR) questions: Students are given an answer grid to complete. Students must fill in the grid with the correct answer using one of several correct formats. Examples of the answer grids used on FCAT are found on Attachment B. Any question that results in a numerical answer (e.g., dates, population figures, counts, or percents) can be answered using a response grid, not just mathematics questions.

Using these question formats on all regular classroom activities and assessments will help students become accustomed to responding in the same way as they will be asked to respond on FCAT.

**④ Rate and grade students’ work using the FCAT and Florida Writes rubrics. In this way, students can become familiar with what is expected of them on FCAT.**

Helping students understand what is expected of them on FCAT is one of the best ways to help prepare them for the test. Students are always asking, “Will I have to do this on the test?” If you actually use the FCAT rubrics to score papers, reports, test questions, projects, etc., then students will develop a clear understanding of the levels of performance expected of them on FCAT.

The FCAT performance tasks are scored using a holistic rubric and scoring methodology, just like Florida Writes. Attachment C includes the ER and SR rubrics for FCAT Reading and Mathematics and the Florida Writes rubrics.

**⑤ Use and develop questions for class discussions and tests that are of the same cognitive rigor as those on FCAT.**

The *Sunshine State Standards* include content standards and benchmarks that are challenging for all students. The standards contain the expectation that students become creative and critical thinkers. FCAT test items and performance tasks are developed with the intent of incorporating the thinking and problem-solving abilities embodied in the standards. To that end, test questions are developed for two distinct cognitive task levels. Table 3 below shows the two levels and their relationship to the cognitive taxonomy developed by Bloom.<sup>1</sup>

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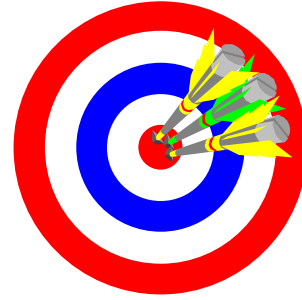
<sup>1</sup> Bloom, B. S., et al. *Taxonomy of education objectives, handbook I: cognitive domain*. New York: McKay, 1956.

<b>Table 3 Cognitive Task Classifications for FCAT</b>	
<b>FCAT Cognitive Levels</b>	<b>Bloom's Cognitive Taxonomy</b>
Level I	Knowledge
	Comprehension
	Application (familiar settings)
Level II	Application (unfamiliar settings)
	Analysis
	Synthesis
	Evaluation

The rigor of the Sunshine State Standards, and consequently FCAT, is due to the high-level cognitive tasks included in the test. Table 4 below shows the percent of questions on FCAT at each level.

<b>Table 4 Cognitive Tasks Levels</b>		
<b>Subject &amp; Grade</b>	<b>Level I</b>	<b>Level II</b>
Reading – 3	60%	40%
Reading – 4, 5, & 6	50%	50%
Reading – 7 & 8	40%	60%
Reading – 9 & 10	30%	70%
Math – 3, 4, & 5	50%	50%
Math – 6, 7, & 8	40%	60%
Math – 9 & 10	35%	65%

**How can teaching and learning  
in all subject areas contribute to  
higher scores on FCAT?**



### **Strategies for higher FCAT Reading Scores:**

- Apply critical reading strategies using discipline-based textbooks or selections
- Identify and explain main ideas, details, conclusions, author's purpose, character and plot development, point of view, tone, etc. using discipline-based textbooks or selections
- Apply creative thinking and problem solving strategies in discipline-based situations

#### **Examples of Discipline-Based Reading**

Social Studies, History, and Psychology: textbooks, biographies, historical fiction, newspaper reports of historical or current events, tables that include data, etc.

The Arts and Graphic Arts: textbooks, art criticisms, concert or program notes, biographies, plays, operas, musical theater, etc.

Health and Physical Education: textbooks, menus, food labels, advertisements, sports articles, biographies, etc.

Science: textbooks, scientific journals and articles, research reports, biographies, science fiction, etc.

Foreign Languages: textbooks, biographies, fiction, etc. in the language being studied

School-to-Work: textbooks, training or job-specific materials, job descriptions, etc.

### **Strategies for higher FCAT Mathematics Scores:**

- Apply creative thinking and problem solving strategies in discipline-based situations
- Identify and explain mathematics concepts, processes, solutions, etc., that are applicable in discipline-based situations
- Create and interpret graphs, tables, etc., in discipline-based situations
- Develop measurement and number sense skills in discipline-based situations

#### **Examples of Discipline-Based Mathematics**

Social Studies, History, and Psychology: per capita populations, land areas, products, proportions, probability, geometric concepts in historical structures (e.g., pyramids), maps, coordinate grids, statistics and their interpretation, etc.

The Arts and Graphic Arts: number sense and proportion (e.g., using color combinations), designs, scale models, time signatures, note values, ticket sales, staging, construction, etc.

Health and Physical Education: graphs and tables, time, distance, statistics, area, perimeter, volume, etc.

Science: scientific notation, probability, statistics and their interpretation, charts, graphs, coordinate grids, rated measures, length, distance, etc.

Foreign Languages: mathematics vocabulary, terminology, notation, etc. in the language being studied

School-to-Work: graphs, salary, commission, profits, time, money, job specific measurement (e.g., construction, retail sales, accounting), etc.

# FCAT Response Grids

## Grade 5 Grids

Whole  
Number  
Grid

0	1	2	3
4	5	6	7
8	9		

Percent  
Grid

0	1	2	3
4	5	6	7
8	9		

%

Decimal  
Grid

0	1	2	3
4	5	6	7
8	9		

Dollar  
Grid

0	1	2	3
4	5	6	7
8	9		

\$

## Grade 6-10 Grids

0	1	2	3
4	5	6	7
8	9		

- } Answer Boxes
- } Fraction Bar
- } Decimal Point



### FCAT Reading – Extended-Response Holistic Rubric

Points	Description
4	The response indicates that the student has a <b><u>thorough understanding</u></b> of the reading concept embodied in the task. The student has provided a response that is accurate, complete, and fulfills all the requirements of the task. Necessary support and/or examples are included, and the information is clearly text-based.
3	The response indicates that the student has an <b><u>understanding</u></b> of the reading concept embodied in the task. The student has provided a response that is accurate and fulfills all the requirements of the task, but the required support and/or details are not complete or clearly text-based.
2	The response indicates that the student has a <b><u>partial understanding</u></b> of the reading concept embodied in the task. The student has provided a response that includes information that is essentially correct and text-based, but the information is too general or too simplistic. Some of the support and/or examples and requirements of the task may be incomplete or omitted.
1	The response indicates that the student has <b><u>very limited understanding</u></b> of the reading concept embodied in the task. The response is incomplete, may exhibit many flaws, and may not address all requirements of the task.
0	The response is <b><u>inaccurate</u></b> , confused, and/or irrelevant, or the student has failed to respond to the task.

### FCAT Reading – Short-Response Holistic Rubric

Points	Description
2	The response indicates that the student has a <b><u>complete understanding</u></b> of the reading concept embodied in the task. The student has provided a response that is accurate, complete, and fulfills all the requirements of the task. Necessary support and/or examples are included, and the information is clearly text-based.
1	The response indicates that the student has a <b><u>partial understanding</u></b> of the reading concept embodied in the task. The student has provided a response that includes information that is essentially correct and text-based, but the information is too general or too simplistic. Some of the support and/or examples and requirements of the task may be incomplete or omitted.
0	The response is <b><u>inaccurate</u></b> , confused, and/or irrelevant, or the student has failed to respond to the task.

## FCAT Mathematics – Extended-Response Holistic Rubric

Points	Description
4	The student demonstrates a <b><u>thorough understanding</u></b> of the mathematics concepts and/or procedures embodied in the task. The student has responded correctly to the task, used mathematically sound procedures, and provided clear and complete explanations and interpretations. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
3	The student demonstrates an <b><u>understanding</u></b> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is essentially correct with the mathematical procedures used and the explanations and interpretations provided demonstrating an essential but less than thorough understanding. The response may contain minor errors that reflect inattentive execution of the mathematical procedures or indications of some misunderstanding of the underlying mathematics concepts and/or procedures.
2	The student has demonstrated only a <b><u>partial understanding</u></b> of the mathematics concepts and/or procedures embodied in the task. Although the student may have used the correct approach to obtaining a solution or may have provided a correct solution, the student's work lacks an essential understanding of the underlying mathematical concepts. The response contains errors related to misunderstanding important aspects of the task, misuse of mathematical procedures, or faulty interpretations of results.
1	The student has demonstrated a <b><u>very limited understanding</u></b> of the mathematics concepts and/or procedures embodied in the task. The student's response to the task is incomplete and exhibits many flaws. Although the student has addressed some of the conditions of the task, the student reached an inadequate conclusion and/or provided reasoning that was faulty or incomplete. The response exhibits many errors or may be incomplete.
0	The student has provided a <b><u>completely incorrect</u></b> solution or uninterpretable response, or no response at all.

## FCAT Mathematics – Short-Response Holistic Rubric

Points	Description
2	The student demonstrates a <b><u>thorough understanding</u></b> of the mathematics concepts and/or procedures embodied in the task. The student has completed the task correctly, in a mathematically sound manner. When required, student explanations and/or interpretations are clear and complete. The response may contain minor flaws that do not detract from the demonstration of a thorough understanding.
1	The student has provided a response that is only <b><u>partially correct</u></b> . For example, the student may provide a correct solution, but may demonstrate some misunderstanding of the underlying mathematical concepts or procedures. Conversely, a student may provide a computationally incorrect solution but could have applied appropriate and mathematically sound procedures or the student's explanation could indicate an understanding of the task, even in light of the error.
0	The student has provided a <b><u>completely incorrect</u></b> solution or uninterpretable response, or no

response at all.

## Florida Writing Assessment - Holistic Rubric

Points	Grade 4
6	The writing is focused on the topic, has a logical organizational pattern (including a beginning, middle, conclusion, and transitional devices), and has ample development of the supporting ideas. The paper demonstrates a sense of completeness or wholeness. The writing demonstrates a mature command of language including precision in word choice. Subject/verb agreement and verb and noun forms are generally correct. With few exceptions, the sentences are complete, except when fragments are used purposefully. Various sentence structures are used.
5	The writing is focused on the topic with adequate development of the supporting ideas. There is an organizational pattern, although a few lapses may occur. The paper demonstrates a sense of completeness or wholeness. Word choice is adequate but may lack precision. Most sentences are complete, although a few fragments may occur. There may be occasional errors in subject/verb agreement and in standard forms of verbs and nouns, but not enough to impede communication. The conventions of punctuation, capitalization, and spelling are generally followed. Various sentence structures are used.
4	The writing is generally focused on the topic, although it may contain some extraneous or loosely related information. An organizational pattern is evident, although lapses may occur. The paper demonstrates a sense of completeness or wholeness. In some areas of the response, the supporting ideas may contain specifics and details, while in other areas, the supporting ideas may not be developed. Word choice is generally adequate. Knowledge of the conventions of punctuation and capitalization is demonstrated, and commonly used words are usually spelled correctly. There has been an attempt to use a variety of sentence structures, although most are simple constructions.
3	The writing is generally focused on the topic, although it may contain some extraneous or loosely related information. Although an organizational pattern has been attempted and some transitional devices have been used, lapses may occur. The paper may lack a sense of completeness or wholeness. Some of the supporting ideas may not be developed with specifics and details. Word choice is adequate but limited, predictable, and occasionally vague. Knowledge of the conventions of punctuation and capitalization is demonstrated, and commonly used words are usually spelled correctly. There has been an attempt to use a variety of sentence structures, although most are simple constructions.
2	The writing may be slightly related to the topic or may offer little relevant information and few supporting ideas or examples. The writing that is relevant to the topic exhibits little evidence of an organizational pattern or use of transitional devices. Development of the supporting ideas may be inadequate or illogical. Word choice may be limited or immature. Frequent errors may occur in basic punctuation and capitalization, and commonly used words may frequently be misspelled. The sentence structure may be limited to simple constructions.
1	The writing may only minimally address the topic because there is little, if any, development of supporting ideas, and unrelated information may be included. The writing that is relevant to the topic does not exhibit an organizational pattern; few, if any, transitional devices are used to signal movement in the text. Supporting ideas may be sparse, and they are usually provided through lists, clichés, and limited or immature word choice. Frequent errors in spelling, capitalization, punctuation, and sentence structure may impede communication. The sentence structure may be limited to simple construction.
0	The paper is unscorable in one of several ways. The response is not related to what the prompt requested the student to do. The response is simply a rewording of the prompt. The response is a copy of a published work. The student refused to write. The response is written in a foreign language. The response is illegible. The response is incomprehensible (words are arranged in such a way that no

meaning is conveyed). The response contains an insufficient amount of writing to determine if the student was attempting to address the prompt. The writing folder is blank.

## Florida Writing Assessment - Holistic Rubric

### Points

### Grade 8

- |   |  |
|---|--|
| 6 | The writing is focused, purposeful, and reflects insight into the writing situation. The paper conveys a sense of completeness and wholeness with adherence to the main idea, and its organizational pattern provides for a logical progression of ideas. The support is substantial, specific, relevant, concrete, and/or illustrative. The paper demonstrates a commitment to and an involvement with the subject, clarity in presentation of ideas, and may use creative writing strategies appropriate to the purpose of the paper. The writing demonstrates a mature command of language (word choice) with freshness of expression. Sentence structure is varied, and sentences are complete except when fragments are used purposefully. Few, if any, convention errors occur in mechanics, usage, and punctuation. |
| 5 | The writing focuses on the topic, and its organizational pattern provides for a progression of ideas, although some lapses may occur. The paper conveys a sense of completeness or wholeness. The support is ample. The writing demonstrates a mature command of language, including precision in word choice. There is variation in sentence structure, and, with rare exceptions, sentences are complete except when fragments are used purposefully. The paper generally follows the conventions of mechanics, usage, and spelling.   |
| 4 | The writing is generally focused on the topic but may include extraneous or loosely related material. An organizational pattern is apparent, although some lapses may occur. The paper exhibits some sense of completeness or wholeness. The support, including word choice, is adequate, although development may be uneven. There is little variation in sentence structure, and most sentences are complete. The paper generally follows the conventions of mechanics, usage, and spelling.   |
| 3 | The writing is generally focused on the topic but may include extraneous or loosely related material. An organizational pattern has been attempted, but the paper may lack a sense of completeness or wholeness. Some support is included, but development is erratic. Word choice is adequate but may be limited, predictable, or occasionally vague. There is little, if any, variation in sentence structure. Knowledge of the conventions of mechanics and usage is usually demonstrated, and commonly used words are usually spelled correctly.   |
| 2 | The writing is related to the topic but includes extraneous or loosely related material. Little evidence of an organizational pattern may be demonstrated, and the paper may lack a sense of completeness or wholeness. Development of support is inadequate or illogical. Word choice is limited, inappropriate, or vague. There is little, if any, variation in sentence structure, and gross errors in sentence structure may occur. Errors in basic conventions of mechanics and usage may occur, and commonly used words may be misspelled.   |
| 1 | The writing may only minimally address the topic. The paper is a fragmentary or incoherent listing of related ideas or sentences or both. Little, if any, development of support or an organizational pattern or both is apparent. Limited or inappropriate word choice may obscure meaning. Gross errors in sentence structure and usage may impede communication. Frequent and blatant errors may occur in the basic conventions of mechanics and usage, and commonly used words may be misspelled.  |
| 0 | The paper is unscorable in one of several ways. The response is not related to what the prompt requested the student to do. The response is simply a rewording of the prompt. The response is a copy of a published work. The student refused to write. The response is written in a foreign language. The response is illegible. The response is incomprehensible (words are arranged in such a way that no   |

meaning is conveyed). The response contains an insufficient amount of writing to determine if the student was attempting to address the prompt. The writing folder is blank.

## Florida Writing Assessment - Holistic Rubric

<b>Points</b>	<b>Grade 10</b>
6	The writing is focused and purposeful, and it reflects insight into the writing situation. The organizational pattern provides for a logical progression of ideas. Effective use of transitional devices contributes to a sense of completeness. The development of the support is substantial, specific, relevant, and concrete. The writer shows commitment to and involvement with the subject and may use creative writing strategies. The writing demonstrates a mature command of language with freshness of expression. Sentence structure is varied, and few, if any, convention errors occur in mechanics, usage, punctuation, and spelling.
5	The writing is focused on the topic, and its organizational pattern provides for a logical progression of ideas. Effective use of transitional devices contributes to a sense of completeness. The support is developed through ample use of specific details and examples. The writing demonstrates a mature command of language, and there is variation in sentence structure. The response generally follows the conventions of mechanics, usage, punctuation, and spelling.
4	The writing is focused on the topic and includes few, if any, loosely related ideas. An organizational pattern is apparent, and it is strengthened by the use of transitional devices. The support is consistently developed, but it may lack specificity. Word choice is adequate, and variation in sentence structure is demonstrated. The response generally follows the conventions of mechanics, usage, punctuation, and spelling.
3	The writing is focused but may contain ideas that are loosely connected to the topic. An organizational pattern is demonstrated, but the response may lack a logical progression of ideas. Development of support is uneven. Word choice is adequate, and some variation in sentence structure is demonstrated. The response generally follows the conventions of mechanics, usage, punctuation, and spelling.
2	The writing addresses the topic but may lose focus by including extraneous or loosely related ideas. The organizational pattern usually includes a beginning, middle, and ending, but these elements may be brief. The development of the support may be erratic and nonspecific, and ideas may be repeated. Word choice may be limited, predictable, or vague. Errors may occur in the basic conventions of sentence structure, mechanics, usage, and punctuation, but commonly used words are usually spelled correctly.
1	The writing addresses the topic but may lose focus by including extraneous or loosely related ideas. The response may have an organizational pattern, but it may lack a sense of completeness or closure. There is little, if any, development of the supporting ideas, and the support may consist of generalizations or fragmentary lists. Limited or inappropriate word choice may obscure meaning. Frequent and blatant errors may occur in the basic conventions of sentence structure, mechanics, usage, and punctuation, and commonly used words may be misspelled.
0	The paper is unscorable in one of several ways. The response is not related to what the prompt requested the student to do. The response is simply a rewording of the prompt. The response is a copy of a published work. The student refused to write. The response is illegible. The response is written in a foreign language. The response is incomprehensible (words are arranged in such a way that no meaning is conveyed). The response contains an insufficient amount of writing to determine if the student was attempting to address the prompt. The writing folder is blank.