



Florida Comprehensive Assessment Test Summary of Tests and Design

I. Purpose of FCAT

The **Florida Comprehensive Assessment Test (FCAT)** is a component of Florida's effort to improve the teaching and learning of higher educational standards. The primary purpose of the FCAT is to assess student achievement of the high-order thinking skills represented in the *Sunshine State Standards (SSS)* for Reading, Writing, Mathematics, and Science. The SSS portion of the FCAT is a criterion-referenced test. The secondary purpose is to compare the performance of Florida students to the performance of students across the nation. This comparison is possible through the use of a norm-referenced test (NRT) for Reading and Mathematics. The current NRT is the Stanford Achievement Test 10[®] (SAT10) published by Harcourt Assessment, Incorporated.

II. Tests Administered in Grades 3 – 11

Table 1: Types of Tests This table provides an overview of the subjects assessed by the FCAT and a listing of the types of tests administered at each grade.

Grade	Subjects				Tests
	R	M	S	W	
3	✓	✓			<ul style="list-style-type: none"> ◆ SSS Reading ◆ SSS Mathematics ◆ NRT Reading and Mathematics
4	✓	✓		✓	<ul style="list-style-type: none"> ◆ SSS Reading ❖ ◆ SSS Mathematics ◆ SSS Writing+ ❖ ◆ NRT Reading and Mathematics
5	✓	✓	✓		<ul style="list-style-type: none"> ◆ SSS Reading ◆ SSS Mathematics ❖ ◆ SSS Science ❖ ◆ NRT Reading and Mathematics
6	✓	✓			<ul style="list-style-type: none"> ◆ SSS Reading ◆ SSS Mathematics ◆ NRT Reading and Mathematics
7	✓	✓			<ul style="list-style-type: none"> ◆ SSS Reading ◆ SSS Mathematics ◆ NRT Reading and Mathematics
8	✓	✓	✓	✓	<ul style="list-style-type: none"> ◆ SSS Reading ❖ ◆ SSS Mathematics ❖ ◆ SSS Science ❖ ◆ SSS Writing+ ❖ ◆ NRT Reading and Mathematics
9	✓	✓			<ul style="list-style-type: none"> ◆ SSS Reading ◆ SSS Mathematics ◆ NRT Reading and Mathematics
10	✓	✓		✓	<ul style="list-style-type: none"> ◆ SSS Reading ❖ ◆ SSS Mathematics ❖ ◆ SSS Writing+ ❖ ◆ NRT Reading and Mathematics
11			✓		<ul style="list-style-type: none"> ◆ SSS Science ❖
11 - adult	✓	✓			<ul style="list-style-type: none"> ◆ SSS Reading Retake ◆ SSS Mathematics Retake
					❖includes performance tasks

III. Content Categories

Tables 2 – 4 present the content categories for the FCAT SSS Reading, SSS Mathematics, and SSS Science tests, along with the approximate percent of raw-score points derived from each content category. Tables 5a and 5b present the types of writing prompts used at each assessed grade and the content category information for the multiple-choice section of FCAT Writing+.

Table 2: SSS Reading

Grade	Words & Phrases in Context	Main Idea, Plot, & Author's Purpose	Comparison & Cause/Effect	Reference & Research
3 – 5	15 – 20%	30 – 55%	20 – 45%	5 – 15%
6 – 8	15 – 20%	30 – 55%	15 – 25%	10 – 30%
9 – 10	15 – 20%	20 – 50%	10 – 25%	20 – 40%

Table 3: SSS Mathematics

Grade	Number Sense, Concepts, and Operations	Measurement	Geometry and Spatial Sense	Algebraic Thinking	Data Analysis
3	30%	20%	17%	15%	18%
4	28%	20%	17%	17%	18%
5 – 8	20%	20%	20%	20%	20%
9 – 10	17%	17%	25%	25%	17%

Table 4: SSS Science

Grade	Physical and Chemical Sciences	Earth and Space Sciences	Life and Environmental Sciences	Scientific Thinking
5	25%	25%	25%	25%
8	25%	25%	25%	25%
11	25%	25%	25%	25%

Tables 5a and 5b: SSS Writing+ *The essay portion of this test provides two prompts for each grade. The two prompts are spiraled among students in grades 4, 8, and 10 so that each student responds to only one prompt that may be for either mode of writing. The modes of writing used at each grade are presented in Table 5a below. The multiple-choice section of Writing+ was field tested in 2005. Table 5b presents the approximate percent of raw-score points derived from each content category for the multiple-choice section of the test.*

Table 5a

Grade	Narrative <i>Writing to tell a story</i>	Expository <i>Writing to explain</i>	Persuasive <i>Writing to convince</i>
4	✓	✓	
8		✓	✓
10		✓	✓

Table 5b

Grade	Focus	Organization	Support	Conventions
4	15 – 25%	15 – 25%	15 – 25%	25 – 55%
8	15 – 25%	15 – 25%	15 – 25%	25 – 55%
10	15 – 25%	15 – 25%	15 – 25%	25 – 55%

IV. SSS Reading Passages

Proposed reading passages are reviewed by Florida educators for quality and appropriateness. Criteria for this review can be found in *FCAT Reading Test Item and Performance Task Specifications*. A review is also conducted by a committee of Florida citizens to insure the passages are free of bias or cultural insensitivity.

Table 6: Lengths of SSS Reading Passages

Grade	Number of Words per Passage	
	Range	Average
3	100 – 700	350
4	100 – 900	400
5	200 – 900	450
6	200 – 1000	500
7	300 – 1100	600
8	300 – 1100	700
9	300 – 1400	800
10	300 – 1700	900

Table 7: SSS Reading Passage Types and Percentage of Test *Literary passages provide entertainment or inspiration and include fiction, non-fiction, poetry, and drama. Informational passages are subject-matter centered and the language may be used to solve problems, raise questions, provide information, or present new ideas. The context of these passages includes everyday life outside of the classroom.*

Grade	Literary Text	Informational Text
3	60%	40%
4	50%	50%
5	50%	50%
6	50%	50%
7	40%	60%
8	40%	60%
9	30%	70%
10	30%	70%

V. Cognitive Complexity

Prior to 2004, the cognitive-level classification system of FCAT items was based upon Bloom's Taxonomy. This model required assumptions about students' instructional backgrounds and their individual approaches to a problem. FCAT items are now classified using a model with origins in the works of Norman Webb¹ on depth of knowledge and the cognitive classification system used for the National Assessment of Educational Progress (NAEP). With the revised classification system, items are classified on the cognitive demand inherent in the test item, not on assumptions about the student's approach to the item. This is a change in how items are classified; there has been no change in the items or in the tests.

¹ Dr. Webb is a professor at the University of Wisconsin's Center for Education Research. Information about his work can be found online at <http://facstaff.wcer.w>

Low complexity items rely heavily on recall and recognition. Moderate complexity items require more flexible thinking and may require informal reasoning or problem solving. High complexity items are written to elicit analysis and abstract reasoning. The tables below present the range for the percentage of raw-score points by cognitive complexity level on each FCAT SSS test.

Table 8: Percentage of Points by Cognitive Complexity Level for FCAT Reading

Grades	Low	Moderate	High
3	25-35	50-70	5-15
4*	20-30	50-70	10-20
5-7	15-25	50-70	15-25
8*	10-20	50-70	20-30
9	10-20	50-70	20-30
10*	10-20	45-65	25-35

Table 9: Percentage of Points by Cognitive Complexity Level for FCAT Mathematics

Grades	Low	Moderate	High
3 – 4	25-35	50-70	5-15
5*	10-20	50-70	20-30
6-7	10-20	60-80	10-20
8*	10-20	50-70	20-30
9	10-20	60-80	10-20
10*	10-20	50-70	20-30

Table 10: Percentage of Points by Cognitive Complexity Level for FCAT Science

Grades	Low	Moderate	High
5*	15-25	40-60	25-35
8*	15-25	40-60	25-35
11*	15-25	40-60	25-35

*These tests include performance tasks, typically moderate to high complexity items.

Table 11: Percentage of Points by Cognitive Complexity Level for FCAT Writing+

The prompt portion of FCAT Writing+ is a high cognitive complexity task. The table below represents the multiple-choice items only.

Grades	Low	Moderate	High
4	15-25	40-60	20-40
8	15-25	40-60	20-40
10	15-25	40-60	20-40

VI. Test Length and Item/Prompt Types

Table 11: Duration of Test *The table below displays the number of minutes allowed for 2005 regular test takers for each SSS and NRT test. With the exception of Writing+, Reading Retake, and Mathematics Retake, all tests are administered in two sessions. The Reading Retake and the Mathematics Retake must be taken in one day.*

Grade	Reading	Mathematics	Science	Writing+
3	SSS: 120 NRT: 80	SSS: 120 NRT: 70		
4	SSS: 160 NRT: 80	SSS: 120 NRT: 70		SSS essay: 45 MC*: 80
5	SSS: 120 NRT: 80	SSS: 160 NRT: 70	SSS: 120	
6	SSS: 120 NRT: 70	SSS: 120 NRT: 70		
7	SSS: 120 NRT: 70	SSS: 120 NRT: 70		
8	SSS: 160 NRT: 70	SSS: 160 NRT: 70	SSS: 120	SSS essay: 45 MC*: 80
9	SSS: 120 NRT: 60	SSS: 120 NRT: 70		
10	SSS: 160 NRT: 60	SSS: 180 NRT: 70		SSS essay: 45 MC*: 80
11			SSS: 150	

* Multiple-choice items

Table 12: Lengths of Tests *This table provides an approximate range for the number of items on each test.*

Grade	Sunshine State Standards				Norm-Referenced Test	
	Writing+	Mathematics	Reading	Science	Mathematics	Reading
3		45 – 50	50 – 55		45 – 50	50 – 55
4	1 prompt 50 – 55	45 – 50	50 – 55		45 – 50	50 – 55
5		55 – 60	50 – 55	55 – 60	45 – 50	50 – 55
6		50 – 55	50 – 55		45 – 50	50 – 55
7		50 – 55	50 – 55		45 – 50	50 – 55
8	1 prompt 50 – 55	55 – 60	50 – 55	55 – 60	45 – 50	50 – 55
9		50 – 55	50 – 55		45 – 50	50 – 55
10	1 prompt 50 – 55	55 – 60	50 – 55		45 – 50	50 – 55
11				55 – 60		
Retake		55 – 60*	55 – 60*			

*All items in the Grade 10 Retake tests contribute to students' scores. Some items, approximately 6 – 10, in all other tests are experimental (field test) and are included in the ranges above but not included in students' scores.

Table 13: Item Types and Numbers *The data in this table give ranges for the approximate number of items by item type. These ranges include both operational and field-test items.*

Grade	SSS Reading	SSS Mathematics	SSS Science	SSS Writing+
3	50 – 55 MC	45 – 50 MC		
4	45 – 50 MC 5 – 7 SR & ER	45 – 50 MC		1 prompt 50 – 55 MC
5	50 – 55 MC	35 – 40 MC 10 – 15 GR 5 – 8 SR & ER	45 – 55 MC 5 – 7 SR & ER	
6	50 – 55 MC	35 – 40 MC 10 – 15 GR		
7	50 – 55 MC	35 – 40 MC 10 – 15 GR		
8	45 – 50 MC 5 – 7 SR & ER	30 – 35 MC 15 – 20 GR 5 – 8 SR & ER	40 – 45 MC 3 – 6 GR 5 – 7 SR & ER	1 prompt 50 – 55 MC
9	50 – 55 MC	30 – 35 MC 15 – 20 GR		