

Florida Comprehensive Assessment Test®



**Florida Department of Education** 

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# **Introduction**

This booklet has been prepared to help you understand the reports for the Florida Comprehensive Assessment Test<sup>®</sup> 2.0 (FCAT 2.0). It includes explanations of the reports, a glossary of the terms used in these reports, and the **Next Generation Sunshine State Standards (NGSSS)** content assessed on the FCAT 2.0. The explanations provided for the sample reports apply to all grade levels except where otherwise noted. Information regarding FCAT reports may be accessed in *Understanding FCAT Reports*, which was last published in 2009 and may be accessed at <a href="http://fcat.fldoe.org/fcatUnderstandReports.asp">http://fcat.fldoe.org/fcatUnderstandReports.asp</a>.

Note: Terms defined in the glossary are cross-referenced and appear in **bold text** the first time they are referenced within a paragraph.

#### Purpose of the FCAT 2.0

The Florida Department of Education (FDOE) is transitioning from the FCAT to the FCAT 2.0 to align with new student academic content standards. The FCAT 2.0 measures student achievement of the **NGSSS** in reading, mathematics, and science, in place of the *Sunshine State Standards*. As FCAT 2.0 assessments are phased in, they will replace existing FCAT assessments. The transition to FCAT 2.0 begins this year with the Reading and Mathematics assessments and will be complete when the FCAT 2.0 Science assessments are administered in 2012 (grades 5 and 8).

### Subjects Tested in 2011

- FCAT 2.0 Reading (grades 3-10)
- FCAT 2.0 Mathematics (grades 3-8)

#### **Question Formats**

- **Multiple-choice questions** appear at all grade levels of the FCAT 2.0 Reading and Mathematics assessments. Students choose the best answer from four answer choices.
- Gridded-response questions appear on FCAT 2.0 Mathematics assessments in grades 4-8.

#### Who is Tested?

Most students, including **English language learner (ELL)** and **exceptional student education (ESE)** students, enrolled in the tested grade levels participate in the FCAT 2.0 administration. Administration accommodations are provided to eligible ELL and ESE students.

#### FCAT 2.0 Reports

FCAT 2.0 results are reported in several formats. Reports are distributed to students, schools, and districts. The table on page 9 provides a list of FCAT 2.0 reports, the grade levels at which they apply, and the page number on which each report is described. Although this booklet does not contain samples of all reports, the examples provided are similar in content and layout to other reports. Information about FCAT 2.0 scores and reports is also available on the FCAT 2.0 website at <u>http://fcat.fldoe.org/fcat2/</u>.

#### **FCAT Equivalent Scores**

Student results for the Spring 2011 FCAT 2.0 assessments are reported on the existing FCAT scale as **FCAT Equivalent Scores** because the new scale and **Achievement Levels** will not be available this year. FCAT Equivalent Scores enable consistent student expectations to be maintained during this transition year. FCAT Equivalent Scores are used to determine student progress from grade to grade in the same way FCAT Scale Scores and Developmental Scale Scores (DSS) were used in prior years. The new FCAT 2.0 score scale and Achievement Levels will be available beginning in 2012.

Student performance on the FCAT 2.0 in 2011 is linked to the existing FCAT score scale through the **equipercentile linking method**. By this method, 2011 FCAT 2.0 scores were linked to 2010 FCAT scores at the same **percentile rank**. This linking method allows the 2011 FCAT 2.0 scores to be reported as **FCAT Equivalent Scale Scores**, which range from 100-500, and **FCAT Equivalent DSS**, which range from 86-3008 across grades 3-10 and show a student's annual progress from grade to grade. On student and parent reports, the FCAT Equivalent DSS is referred to as the **FCAT Equivalent Score**, as scores on the 100-500 scale are not reported on these reports. Additional information about how the 2011 FCAT 2.0 scores were determined through the equipercentile linking method is provided in the document 2011 Equipercentile Linking: FCAT 2.0 Reading and Mathematics, which is posted at http://www.fldoe.org/pdf/2011EquipercentileLinking.pdf.

### 2011 Passing Score Requirements for FCAT 2.0

- Students in grade 3 must achieve an **FCAT Equivalent Score** at Level 2 or higher in Reading, or show good cause, to be eligible for promotion.
- Students in grade 10 who entered grade 9 in the 2009-10 school year must score an FCAT Reading Equivalent Developmental Scale Score of 1926 (Scale Score of 300) or above on FCAT 2.0 Reading for graduation purposes. This cohort of students must also score an FCAT Mathematics Developmental Scale Score of 1889 (Scale Score of 300) or above for graduation purposes. After grade 10, there will be additional opportunities to earn passing scores by retaking the test(s) if students are not successful on the first attempt.

For students who entered grade 9 in the 2008-09 school year or prior, consult the *FCAT Graduation Requirements* document posted at <u>http://fcat.fldoe.org/pdf/fcatpass.pdf</u>.

## **Achievement Levels**

**Achievement Levels** describe the success a student has achieved with the content assessed. The existing FCAT Achievement Levels are being used to describe this success until new Achievement Levels are approved for the FCAT 2.0. Achievement Levels range from 1 to 5, with Level 1 being the lowest and Level 5 being the highest. To be considered on grade level, students must achieve Level 3 or higher.

Level 5	indicates success with the content on the FCAT by answering most questions correctly.
Level 4	indicates success with the content on the FCAT by answering most questions correctly, except for the most challenging questions.
Level 3	indicates partial success with the content on the FCAT.
Level 2	indicates limited success with the content on the FCAT.
Level 1	indicates little success with the content on the FCAT.

Tables 1 through 4 list the **Achievement Levels** for the FCAT Reading and Mathematics Equivalent Scores, by grade level. Tables 1 and 2 provide the DSS ranges for each Achievement Level. Tables 3 and 4 provide the Scale Score ranges for each Achievement Level.

Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	86 - 1045	1046 - 1197	1198 - 1488	1489 - 1865	1866 - 2514
4	295 - 1314	1315 - 1455	1456 - 1689	1690 - 1964	1965 - 2638
5	474 - 1341	1342 - 1509	1510 - 1761	1762 - 2058	2059 - 2713
6	539 - 1449	1450 - 1621	1622 - 1859	1860 - 2125	2126 - 2758
7	671 - 1541	1542 - 1714	1715 - 1944	1945 - 2180	2181 - 2767
8	886 - 1695	1696 - 1881	1882 - 2072	2073 - 2281	2282 - 2790
9	772 - 1771	1772 - 1971	1972 - 2145	2146 - 2297	2298 - 2943
10	844 - 1851	1852 - 2067	2068 - 2218	2219 - 2310	2311 - 3008

# Table 1: Achievement Levels for theFCAT Reading Equivalent Scores (Developmental Scale Scores)

# Table 2: Achievement Levels for theFCAT Mathematics Equivalent Scores (Developmental Scale Scores)

Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	375 - 1078	1079 - 1268	1269 - 1508	1509 - 1749	1750 - 2225
4	581 - 1276	1277 - 1443	1444 - 1657	1658 - 1862	1863 - 2330
5	569 - 1451	1452 - 1631	1632 - 1768	1769 - 1956	1957 - 2456
6	770 - 1553	1554 - 1691	1692 - 1859	1860 - 2018	2019 - 2492
7	958 - 1660	1661 - 1785	1786 - 1938	1939 - 2079	2080 - 2572
8	1025 - 1732	1733 - 1850	1851 - 1997	1998 - 2091	2092 - 2605

# Table 3: Achievement Levels for theFCAT Reading Equivalent Scale Scores

Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	100 - 258	259 - 283	284 - 331	332 - 393	394 - 500
4	100 - 274	275 - 298	299 - 338	339 - 385	386 - 500
5	100 - 255	256 - 285	286 - 330	331 - 383	384 - 500
6	100 - 264	265 - 295	296 - 338	339 - 386	387 - 500
7	100 - 266	267 - 299	300 - 343	344 - 388	389 - 500
8	100 - 270	271 - 309	310 - 349	350 - 393	394 - 500
9	100 - 284	285 - 321	322 - 353	354 - 381	382 - 500
10	100 - 286	287 - 326	327 - 354	355 - 371	372 - 500

# Table 4: Achievement Levels for theFCAT Mathematics Equivalent Scale Scores

Grade	Level 1	Level 2	Level 3	Level 4	Level 5
3	100 - 252	253 - 293	294 - 345	346 - 397	398 - 500
4	100 - 259	260 - 297	298 - 346	347 - 393	394 - 500
5	100 - 287	288 - 325	326 - 354	355 - 394	395 - 500
6	100 - 282	283 - 314	315 - 353	354 - 390	391 - 500
7	100 - 274	275 - 305	306 - 343	344 - 378	379 - 500
8	100 - 279	280 - 309	310 - 346	347 - 370	371 - 500

### FCAT 2.0 Content Area Scores

**Content area scores** are the actual number of questions answered correctly within each **reporting category**. These scores are also known as raw scores. Reporting categories represent groups of similar student skills, or **benchmarks** that are assessed within each grade and subject. The **state mean** for each reporting category also is provided to allow for comparisons to average performance statewide.

So that educators may gather reliable information from the FCAT 2.0, it is important to identify the comparisons at the content-area-score level that yield valid interpretations of student performance. The comparisons described in the following paragraphs can be applied in school- and district-level evaluations.

One valid comparison is of performance on a given **content area score** between schools, districts, and the state. For example, a school's content area score results can be compared to other schools', districts', or the state's content area score results. District results can be compared to other district results and state results. Since students in any group (school, district, or state) will take the same set of test items in a given year, regardless of varying item difficulty at the content-area level, their results are comparable.

In Table 5 below, students in two schools (Sunshine and Evergreen) and students in the district (Coastal) can be compared to students in the state, based on their performance on FCAT 2.0 Reading, **Reporting Category** 1.

# Table 5: Mean Percent Correct for Grade 3 FCAT 2.0 Reading, Reporting Category 1 2011 School Year (mock data)

Sunshine Elementary	Evergreen Elementary	Coastal District	State of Florida
(mock data)	(mock data)	(mock data)	(mock data)
48%	62%	64%	57%

In Table 6 below, 2011 mock results for Evergreen Elementary are compared to both the district (Coastal) and the state.

# Table 6: Mean Percent Correct for Grade 3 FCAT 2.0 Reading, 2011 School Year Comparison of School to District and School to State (mock data)

Reporting Category	Evergreen Elementary (mock data)	Coastal District (mock data)	Difference (mock data)	Evergreen Elementary (mock data)	State of Florida (mock data)	Difference (mock data)
Reporting Category 1	62%	64%	-2%	62%	57%	5%
Reporting Category 2	64%	57%	7%	64%	63%	1%
Reporting Category 3	57%	60%	-3%	57%	72%	-15%
Reporting Category 4	70%	72%	-2%	70%	64%	6%

This presentation of data provides another perspective of student performance and program effectiveness. For example, in **Reporting Category** 2, Evergreen Elementary had a higher **mean** percent correct statistic than the Coastal District (64 percent versus 57 percent, respectively); however, Evergreen Elementary results were comparable to the state (64 percent versus 63 percent, respectively). If this variance remains consistent over time, there would be good reason to identify and share best practices in Evergreen Elementary with the rest of the district.

Another meaningful finding from Table 6 is illustrated in **Reporting Category** 4 results. In this **content area**, Evergreen Elementary had a slightly lower **mean** percent correct than Coastal District (70 percent versus 72 percent, respectively); however, this same statistic was higher than that of the state (70 percent versus 64 percent, respectively). It would be easy to miss the fact that, while Evergreen Elementary's performance on Reporting Category 4 was lower than that of the district, the performances of both were substantially higher than the state's. It is therefore likely that targeting additional resources to improve performance in Reporting Category 4 would be a lower priority.

Another type of valid comparison is the trend of any of the aforementioned comparisons (e.g., school to school, school to district); however, trend data for the FCAT 2.0 will not be available until three test administrations have occurred.

The Florida Department of Education encourages educators to use FCAT 2.0 results in any way that is statistically appropriate. The comparisons that have been described in this section provide possibilities for evaluation at the school and district levels.

# FCAT 2.0 Student, School, District, and State Reports

	FCAT 2.0 Report Title	Grades	Page of Report Description
Student Reports	Reading and Mathematics Parent and Student Report	3-8 and 10*	11
Student	Reading Parent and Student Report	9	11
School Reports	Reading School Report of Students	3-10	12
School	Mathematics School Report of Students	3-8	12
	Reading District Report of Schools	3-10	13
District Reports	Mathematics District Report of Schools	3-8	13
	Reading District Summary	3-10	13
	Mathematics District Summary	3-8 and 10**	13
	Reading State Report of Districts	3-10	13
State Reports	Mathematics State Report of Districts	3-8	13
	Reading State Summary	3-10	13
	Mathematics State Summary	3-8 and 10**	13

# Table 7: FCAT 2.0 Reports

\* The Grade 10 Reading and Mathematics Student and Parent Report provides results for FCAT 2.0 Reading and FCAT Mathematics.

\*\*Grade 10 FCAT Mathematics results are provided in the District and State Summary Reports.

### **Codes for No Data Reported**

The following abbreviations may appear on some student and educator reports.

**NT** (Not Tested) indicates that no data are reported for the student because he or she was not tested for that subject.

**NR** (Not Reported) indicates that no data are reported for the student because he or she answered too few questions for that subject or the test was invalidated. Reports containing student results will indicate that no data are reported for one of the following reasons:

- NR2—Did Not Meet Attemptedness Criteria
- NR3—Marked Do Not Score
- NR5—Off-Grade Tester
- NR6—Duplicate Record
- NR7—FDOE Hold
- NR8—FDOE Invalidated

If a student receives an NR code, the parent or student should consult the student's designated guidance counselor.

**NA** (Not Available) indicates that data are not reported for the student because no data were available, or that the data do not apply at that grade level.

**NM** (No Match to Previous Year) indicates that no data were reported from the prior year.

**NF** (Not Found) indicates that no prior data were available for the student for that year, or that student's record for 2009 was not matched to the student's record for 2004, 2005, 2006, 2007, 2008, 2009, and/or 2010.

A dash (—) on the reports indicates that no data are reported because fewer than 10 students were tested. To provide meaningful results and to protect the privacy of individual students, data are printed only when the total number of students in a group is at least 10 and when the performance of individuals is not disclosed.

## FCAT 2.0 Reading and Mathematics Parent and Student Report

### Readers should have their FCAT 2.0 Reading and Mathematics Parent and Student Report when reviewing and interpreting information provided in this section.

The FCAT 2.0 Reading and Mathematics Student and Parent Report is a four-page color folder. The first page includes a letter to parents, guardians, or students. The fourth page provides general information about the FCAT 2.0 program, definitions of key FCAT 2.0 terms, and resources for students. The information on both of these pages is translated into Spanish and Haitian Creole.

Inside the report, pages 2 and 3 provide the student's 2011 FCAT 2.0 results. Page 2 displays the Reading results, and page 3 displays the Mathematics results. Since grade 9 students no longer take a comprehensive mathematics assessment, FCAT 2.0 Reading results are provided on page 2 and an explanation regarding why no mathematics results are included is provided on page 3 in English, Spanish, and Haitian Creole. For grade 10, FCAT 2.0 Reading results are provided on page 2 and FCAT Mathematics results are provided on page 3.



**U** Top of Report: The test, student, school, and district are identified on the top of page 1. The test and student are identified on the top of pages 2-4.

**CAT Equivalent Scores:** On the left side of pages 2 and 3, this graph displays the student's FCAT Equivalent Score and Achievement Level. On the grade 10 report, the graph also shows whether the student passed or did not pass the test. The graph displays the score ranges for Achievement Levels 1 through 5. Beneath the graph, a statement indicates whether the student earned a passing score (for grade 10 only), followed by a statement identifying the student's FCAT Equivalent Score and Achievement Level. This information is translated into Spanish and Haitian Creole. A note below the translations describes the range within which a student's FCAT Equivalent Score would likely fall if the student were to take the test again without additional instruction. Students who receive additional instruction would likely improve their scores.

Content Area Scores: This section appears on the right side of pages 2 and 3; it lists and defines the FCAT 2.0 Reading and Mathematics content areas assessed, also called reporting categories. Spanish and Haitian Creole translations of this information are provided. The titles of the reporting categories are the same across all grade levels for FCAT 2.0 Reading and are different across grade levels for FCAT 2.0 Mathematics. Pages 13-15 of this booklet describe the content assessed on the FCAT 2.0 Reading and Mathematics.

The "Points Earned" column shows the actual number of points earned in each of the content areas. The "Points Possible" column provides the total number of points possible for each of the content areas. The "State Mean" is provided on the far right for comparison. The state mean shows the mean earned by students across the state.

**Bottom of Report:** This area of pages 2 and 3 provides information on the student's score history. The chart to the right shows the student's scores and Achievement Level, as well as the necessary on-grade-level score, for each year the student was tested (if the student's scores were available). A dark gray bar indicates that the student scored in Achievement Level 3 or higher for that year; a light gray bar indicates that the student scored below Achievement Level 3 for that year. The FCAT/FCAT Equivalent Score indicates a student's annual progress from grade to grade and ranges from 86 to 3008. Longitudinal results are not displayed on the bottom of grade 3 reports because there are no historical comparisons. Achievement Level definitions are given to the left of the student's history chart.

# FCAT 2.0 Reading and Mathematics School Report of Students

Readers should have their FCAT 2.0 Reading School Report of Students or FCAT 2.0 Mathematics School Report of Students when reviewing and interpreting information provided in this section. Only authorized district and school personnel may access this report, since it contains confidential student information.



**U** Top of Report: The title of the report is printed here. It identifies the content of the report and the grade level of the data included in the report. The name and number of the district and school are also printed in this area.

**2** Left Side of Report: The name and student ID for all students whose tests were submitted for scoring appear in the first two columns. The FCAT Equivalent Developmental Scale Score (DSS) and FCAT Equivalent Scale Score are provided in the third and fourth columns. For students receiving "NR" in the FCAT Equivalent DSS column, the footnote at the bottom of the report details reasons why the score is not reported (see page 7 for NR codes). If a student has "NT" in the FCAT Equivalent DSS column, this means that the student was not tested. The "Passing" column only appears on the Grade 10 FCAT 2.0 Reading report. The School Report of Students indicates whether a student earned a passing score with a "Y" (Yes) or "N" (No). (Note: Passing information is provided on the School Report of Students for the Grade 10 FCAT Mathematics assessment as well.)

B Achievement Level Section: This section of the report indicates the student's Achievement Level. The FCAT Equivalent DSS range for each Achievement Level is provided in the header.

**Operators Earned by Content Area:** The first row of information shown in this section provides the **"Points"** Possible" for each content area, or reporting category, which varies by subject and grade level. The points earned by content area appear on each student's row, if the student received a score (see section 2 above). The School Report of Students does not contain summary information.

**B** Results for Student Matched to Previous Year: This section provides information on the results matched to the previous year for each student. This section does not appear on grade 3 reports because there is no prior year's data to match. This section includes the previous year's FCAT Achievement Level and FCAT DSS as well as the "DSS Change" from 2010 to 2011 for each student with a record that matched to the previous year. When a student does not have a match to the previous year, an "NM" (No Match to Previous Year) will appear in this column.

# FCAT 2.0 Reading and Mathematics State and District Reports of Results

Readers should have one of the following reports when reviewing and interpreting information provided in this section: *District Report of Schools, District Summary, State Report of Districts,* and *State Summary.* These reports are formatted similarly.

**Top of Reports:** The title of the report is printed here. It identifies the content of the report and the grade level of the data included in the report. The name and number of the district (or of the district and school) are also printed in this area.

Left Side of Reports: Identifying information for the district or school is provided in the first column. The number of students tested appears in the second column of all reports. The Mean FCAT Equivalent Developmental Scale Score (DSS) and Mean FCAT Equivalent Scale Score are provided in the third and fourth columns. The "Percent Passing" column only appears on the FCAT 2.0 Reading reports of results for grade 10 and indicates the percent of students who earned a passing score. On the FCAT 2.0 Reading State and District Summary Reports, "NA" appears in the "Percent Passing" column for grades 3-9 to indicate not applicable. (Note: Passing information for grade 10 students is provided on the State and District Summary Reports for the FCAT Mathematics assessment as well.)

Percent in Each Achievement Level: This section of the report indicates the percentage of students who scored within each Achievement Level. The FCAT Equivalent DSS range for each Achievement Level is provided in the header of the District Report of Schools and State Report of Districts. Tables providing the Achievement Levels for each grade and subject are provided at the bottom of the District Summary and State Summary.

Mean Points Earned by Content Area: The first row of information shown in this section provides the "Points Possible" for each content area, or reporting category, which varies by subject and grade level. The other information in this section varies depending on the report:

- The District Report of Schools displays mean points earned by school.
- The State Report of Districts displays mean points earned by district.
- The *District Summary* displays district- and state-level mean points earned, grouped by student grade level.
- The State Summary displays state-level mean points earned, grouped by student grade level.

# FCAT 2.0 Content

The content of each statewide assessment is organized by reporting categories that are used for test design, scoring, and reporting purposes. Reporting categories group the assessed student knowledge and skills, or **benchmarks**, into broad **content areas**. The FCAT 2.0 Reading reporting categories are the same for each grade level, and the FCAT 2.0 Mathematics reporting categories differ by grade level. In reading, students build upon fundamental reading skills as they progress from grade to grade; therefore, the same reporting categories organize the reading skills assessed for all grade levels. In mathematics, because students are introduced to new skill sets as they progress from grade to grade, reporting categories vary by grade level.

## FCAT 2.0 Reading Reporting Categories

The FCAT 2.0 Reading assessments measure student achievement of the **Next Generation Sunshine State Standards** in reading and literature. For grades 3-10, the FCAT 2.0 Reading tests consist of **multiple-choice** items that assess students' reading comprehension of various types of reading selections.

For all grade levels tested, FCAT 2.0 Reading assesses what students know and are able to do in the broad reporting categories listed below. The concept difficulty assessed on the FCAT 2.0 Reading assessment progresses systematically from grade to grade, as does the complexity of the text presented to the student at each grade level.

### Grades 3-10

- Vocabulary Students use multiple strategies to determine the meaning of grade-appropriate vocabulary words.
- **Reading Application** Students use a variety of strategies to comprehend text suitable for the grade level.
- Literary Analysis: Fiction and Nonfiction
   Students identify, analyze, and apply knowledge of the elements of a variety of literary texts, both fiction and nonfiction.
- Informational Text and Research Process Students comprehend and interpret informational text from a variety of sources.

# FCAT 2.0 Mathematics Reporting Categories

The FCAT 2.0 Mathematics assessments measure student achievement of the *Next Generation Sunshine State Standards* in mathematics. For grade 3, the FCAT 2.0 Mathematics includes only **multiple-choice** items. For grades 4 through 8, the FCAT 2.0 Mathematics assessments include both **gridded-response** and multiple-choice items.

For all grade levels tested, FCAT 2.0 Mathematics assesses what students know and are able to do in the broad reporting categories listed below. The concept difficulty assessed on the FCAT 2.0 Mathematics assessment progresses systematically from grade to grade, as does the complexity of the numerals and mathematical operations included at each grade level.

### Grade 3

• Number: Operations, Problems, and Statistics

Students use number concepts and computation skills to solve real-world problems; create, analyze, and represent patterns and relationships; and construct and analyze data displays and graphs.

- Geometry and Measurement
   Students describe and analyze properties of two-dimensional shapes, including symmetry and congruence; solve problems related to perimeter; and measure objects and tell time.
- Number: Fractions

Students use models to represent fractions and equivalent fractions, including fractions greater than one; and compare and order fractions.

### Grade 4

• Number: Operations and Problems

Students use number concepts and computation skills to solve real-world problems; and analyze patterns and relationships using expressions, equations, and visual representations.

- Geometry and Measurement
   Students determine the area of two-dimensional shapes; classify angles and identify the results of transformations; and use spatial reasoning to solve geometric problems.
- Number: Base 10 and Fractions
   Students identify and estimate decimals; relate fractions, decimals, and percents; and compare and order fractions and decimals.

## Grade 5

• Number: Base Ten and Fractions

Students divide multi-digit whole numbers, including solving real-world problems; and add and subtract decimals, fractions, and mixed numbers.

- Geometry and Measurement Students analyze shapes and solve problems related to area, surface area, and volume; and compare units of measure within the same system of measurement; and identify ordered pairs on a coordinate plane.
- Expressions, Equations, and Statistics Students simplify expressions and use properties of equality to solve equations and real-world problems; and analyze graphs appropriate to the context of the situation.

## Grade 6

• Fractions, Ratios, Proportional Relationships, and Statistics

Students multiply and divide fractions and decimals, and solve real-world problems involving percents, ratios, and rates; and analyze and determine measures of central tendency and variability.

- Expressions and Equations Students evaluate expressions, equations, and inequalities; and use algebraic notation to describe linear functions and simple relations.
- Geometry and Measurement Students analyze and solve problems involving perimeter, area of two-dimensional composite figures, and the volume of prisms.

### Grade 7

• Geometry and Measurement

Students solve problems involving the transformation of figures on a coordinate plane; determine the volume and surface area of three-dimensional figures; and compare and convert units of measure.

- Ratios and Proportional Relationships
   Students solve problems using ratios and apply proportional relationships to real-world and mathematical situations.
- Number: Base Ten

Students solve real-world problems using operations on all rational numbers and use different strategies to solve linear equations.

• Statistics and Probability

Students analyze graphs and make generalizations from population samples; and determine and use probability to make predictions.

#### Grade 8

- Expressions, Equations, and Functions Students analyze and represent linear functions to solve linear equations and systems of linear equations; and solve and graph inequalities.
- Geometry and Measurement
   Students analyze two- and three-dimensional figures by using distance and angle; and compare and convert units of measure.
- Number: Operations, Problems, and Statistics Students solve real-world problems using operations on real numbers; and analyze and summarize data sets.

# Glossary

Note: Terms defined in this glossary that have been cross-referenced appear in **bold text** the first time they are referenced within a definition other than their own.

Achievement Levels—Five categories of achievement that represent the success students demonstrate with the content assessed. The Achievement Levels are helpful in interpreting what a student's score represents. Achievement Levels range from 1 to 5, with Level 1 being the lowest and Level 5 being the highest. To be considered on grade level, students must achieve Level 3 or higher. 2011 FCAT 2.0 scores are reported using the existing FCAT Achievement Level scoring tables (see page 6). Achievement Levels for the FCAT 2.0 scale will be available beginning in 2012 and will be established using the input of classroom teachers, curriculum specialists, education administrators, and other interested citizens.

**Benchmark**—A specific statement that describes what students should know and be able to do. The benchmarks are part of the **NGSSS**.

### Content Area—See Reporting Category.

**Content Area Scores**—The actual number of questions answered correctly within each **reporting category** of FCAT 2.0 Reading and Mathematics. For example, the content area scores are reported for the following reporting categories for Grade 3 FCAT 2.0 Mathematics: *Number: Operations, Problems, and Statistics; Geometry and Measurement; and Number: Fractions.* Content area scores are also referred to as raw scores.

**DSS Change**—A calculation made by the subtraction of two years' developmental scale scores, which yields the amount of change across the two years, e.g., 2011 DSS – 2010 DSS = DSS Change. This number can be large for students who move from a low **Achievement Level** 1 score to a low Achievement Level 2 score. It also can be small for a student who maintains a high score in Achievement Level 4. The DSS Change can be understood best when also considering the Achievement Level scores for the two years.

**English Language Learners (ELLs)**—Students classified as ELLs who are enrolled in an English for Speakers of Other Languages (ESOL) program. These students are permitted testing accommodations when taking the FCAT 2.0 if the accommodations are specified in student ELL plans. All ELLs are expected to participate in the statewide assessments. However, if an ELL has been receiving services in an approved ESOL program for one year or less AND a majority of the student's ELL committee determines that it is appropriate, the ELL may be exempt from the FCAT 2.0 Reading administration.

**Equipercentile Linking Method**—FCAT 2.0 scores are linked to the existing FCAT score scale through the equipercentile linking method. By this method, 2011 FCAT 2.0 scores were linked to 2010 FCAT scores at the same **percentile rank**. This linking method allows the 2011 FCAT 2.0 scores to be reported as **FCAT Equivalent Scores** (**FCAT Equivalent Scale Scores**, which range from 100–500, and **FCAT Equivalent DSS**, which range from 86–3008 across grades 3–10 and show a student's annual progress from grade to grade).

**Exceptional Student Education (ESE)**—Special educational services that are provided to eligible students, e.g., visually impaired, hearing impaired. These services are required by federal law and are provided to Florida students according to the State Board of Education Rule 6A-6.0331, Florida Administrative Code. Students demonstrate the conditions required for the services, and services are provided as described in an Individual Education Plan (IEP) or **Section 504** Plan. The IEP or Section 504 Plan also specify the testing accommodations a student needs for classroom instruction and assessments.

**FCAT Equivalent Developmental Scale Score (DSS)**—A type of scale score used to determine a student's annual progress from grade to grade. The FCAT Equivalent DSS scale for the 2011 FCAT 2.0 Reading and Mathematics assessments uses the existing FCAT scale and ranges from 86–3008 across grades 3–10. These scores are linked to the existing FCAT score scale through the **equipercentile linking method**. On the *FCAT 2.0 Reading and Mathematics Student and Parent Report*, the FCAT Equivalent DSS is called the **FCAT Equivalent Score**. Scores on the new FCAT 2.0 developmental score scale will be available beginning in 2012.

**FCAT Equivalent Scale Score**—The 2011 FCAT 2.0 scale scores that are reported on the existing FCAT scale which ranges from 100–500 for each grade level and **subject area**. These scores are linked to the existing FCAT score scale through the **equipercentile linking method**. The FCAT Equivalent Scale Score is not provided on the *Student and Parent Report*; it is provided on all district and state reports.

**FCAT Equivalent Score**—Student results for the Spring 2011 FCAT 2.0 assessments are reported on the existing FCAT scale as FCAT Equivalent Scores. These scores are also called **FCAT Equivalent Developmental Scale Scores (DSS)** and range from 86–3008 across grades 3–10. The scores are being reported in this way to maintain consistent student expectations during the transition year. FCAT Equivalent Scores will be used to determine student progress from grade to grade in the same way FCAT scores have been used in prior years, using the existing FCAT **Achievement Level** scoring tables (see page 6). The FCAT Equivalent Score is the only score reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report* (i.e., **FCAT Equivalent Scale Scores** are not reported on the *Student and Parent Report*). Scores on the new FCAT 2.0 scale will be available beginning in 2012.

**Gridded-Response (GR)**—Test questions that require students to solve a problem for which the answer is numerical. Answers must be written and bubbled into a number grid. The gridded-response question format is used in FCAT 2.0 Mathematics (grades 4–10).

## Limited English Proficient (LEP)—See English Language Learners (ELL).

**Mean**—An average of the individual scores that describes the performance of a group of students. The mean is computed by finding the sum of all scores and dividing by the number of students.

**Median**—A score that identifies the middle value of a group of data. The median is the point at which a group of numbers (scores) is divided in half (50 percent above and below).

**Mode**—The most frequently occurring score in a set of scores. If a distribution of scores is statistically normal, the **mean**, **median**, and mode are the same score.

**Multiple-Choice (MC)**—Test questions that present students with several options from which to choose the correct answer. FCAT 2.0 Reading and Mathematics assessments use items in which four choices are given, only one of which is correct.

**Next Generation Sunshine State Standards (NGSSS)**—The core content of the curricula taught in Florida. The NGSSS specify the core content knowledge and skills that K-12 public school students are expected to acquire in the **subject areas** of language arts, mathematics, science, social studies, visual and performing arts, physical education, health, and foreign languages. The NGSSS **benchmarks** identify what a student should know and be able to do at each grade level for each subject area.

Percentile Rank—The percentile rank is the percentage of scores that fall at or below a given score.

## Points Earned—See Content Area Scores.

**Points Possible**—The number of "Points Possible" shows the total number of test questions for a **content area**, or **reporting category**, on a test. Each question counts as one point. The number of points possible in a content area may change slightly each year.

**Reporting Category**—The assessed student knowledge and skills, or **benchmarks**, are grouped into broad **content areas** called reporting categories. The FCAT 2.0 Reading reporting categories are the same for each grade level, and the FCAT 2.0 Mathematics reporting categories differ by grade level. In reading, students build upon fundamental reading skills as they progress from grade to grade; therefore, the same reporting categories organize the reading skills assessed for all grade levels. In mathematics, because students are introduced to new skill sets as they progress from grade to grade, reporting categories vary by grade level.

**Section 504**—A special classification of students as defined in Section 504 of the Rehabilitation Act of 1973. Testing accommodations are permitted for students who meet the 504 criteria.

**State Mean**—The average score for each grade used for comparison purposes. Individual student scores, school **mean** scores, or district mean scores can be compared to state averages.

**Subject Area**—The information or skills contained in an area of study. The subject areas assessed on the 2011 FCAT 2.0 are reading and mathematics. In 2012, the FCAT 2.0 will assess science as well.