



# Understanding Florida End-of-Course Assessment Reports

Spring 2013

Florida Department of Education



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## Introduction

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This booklet has been prepared to help you understand the reports for the Spring 2013 **Florida End-of-Course (EOC) Assessments**. It includes explanations of the Florida EOC Assessments, EOC assessment scores and reports, a glossary of the terms used in these reports, and information about the **Next Generation Sunshine State Standards (NGSSS)** content assessed on the Algebra 1, Biology 1, Geometry, and U.S. History EOC Assessments.

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

### Purpose of the Florida EOC Assessments

In accordance with Section 1008.22, Florida Statutes, the Florida Department of Education (FDOE) has implemented **EOC assessments** for certain courses administered at the middle and high school levels. The **Florida EOC Assessments** are designed to measure student achievement of the **NGSSS** for specific courses, as outlined in their **course descriptions** (content knowledge and skills, as specified in the **NGSSS benchmarks**, taught in a course). These assessments are part of Florida's Next Generation Strategic Plan for increasing student achievement and improving college and career readiness. The first assessment to begin the transition to EOC testing in Florida was the 2011 Algebra 1 EOC Assessment. Geometry and Biology 1 EOC Assessments were administered for the first time in spring 2012, and the U.S. History EOC assessment was administered for the first time in spring 2013. The schedule for implementing Florida EOC Assessments is posted at <http://www.fldoe.org/asp/k12memo/pdf/tngcbtf.pdf>. Course descriptions are posted at <http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx>.

Students will take the **EOC assessments** toward the completion of relevant courses. During the first year of implementation, each EOC assessment will only be administered during the spring semester. After the first school year of implementation, each EOC assessment will be administered in the winter and spring at the conclusion of both the fall and spring semesters to accommodate courses that conclude at the end of each semester. In addition, the current schedule includes administrations of Algebra 1, Biology 1, Geometry and U.S. History in summer 2013 and fall 2013.

### Reporting Florida EOC Assessment Scores

Florida EOC Assessments will be reported using **scale scores** and **Achievement Levels**. However, the FDOE cannot establish the Achievement Levels until a baseline test administration has occurred. This means that when a new **EOC assessment** is administered for the first time, the reporting of student assessment results will be limited to scale scores, statewide **means**, and other **normative data**. Students will receive a score on a scale of 20-80, known as a **T-score scale**. On this scale, a score of approximately 50 is the statewide average and the **standard deviation** is 10. Individual Student Reports (ISRs) will indicate whether the student's score falls within the highest, middle, or lowest level compared to other students in Florida.

Once **Achievement Levels** are established for an **EOC assessment**, the passing score is the minimum **scale score** in Achievement Level 3. Level 4 or higher indicates that a student is high achieving and has the potential to meet college-readiness standards by the time he or she graduates from high school.

## ***Students Tested in 2013***

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The Algebra 1, Biology 1, and Geometry EOC Assessments were administered to students close to the end of the semester in which the course was completed (e.g., a student in block scheduling who completed a course at the end of semester one took the assessment in the winter). Students who completed one of the U.S. History courses listed below at any time during the 2012-13 school year took the U.S. History EOC Assessment in the spring.

### **Algebra 1 EOC Assessment**

The Algebra 1 EOC Assessment was administered to students enrolled in and completing any of the following courses:

- Algebra 1 – 1200310
- Algebra 1 Honors – 1200320
- Algebra 1B – 1200380
- Pre-AICE Mathematics 1 – 1209810
- IB Middle Years Program Algebra 1 Honors – 1200390

### **Biology 1 EOC Assessment**

The Biology 1 EOC Assessment was administered to students enrolled in and completing any of the following courses:

- Biology 1 – 2000310
- Biology 1 Honors – 2000320
- Pre-AICE Biology – 2000322
- Biology Technology – 2000430
- Biology 1 PreIB – 2000800
- IB Middle Years Program Biology Honors – 2000850
- Integrated Science 3 – 2002440
- Integrated Science 3 Honors – 2002450
- AP Biology – 2000340 (if taken to satisfy the high school Biology 1 graduation requirement)

### **Geometry EOC Assessment**

The Geometry EOC Assessment was administered to students enrolled in and completing any of the following courses:

- Geometry – 1206310
- Geometry Honors – 1206320
- IB Middle Years Program Geometry Honors – 1206810
- Pre-AICE Mathematics 2 – 1209820

### **U.S. History EOC Assessment**

The U.S. History EOC Assessment was administered to students enrolled in and completing one of the following courses:

- United States History – 2100310
- United States History Honors – 2100320

### **All Florida EOC Assessments**

For all EOC assessments, participating students include English language learner (ELL) and exceptional student education (ESE) students enrolled in the courses. Accommodations are available for eligible ELL and ESE students. In addition to the students enrolled in and completing the courses listed in each section above, the following students may have participated in an EOC assessment administration:

- Students retaking an assessment to earn a passing score for course credit, including students enrolled in a credit recovery course
- Students who had not yet taken an assessment to be averaged as 30 percent of their final course grade
- Students enrolled in a grade forgiveness program retaking the assessment to improve their course grade
- Students in a credit acceleration program (CAP) taking the assessment to earn course credit
- Private school students planning to transfer to the public school system

# Florida EOC Assessments

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## Test Administration Schedule

The full schedule for all statewide assessments for the 2012-13 school year is posted at <http://info.fldoe.org/docushare/dsweb/Get/Document-6155/1113sasb.pdf>. Spring Florida EOC Assessments were administered according to the schedule provided below. Districts were required to administer the EOC assessments in the order listed below, and testing for one subject had to be completed before testing for another subject could begin.

- U.S. History EOC Assessment—April 22 – May 3, 2013
- Biology 1 EOC Assessment—April 29 – May 10, 2013
- Algebra 1 EOC Assessment—May 6 – 17, 2013
- Geometry EOC Assessment—May 13 – 24, 2013
- Statewide Make-up Days—May 28 – 31, 2013

## Test Sessions

The Algebra 1, Biology 1, Geometry, and U.S. History EOC Assessments are administered in one 160-minute session with a 10-minute break after the first 80 minutes (individual breaks are allowed as needed). Although the assessments are scheduled for a 160-minute session, any student not finished by the end of the 160 minutes may continue working; however, testing must be completed within the same school day.

## Testing Format

All Florida EOC Assessments are administered via a **computer-based testing** platform. Paper-based versions (regular print, braille) are provided for students with disabilities who require allowable accommodations, as specified in their Individual Educational Plans (IEPs) or Section 504 plans. Large print, zoom, color contrast, and screen reader are computer-based accommodations available for students whose IEPs or Section 504 plans indicate these accommodations.

For the Algebra 1 and Biology 1 EOC Assessments, students may request the use of a hand-held four-function calculator if, after participating in a practice test, they prefer not to use the online calculator provided. For the Geometry EOC Assessment, districts may decide whether to permit students who request them to use approved hand-held scientific calculators; the FDOE does not provide scientific calculators to districts. Algebra 1, Biology 1, and Geometry students are provided four-page work folders to use as scratch paper. For the U.S. History EOC Assessment, students may use a one-page **computer-based testing** worksheet as scratch paper for note-taking.

## Question Formats

- **Selected-response questions** appear on all Florida EOC Assessments. Students choose the best answer from four answer choices.
- **Fill-in response questions** appear on the Algebra 1 and Geometry EOC Assessments. Students solve a problem for which the answer is numerical. Students type or “fill-in” the digits 0-9 or the symbols for a decimal point, fraction bar, or negative sign in the answer boxes provided.

Each form of the Algebra 1 and Geometry EOC Assessments includes 35-40 **selected-response** and 20-25 **fill-in response** questions. Each form of the Biology 1 EOC Assessment includes 60-66 selected-response questions. Each form of the U.S. History EOC Assessment includes 50-60 selected-response questions. Approximately six to 10 of these questions, which are also referred to as test **items**, are experimental (**field test**) questions and are NOT used to calculate student scores.

### 2013 Algebra 1, Biology 1, Geometry, and U.S. History EOC Assessment Forms

There were four test forms of the Algebra 1, Biology 1, Geometry, and U.S. History EOC Assessments in spring 2013. These forms are coded as Forms A, B, C, and D. For each EOC assessment, each form contained questions common to all four forms, as well as questions unique to each form and **field-test questions**. Table 1 provides the percentage of questions in each **reporting category**.

**Table 1: Reporting Category Percentages for 2013 Florida EOC Assessments**

Assessment	Category	Percentage
Algebra 1	Functions, Linear Equations, and Inequalities	55
	Polynomials	20
	Rationals, Radicals, Quadratics, and Discrete Mathematics	25
Biology 1	Molecular and Cellular Biology	35
	Classification, Heredity, and Evolution	25
	Organisms, Populations, and Ecosystems	40
Geometry	Two-Dimensional Geometry	65
	Three-Dimensional Geometry	20
	Trigonometry and Discrete Mathematics	15
U.S. History	Late Nineteenth and Early Twentieth Century, 1860–1910	33
	Global Military, Political, and Economic Challenges, 1890–1940	34
	The United States and the Defense of the International Peace, 1940–present	33

The test forms match the test design in the Test Design Summary posted at <http://fcad.fldoe.org/pdf/designsummary.pdf>.

During test construction, the four test forms for each EOC assessment were developed by content and psychometric experts using operational and field-test statistics so that they would be comparable in difficulty. The four forms created for each EOC assessment were then reviewed by committees of Florida mathematics, science, and social studies educators who were trained in Dr. Norman Webb’s alignment criteria prior to the review. Committee members conducted a comprehensive review of the test forms and determined that they are fair assessments aligned to the **course descriptions** for each EOC assessment. The committees did not recommend any changes to the test forms.

## Florida EOC Assessment Scores

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Florida EOC Assessments will be reported using **scale scores** and **Achievement Levels**. However, the Department cannot establish the Achievement Levels until a baseline test administration has occurred. A baseline test administration is the first statewide test administration of an assessment. This means that each time a new **EOC assessment** is administered statewide for the first time (such as the 2013 U.S. History EOC Assessment), the reporting of student assessment results will be limited to scale scores, statewide **means**, and other **normative data**.

### Achievement Levels

**Achievement Levels** describe the success a student has achieved with the content assessed. Achievement Levels range from 1 to 5, with Level 1 being the lowest and Level 5 being the highest. Level 3 indicates satisfactory performance. The passing score for the Algebra 1, Biology 1, and Geometry EOC Assessments is the minimum **scale score** in Achievement Level 3. Level 4 or higher indicates the student is high achieving and has the potential to meet college-readiness standards by the time the student graduates from high school.

**Achievement Levels** were established for the Algebra 1 EOC Assessment by the State Board of Education on December 19, 2011, and were reported for the first time in 2012. Achievement Levels were established by the State Board of Education for the Biology 1 and Geometry EOC Assessments on December 12, 2012, and are being reported for the first time this spring. Achievement Levels for additional **EOC assessments** will be established by the State Board of Education according to the schedule provided in Table 2.

**Table 2: School Year Achievement Levels Will Be Established**

School Year	Florida EOC Assessment
2013-14	U.S. History EOC Assessment
2014-15	Civics EOC Assessment

The following **Achievement Level Policy Definitions**, which describe student success with the **Next Generation Sunshine State Standards (NGSSS)**, apply to all Florida EOC Assessments:

- Level 5** Students at this level demonstrate mastery of the most challenging content of the *Next Generation Sunshine State Standards*.
- Level 4** Students at this level demonstrate an above satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.
- Level 3** Students at this level demonstrate a satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.
- Level 2** Students at this level demonstrate a below satisfactory level of success with the challenging content of the *Next Generation Sunshine State Standards*.
- Level 1** Students at this level demonstrate an inadequate level of success with the challenging content of the *Next Generation Sunshine State Standards*.

Tables 3 through 5 provide the **scale score** range for each **Achievement Level** for the Algebra 1, Biology 1, and Geometry EOC Assessments.

**Table 3: Achievement Levels for the Algebra 1 EOC Assessment Scale Scores (325 to 475)**

Level 1	Level 2	Level 3	Level 4	Level 5
325-374	375-398	399-424	425-436	437-475

**Table 4: Achievement Levels for the Biology 1 EOC Assessment Scale Scores (325 to 475)**

Level 1	Level 2	Level 3	Level 4	Level 5
325-368	369-394	395-420	421-430	431-475

**Table 5: Achievement Levels for the Geometry EOC Assessment Scale Scores (325 to 475)**

Level 1	Level 2	Level 3	Level 4	Level 5
325-369	370-395	396-417	418-433	434-475

### U.S. History EOC Assessment Scores

For the 2013 U.S. History EOC Assessment, students receive a score on a scale of 20-80. This scale, which will only be used for the first statewide test administration of each EOC assessment, is a special scale known as a **T-score scale**, and the score that students receive is called a **T score**. On the T-score scale, a score of approximately 50 is the statewide average and all interpretations are norm-referenced interpretations. For example, on this scale, scores around 60 could be considered above average, and scores around 40 could be considered below average. Similarly, scores around 70 could be considered excellent, and scores around 30 could be considered poor. Individual Student Reports (ISRs) indicate whether the student's score falls within the high, middle, or low levels compared to other students in Florida.

### Equating

Since there are four test forms for each 2013 EOC assessment, student results from all four test forms for an EOC assessment must be compared and, if necessary, adjusted to ensure that the difficulty level of the test is the same for each form. This process, called **equating**, takes place after testing when enough student scores are in the system to ensure that a representative sample of student results is available for use in the comparison.

For the Algebra 1, Biology 1, and Geometry EOC Assessments, there are two main steps in the **equating** process. First, the four different test forms are concurrently calibrated, which places the **state mean** at a score of 400 for all test forms combined, and ensures that the students' scores across the four test forms are comparable. This means that even if the state mean for each test form differs slightly across forms, this step ensures that the interpretation or meaning of student Algebra 1, Biology 1, and Geometry EOC Assessment scores on the different forms is the same. Second, the test forms concurrently calibrated in the previous step are also placed on the baseline scale so that the performance of the current year's students on the EOC assessment can be compared to the performance of the initial year's students on the same assessment. This two-step process ensures that test scores are comparable within and across years.

Through the **equating** process, which places the statewide average, or **state mean**, at a score of approximately 50 on a scale of 20-80 for all test forms combined, student scores across the four test forms for each EOC assessment are comparable. This means that even if the state mean for each test form or **content area** differs slightly across the four test forms for each EOC assessment, the equating process ensures that the interpretation or meaning of student **T scores** on the different test forms is the same.

## 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 subject area. The **state mean** for each reporting category is provided on Individual Student Reports, and aggregated files are provided to districts to allow for comparisons to average performance statewide. There are three reporting categories for each of the 2013 EOC assessments. The percentage each reporting category comprises of students' final scores for each EOC assessment is provided in Table 1 on page 7. The content assessed by each EOC assessment is described on pages 20-21.

It is important to identify the comparisons at the content-area-score level that yield valid interpretations of student performance so educators may gather reliable information from the EOC assessments. When comparing **content area scores**, it is important to keep in mind that there are four test forms for each EOC assessment. **Mean** content area scores for each test form might be different; therefore, content area scores should not be compared across test forms. The **equating** process described on page 9 only ensures that the **scale scores** and **T scores** on the different test forms have the same meaning and are therefore comparable. 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** for a specific test form between schools, districts, and the state. For example, a school's content area score results for Form A can be compared to other schools', districts', or the state's content area score results for Form A. District results can be compared to other district results and state results for the same test form. Since students in any group (school, district, or state) will take the same set of test questions for the same test form in a given year, their results are comparable regardless of varying **item** difficulty at the content-area level.

In Table 6, 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 the Algebra 1 EOC Assessment Form A, **Reporting Category 1**.

**Table 6: Mean Percentage Correct for the Algebra 1 EOC Assessment Form A, Reporting Category 1  
2013 School Year (mock data)**

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

In Table 7 below, 2013 mock results for Evergreen High School are compared to both the district (Coastal) and the state.

**Table 7: Mean Percentage Correct for the Algebra 1 EOC Assessment Form A, 2013 School Year  
Comparison of School to District and School to State (mock data)**

Reporting Category	Evergreen High School (mock data)	Coastal District (mock data)	School/District Difference (mock data)	Evergreen High School (mock data)	State of Florida (mock data)	School/State Difference (mock data)
Reporting Category 1	62%	64%	-2%	62%	57%	5%
Reporting Category 2	64%	57%	7%	64%	63%	1%
Reporting Category 3	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 High School had a higher **mean** percentage correct statistic than the Coastal District on Form A (64 percent versus 57 percent, respectively); however, Evergreen High School's results

were comparable to the state's on Form A (64 percent versus 63 percent, respectively). If this variance remains consistent over time when comparing the same test form, there would be evidence to support identifying and sharing best practices at Evergreen High School with the rest of the district.

Another meaningful finding from Table 7 is illustrated in **Reporting Category 3** results. In this **content area**, Evergreen High School had a slightly lower **mean** percentage correct on Form A 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 High School's performance on Reporting Category 3 was lower than that of the district, the performances of both were substantially higher than the state's performance. If this is the case for all three test forms, then it is likely that targeting additional resources to improve performance in Reporting Category 3 should be a lower priority.

**The Florida Department of Education encourages educators to use EOC assessment 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.**

## EOC Assessment Student, School, District, and State Reports

**Table 8: Florida EOC Assessment Reports**

Florida EOC Assessment Report Title		Page of Report Description
Student Reports	Algebra 1 EOC Assessment Student Report	14
	Biology 1 EOC Assessment Student Report	14
	Geometry EOC Assessment Student Report	14
	U.S. History EOC Assessment Student Report	15
School Reports	Algebra 1 EOC Assessment School Report of Students	16
	Biology 1 EOC Assessment School Report of Students	16
	Geometry EOC Assessment School Report of Students	16
	U.S. History EOC Assessment School Report of Students	17
District Reports	Algebra 1 EOC Assessment District Report of Schools	18
	Biology 1 EOC Assessment District Report of Schools	18
	Geometry EOC Assessment District Report of Schools	18
	U.S. History EOC Assessment District Report of Schools	19
	Algebra 1 EOC Assessment District Summary	18
	Biology 1 EOC Assessment District Summary	18
	Geometry EOC Assessment District Summary	18
	U.S. History EOC Assessment District Summary	19
State Reports	Algebra 1 EOC Assessment State Report of Districts	18
	Biology 1 EOC Assessment State Report of Districts	18
	Geometry EOC Assessment State Report of Districts	18
	U.S. History EOC Assessment State Report of Districts	19
	Algebra 1 EOC Assessment State Summary	18
	Biology 1 EOC Assessment State Summary	18
	Geometry EOC Assessment State Summary	18
	U.S. History EOC Assessment State Summary	19

## Codes for No Data Reported

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

**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
- **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.

A dash (—) on the reports indicates that no data are reported because fewer than 10 students were tested or all students would be reported in the same category (e.g., the same **Achievement Level** or the same **Third**). 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.

## Algebra 1, Biology 1, and Geometry EOC Assessments Student Reports

Readers should have their *Algebra 1 EOC Assessment Student Report*, *Biology 1 EOC Assessment Student Report*, or *Geometry EOC Assessment Student Report* for reference when reviewing and interpreting information provided in this section.

The *Algebra 1 EOC Assessment Student Reports*, *Biology 1 EOC Assessment Student Reports*, and *Geometry EOC Assessment Student Reports* are two-page reports. The first page provides an explanation of the score requirements and displays the student's **scale score**. Page 2 provides the student's **content area scores**. The information on both of these pages is also provided in Spanish and Haitian Creole.

- 1 Top of Report:** The test, grade level, student, school, and district are identified on the top of pages 1 and 2 of the report.
- 2 Introduction:** An introductory note explaining the score requirements appears beneath the EOC assessment logo and student's identifying information.
- 3 Scale Scores:** The graph in the middle of page 1 displays the student's **scale score** and **Achievement Level**. The graph also shows whether the student passed or did not pass the test. The passing score for an EOC assessment is the minimum score in Achievement Level 3. The graph displays the score ranges for Achievement Levels 1 through 5. To the right of the graph, a statement indicates whether the student earned a passing score, followed by a statement identifying the student's scale score and Achievement Level. A note below the Spanish and Haitian Creole translations describes the range within which a student's scale score would likely fall if the student were to take the test again without additional instruction.
- 4 Achievement Levels:** Definitions for **Achievement Levels** 1 through 5 are provided at the bottom of page 1.
- 5 Content Area Scores:** **Content area scores** are explained on page 2 of the report. The top portion of the page provides an explanation of content area scores. The table in the middle of the page provides the form of the test the student took and the results for each **content area**. 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**" for each content area is provided on the far right for comparison. The state mean shows the **mean** points earned by students across the state on the same test form. The content areas assessed, also called **reporting categories**, are defined on the bottom of the page.

## U.S. History EOC Assessment Student Report

Readers should have their *U.S. History EOC Assessment Student Report* for reference when reviewing and interpreting information provided in this section.

The *U.S. History EOC Assessment Student Report* is a two-page report. The first page provides an explanation of the assessment and displays the student's **scale score**. Page 2 provides the student's **content area scores**. The information on both of these pages is translated into Spanish and Haitian Creole.

- 1 Top of Report:** The test, grade level, student, school, and district are identified on the top of pages 1 and 2 of the report.
- 2 Introduction:** An introductory note explaining the score requirements appears beneath the EOC assessment logo and student's identifying information.
- 3 Scale Scores:** The graph and table in the middle of page 1 provide the student's score on a scale of 20-80. The section of this table titled "Compared to Other Students" indicates whether the student scored within the lowest, middle, or highest **third** when compared to other students in the state. The graph also shows the student's results in relation to the **state mean**. To the right of the graph is a statement identifying the student's **scale score**, which is also referred to as a **T score**. A note below the Spanish and Haitian Creole translations describes the range within which a student's score would likely fall if the student were to take the test again without additional instruction.
- 4 Content Area Scores:** **Content area scores** are explained on page 2 of the report. The top portion of the page provides an explanation of content area scores. The table in the middle of the page provides the form of the test the student took and the results for each **content area**. 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**" for each content area is provided on the far right for comparison. The state mean shows the **mean** points earned by students across the state on the same test form. The content areas assessed, also called **reporting categories**, are defined on the bottom of the page.

## Algebra 1, Biology 1, and Geometry EOC Assessments School Report of Students

Readers should have their *Algebra 1 EOC Assessment School Report of Students*, *Biology 1 EOC Assessment School Report of Students*, or *Geometry EOC Assessment School Report of Students* for reference 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.

- 1 Top of Report:** The title of the report is printed here. It identifies the subject area and test administration for 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. Students are grouped by grade level, which is indicated in the first column. The test form is provided in the third column, and each student's **scale score** is provided in the fourth column. For a student with an "NR" code in the fourth column, the footnote at the bottom of the report details reasons why the score is not reported (see page 13 for NR codes). The "Passed" column indicates whether a student earned a passing score (Level 3 or above) with a "Y" (Yes) or "N" (No). For students who must have the EOC assessment results factored as 30 percent of their final course grade, districts received conversion tables that may be used to convert the scale scores into **T scores**, which are the scores that were reported in spring 2011 for Algebra 1 and spring 2012 for Biology 1 and Geometry. The T scores should then be factored into the student's course grade in the same manner as they were for the initial statewide test administration.
- 3 Achievement Levels:** This section of the report indicates the student's **Achievement Level**. The score range for each Achievement Level is provided in the header.
- 4 Points Earned/Points Possible by Content Area:** The **content areas** are listed in the header of this section. The "Points Earned" out of the "Points Possible" for each content area, or **reporting category**, are provided for each student. The *School Report of Students* does not contain summary information. A footnote for this section reads, "Content area results are not intended for comparison across administrations or test forms." Valid interpretations of **content area scores** are explained on pages 10-11.

## U.S. History EOC Assessment School Report of Students

Readers should have their *U.S. History EOC Assessment School Report of Students* for reference 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.

- 1 Top of Report:** The title of the report is printed here. It identifies the subject area and test administration for 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. Students are grouped by grade level, which is indicated in the first column. The test form each student took is provided in the third column, and the **scale score**, which is also referred to as a **T score**, is provided in the fourth column. For a student with an “NR” code in the fourth column, the footnote at the bottom of the report details reasons why the score is not reported (see page 13 for NR codes).
- 3 Statewide Comparisons by Thirds Section:** This section of the report indicates which **third** the student’s score is in when compared to the state: 1 indicates the lowest third, 2 indicates the middle third, and 3 indicates the highest third.
- 4 Points Earned/Points Possible by Content Area:** The **content areas** are listed in the header of this section. The “**Points Earned**” out of the “**Points Possible**” for each content area, or **reporting category**, are provided for each student. The *School Report of Students* does not contain summary information. A footnote for this section reads, “Content area results are not intended for comparison across administrations or test forms.” Valid interpretations of **content area scores** are explained on pages 10-11.

## Algebra 1, Biology 1, and Geometry EOC Assessments State and District Reports of Results

Readers should have one or more of the following Algebra 1, Biology 1, or Geometry EOC Assessment reports for reference when reviewing and interpreting information provided in this section: *District Report of Schools*, *District Summary*, *State Report of Districts*, and/or *State Summary*. These reports are formatted similarly.

- 1 Top of Reports:** The title of the report is printed here. It identifies the subject area and test administration for the data included in the report. The name and number of the district are also printed in this area on district-level reports.
- 2 Left Side of Reports:** As appropriate, identifying information for the district or school is provided in the first column. The first column indicates whether the data are for first-time testers (separated by grade level), retakers (all grades combined), or all students (first-time testers and retakers for all grades combined). The number of students tested appears in the second column of all reports. The **mean scale score** is provided in the third column. The “Percentage Passing” column indicates the percentage of students who earned a passing score (Level 3 or above).
- 3 Percentage in Each Achievement Level:** This section of the report indicates the percentage of students who scored within each **Achievement Level**. The **scale score** range for each Achievement Level is provided in the header.

## U.S. History EOC Assessment State and District Reports of Results

Readers should have one or more of the following U.S. History EOC Assessment 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.

- 1 Top of Reports:** The title of the report is printed here. It identifies the subject area and test administration for the data included in the report. The name and number of the district are also printed in this area on district-level reports.
- 2 Left Side of Reports:** As appropriate, identifying information for the district or school and grade levels tested is provided in the first column. The number of students reported for the school, district, or state appears in the second column of all reports. The **mean scale score**, which is also referred to as a **T Score**, is provided in the third column.
- 3 Percentage in Each Third:** This section of the report indicates the percentage of students who scored within each **third**, with 1 indicating the lowest third, 2 indicating the middle third, and 3 indicating the highest third.

## Content Assessed

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The content of the **Florida EOC Assessments** 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**. Definitions and sample test questions for each reporting category are provided below for each of the 2013 EOC assessments.

### Algebra 1 EOC Assessment Reporting Categories

The Algebra 1 EOC Assessment measures student achievement of the **Next Generation Sunshine State Standards (NGSSS)** in mathematics, as outlined in the Algebra 1 **course description**. Forty NGSSS **benchmarks** comprise the Algebra 1 course description, which may be accessed at <http://www.floridastandards.org/Courses/PublicPreviewCourse1.aspx>. The test consists of **selected-response** and **fill-in response** questions that measure what students know and are able to do in the broad **reporting categories** listed below.

- **Functions, Linear Equations, and Inequalities**  
Students solve real-world problems involving relations and functions; interpret graphs, including the domain and range; use function notation and link equations to functions; and solve, graph, and interpret linear equations and inequalities.
- **Polynomials**  
Students perform operations on polynomials; and simplify monomial expressions and factor polynomial expressions.
- **Rationals, Radicals, Quadratics, and Discrete Mathematics**  
Students simplify rational and radical expressions; solve algebraic proportions; perform operations on radical expressions; interpret graphs of and solve quadratic equations; perform set operations; and use and interpret Venn diagrams.

### Biology 1 EOC Assessment Reporting Categories

The Biology 1 EOC Assessment measures student achievement of the **NGSSS** in science, as outlined in the Biology 1 **course description**. Seventy-five NGSSS **benchmarks** comprise the 2012-13 Biology 1 course description, which may be accessed at <http://www.floridastandards.org/Courses/PublicPreviewCourse69.aspx>. The test consists of **selected-response** questions that measure what students know and are able to do in the broad **reporting categories** listed below.

- **Molecular and Cellular Biology**  
Students compare prokaryotic and eukaryotic cells; differentiate between mitosis and meiosis; relate the structure and function of the four major categories of biological macromolecules; and differentiate the processes of photosynthesis and cellular respiration.
- **Classification, Heredity, and Evolution**  
Students identify evidence that supports the scientific theory of evolution; classify organisms into domains or kingdoms; identify scientific explanations of the origin of life; determine conditions required for natural selection; and analyze patterns of inheritance.
- **Organisms, Populations, and Ecosystems**  
Students relate structure and function of organs and tissues in plants and animals; evaluate factors contributing to changes in population size; determine consequences of the loss of biodiversity; and evaluate the impact of biotechnology.

### Geometry EOC Assessment Reporting Categories

The Geometry EOC Assessment measures student achievement of the **NGSSS** in mathematics, as outlined in the Geometry **course description**. Forty-nine NGSSS **benchmarks** comprise the 2012-13 Geometry course description, which may be accessed at <http://www.floridastandards.org/Courses/PublicPreviewCourse36.aspx>. The test consists

of **selected-response** and **fill-in response** questions that measure what students know and are able to do in the broad **reporting categories** listed below.

- **Two-Dimensional Geometry**  
Students analyze and solve real-world problems involving angles, polygons, and circles and determine the effect of changes in dimensions; apply transformations to polygons; and determine and prove properties of regularity, congruency, similarity, and symmetry.
- **Three-Dimensional Geometry**  
Students analyze and describe relationships of polyhedra; solve real-world problems for lateral area, surface area, and volume of solids and determine the effect of changes in dimensions; and use properties of congruent and similar solids.
- **Trigonometry and Discrete Mathematics**  
Students use trigonometry to solve real-world problems involving right triangles; and identify a conditional statement and identify the converse, inverse, and contrapositive.

### **U.S. History EOC Assessment Reporting Categories**

The U.S. History EOC Assessment measures student achievement of the **NGSSS** in social studies, as outlined in the United States History **course description**. One hundred and twenty-five NGSSS **benchmarks** comprise the 2012-13 United States History course description, which may be accessed at <http://www.cpalms.org/Courses/PublicPreviewCourse1723.aspx?ct=1&kw=2100310>. The test consists of **selected-response** questions that measure what students know and are able to do in the broad **reporting categories** listed below.

- **Late Nineteenth and Early Twentieth Centuries (1860-1910)**  
Students understand and articulate the impact of issues related to the Civil War, Reconstruction, the closing of the frontier, the industrialization of the nation, and changes in American society at the beginning of the twentieth century.
- **Global Military, Political, and Economic Challenges (1890-1940)**  
Students understand and articulate the impact of the issues related to the rise of American military power, America's increased involvement in world affairs, and changing social, political, and economic forces affecting the 1920s and 1930s.
- **The United States and the Defense of the International Peace (1940-2010)**  
Students understand and articulate the impact of issues related to World War II, the Cold War, the social revolutions of the late twentieth century, and the challenges of the early twenty-first century.

## Glossary

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

**Achievement Levels**—Once standards are set for an **EOC assessment**, scores are defined by five categories of achievement that represent the success students demonstrate with the content assessed. 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. In order to earn course credit for select assessments, students must achieve Level 3 or higher. Level 4 indicates the student is high achieving and has the potential to meet college-readiness standards by the time the student graduates from high school. Achievement Levels have been established for the Algebra 1, Biology 1, and Geometry EOC Assessments. Achievement Levels for the U.S. History EOC Assessment will be available beginning in 2014 and will be established using the input of classroom teachers, curriculum specialists, education administrators, and other stakeholders.

**Achievement Level Policy Definitions**—Definitions that summarize the level of success a student has with the **Next Generation Sunshine State Standards (NGSSS)**. Each **Achievement Level**, with Level 5 being the highest and Level 1 being the lowest, has a policy definition.

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

**CBT Tools**—Tools available to students in the **computer-based testing** platform. CBT tools vary slightly depending on the subject area. The CBT tools provided to all students are as follows: highlighter, eraser, eliminate-choice, review, and help. Algebra 1, Geometry, and Biology 1 EOC Assessment also have a calculator, straightedge, and exhibit tool (a reference sheet of commonly used formulas is provided for Algebra 1 and Geometry and the Periodic Table of Elements is provided for Biology 1). The U.S. History EOC Assessment and Civics EOC Assessment Field Test have a notepad. Students may use these tools at any time during the assessment.

**Computer-Based Practice Test**—Students participate in a practice test at school that demonstrates the tools and **item** types they will see on the actual assessment. The practice test is delivered through an **Electronic Practice Assessment Tool (ePAT)**, which mimics the software the students will use on the day of testing. This practice test is not intended to be a predictor of performance on the assessment. Students may also practice on their own by accessing the appropriate ePAT at [www.FLAssessments.com/ePAT](http://www.FLAssessments.com/ePAT).

**Computer-Based Testing**—Several Florida statewide assessments are now being administered using a computer-based format. The **Florida EOC Assessments** are all given in a computer-based format, with paper-based accommodations offered for eligible students. When taking the test on the computer, students make their answer choices using the mouse or keyboard, and they may use various **CBT tools**, such as the eliminate-choice tool or the highlighter tool, as they work. Once they have completed the test, they submit their answers electronically. Before exiting the assessment and submitting their responses, students are taken to a screen that identifies questions that are answered, unanswered, and marked for review.

**Content Area**—See **Reporting Category**.

**Content Area Scores**—The actual number of questions answered correctly within each **reporting category** of an assessment. For example, content area scores are reported for the following reporting categories for the Algebra 1 EOC Assessment: *Functions, Linear Equations, and Inequalities; Polynomials; and Rationals, Radicals, Quadratics, and Discrete Mathematics*. Content area scores are also referred to as raw scores.

**Course Description**—The content knowledge and skills taught in a course. **EOC assessments** measure achievement of students enrolled in a course by assessing the **NGSSS benchmarks** assigned to the course description for the

subject area. Course descriptions may be accessed at <http://www.floridastandards.org/Courses/CourseDescriptionSearch.aspx>.

**Electronic Practice Assessment Tool (ePAT)**—See **Computer-Based Practice Test**.

**EOC Assessment**—See **Florida End-of-Course (EOC) Assessments**.

**Equating**—A process that occurs during scoring in which results from different test forms are reviewed, compared, and adjusted so that the same scores for each test form indicate the same level of achievement. This process ensures that the difficulty level of each test form is adjusted so that scores across test forms are comparable. This process also ensures that **scale scores** indicate the same level of difficulty each year.

**E-Tools**—See **CBT Tools**.

**Field Test**—Before a statewide assessment can occur, **items** must be field-tested in order to try out questions before they are used to determine a student's score.

**Field-test Questions**—Newly developed questions that are administered to students before they can be used on a future test. If the data on the field-test questions are acceptable, then the questions may be used on an actual test and count toward a student's score.

**Fill-In Response**—Test questions that require students to solve a problem for which the answer is numerical. Students will use the keyboard or number pad to type the digits 0-9 or the symbols for a decimal point, fraction bar, or negative sign in the answer boxes. The fill-in response format is used in the Algebra 1 and Geometry End-of-Course Assessments.

**Florida End-of-Course (EOC) Assessments**—Tests designed to measure student achievement of the **NGSSS** for specific courses, as outlined in their **course descriptions**. These assessments are part of Florida's Next Generation Strategic Plan for increasing student achievement and improving college and career readiness. The first assessment to begin the transition to EOC testing in Florida was the 2011 Algebra 1 EOC Assessment. The Biology 1 and Geometry EOC Assessments were first administered in spring 2012. The U.S. History EOC Assessment was first administered in spring 2013, and the Civics EOC Assessment was field-tested this spring and will be administered statewide for the first time in spring 2014.

**Items**—Test questions that students are required to answer.

**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**—See **Selected-Response**.

**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.

**Normative Data**—Data representing prescribed norms or averages. For example, types of normative data available for the first test administration year for **EOC assessments** are the **mean** and the percentage of students scoring in each **third**.

**Points Earned**—See **Content Area Scores**.

**Points Possible**—The number of “Points Possible” is the total number of test questions for a **content area**, or **reporting category**, on a test. The number of questions in each reporting category on the test equals the number of points possible. The number of points possible in a content area may change slightly each year.

**Reporting Category**—Broad **content areas** into which the assessed student knowledge and skills, or **benchmarks**, are grouped.

**Scale Score**—The type of score students receive on an EOC assessment. When a student takes an EOC assessment, the student’s **content area scores**, which are also called raw scores, are converted to a scale score through an **equating** process. The equating process ensures that the scale scores represent the same level of difficulty each year.

**Selected-Response**—Test questions that present students with several options from which to choose the correct answer. FCAT 2.0 Reading, Mathematics, and Science assessments use selected-response **items** in which four choices are given, only one of which is correct.

**Standard Deviation**—The amount of average variation, or dispersion, from the **mean**.

**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 the state mean.

**Thirds**—This section of a report indicates the percentage of students who scored within each third, with 1 being the lowest and 3 being the highest. Thirds are determined by the total **scale score** distribution for a specific grade/subject by dividing the distribution into three equal groups. Thirds are only reported for the first statewide test administration of an EOC assessment.

**T Score**—The score that students receive the first year that an **EOC assessment** is administered. T scores are reported using a norm-referenced score scale known as a **T-score scale**. On student, school, district, and state reports, the T score is referred to as a **scale score**.

**T-Score Scale**—A scale of 20-80 in which the **mean** is a score of 50 and the **standard deviation** is 10.