

SUNSHINE SOLUTION TALKING POINTS/DOCUMENT DESCRIPTIONS

August 16, 2015

Sunshine Solution Talking Points – Board Member to Board Member

1. The Sunshine Solution is what is best for students and supports accountability. (See Sunshine Solution PP-Slide 1)
2. The Sunshine Solution is in response to legislators and parents who are seeking a proactive solution to the many challenges experienced throughout the FSA. (See Sunshine Solution PP-Slide 1)
3. The Sunshine Solution is intended to spur discussions among all districts to find a valid and reliable solution to FSA testing and reduce the number of hours students are engaged in state mandated testing. (See Sunshine Solution PP-Slide 4)
4. The Sunshine Solution is about flexibility that allows districts to choose a combination of paper/pencil and computer-based testing to suit the individual computer readiness of each district.
5. The Sunshine Solution recommends a nationally normed test be used that is aligned to Florida Standards (the DOE and districts can work together to determine nationally normed assessment options). Nationally normed tests, such as Iowa, and SAT, are acceptable measures for Third Grade Good Cause Exemption, HS Graduation, private students using tax credit scholarships, and most recently \$40 million dollars in teacher scholarships. (See Sunshine Solution PP-Slide 5)
6. Florida families need to clearly understand how their students compare nationally and internationally and understand their student's annual growth.
7. The Sunshine Solution is about preserving instructional time and putting the instructional needs of students and their achievement first. (See Sunshine Solution PP-Slide 4)
8. Assessments should inform instruction. The Sunshine Solution is about getting test results back within weeks of taking a paper/pencil tests and days of taking computer based tests. Test data needs to be timely to assist with summer school placement and scheduling for the next year. Families deserve their students' results before they leave for the summer break. . (See Sunshine Solution PP-Slide 4)
9. The Sunshine Solution is about educating key decision makers of the close alignment of Common Core and Florida Standards and what is tested on the FSA. (See Sunshine Solution PP-Slides 2 and3)
10. The Sunshine Solution is about having a test and testing process that is transparent to districts, teachers and families. FSA is shrouded in secrecy, our families and schools need more information about their students and about the assessment they take.

Let's be bold and do the right thing for our students.

Sunshine Solution Documents

1. Letter to Commissioner Pam Stewart – July 13, 2015
2. Response from Commissioner Pam Stewart – July 17, 2015
3. Email to Executive Vice Chancellor Mary Jane Tappen – August 5, 2015
4. Seminole County Public Schools Comparison Analysis: Common Core State Standards (CCSS), Florida Standards (FS) and FSA Assessed Standards
5. Email response from Executive Vice Chancellor Mary Jane Tappen – August 10, 2015
6. Sunshine Solution Power Point Slides



WALT GRIFFIN, Ed.D.
Superintendent

Educational Support Center
400 E. Lake Mary Boulevard
Sanford, Florida 32773-7127
Phone: (407) 320-0000
Fax: (407) 320-0281

SCHOOL BOARD

TINA CALDERONE, Ed.D.
Chairman

AMY LOCKHART
Vice Chairman

KAREN ALMOND
Board Member

JEFFREY BAUER
Board Member

DEDE SCHAFFNER
Board Member



**"A" Rated
School District**

Visit Our Web Site
www.scps.us

July 13, 2015

Commissioner Pam Stewart
Florida Department of Education, Office of the Commissioner
Turlington Building, Suite 1514
325 West Gaines Street, Tallahassee, FL 32399

Dear Commissioner Stewart,

This letter is in response to a request from legislators to identify a solution to reduce the number of hours students are engaged in state mandated testing and to find a valid and reliable way to nationally assess our students. In Seminole County, we understand and value accountability and the importance of a valid and reliable tool that measures individual student achievement and student growth. In supporting the Governor's initiative to produce college and career ready graduates, assessment tools need to be aligned to the Florida Standards and the skills sought by businesses.

It is often easy to be critical of work that has been done; it is much harder to come forward with a solution. The simple solution we are proposing is to work with the Governor, the Legislature and you to support the use of nationally normed-referenced tests statewide beginning in 2015-16 in place of using the Florida Standards Assessment (FSA).

Florida law charges you with the design and implementation of an assessment program that results in data that districts can use to improve instruction. Respectfully, the 2014-15 administration of FSA failed to achieve this goal and, even if the data is subsequently determined to be valid, obtaining the data was far too disruptive to valuable instructional time. The solution being proposed is to replace the 2015-16 ELA and Math FSA with a paper-based nationally normed test, such as the Iowa Assessment for elementary and middle school students and the PSAT/SAT for 9th-10th grade students (currently Iowa and SAT are approved concordant tests). These tests would provide nationally normed data within approximately 30 days utilizing a valid and reliable instrument and reduce the per student testing time to approximately four hours per student per year compared to over a month of schoolwide disruptions due to FSA testing. Our proposed solution would minimize the inequities stated below experienced by our students and vocalized by our community.

- Students with disabilities are being denied the same instructional time as their non-disabled peers. Per the DOE 2014-2015 and 2015-2016 testing schedules, there is a 14-day difference between the testing windows for paper-based tests and computer-based tests resulting in decreased instructional time for students utilizing paper based testing accommodations.
- The mandate to utilize computers for state testing and the elongated testing windows to accommodate multi-session tests results in students moving in and out of testing labs, disrupting instruction for 29 days at our middle schools and 31 days at our high schools.
- The April 20th state technical issue impacted thousands of our high school students. The testing platforms have been plagued with network and procedural issues, software bugs, and instability throughout the testing window.

By supporting our request to permit the use of nationally norm-referenced standardized achievement tests beginning in the 2015-16 school year in place of FSA, you will confirm your commitment to doing what our parents, students, educators, business leaders, elected officials, and community members have asked us to do--find a solution to reduce, not abandon, a rigorous and nationally recognized assessment program for our students. Our teachers deserve to teach and our students deserve to learn. We are available for further discussion and look forward to receiving your response.

Respectfully,

Walt Griffin, Ed.D.
Superintendent
Seminole County Public Schools



Marva Johnson, *Chair*
John R. Padgett, *Vice Chair*
Members
Gary Chartrand
John A. Colón
Rebecca Fishman Lipsey
Michael Olenick
Andy Tuck

July 17, 2015

Dr. Walt Griffin, Superintendent
Seminole County Public Schools
Educational Support Center
400 E. Lake Mary Boulevard
Sanford, FL 32773-7127

Dear Dr. Griffin,

I am writing in response to your letter dated July 13, 2015. Thank you very much for offering your suggestions for issues relating to the Florida Standards Assessments. As you know, ensuring student success is my top priority, and I appreciate insights from school district leadership.


As you know, the Department of Education is currently awaiting the results of the third-party validity study mandated by HB 7069. The statutory requirement is that Alpine Solutions provide its findings by September 1, 2015, at which time we will determine the appropriate course of action regarding the statewide assessment program. In the meantime, I hope I can provide you with some background information regarding how certain decisions are made.

While the assessments you mention are measures of student academic performance, the statewide assessments offered by the Department measure student achievement of the Florida Standards. The Florida Standards are unique to our state, and other assessments would not be able to measure student achievement of our state's specific educational benchmarks and expectations appropriately. We are statutorily required to assess our students based on the same academic content standards in which they are instructed.

Regarding the length of testing windows, for each assessment, the Department sets the broadest window possible, and we encourage districts to establish schedules that maximize student instructional time. It is important to note that the window for students with disabilities who are provided accommodations to take paper-based assessments and the window for computer-based assessments opened at the same time. This allows districts the ability to make decisions on how to best schedule testing for all of their students. If one is looking at instruction based on year-to-year, these students have had a full year of instruction since last year's test administration.

Thank you again for sharing with me your concrete suggestions and ideas, and for all you do to contribute to the high quality of education in our state.

Sincerely,

A handwritten signature in black ink that reads "Pam Stewart". The signature is written in a cursive, flowing style.

Pam Stewart
Commissioner of Education
PS/jc

Mahramus, Jill

From: Cote, Anna-Marie
Sent: Wednesday, August 05, 2015 5:55 PM
To: Mary.Tappen@fldoe.org
Cc: Griffin, Walt; Commissioner@fldoe.org
Subject: Comparison: CCSS, FS, and FSA Assessed Standards

Dear Ms. Tappen,

As you know, in Seminole County, we understand and value accountability and the importance of a valid and reliable tool that measures individual student achievement and student growth. Legislators, parents and community members asked for a solution to reduce the number of hours students are engaged in state mandated testing and to find a valid and reliable way to nationally assess our students.

The attached analysis is offered to demonstrate the similarities between the Common Core State Standards, the Florida Standards, and the FSA assessed standards for the purpose of considering nationally-normed, Common Core aligned assessments (e.g., Iowa, SAT, PSAT) in place of the Florida Standards Assessment. It is important to clarify that the Seminole Solution is not about using or not using the Common Core State Standards. The Seminole Solution is about the test used to assess the state-adopted standards as efficiently and effectively as possible so that students have more time to learn and teachers have more time to teach.

In the Commissioner's letter to Superintendent Griffin dated July 17, 2015, the Commissioner states, "The Florida Standards are unique to our state, and other assessments would not be able to measure student achievement of our state's specific educational benchmarks and expectations appropriately." The documents used to prepare this analysis include the Common Core State Standards, the February 18, 2014 Florida Department of Education presentation to the Florida State Board of Education titled, "Student Performance Standards" and the Florida Standards posted on the Florida Department of Education's CPALMS website.

In order to ensure that we have correctly analyzed these documents, we respectfully request that you and the appropriate Florida Department of Education staff review this information and provide feedback. Dr. Tina Calderone, Seminole County School Board Chair, requested this analysis. We would appreciate receiving a response prior to the August 25th School Board meeting. Superintendent Griffin is available to speak with you at your convenience.

Respectfully,

Anna-Marie Cote, Ed.D.

Deputy Superintendent, Instructional Excellence and Equity
Seminole County Public Schools
400 E. Lake Mary Blvd.
Sanford, FL 32773
Phone: 407-320-0504
www.scps.k12.fl.us

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

In Seminole County, we understand and value accountability and the importance of a valid and reliable tool that measures individual student achievement and student growth. Legislators, parents and community members asked for a solution to reduce the number of hours students are engaged in state mandated testing and to find a valid and reliable way to nationally assess our students.

The attached analysis is offered to demonstrate the similarities between the Common Core State Standards, the Florida Standards, and the FSA assessed standards for the purpose of considering nationally-normed, Common Core aligned assessments (e.g., Iowa, SAT, PSAT) in place of the Florida Standards Assessment. It is important to clarify that the Seminole Solution is not about using or not using the Common Core State Standards. The Seminole Solution is about the test used to assess the state-adopted standards as efficiently and effectively as possible so that students have more time to learn and teachers have more time to teach.

MATH STANDARDS

SUMMARY OF K-12 MATH CHANGES

Grade	Total Number of Common Core State Standards	Total Number of Florida Standards	Total Number of Standards Added/Changed in Shift from Common Core to Florida Standards by Grade	Total Number of Added/Changed Standards Assessed on FSA in Spring 2015
K	22	23*	5	Not Assessed
1	21	22**	5	Not Assessed
2	26	27	6	Not Assessed
3	25	25	1	1
4	28	30	4	2
5	26	26	3	3
6	29	29	1	1
7	24	24	0	0
8	28	28	0	0
K-8 Total	229	234	25	7
9-12	156	157	9	8
Calculus	0	52***	52***	0

Table 1: Summary of K-12 Math Changes

*Includes 2 added standards and 1 deleted standard.

**Includes 2 added standards and 1 deleted standard.

***Common Core State Standards do not include Calculus standards. The Math Florida Standards include a set of 52 Calculus standards. They are not assessed by FSA.

PERCENT OF MATH FLORIDA STANDARDS (MAFS) THAT ARE UNCHANGED FROM THE CCSS

Table 2: Percent of Math Florida Standards that are unchanged from the CCSS

FSA Tested Grade Levels	# of MAFS that are identical to CCSS	Percent Unchanged
3-5	73 of 81	90.12%
6-8	80 of 81	98.76%
9-11	End of Course Exam	NA

SEE NEXT PAGES FOR LINE BY LINE COMPARISON OF THE MATH STANDARDS CHANGES

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

COMPARISON OF K-12 MATH CHANGES

All changes in the Math Florida Standards (MAFS) language are displayed in the table below. The changes are highlighted in red. In grade 4, the two added standards were not assessed in spring of 2015, but are scheduled to be assessed in the future.

Table 3: Comparison of K-12 Math Changes

Grade	Common Core	Florida	FSA Tested
K	CCSS.Math.Content.K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	MAFS.K.CC.1.3 Read and write numerals from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	No
K	CCSS.Math.Content.K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	MAFS.K.OA.1.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem (Students are not required to independently read the word problems.)	No
K	CCSS.Math.Content.K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	MAFS.K.OA.1.3 Omitted from FL Standards	No
K	<i>Does not appear in CCSS.</i>	Newly Added FL Standard MAFS.K.OA.1.a Use addition and subtraction within 10 to solve word problems involving both addends unknown, e.g., by using objects, drawings, and equations with symbols for the unknown numbers to represent the problem. (Students are not required to independently read the word problems.)	No
K and 1*	<i>*Added to Kindergarten and Removed from Grade 1.</i> CCSS.Math.Content.1.MD.A.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a	FL Standards moved this 1st grade standard to K. MAFS.K.MD.1.a Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <i>Limit to contexts where the object being measured is spanned by a</i>	No

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<i>whole number of length units with no gaps or overlaps.</i>	<i>whole number of length units with no gaps or overlaps.</i>	
1	CCSS.Math.Content.1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	MAFS.1.OA.1.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem (<i>Students are not required to independently read the word problems.</i>)	No
1	CCSS.Math.Content.1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	MAFS.1.NBT.2.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. a. 10 can be thought of as a bundle of ten ones---called a "ten." b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). d. <i>Decompose two-digit numbers in multiple ways (e.g., 64 can be decomposed into 6 tens and 4 ones or into 5 tens and 14 ones).</i>	No
1	<i>Does not appear in CCSS.</i>	MAFS.1.MD.1.a <i>Understand how to use a ruler to measure length to the nearest inch.</i> a. <i>Recognize that the ruler is a tool that can be used to measure the attribute of length.</i> b. <i>Understand the importance of the zero point and end point and that the length measure is the span between two points.</i> c. <i>Recognize that the units marked on a ruler have equal length intervals and fit together with no gaps or overlaps. These equal interval distances can be counted to determine the overall length of an object.</i>	No

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

1	<i>Does not appear in CCSS.</i>	<p>MAFS.1.MD.2.a Identify and combine values of money in cents up to one dollar working with a single unit of currency.</p> <ul style="list-style-type: none"> a. Identify the value of coins (pennies, nickels, dimes, quarters). b. Compute the value of combinations of coins (pennies and/or dimes). c. Relate the value of pennies, dimes, and quarters to the dollar (e.g., There are 100 pennies or ten dimes or four quarters in one dollar.) <p>(Students are not expected to understand the decimal notation for combinations of dollars and cents.)</p>	No
2	<i>Does not appear in CCSS.</i>	<p>MAFS.2.OA.1.a Determine the unknown whole number in an equation relating four or more whole numbers. For example, determine the unknown number that makes the equation true in the equations $37 + 10 + 10 = \underline{\quad} + 18$, $? - 6 = 13 - 4$, and $15 - 9 = 6 + \underline{\quad}$.</p>	No
2	CCSS.Math.Content.2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<p>MAFS.2.MD.1.1 Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p>	No
2	CCSS.Math.Content.2.MD.A.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	<p>MAFS.2.MD.1.2 Describe the inverse relationship between the size of a unit and number of units needed to measure a given object. <i>Example: Suppose the perimeter of a room is lined with one-foot rulers. Now, suppose we want to line it with yardsticks instead of rulers. Will we need more or fewer yardsticks than rulers to do the job? Explain your answer.</i></p>	No
2	CCSS.Math.Content.2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters.	<p>MAFS.2.MD.1.3 Estimate lengths using units of inches, feet, yards, centimeters, and meters.</p>	No
2	CCSS.Math.Content.2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	<p>MAFS.2.MD.3.7 Tell and write time from analog and digital clocks to the nearest five minutes.</p>	No
2	CCSS.Math.Content.2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using	<p>MAFS.2.MD.3.8 Solve one- and two-step word problems involving dollar bills (singles, fives, tens,</p>	No

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<p>\$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>	<p>twenties, and hundreds) or coins (quarters, dimes, nickels, and pennies) using \$ and ¢ symbols appropriately. Word problems may involve addition, subtraction, and equal groups situations. Example: The cash register shows that the total for your purchase is 59¢. You gave the cashier three quarters. How much change should you receive from the cashier?</p> <ol style="list-style-type: none"> Identify the value of coins and paper currency. Compute the value of any combination of coins within one dollar. Compute the value of any combinations of dollars (e.g., If you have three ten-dollar bills, one five-dollar bill, and two one-dollar bills, how much money do you have?). Relate the value of pennies, nickels, dimes, and quarters to other coins and to the dollar (e.g., There are five nickels in one quarter. There are two nickels in one dime. There are two and a half dimes in one quarter. There are twenty nickels in one dollar). <p>(See glossary Table 1)</p>	
3	<p>CCSS.Math.Content.3.MD.A.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).¹ Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.²</p>	<p>MAFS.3.MD.1.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units.</p>	Yes
4	<p>Does not appear in CCSS.</p>	<p>MAFS.4.OA.1.a Determine whether an equation is true or false by using comparative relational thinking. For example, without adding $60 + 24 = 57 + 27$ is true or false.</p>	Not assessed in 2015 but will be assessed in the future.
4	<p>Does not appear in CCSS.</p>	<p>MAFS.4.OA.1.b Determine the unknown whole number in an equation relating four whole numbers</p>	Not assessed in 2015

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

		using comparative relational thinking. For example, solve $76 + 9 = n + 5$ for n by arguing that nine is four more than five, so the unknown number must be four greater than 76.	but will be assessed in the future.
4	CCSS.Math.Content.4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.	MAFS.4.OA.2.4 Investigate factors and multiples. a. Find all factor pairs for a whole number in the range 1–100. b. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. c. Determine whether a given whole number in the range 1–100 is prime or composite.	Yes
4	CCSS.Math.Content.4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	MAFS.4.MD.1.2 Use the four operations to solve word problems involving distances, intervals of time, and money, including problems involving simple fractions or decimals. Represent fractional quantities of distance and intervals of time using linear models. (See glossary Table 1 and Table 2) (Computational fluency with fractions and decimals is not the goal for students at this grade level.)	Yes
5	CCSS.Math.Content.5.MD.A.1 Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	MAFS.5.MD.1.1 Convert among different-sized standard measurement units (i.e., km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec) within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	Yes
5	CCSS.Math.Content.5.MD.C.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge	MAFS.5.MD.3.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge	Yes

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<p>lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <p>b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> <p>c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p>	<p>lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.</p> <p>b. Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.</p> <p>c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.</p>	
5	<p>CCSS.Math.Content.5.G.B.4</p> <p>Classify two-dimensional figures in a hierarchy based on properties.</p>	<p>MAFS.5.G.2.4</p> <p>Classify and organize two-dimensional figures into Venn diagrams based on the attributes of the figures.</p>	Yes
6	<p>CCSS.MATH.CONTENT.6.RP.A.3</p> <p>Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <p>b. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i></p> <p>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</p>	<p>MAFS.6.RP.1.3</p> <p>Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.</p> <p>a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.</p> <p>b. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i></p> <p>c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.</p>	Yes

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities. e. Understand the concept of Pi as the ratio of the circumference of a circle to its diameter.	
9-12 (Alg1 and Alg2)	CCSS.MATH.CONTENT.HSA.CED.A.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational and exponential functions.	MAFS.912.A-CED.1.1 Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear and quadratic functions, and simple rational, absolute , and exponential functions.	Yes
9-12 (Alg1 and Alg2)	CCSS.MATH.CONTENT.HSF.IF.C.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. d. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude.	MAFS.912.F-IF.3.7 Graph functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated cases. a. Graph linear and quadratic functions and show intercepts, maxima, and minima. b. Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions. c. Graph polynomial functions, identifying zeros when suitable factorizations are available, and showing end behavior. d. Graph rational functions, identifying zeros and asymptotes when suitable factorizations are available, and showing end behavior. e. Graph exponential and logarithmic functions, showing intercepts and end behavior, and trigonometric functions, showing period, midline, and amplitude, and using phase shift.	Yes
9-12 (Geo)	CCSS.MATH.CONTENT.HSG.CO.B.8 Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	MAFS.912.G-CO.2.8 Explain how the criteria for triangle congruence (ASA, SAS, SSS, and Hypotenuse-Leg) follow from the definition of congruence in terms of rigid motions.	Yes
9-12 (Geo)	CCSS.MATH.CONTENT.HSG.CO.C.9	MAFS.912.G-CO.3.9	Yes

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<p>Prove theorems about lines and angles. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i></p>	<p>Prove theorems about lines and angles; use theorems about lines and angles to solve problems. <i>Theorems include: vertical angles are congruent; when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.</i></p>	
9-12 (Geo)	<p>CCSS.MATH.CONTENT.HSG.CO.C.10 Prove theorems about triangles. <i>Theorems include: measures of interior angles of a triangle sum to 180°; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i></p>	<p>MAFS.912.G-CO.3.10 Prove theorems about triangles; use theorems about triangles to solve problems. <i>Theorems include: measures of interior angles of a triangle sum to 180°; triangle inequality theorem; base angles of isosceles triangles are congruent; the segment joining midpoints of two sides of a triangle is parallel to the third side and half the length; the medians of a triangle meet at a point.</i></p>	Yes
9-12 (Geo)	<p>CCSS.MATH.CONTENT.HSG.CO.C.11 Prove theorems about parallelograms. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i></p>	<p>MAFS.912.G-CO.3.11 Prove theorems about parallelograms; use theorems about parallelograms to solve problems. <i>Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other, and conversely, rectangles are parallelograms with congruent diagonals.</i></p>	Yes
9-12 (Alg2)	<p>CCSS.MATH.CONTENT.HSF.TF.A.1 Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle.</p>	<p>MAFS.912.F-TF.1.1 Understand radian measure of an angle as the length of the arc on the unit circle subtended by the angle; Convert between degrees and radians.</p>	Yes
9-12 (Alg2)	<p><i>Does not appear in CCSS.</i></p>	<p>MAFS.F-BF.2.a Use the change of base formula.</p>	Not assessed in 2015 but will be assessed in the future.
9-12 Pre-Calculus	<p>CCSS.MATH.CONTENT.HSF.TF.C.9 Prove the addition and subtraction formulas for sine, cosine, and tangent and use them to solve problems.</p>	<p>MAFS.912.F-TF.3.9 Prove the addition and subtraction, half-angle, and double-angle formulas for sine, cosine, and tangent and use these formulas to solve problems.</p>	No

Seminole County Public Schools
Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

ENGLISH LANGUAGE ARTS

SUMMARY OF K-10 ENGLISH LANGUAGE ARTS CHANGES

Table 4: Summary of K-10 ELA Changes

Grade	Total Number of Common Core State Standards	Total Number of Florida Standards	Total Number of Standards Added/Changed in Shift from Common Core to Florida Standards by Grade	Total Number of Added/Changed Standards Assessed on FSA in Spring 2015
K	41	41	3	Not Assessed
1	41	41	0	Not Assessed
2	40	40	2	Not Assessed
3	42	42	3	0*
4	43	43	2	1*
5	43	43	2	1*
6	41	41	0	0
7	41	41	0	0
8	41	41	0	0
9-10	41	41	1	1
Total	414	414	13	3

*Third, Fourth, and Fifth include language regarding cursive writing, which is currently not assessed. The assessed portion of the standards impacted by cursive have not changed.

PERCENT OF LANGUAGE ARTS FLORIDA STANDARDS (LAFS) THAT ARE UNCHANGED FROM THE CCSS

Table 5: Percent of Language Arts Florida Standards that are Unchanged from the CCSS

FSA Tested Grade Levels	# of LAFS that are identical to CCSS	Percent Unchanged
3-5	121 of 128	94.53%
6-8	123 of 123	100.00%
9-10	40 of 41	97.56%

SEE NEXT PAGES FOR LINE BY LINE COMPARISON OF THE ENGLISH LANGUAGE ARTS STANDARDS CHANGES

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

COMPARISON OF K-10 ENGLISH LANGUAGE ARTS CHANGES

All changes in the English Language Arts Standards (LAFS) language are displayed in the table below. The changes are highlighted in red.

Table 6: Comparison of K-10 ELA Changes

Grade	Common Core	Florida	FSA Tested
K	CCSS.ELA-Literacy.RL.K.4 Ask and answer questions about unknown words in a text.	LAFS.K.RL.2.4 With prompting and support , ask and answer questions about unknown words in a text.	No
K	CCSS.ELA-Literacy.RL.K.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	LAFS.K.RL.2.6 With prompting and support, identify the author and illustrator of a story and define the role of each in telling the story.	No
K	CCSS.ELA-Literacy.RI.K.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	LAFS.K.RI.2.6 With prompting and support , identify the author and illustrator of a text and define the role of each in presenting the ideas of information in a text.	No
2	CCSS.ELA-Literacy.RI.2.8 Describe how reasons support specific points the author makes in a text.	LAFS.2.RI.3.8 Describe how an author uses reasons to support specific points in a text.	No
2	CCSS.ELA-Literacy.L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. <ul style="list-style-type: none"> a. Use collective nouns (e.g., <i>group</i>). b. Form and use frequently occurring irregular plural nouns (e.g., <i>feet, children, teeth, mice, fish</i>). c. Use reflexive pronouns (e.g., <i>myself, ourselves</i>). d. Form and use the past tense of frequently occurring irregular verbs (e.g., <i>sat, hid, told</i>). e. Use adjectives and adverbs, and choose between them depending on what is to be modified. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., <i>The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy</i>). 	LAFS.2.L.1.1 Demonstrate the command of the conventions of standard English grammar and usage with writing or speaking. <ul style="list-style-type: none"> a. Demonstrate legible printing skills. (The rest of the parts of this standard are the same as Common Core.)	No

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

3	<p>CSS.ELA-Literacy.SL.3.5 Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.</p>	<p>LAFS.3.SL.2.5 Demonstrate fluid reading at an understandable pace, adding visual displays and engaging audio recordings when appropriate to emphasize or enhance certain facts or details.</p>	No
3	<p>CCSS.ELA-Literacy.L.3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., <i>childhood</i>). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., <i>I walked; I walk; I will walk</i>) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences. 	<p>LAFS.3.L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Demonstrate beginning cursive writing skills. <p>(All parts of the Common Core standard are included in the Florida standard as parts b-j.)</p>	Yes- Assessed in the editing task portion of the FSA
3	<p>CCSS.ELA-Literacy.L.3.6 Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., <i>After dinner that night we went looking for them</i>).</p>	<p>LAFS.3.L.3.6 Acquire and use accurately, general academic, and domain specific words and phrases as found in grade appropriate texts, including those that signal spatial and temporal relationships (e.g., <i>after dinner that night we went looking for them</i>.)</p>	No.
4	<p>CCSS.ELA-Literacy.L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	<p>LAFS.4.L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p>	Yes; Assessed on the editing

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<ul style="list-style-type: none"> a. Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>). b. Form and use the progressive (e.g., <i>I was walking; I am walking; I will be walking</i>) verb tenses. c. Use modal auxiliaries (e.g., <i>can, may, must</i>) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., <i>a small red bag</i> rather than <i>a red small bag</i>). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., <i>to, too, two; there, their</i>).* 	<p>a. Demonstrate legible cursive writing skills.</p> <p>(All parts of the Common Core standard are included in the Florida standard as parts b-h.)</p>	<p>tasks on FSA.</p>
4	<p>CSS.ELA-Literacy.L.4.6</p> <p>Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., <i>quizzed, whined, stammered</i>) and that are basic to a particular topic (e.g., <i>wildlife, conservation, and endangered</i> when discussing animal preservation).</p>	<p>LAFS.4.L.3.6</p> <p>Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal precise actions, emotions or states of being (e.g. <i>wildlife, conservation, and endangered when discussing animal preservation</i>)</p>	<p>Yes; Assessed on the Writing Component of the FSA.</p>
5	<p>CCSS.ELA-Literacy.L.5.1</p> <p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <ul style="list-style-type: none"> a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., <i>I had walked; I have walked; I will have walked</i>) verb tenses. 	<p>LAFS.5.L.1.1</p> <p>Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.</p> <p>a. Demonstrate fluent and legible cursive writing skills.</p> <p>(All parts of the Common Core standard are included in the Florida standard as parts b-f.)</p>	<p>Yes; Assessed in the editing tasks on FSA</p>

Seminole County Public Schools

Comparison: Common Core State Standards (CCSS), Florida Standards (FS), and FSA Assessed Standards

	<ul style="list-style-type: none"> c. Use verb tense to convey various times, sequences, states, and conditions. d. Recognize and correct inappropriate shifts in verb tense.* e. Use correlative conjunctions (e.g., <i>either/or, neither/nor</i>). 		
5	<p>CCSS.ELA-Literacy.L.5.6</p> <p>Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., <i>however, although, nevertheless, similarly, moreover, in addition</i>).</p>	<p>LAFS.5.L.3.6</p> <p>Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal contrast, addition, and other logical relationships (e.g., <i>however, nevertheless, similarity, moreover, in addition</i>.)</p>	Yes; Assessed on the Writing Component of the FSA.
9-10	<p>CCSS.ELA-LITERACY.L.9-10.2</p> <p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use a semicolon (and perhaps a conjunctive adverb) to link two or more closely related independent clauses. b. Use a colon to introduce a list or quotation. c. Spell correctly. 	<p>LAFS.910.L.1.2</p> <p>Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <ul style="list-style-type: none"> a. Use a semicolon, with or without a conjunctive adverb, to link two of more closely related independent clauses. b. Use a colon to introduce a list or quotation. c. Spell correctly. 	Yes

Mahramus, Jill

From: Tappen, Mary <Mary.Tappen@fldoe.org>
Sent: Monday, August 10, 2015 5:18 PM
To: Cote, Anna-Marie
Cc: Griffin, Walt; Commissioner; Lyons, Hershel
Subject: RE: Comparison: CCSS, FS, and FSA Assessed Standards
Attachments: 0074920-109401pres.pdf; 0074919-mathematics.pdf; 0074918-english.pdf

Thank you Anna-Marie,

I have attached our presentation materials provided to the State Board of Education to inform them about the proposed adoption of the Florida Standards in English Language Arts and Mathematics in February 2014. These include the PowerPoint presentation and the table of changes to the English language arts standards and the table of changed to the mathematics standards. The State Board of Education adopted these standards as presented. This information can be used to inform your work.

A few points to consider in this work:

- Student growth measures require aligned instructional standards to be taught from year-to-year and assessed from year-to-year.
- School districts are required by law to teach the standards and courses adopted by the State Board of Education.
- School districts are required by law to provide instructional materials that include the state adopted standards.
- Students in Florida are required to participate in the statewide assessments.

Thank you again for your correspondence.

From: Cote, Anna-Marie [mailto:anna-marie_cote@scps.k12.fl.us]
Sent: Wednesday, August 05, 2015 5:55 PM
To: Tappen, Mary
Cc: Griffin, Walt; Commissioner
Subject: Comparison: CCSS, FS, and FSA Assessed Standards

Dear Ms. Tappen,

As you know, in Seminole County, we understand and value accountability and the importance of a valid and reliable tool that measures individual student achievement and student growth. Legislators, parents and community members asked for a solution to reduce the number of hours students are engaged in state mandated testing and to find a valid and reliable way to nationally assess our students.

The attached analysis is offered to demonstrate the similarities between the Common Core State Standards, the Florida Standards, and the FSA assessed standards for the purpose of considering nationally-normed, Common Core aligned assessments (e.g., Iowa, SAT, PSAT) in place of the Florida Standards Assessment. It is important to clarify that the Seminole Solution is not about using or not using the Common Core State Standards. The Seminole Solution is about the test used to assess the state-adopted standards as efficiently and effectively as possible so that students have more time to learn and teachers have more time to teach.

In the Commissioner's letter to Superintendent Griffin dated July 17, 2015, the Commissioner states, "The Florida Standards are unique to our state, and other assessments would not be able to measure student achievement of our state's specific educational benchmarks and expectations appropriately." The documents used to prepare this analysis include the Common Core State Standards, the February 18, 2014 Florida Department of Education presentation to the

Florida State Board of Education titled, "Student Performance Standards" and the Florida Standards posted on the Florida Department of Education's CPALMS website.

In order to ensure that we have correctly analyzed these documents, we respectfully request that you and the appropriate Florida Department of Education staff review this information and provide feedback. Dr. Tina Calderone, Seminole County School Board Chair, requested this analysis. We would appreciate receiving a response prior to the August 25th School Board meeting. Superintendent Griffin is available to speak with you at your convenience.

Respectfully,

Anna-Marie Cote, Ed.D.

Deputy Superintendent, Instructional Excellence and Equity

Seminole County Public Schools

400 E. Lake Mary Blvd.

Sanford, FL 32773

Phone: 407-320-0504

www.scps.k12.fl.us

[Florida has a very broad Public Records Law. Virtually all written communications to or from School District Personnel are public records available to the public and media upon request. E-mail sent or received on the School District system will be considered public and will only be withheld from disclosure if deemed confidential pursuant to State Law.]



Sunshine Solution

Letter to the Florida Commissioner of Education – July 13, 2015

“The simple solution we are proposing is to work with the Governor, Legislature and you to support the use of nationally norm-referenced tests statewide beginning in 2015-16 in place of using the Florida Standards Assessment (FSA).”

Superintendent Walt Griffin



Math Standards

SUMMARY OF K-12 MATH CHANGES

Grade	Total Number of Common Core State Standards	Total Number of Florida Standards	Total Number of Standards Added/Changed in Shift from Common Core to Florida Standards by Grade	Total Number of Added/Changed Standards Assessed on FSA in Spring 2015
K-8 Total	229	234	25	7
9-12	156	157	9	8
Calculus	0	52***	52***	0

PERCENT OF MATH FLORIDA STANDARDS (MAFS) THAT ARE UNCHANGED FROM THE CCSS

FSA Tested Grade Levels	# of MAFS that are identical to CCSS	Percent Unchanged
3-5	73 of 81	90.12%
6-8	80 of 81	98.76%
9-11	End of Course Exam	NA



English Language Arts Standards

SUMMARY OF K-10 ENGLISH LANGUAGE ARTS CHANGES

Grade	Total Number of Common Core State Standards	Total Number of Florida Standards	Total Number of Standards Added/Changed in Shift from Common Core to Florida Standards by Grade	Total Number of Added/Changed Standards Assessed on FSA in Spring 2015
Total	414	414	13	3

PERCENT OF LANGUAGE ARTS FLORIDA STANDARDS (LAFS) THAT ARE UNCHANGED FROM THE CCSS

FSA Tested Grade Levels	# of LAFS that are identical to CCSS	Percent Unchanged
3-5	121 of 128	94.53%
6-8	123 of 123	100.00%
9-10	40 of 41	97.56%



Comparative Sample Test Timing

FSA ELA/Math & FCAT Science			
Grade	# of Days in Testing Window	# of Days Impacted by Test	Total Testing Minutes By Grade Level ELA&Math
3	15	12	320
4			440
4-5 Writing	10	4	
5	20	20	600
6	20	14	470
7			470
8			630
6-8 Writing	10	4	
High school information reflects ELA and Writing only			
9	20	20	300
10			300
9-10 Writing	10	6	
Totals	105		3530

Test time for FSA Writing Assessment is included in grade level total

Iowa/PSAT			
Grade	# of Days in Testing Window	# of Days Impacted by Test	Total Testing Minutes By Grade Level ELA&Math Only/ Complete Battery w/Science and Social Studies
3	5	5	270/340
4			225/295
5			225/295
6	4	4	225/295
7			225/295
8			225/295
9	0.5	0.5	85/145
10			95/165
Totals	5.5		1575/2125



	Norm-Referenced Tests	Criterion-Referenced Tests
Purpose	Designed to measure and compare individual students' performances or test results to those of an appropriate peer group at the classroom, district, state, or national level.	Designed to measure student achievement against objective standards that are independent of the group of students being assessed.
Content	Broad assessment of skills	More specific assessment of skills
Item Characteristics	Usually between 1-3 items tested per skill	Usually 4 or more items tested per skill
Score Interpretation	Each student is compared with a peer group and assigned a score –usually a percentile and/or grade equivalent score	Each student is compared with a fixed standard for acceptable achievement. The scores assigned are usually a percentage correct or a scale score/ level of performance.
Uses for data	<ul style="list-style-type: none">• Inform instruction and adjustments to curriculum• Help inform program placement decisions• May be able to assess student growth• May assess mastery of standards• Measure instructional effectiveness	<ul style="list-style-type: none">• Assess mastery of standards• May be able to assess student growth• Measure instructional effectiveness