



INTRODUCTION TO THE COMMON CORE STATE STANDARDS (CCSS) FOR PARENTS OF STUDENTS IN GRADES 5-8

**LINDA C. BERRY, ED.D.
DIRECTOR OF CURRICULUM, INSTRUCTION AND
ASSESSMENT
REGION 13 PUBLIC SCHOOLS
NOVEMBER 15, 2012**

WHY ARE NEW STANDARDS NECESSARY?

The type of instruction that you and I had when we were in school is no longer adequate for our own children because the work force has changed and will continue to change. The majority of the jobs our children will have in the future don't even exist yet.





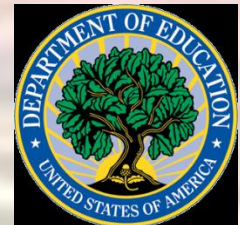
“Like air and drinking water, being **digital** will be noticed only by its absence, not its presence.” ¹

¹ Negroponte, Nicholas. *Being Digital*.



HOW HAS THE UNITED STATES BEEN DOING?

- The majority of American students are falling behind their international counterparts. By the end of 8th grade, U.S. students are two years behind in the mathematics being studied in other countries. Even our top math students rank 25th out of 30 when compared with the best students across the globe. 1
- The U.S. currently ranks 17th among nations in high school graduation and 14th in college graduation. In today's economy, all students must compete not only with peers across this country, but with students around the world. 1



COLLEGE READINESS IN USA

- Almost half of the 3 million people in the United States who start their first year of college will drop out before they earn their degree, and 30% will drop out after their first year. ¹
- At the community college level, out of 6 million students, 1 million will take remedial courses. ¹
- Inadequate preparation is repeatedly cited as a central factor in the disappointing college success rates. ¹

1 The College Completion Agenda: 2010 Progress Report, Lee & Rawls, 2010

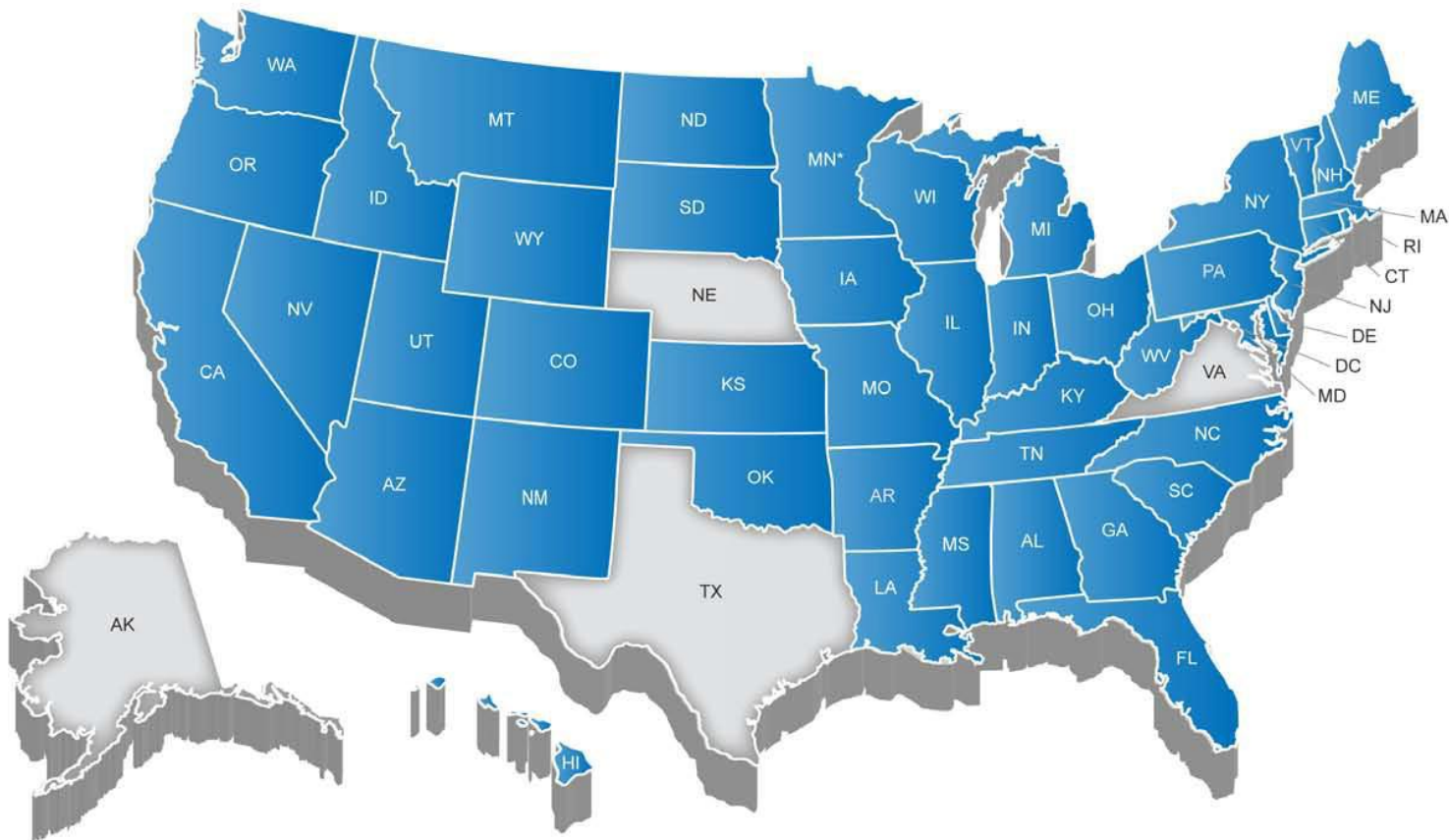
IS COLLEGE AND CAREER READINESS A CONCERN IN CONNECTICUT?

- 64% of Connecticut students enrolled in a four-year college graduate within 6 years, while only 13% of students enrolled in a two-year college graduate within 3 years.¹
- By 2018, the nation will need to increase the number of postsecondary degrees conferred by about 10 percent annually in order to meet workforce demands.²

1. Analysis of data from NCES Integrated Postsecondary Education Data System, 2010.

2. A. Carnevale, N. Smith, and J. Strohl, *Help Wanted: Projections of Jobs and Economic Requirements Through 2018* (Washington, DC: Georgetown Center on Education and the Workforce, 2010).

46 STATES & DC HAVE ADOPTED THE COMMON CORE STATE STANDARDS



WHAT ARE THE COMMON CORE STANDARDS AND WHO WROTE THEM?

- The Common Core State Standards (CCSS) are a set of expectations that outline what students should know in English/Language Arts and Mathematics at each grade level.
- The CCSS were not developed by the federal government, but by a group of educators and experts coordinated by the National Governors Association Center for Best Practices (NGA Center) and the Council of Chief State School Officers (CCSSO). The federal government will not oversee the implementation of the CCSS.

SHIFTS IN MATHEMATICS

Shift 1	Focus	Teachers significantly narrow and deepen the scope of how time and energy is spent in the math classroom. They do so in order to focus deeply on only the concepts that are prioritized in the standards.
Shift 2	Coherence	Principals and teachers carefully connect the learning within and across grades so that students can build new understanding onto foundations built in previous years.
Shift 3	Fluency	Students are expected to have speed and accuracy with simple calculations; teachers structure class time and/or homework time for students to memorize, through repetition, core functions.
Shift 4	Deep Understanding	Students deeply understand and can operate easily within a math concept before moving on. They learn more than the trick to get the answer right. They learn the math.
Shift 5	Application	Students are expected to use math and choose the appropriate concept for application even when they are not prompted to do so.
Shift 6	Dual Intensity	Students are practicing and understanding. There is more than a balance between these two things in the classroom – both are occurring with intensity.

EXPECTATIONS OF FLUENCY AND CONCEPTUAL UNDERSTANDING

GRADE	CRITICAL KEY CONCEPTS
K-2	Addition and subtraction--concepts, skills, and problem solving
3-5	Multiplication and division of whole numbers and fractions – concepts, skills, and problem solving
6	Ratios and proportional relationships; early expressions and equations
7	Ratios and proportional relationships; arithmetic of rational numbers
8	Linear algebra

WHY IS NUMBER SENSE IMPORTANT?

Researchers have linked good number sense with skills observed in students proficient in the following mathematical activities:

- Mental calculation (Hope & Sherrill, 1987; Trafton, 1992);
- Computational estimation (for example; Bobis, 1991; Case & Sowder, 1990);
- Judging the relative magnitude of numbers (Sowder, 1988);
- Recognizing part-whole relationships and place value concepts (Fischer, 1990; Ross, 1989) and;
- Problem solving (Cobb et.al., 1991).

MORE ON MATH CC STANDARDS

Domains and Conceptual Categories

K	1	2	3	4	5	6	7	8	HS
Counting & Cardinality									
Number and Operations in Base Ten						Ratios and Proportional Relationships			
			Number and Operations – Fractions			The Number System		Number & Quantity	
Operations and Algebraic Thinking						Expressions and Equations		Algebra	
								Functions	Functions
Geometry									Geometry
Measurement and Data						Statistics and Probability		Statistics & Probability	

Findwell, Bradford & Foughty, Zachary. "Preparing to Implement the Common Core State Standards for Mathematics." Indiana Department of Education and Ohio Department of Education. March 30, 2011

ASSESSMENTS

- There are two consortia that are developing the assessments which will be given in grades 3-8 and 11.
- Connecticut is part of the **Smarter Balanced Assessment Consortium (SBAC)** - The SBAC was awarded a four-year \$176 million Race to the Top assessment grant by the US Department of Education (USED) to develop a student assessment system aligned to a Common Core of academic standards.
- Assessments will begin the spring of 2015 and replace the CMT and CAPT

COMPONENTS OF THE SUMMATIVE ASSESSMENT

Performance Tasks

- Measure the ability to integrate knowledge and skills as required in the CCSS
- Each task administered in up to an hour long sitting
- Computer delivered during last 12 weeks of school
- Results within 2 weeks

Computer Adaptive Test

- A computer based assessment given during final 12 weeks of school
- Multiple item types , scored by a computer, including tasks.
- Students will have a chance to take the summative assessment twice.

Scores from the Performance Tasks and the Computer Adaptive Test will be combined for an annual accountability score - starting spring 2015






COMPUTER ADAPTIVE TESTING

Based on student responses, the computer program **adjusts the difficulty of questions** throughout the assessment. For example, a student who answers a question correctly will receive a more challenging item, while an incorrect answer generates an easier question. By adapting to the student as the assessment is taking place, these assessments present an **individually tailored set of questions** to each student and can quickly identify which skills students have mastered.

43025



Five swimmers compete in the 50-meter race. The finish time for each swimmer is shown in the video.

	23.42
	23.18
	23.21
	23.35
	23.24
Men's 50 Meter Freestyle	

Explain how the results of the race would change if the race used a clock that rounded to the nearest tenth.

43047



Look at each expression. Is it equivalent to $36x + 24y$?

Select Yes or No for expressions A – C.

A. $6(6x + 4y)$

☐ Yes

☐ No

B. $30(6x - 6y)$

☐ Yes

☐ No

C. $12(x + 2y + 2x)$

☐ Yes

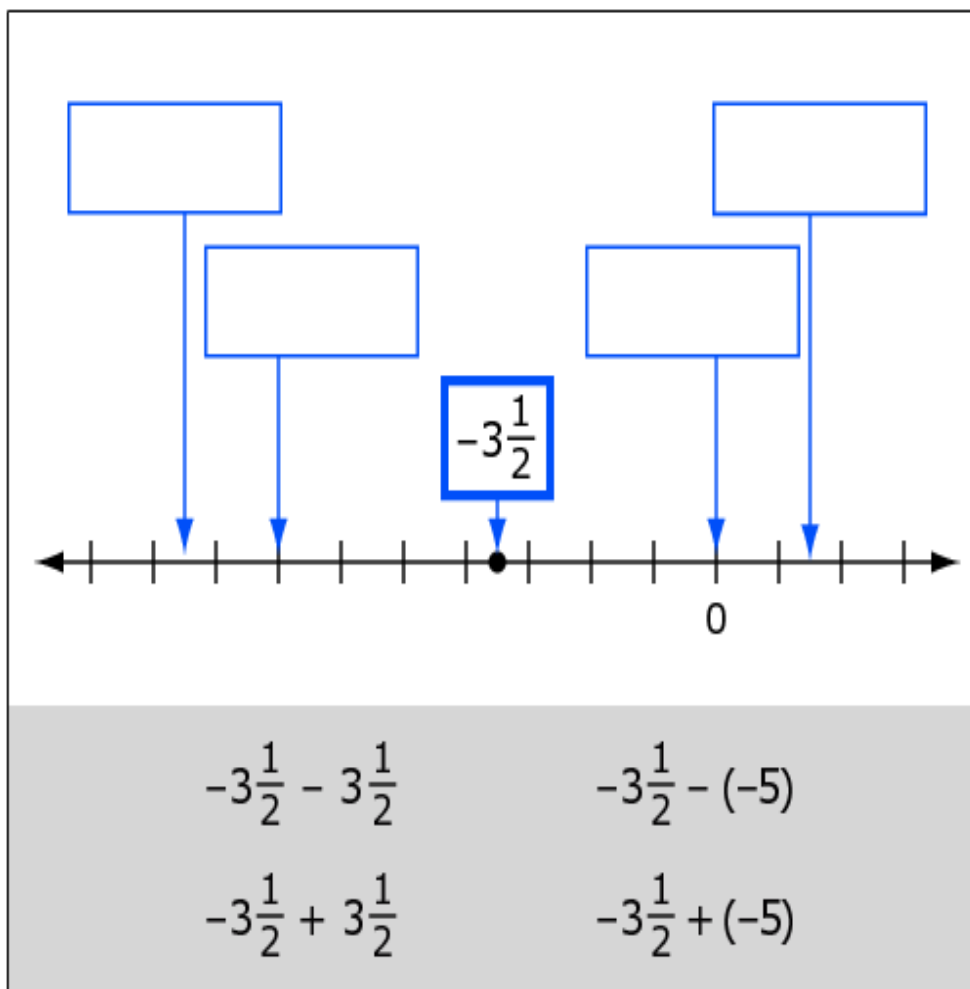
☐ No

42960



The point on the number line shows the location of $-3\frac{1}{2}$.

Move each expression into a box to show its correct location on the number line.



42933

Different states have different sales tax rates. Three states have online calculators to compute sales tax on a purchase. Use the following steps to match each calculator with the correct state.

- Select Calculator A, B, or C.
- Enter a purchase price.
- Then select "Find Sales Tax" to compute the sales tax for that purchase price.

You may use the calculators as many times as you need to solve the problem to the right.

Select a Calculator

- ☐ Calculator A
☐ Calculator B
☐ Calculator C

Purchase Price

Find Sales Tax

Calculator	Purchase Price	Sales Tax

42961

Different states and their sales tax rates are shown.

Drag each calculator into the correct row to show which state can use it to calculate sales tax.

	State	Sales Tax Rate	Calculator
Calculator A	Illinois	6.250%	
	Indiana	7.000%	
Calculator B	Kansas	6.300%	
	Maine	5.000%	
Calculator C	Maryland	6.000%	
	Minnesota	6.875%	

43056



For each linear equation in the table, select whether the equation has no solution, one solution, or infinitely many solutions.

Equation	No Solution	One Solution	Infinitely Many Solutions
$36x + 24 = 12(x + 2 + 2x)$			
$x = x + 1$			
$-12(x + 2) = -14x + 2$			

SHIFTS IN ELA/ LITERACY

Shift 1	Balancing Informational & Literary Text	Students read a true balance of informational and literary texts.
Shift 2	Knowledge in the Disciplines	Students build knowledge about the world (domains/ content areas) through TEXT rather than the teacher or activities
Shift 3	Staircase of Complexity	Students read the central, grade appropriate text around which instruction is centered. Teachers are patient, create more time and space and support in the curriculum for close reading.
Shift 4	Text-based Answers	Students engage in rich and rigorous evidence based conversations about text.
Shift 5	Writing from Sources	Writing emphasizes use of evidence from sources to inform or make an argument.
Shift 6	Academic Vocabulary	Students constantly build the transferable vocabulary they need to access grade level complex texts. This can be done effectively by spiraling like content in increasingly complex texts.

COMPARISONS

PREVIOUS STANDARDS	COMMON CORE STATE STANDARDS
Almost exclusive emphasis on literature	Balance of <u>literature</u> and <u>informational texts</u> ; focus on text complexity
Almost exclusive emphasis on narrative writing	Emphasis on argument, narrative, informative/explanatory writing, and research
Literacy belongs to the Language Arts teacher only	Literacy is a shared responsibility across the school for history, science, and technical subjects

READING STANDARD PROGRESSION 6-8

College and Career Readiness Anchor Standards for Reading

Key Ideas and Details - Literature

Anchor	Grade 6	Grade 7	Grade 8
1. Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.	1. Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	1. Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	1. Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
2. Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.	2. Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.	2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.	2. Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text.
3. Analyze how and why individuals, events, and ideas develop and interact over the course of a text.	3. Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.	3. Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot).	3. Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. Craft and Structure

BALANCE OF WRITING TEXT TYPES

Grade Level	To Persuade (Argumentative)	To Explain (Informative)	To Convey Experience (Narrative)
4	30%	35%	35%
8	35%	35%	30%
12	40%	40%	20%

In grades K-5, the term **opinion** refers to **persuasive** writing

Argumentative is a form of persuasion but brings in evidence from both sides of the issue.

Narrative strategies are important component to developing both argumentative and explanatory writing

WRITING USING EVIDENCE

- Expect students to compose arguments and opinions, informative/explanatory pieces, and narrative texts
- Focus on the use of **reason and evidence** to substantiate an argument or claim
- Emphasize ability to **conduct research** – short projects and sustained inquiry
- Require students to **incorporate technology** as they create, refine, and collaborate on writing
- Include student writing samples that illustrate the criteria required to meet the standards

Grade 5

Text Passage

Paired Passages

Black Beauty
by Anna Sewall

This passage is narrated by a horse named Black Beauty.

1 When I was four years old **Squire** Gordon came to look at me. He examined my eyes, my mouth, and my legs; he felt them all down; and then I had to walk and trot and gallop before him. He seemed to like me, and said, "When he has been well broken in he will do very well." My master said he would break me in himself, as he should not like me to be frightened or hurt, and he lost no time about it, for the next day he began.

2 Every one may not know what breaking in is, therefore I will describe it. It means to teach a horse to wear a saddle and bridle, and to carry on his back a man, woman or child; to go just the way they wish, and to go quietly. Besides this he has to learn to wear a collar, a **crupper**, and a **breaching**, and to stand still while they are put on; then to have a cart or a **chaise** fixed behind, so that he cannot walk or trot without dragging it after him; and he must go fast or slow, just as his driver wishes. He must never start at what he sees, nor speak to other horses, nor bite, nor kick, nor have any will of his own; but always do his master's will, even though he may be very tired or hungry; but the worst of all is, when his harness is once on, he may neither jump for joy nor lie down for weariness. So you see this breaking in is a great thing.

3 I had of course long been used to a halter and a headstall, and to be led about in the fields and lanes quietly, but now I was to have a **bit and bridle**; my master gave me some oats as usual, and after a good deal of coaxing he got the bit into my mouth, and the bridle fixed, but it was a nasty thing! Those who have never had a bit in their mouths cannot think how bad it feels: a great piece of cold hard steel as thick as a man's finger to be pushed into one's mouth, between one's teeth, and over one's tongue, with the ends coming out at the corner of your mouth, and held fast there by straps over your head, under your throat, round your nose, and under your chin; so that no way in the world can you get rid of the nasty hard thing: it is very bad! yes, very bad! at least I thought so; but I knew my mother always wore one when she went out, and all horses did when they were grown up; and so, what with the nice oats, and what with my master's pats, kind words, and gentle ways, I got to wear my bit and bridle.

4 Next came the saddle, but that was not half so bad; my master put it on my back very gently, while old Daniel held my head; he then made the **girths** fast under my body, patting and talking to me all the time; then I had a few oats, then a little leading about; and this he did every day till I began to look for the oats and the saddle. At length, one morning, my master got on my back and rode me round the meadow on the soft grass. It certainly did feel queer; but I must say I felt rather proud to carry my master, and as he continued to ride me a little every day I soon became accustomed to it.

Assessment Questions

10

Describe the challenge that Black Beauty faces in the story and how he responds. Use **two** details from the text to support your answer.

Write your answer in complete sentences.

CCLS Alignment: RL.5.2

Commentary: This question aligns to CCLS RL.5.2 because it asks students to describe a challenge that Black Beauty faces and how he responds.

Rationale: The response accurately identifies the challenge: being broken in. Black Beauty is not thrilled at first but accepts the bit because he wants to be grown up and please his master.

Read the text and complete the task that follows it.

Cell Phones in School—Yes or No?

Cell phones are convenient and fun to have. However, there are arguments about whether or not they belong in schools. Parents, students, and teachers all have different points of view. Some say that to forbid them completely is to ignore some of the educational advantages of having cell phones in the classroom. On the other hand, cell phones can interrupt classroom activities and some uses are definitely unacceptable. Parents, students, and teachers need to think carefully about the effects of having cell phones in school.

Some of the reasons to support cell phones in school are as follows:

- Students can take pictures of class projects to e-mail or show to parents.
- Students can text-message missed assignments to friends that are absent.
- Many cell phones have calculators or Internet access that could be used for assignments.
- If students are slow to copy notes from the board, they can take pictures of the missed notes and view them later.
- During study halls, students can listen to music through cell phones.
- Parents can get in touch with their children and know where they are at all times.
- Students can contact parents in case of emergencies.

Some of the reasons to forbid cell phones in school are as follows:

- Students might send test answers to friends or use the Internet to cheat during an exam.
- Students might record teachers or other students without their knowledge. No one wants to be recorded without giving consent.
- Cell phones can interrupt classroom activities.
- Cell phones can be used to text during class as a way of passing notes and wasting time.

Based on what you read in the text, do you think cell phones should be allowed in schools? Using the lists provided in the text, write a paragraph arguing why your position is more reasonable than the opposing position.

"Home"

by Rupert Brooke, 1913

I came back late and tired last night
Into my little room,
To the long chair and the firelight
And comfortable gloom.

5 But as I entered softly in
I saw a woman there,
The line of neck and cheek and chin,
The darkness of her hair,
10 The form of one I did not know
Sitting in my chair.

I stood a moment fierce and still,
Watching her neck and hair.
I made a step to her; and saw
That there was no one there.

15 It was some trick of the firelight
That made me see her there.
It was a chance of shade and light
And the cushion in the chair.

20 Oh, all you happy over the earth,
That night, how could I sleep?
I lay and watched the lonely gloom;
And watched the moonlight creep
From wall to basin, round the room,
All night I could not sleep.

Paired Passages

The Quest of the Silver Fleece

by W.E.B. Du Bois

Night fell. The red waters of the swamp grew sinister and sullen. The tall pines lost their slimness and stood in wide blurred blotches all across the way, and a great shadowy bird arose, wheeled and melted, murmuring, into the black-green sky.

5 The boy wearily dropped his heavy bundle and stood still, listening as the voice of crickets split the shadows and made the silence audible. A tear wandered down his brown cheek. They were at supper now, he whispered—the father and old mother, away back yonder beyond the night. They were far away; they would never be as near as once they had been, for he had stepped into the world. And the cat and
10 Old Billy—ah, but the world was a lonely thing, so wide and tall and empty! And so bare, so bitter bare! Somehow he had never dreamed of the world as lonely before; he had fared forth to beckoning hands and luring, and to the eager hum of human voices, as of some great, swelling music.

15 Yet now he was alone; the empty night was closing all about him here in a strange land, and he was afraid. The bundle with his earthly treasure had hung heavy and heavier on his shoulder; his little horde of money was tightly wadded in his sock, and the school lay hidden somewhere far away in the shadows. He wondered how far it was; he looked and harkened, starting at his own heartbeats, and fearing more and more the long dark fingers of the night.

20 Then of a sudden up from the darkness came music. It was human music, but of a wildness and a weirdness that startled the boy as it fluttered and danced across the dull red waters of the swamp. He hesitated, then **impelled** by some strange power, left the highway and slipped into the forest of the swamp, shrinking, yet following the song hungrily and half forgetting his fear. A harsher, shriller note
25 struck in as of many and ruder voices; but above it flew the first sweet music, birdlike, abandoned, and the boy crept closer.

30 The cabin crouched ragged and black at the edge of black waters. An old chimney leaned drunkenly against it, raging with fire and smoke, while through the chinks winked red gleams of warmth and wild cheer. With a revel of shouting and noise, the music suddenly ceased. Hoarse staccato cries and peals of laughter shook the old hut, and as the boy stood there peering through the black trees, abruptly the door flew open and a flood of light illumined the wood.

Extended Constructed Response Paired Passages

14

Compare and contrast how the main character of "The Quest of the Silver Fleece" and the speaker of "Home" feel initially and how each one's feelings change over time.

In your response, be sure to do the following:

- ☐ describe how the character in "The Quest of the Silver Fleece" feels at the beginning of his journey and how his feelings change
- ☐ describe how the speaker in "Home" feels upon returning home and how the speaker's feelings change
- ☐ describe similarities and/or differences in the change of feelings experienced in both passages
- ☐ use details from both passages in your response

Short Answer Constructed Response Questions for "The Story of My Life"

10

Closely reread the following sentences from lines 37–39 of the passage:

"Everything had a name, and each name gave birth to a new thought. As we returned to the house every object which I touched seemed to quiver with life."

How do these sentences reflect the author's changing relationship with language? Use two details from the passage to support your answer.

Write your answer in complete sentences.

Aligned CCLS: RI.8.2

Commentary: This item aligns to CCLS RI.8.2 because it asks students to analyze how a particular incident reveals an aspect of the author.

Rationale: The response accurately describes how the author's newfound relationship to words (that objects now "quiver with life"), brought on by her experience with touching water, is different from her initial experiences with words. (The correct response can include either the initial experience with the word "doll" or the later initial experience with "mug" and "water.")

Grade
8

WHAT WILL HOMEWORK BE LIKE WITH THE COMMON CORE?

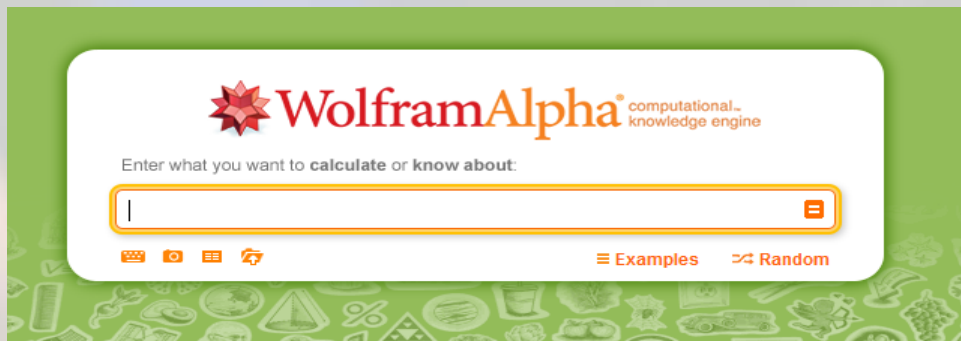
ELA	MATH
A wider variety of texts that student are reading	Math homework that contains fewer but more complex problems
Books that have more difficult vocabulary and more complex themes	Problems that require more steps and logical reasoning
Questions that require close reading and re-reading	More writing about math problems and solutions
More and different types of writing	More discussion about how students learn and solve problems

HOW CAN YOU AS A PARENT SUPPORT THIS NEW LANGUAGE ARTS LEARNING?

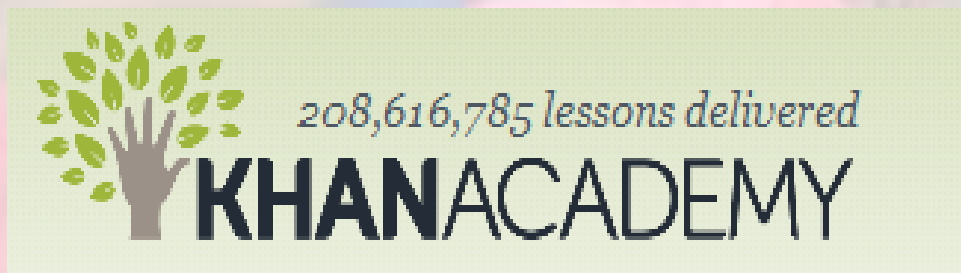
- Be ready to **support** your children as writing becomes more challenging and reading becomes more difficult.
- There is no substitute for **reading**! Reading a variety of books increases vocabulary, comprehension, general knowledge of the world, and love of learning. The more you read, the better reader you are!

From the time your children are young, **provide regular, structured time for reading.** Fill your home with opportunities to read. Show them that you are a reader, too!

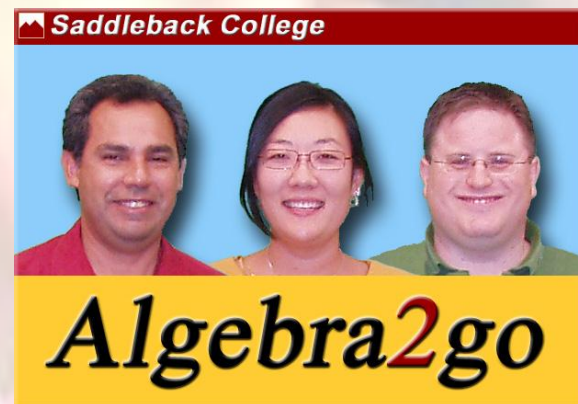
HELPFUL WEBSITES



www.wolframalpha.com/



www.khanacademy.org/



<http://www.saddleback.edu/faculty/lperez/algebra2go/index.html>

HOW WE STARTED TO IMPLEMENT THE CCSS - 2011-2012

- Began study of the Common Core State Standards
- Prioritized needs and developed four- year Implementation Plan
- Board of Education presentation
- District and building administrators attended workshops
- Provided professional development for teaching staff on CC
- Evaluated existing curriculum documents for alignment with CCSS
- Teachers from all grade levels and buildings met to unwrap the CC Standards using Ainsworth's Model
- K-4 Mathematics Curriculum was revised during the spring & summer of 2012
- Region 13 Staff worked at ACES during the summer of 2012 to write mathematics units to support our new curriculum
- Began evaluating our computer readiness for SBAC test administration

HOW WILL WE CONTINUE TO IMPLEMENT THE CC AND INTRODUCE THE NEW ASSESSMENTS?

2012-2013

- Implementation of K-2 Pearson mathematics materials, fall, 2012
- Revision of grade 5-8 Mathematics Curriculum
- Unit writing for grade K-4 mathematics curriculum
- Summer curriculum work – grade 9-12 mathematics curriculum revision
- Summer curriculum work - revision of English Language Arts Curriculum K-5 and development of units
- Review of additional instructional materials that will align with the Common Core State Standards
- Begin using SBAC released test questions and develop performance tasks
- Investigate computer-based instruction in grades K-4
- Continue ACES work with 18 other districts throughout school year and summer
- Continue professional development for staff

HOW WILL WE CONTINUE TO IMPLEMENT THE CC AND THE NEW ASSESSMENTS?

2013-2014

- Vertical and horizontal alignment with SBAC assessments
- Assessment of Informative Text collections
- Implement new English Language Arts Curriculum & Units
- Implementation of new grade 3-8 materials in math
- Develop SBAC assessments for instructional units
- Continue professional development for staff
- Implement computer-based instruction
- Pilot performance tasks and computer based items

HOW WILL WE CONTINUE TO IMPLEMENT THE NEW ASSESSMENTS?

2014-2015

- Administer SBAC practice assessments
- Implement SBAC assessments in grades 3-8 and 11, Spring 2015
- Review and revise curricula as required to align with SBAC assessments
- Review and revise instructional units
- Review and revise computer based test items and performance tasks
- Continue professional development for staff