

The Common Core State Standards in *Mathematics* and *Language Arts*

Side By Side's Approach



SIDE BY SIDE

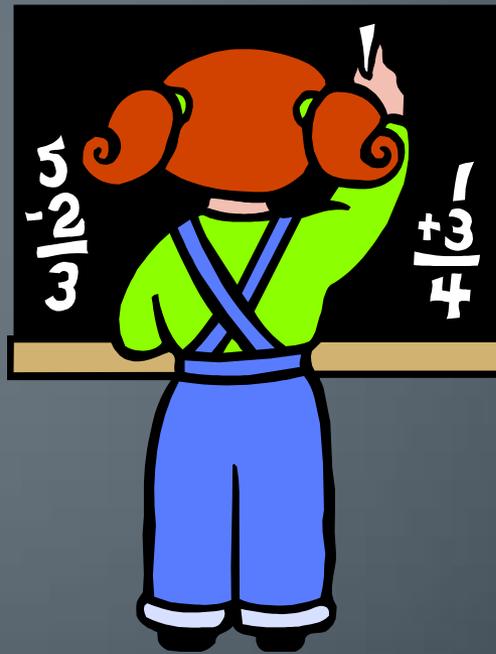
CHARTER SCHOOL

What are the Common Core State Standards (CCSS)?

- **Common Core State Standards (CCSS or Common Core)** are a set of research-based, globally competitive K-12 expectations (adopted by 45 states across the country) for English language arts (ELA) and mathematics, as well as literacy in history/social studies, science, and technical subjects.
- The Common Core State Standards are fewer, higher, and clearer, than the CT frameworks
- Because so many states have adopted them, they are comparable across states.

Here's some help from a quick clip....

- <http://vimeo.com/51933492>



Why did CT adopt the CCSS?

1. There are significant differences between current accountability assessment systems between states, and between states and national assessments

	Grade 4 Reading		Grade 8 Reading		Grade 4 Math		Grade 8 Math	
	State	NAEP	State	NAEP	State	NAEP	State	NAEP
District of Columbia	46	17	46	14	50	17	44	11
Massachusetts	54	47	79	43	48	57	49	52
Connecticut	70	42	77	43	81	46	81	40
Florida	74	36	54	32	75	40	66	29

2. The Achievement Gap

Connecticut has the largest achievement gap in the U.S

- This is because low income correlates with low levels of academic achievement. In Connecticut we have some of the wealthiest towns in the country as well as some of the poorest. This disparity in income contributes to the achievement gap.
- But it is not all a result of income differences. When compared to low-income students from other states, Connecticut's low-income students score in the bottom third on some key assessments.

How will the CCSS help?

- The common core standards are premised on a belief in high standards for ALL children
- Based on this belief, the CCSS will not only improve what your kids learn but how they learn, with a focus on critical thinking, problem solving, and effective communication skills.
- Students will become active learners—rather than passive—in a dynamic classroom environment.
- They will become independent thinkers who can create informed opinions, critique the opinions of their peers and their world, defend their arguments with evidence, and communicate their points of view effectively.
- On tests, they will be required to reason out the best answer, rather than memorizing the “correct” answer.

What are the changes to English language arts (ELA)/Literacy?

1. Building knowledge through content-rich nonfiction

- Building knowledge through content-rich nonfiction plays an essential role in literacy and in the standards. To be clear, the standards do require substantial attention to literature throughout K-12, as half of the required work in K-5 and the central work of 6-12 ELA teachers.
- In K-5, fulfilling the standards requires a 50-50 balance between informational and literary reading. Informational reading primarily includes content-rich nonfiction in history/social studies, and the arts
- In 6-12, English language arts (ELA) classes place a greater emphasis on a specific category of informational text—literary nonfiction—than has been traditional. In grades 6-12, the standards for literacy in history/social studies, science, and technical subjects ensure that students can independently build knowledge in these disciplines through reading and writing. Students are expected to be at a 70-30 split on informational and literary reading.

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What are the changes to English language arts (ELA)/Literacy?

2. Reading, writing, and speaking grounded in evidence from text, both literary and informational

- The standards place a premium on students writing to sources, (i.e. using evidence from texts to present careful analyses, well-defended claims, and clear information). Rather than asking students questions they can answer solely from their prior knowledge or experience, the standards expect students to answer questions that depend on their having read the text or texts with care.
- The standards also require the cultivation of narrative writing throughout the grades, and in later grades a command of sequence and detail will be essential for effective argumentative and informational writing.
- Likewise, the reading standards focus on students' ability to read carefully and grasp information, arguments, ideas, and details based on text evidence. Students should be able to answer a range of text-dependent questions—questions in which the answers require inferences based on careful attention to the text.
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What are the changes to English language arts (ELA)/Literacy?

3. Regular practice with **complex text and its academic language**

- Rather than focusing solely on the skills of reading and writing, the standards highlight the growing complexity of the texts students must read to be ready for the demands of college and career.
- The standards build a staircase of text complexity so that all students are ready for the demands of college and career level reading no later than the end of high school. Closely related to text complexity, and inextricably connected to reading comprehension, is a focus on academic vocabulary—words that appear in a variety of context areas, such as *ignite* and *commit*.
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What are the changes to Mathematics?

1. **Focus** strongly on the topics emphasized in the standards

- The standards call for a greater focus in mathematics. Rather than racing to cover topics in today's mile-wide, inch-deep curriculum, teachers use the power of the eraser and significantly narrow and deepen the way time and energy is spent in the mathematics classroom.
- They focus deeply on the major work* of each grade so that students can gain strong foundations—solid conceptual understanding, a high degree of procedural skill and fluency, and the ability to apply the mathematics they know to solve problems inside and outside the mathematics classroom.

What are the changes to Mathematics?

2. Coherence: Think across grades, and link to major topics* within grades

- Thinking across grades: The standards are designed around coherent progressions from grade to grade. Principals and teachers carefully connect learning across grades so that students can build new understanding onto foundations developed in previous years. Teachers can begin to count on students having a deep conceptual understanding of core content and build on it. Each standard is not a new event, but an extension of previous learning.
- Linking to major topics: Instead of allowing additional or supporting topics to detract from the focus of the grade, these topics can serve the grade level focus. For example, instead of data displays as an end in themselves, they support grade-level word problems

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What are the changes to Mathematics?

3. Rigor: In major topics* pursue Conceptual understanding, procedural skill and fluency; and application with equal intensity

- **Conceptual understanding:** The standards call for conceptual understanding of key concepts, such as place value and ratios. Teachers support students' ability to access concepts from a number of perspectives so that students are able to see mathematics as more than a set of mnemonics or discrete procedures.
- **Procedural skill and fluency:** The standards call for speed and accuracy in calculation. Teachers structure class time and/or homework for students to practice core functions, such as single-digit multiplication, so that students have access to more complex concepts and procedures.
- **Application:** The standards call for students to use mathematics flexibly for applications. Teachers provide opportunities for students to apply mathematics in context. Teachers in content areas outside of mathematics, particularly science, ensure that students are using mathematics to make meaning of and access content.

Major topics by grade

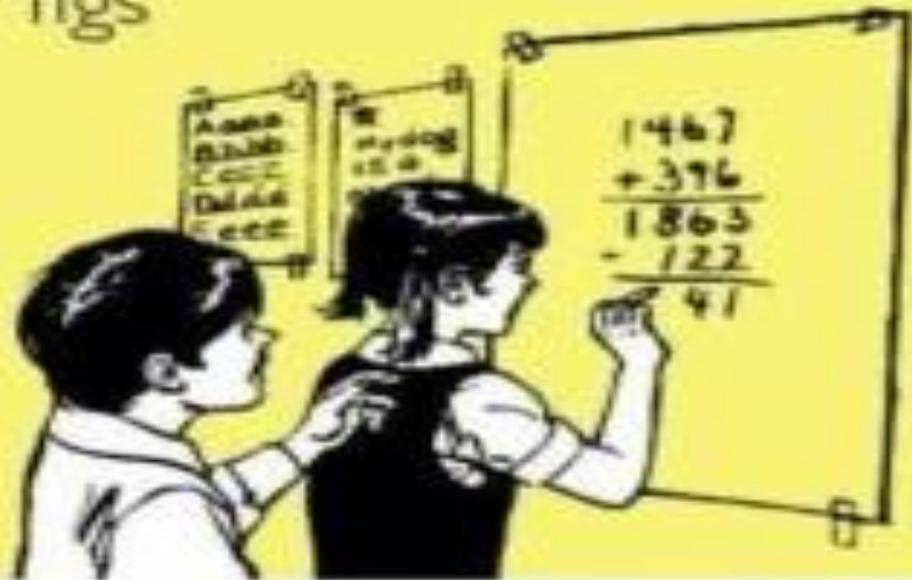
- K-2 Addition and subtraction – concepts, skills, problem solving, and place value
- 3-5 Multiplication and division of whole number and fractions – concepts, skills, and problem solving
- 6 Ratios and proportional reasoning, early expressions and equations
- 7 Ratios and proportional reasoning, arithmetic of rational numbers
- 8 Linear algebra, linear functions

And so, what your kids may see for a while...

Common Core: Jack has a cat and Jill has a pail of water. If Billy has \$5.00, how many figs will his dog eat?

Write your constructed response using a bar graph.

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What is a performance tasks?

- Performance tasks challenge students to apply their knowledge and skills to respond to real-world problems. They can best be described as collections of questions and activities that are coherently connected to a single theme or scenario. These activities are meant to measure capacities such as depth of understanding, research skills, and complex analysis, which cannot be adequately assessed with selected- or constructed-response items.
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- Performance tasks in reading, writing, and mathematics will be part of the Smarter Balanced summative, year-end assessment. Performance tasks can also be administered as part of the optional interim assessments throughout the year. The performance tasks will be delivered by computer (but will not be computer adaptive) and will take one to two class periods to complete.

In closing

