

# COMMON CORE STATE STANDARDS IN MATHEMATICS

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## OBJECTIVE:

1. CA Standards update
2. Revisit the “shifts” in mathematics
3. A look at SMARTER Balanced Assessment Consortium

Objectives for the meeting.

## STANDARDS UPDATE

- On Wednesday, January 16, 2013 the state board approved **Modifications to the California Additions** to the Common Core Math standards.
- The biggest impact is CA no longer has an 8<sup>th</sup> grade Algebra 1 different from high school Algebra 1.
- Next big impact is CA has now put high school standards into 2 sequences of courses – **Integrated and Traditional**.
- Each grade level, K – 12 had some or all of the additions removed.

**California Additions:** As states adopted the Common Core standards, they could add 15% to the existing set of standards. When California adopted the standards in 2010, CA put together a set of standards for 8<sup>th</sup> grade Algebra 1, high school Calculus, and high school AP Statistics. CA also sprinkled a few standards throughout each grade level from K – 7. The additional standards in grades 6 and 7 were meant to assure that a proficient 7<sup>th</sup> grader would be ready for Algebra 1 in 8<sup>th</sup> grade.

**Modifications:** Since No Child Left Behind states that each grade level can only have 1 set of standards, CA decided to drop the set of standards they'd put together for 8<sup>th</sup> grade Algebra 1 and keep the Common Core grade 8 math as is. Since there was no longer a need to prepare all 7<sup>th</sup> graders for Algebra 1 in grade 8, the additional standards in grades 6 and 7 were also dropped. The modifications that occurred in K – 5 were mostly due to redundancy.

**High school courses:** The two course sequences are for a traditional math program (Algebra 1, Geometry, Algebra 2) and for an integrated program (Math 1, Math 2, Math 3).

# STANDARDS UPDATE

Middle school math standards  
from 1997 to Common Core

1997:

Math 6 → Math 7 → Algebra 1

Common Core:

Math 6 → Math 7 → Math 8 → Algebra 1

Overview of the middle school sequence of courses/standards comparing 1997 to the Common Core.

# STANDARDS UPDATE

Middle school math standards  
from 1997 to Common Core

1997:

Math 6 → Math 7 → Algebra 1

Common Core:

Math 6 → Math 7 → Math 8 → Algebra 1

Two clicks will highlight the changes in standards coverage. Essentially, what we now cover in grades 6 and 7 will be spread out among the three grades, 6, 7 and 8. Algebra 1/Math 1 will become a 9<sup>th</sup> grade expectation but high achieving 7<sup>th</sup> graders will be able to accelerate to take Algebra 1 or Math 1 in grade 8.

## REVIEW OF THE “3 SHIFTS”

1. Focus
2. Coherence
3. Rigor

Review of the 3 major shifts in mathematics with the Common Core.  
See **handout** titled “Key Instructional Shifts of the Common Core Standards for Mathematics.” The next 3 slides go in to more detail.

## REVIEW OF THE “3 SHIFTS”

### 1. Focus

- a. Spend more time on fewer things.
- b. Narrow and deepen the way time and energy are spent in the classroom.
- c. Students gain a stronger foundation.

No longer a “mile wide and inch deep” curriculum. Each grade level will focus on fewer topics than we currently do.

# REVIEW OF THE “3 SHIFTS”

## 2. Coherence

- a. Coherent progressions from grade to grade.
- b. Standards are an extension of previous learning.
- c. Occurs within a grade when **Major topics** are linked by supporting and additional topics.

There is a structure and flow of ideas, across and within grade levels.

**Major topics:** see **handouts** highlighting the Major clusters, Supporting clusters, and Additional clusters for grade levels, K – 8.



## REVIEW OF THE “3 SHIFTS”

### 3. Rigor

Equal intensity with:

- a. **Conceptual understanding** of key concepts
- b. Procedural skill and **fluency**
- c. Application

Emphasis is on the equality of time spent on each of the 3 components of Rigor.

**Conceptual understanding:** not teaching math as a set of rules, mnemonics, tricks, songs,

...

**Procedural skill and fluency:** fluency and precision in computation gives the brain time and space to absorb new learning. See **fluency handout (2 pages)**.

**Application:** the reason we learn math, to apply it.

## PHIL DARO – AGAINST ANSWER GETTING (17 MINUTE VIDEO)

[Phil Daro - Against Answer Getting on Vimeo](#)

Another writer of the math standards talks about the problem with “answer getting.”

## THE ASSESSMENT

- ◉ Smarter Balanced Assessment Consortium (SBAC)
- ◉ Pilot testing in 2012 – 2013
- ◉ Field testing in 2013 – 2014
- ◉ Testing begins in 2014 – 2015
- ◉ Summative test in grades 3 – 8, and 11
- ◉ CA may add grades 2, 9 and 10

An overview of the assessment of CCSS with Smarter Balanced Assessment Consortium.

# SMARTER BALANCED

Green – governing states, Blue – participating states



These are the states that belong to the SBAC.

## ASSESSMENT ITEM TYPES

- Selected Response
- Constructed Response
- Extended Response
- Performance Task

This is a description of the question types released by SBAC.

## SBAC SAMPLE ITEMS

The sample items and performance tasks are intended to help implement the Common Core State Standards (CCSS) and prepare for next-generation assessments.

While the items and tasks are not intended to be used as sample tests, educators can use them to begin planning the shifts in instruction that will be required to help students meet the demands of the new assessments.

<http://sampleitems.smarterbalanced.org/itempreview/sbac/index.htm>

Information about the math sample items on the site and a link directly to the math sample items page.

## VUSD WEBSITE FOR TEACHERS

The VUSD office of Curriculum & Instruction has designed this web page as a resource for teachers and parents. We hope these resources will provide useful tools that will promote conversations and collaboration around the Common Core State Standards and use them to guide decisions about rigorous teaching, learning, and assessment.

<http://www.venturausd.org/>

From the district website:

- Select Curriculum & Instruction from the “Departments” pull down menu at the top.
- On the Curriculum & Instruction website, select “Common Core State Standards Web Site.”
- On the Common Core Web Site you will find additional resources in the margin on the left side.





## WEBSITES:

- ◉ Smarter Balanced Assessment Consortium:  
[www.smarterbalanced.org](http://www.smarterbalanced.org)
- ◉ California Common Core State Standards & resources: [www.cde.ca.gov/ci/cc](http://www.cde.ca.gov/ci/cc)
- ◉ Ventura Unified School District:  
<http://www.venturausd.org/>

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