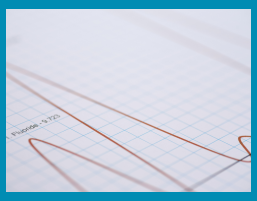
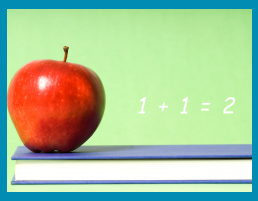
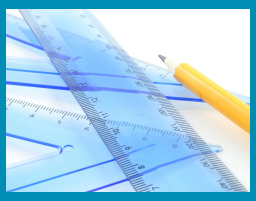
SBUSD - Common Core Math




January 15, 2014

What is Common Core Mathematics?

The Common Core State Standards (CCSS) in mathematics are a set of standards based on research on how students learn mathematics.

CCCS mathematics are built on the foundation of *Focus, Coherence and Rigor* where students will balance conceptual understanding, procedural fluency and application. The goal of CCSS is to prepare College and Career Ready high school graduates.

There are Common Core Math ***Content*** Standards defined for each grade level from Kindergarten through 8th grade, in addition to a set of high school content standards. These standards are the "what" of mathematics, such as number, algebra, geometry, functions, statistics and probability.

Additionally, there are Common Core Standards for Mathematical ***Practices***. These eight practices are the same from K through grade 12. These standards are the "doing" of mathematics.

Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Students in grades 3-8 and 11 will also be taking new state assessments (Smarter Balanced) that allow students to show their progress towards College and Career Readiness. Every student in each grade level will be assessed *all domains* of mathematics in that grade level. For example, all 8th graders will be assessed on 8th grade CCSS mathematics.

What Changes Can I Expect for Students Entering Junior High School?

Next year the math courses in SBUSD junior highs will be changing as we update our courses to reflect the Common Core State Standards for Math. No longer will 7th grade students enroll in pre-algebra courses and algebra courses, but instead Common Core Math 7 and Common Core Math 8. This transition will take time for students, teachers and parents to adapt to.

Some students will adapt more quickly and others will need additional support. This requires us to rethink our current course structures. We recognize that students who have traditionally enrolled in algebra in 7th grade may be eager for an enriching math experience. We have a draft of new course pathways and we seek your feedback.

What Happened to Algebra in 8th Grade?

Common Core Math 8 is a new course that contains the first half of the Algebra 1 course many people are familiar with, some of the geometry from our current high school course, statistics and more.

The California Math Framework describes the new CCSS Math 8 as being "significantly higher rigor than the Algebra 1 course that many students have taken while in 8th grade. The CA CCSSM for grade eight address the foundations of algebra by including content that was previously part of the Algebra I course, such as more in-depth study of linear relationships and equations, a more formal treatment of functions, and the exploration of irrational numbers....The CA CCSSM for grade eight also include geometry standards that relate graphing to algebra in a way that was not explored previously. In addition, the statistics presented in the CA CCSSM for grade eight are more sophisticated than those previously included in middle school and connect linear relations with the representation of bivariate data" (California Framework, Nov 2013).

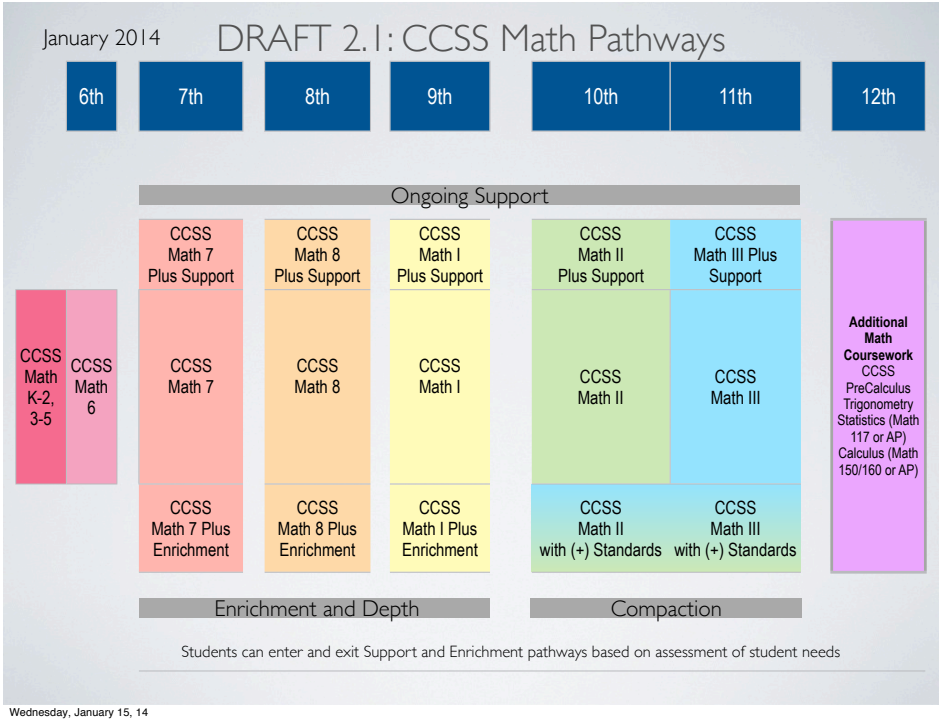
What Changes Can I Expect for Incoming High School Students?

In the 2014-2015 school year, SBUSD will be phasing in the CCSS Integrated math sequence of high school courses. Many districts within the region, state and country are transitioning their high school math programs to follow the Integrated CCSS sequence. Integrated courses allow students to see how topics in mathematics are connected to each other rather than as separate topics (e.g., algebra, geometry, trigonometry and statistics).

For next school year, the only incoming high school students who will be enrolled in our new high school Common Core math course (CCSS Integrated Math I) will be students who have not successfully completed Algebra 1 in junior high. Students who would typically be enrolled in a 9th grade algebra course, instead, will be enrolled in the new CCSS Integrated Math I course. Students who have successfully completed an algebra or geometry course in junior high will continue and finish the current course sequence of Algebra 1, Geometry and Algebra 2.

Students that would have been enrolled in a 9th grade algebra course will instead be enrolled in the new CCSS Integrated Mathematics I course.

Proposed SBUSD Pathways for Secondary Math



This chart shows a draft of the proposed pathways for secondary CCSS mathematics courses in SBUSD based on the recommendations described in the Common Core and the new California Mathematics Framework.

There are three pathways that lead to high school graduates being College and Career Ready.

The middle pathway way is the Common Core pathway that most students will take. It includes all of the rigorous new content of the CCSS.

The top pathway includes support opportunities for students to meet the new demands outlined in CCSS. These experiences may include extended time, double math periods, summer learning, and tutorials.

Some students will be interested in our proposed Enrichment (grades 7-9) and Compaction (grades 10-11) CCSS math courses, shown in the bottom pathway. For junior high, these courses will be designed for students who meet the qualifications (still under development) and want *additional* math enrichment experiences to provide a deeper exploration of mathematics. During high school, interested students who meet the qualifications (still under development) can take our Compacted CCSS Math II and III which include *additional* math (+) standards beyond the CCSS that prepare students to be quantitative majors in college.

Teachers, Principals and School Board members have given feedback on earlier versions of these pathways to help us create this current version (Draft 2.1). Contact your principal with questions and comments.