

Cambrian School District

January 21, 2016

**LOCAL CONTROL
ACCOUNTABILITY PLAN GOAL 1:
HIGH ACADEMIC ACHIEVEMENT
PART I**

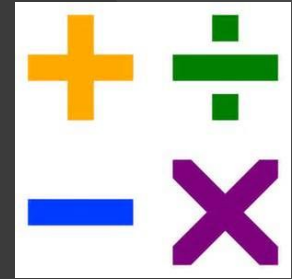
Overview

- Our Objective
- Mathematics Instructional Guidelines
- Professional Learning
- Tier II Interventions
- Next Steps
- Resources

Our Objective

“Cambrian School District will promote high academic achievement for all students while preparing them for 21st century college and career readiness.”

Mathematics Instructional Guidelines



- Common Core State Standards will provide the Framework.
- The 8 Standards of Mathematical Practice will guide planning and instruction.
- Multiple assessments will guide teachers to make informed decisions for student learning.
- All Students have the potential to reach district standards in mathematics.
- Mathematical discussion is foundational for developing conceptual knowledge.

The Big Ideas in Common Core

◎ Rigor

● Depth of Knowledge Taxonomy

1. Remember
2. Understand
3. Apply
4. Analyze
5. Evaluate
6. Create

◎ Relevance

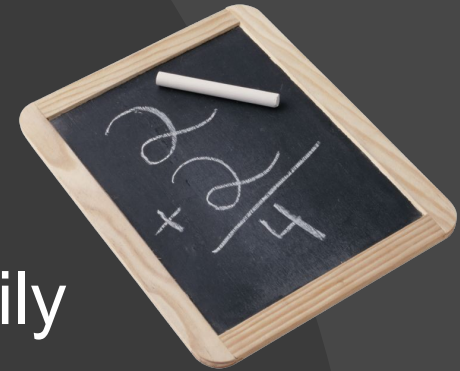
◎ Perseverance

CCSS:	Key Shifts in Mathematics
FOCUS:	Greater focus on fewer topics <i>(narrow and deeper)</i>
COHERENCE:	Linking topics and thinking across grades
RIGOR:	Pursue conceptual understanding, fluency and application with equal intensity

8 Mathematical Practices

- ⦿ Make sense of problems and persevere in solving them.
- ⦿ Reason abstractly and quantitatively.
- ⦿ Construct viable arguments and critique the reasoning of others.
- ⦿ Model with mathematics
- ⦿ Use appropriate tools strategically.
- ⦿ Attend to precision.
- ⦿ Look for and make use of structure.
- ⦿ Look for and express regularity in repeated reasoning

Number Talks



- A Number Talk is a short, ongoing daily routine that provides students with meaningful ongoing practice with computation.
- A Number Talk is a powerful tool for helping students develop computational fluency.
- Number Talks are a large or small group meeting where the teacher poses intentionally selected problems for students to solve.

Price Middle School

Two Course Pathways for Students

Traditional Course Pathway

- Grade 6 CC Math
- Grade 7 CC Math
- Grade 8 CC Math

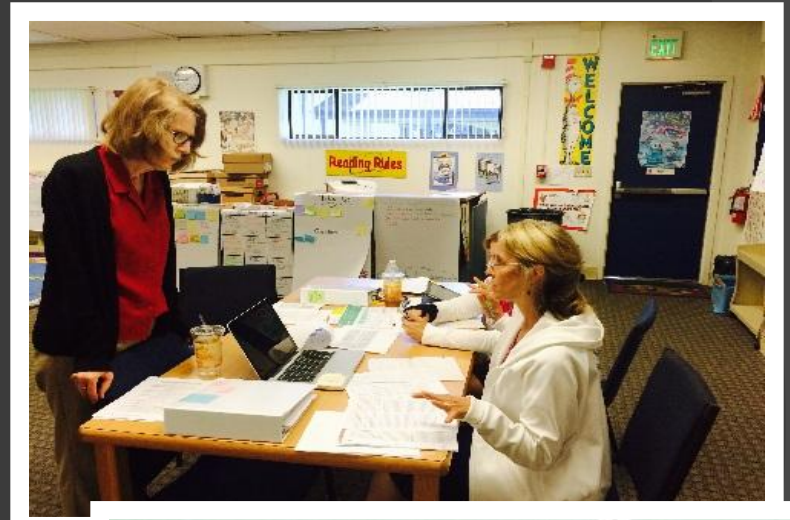
Packs Algebraic skills over 3 years to build strong conceptual skills.

Accelerated Course Pathway

- **Grade 6 Plus**
- **Grade 7/8**
 - Grade 7 Math
 - First ½ Grade 8 Math
- **Integrated Math 1**
- Grade 8 Math
- First ½ Grade 9 Math

Math Teacher Leadership

- 13 Cambrian teacher leaders from grades TK-5
- 4 elementary schools were engaged in a 4-day Math Leadership Summer Institute
- Silicon Valley Math Initiative
- Common Core Standards and best mathematical practices
- 3 follow-up training days
- 3 Elementary district professional learning Wednesdays



Math Teacher Leadership

- Our goals is to:
 - improve classroom discourse and mathematical articulation through Number Talks
 - learn instructional techniques/facilitation moves to shift teaching to the Standards for Mathematical Practices
 - develop skills for teacher leaders to lead grade level professional development
 - Build teacher capacity and sustainability of our programs



Tier II Intervention Principles

- ◉ Instructional explicitness
- ◉ Instructional design that eases the learning challenge
- ◉ A strong conceptual basis for procedures that are taught
- ◉ An emphasis on drill and practice
- ◉ Cumulative review as part of drill and practice
- ◉ Motivators to help students regulate their attention and behavior and to work hard

Do the Math by Marilyn Burns

Grades 1-5

A red speech bubble containing the text "Do The Math" in white, bold, sans-serif font. The speech bubble has a tail pointing towards the bottom right.

Do
The
Math

- ⦿ Help students catch up and keep up
- ⦿ Helps students develop the skills they need to compute with accuracy and efficiency, the number sense they need to reason, and the ability to apply their skills and reasoning to solve problems.
- ⦿ Flexible Intervention
 - Afterschool Program
 - Resource Specialist Program
 - Target additional pullout/push-in support

Silicon Valley Education Foundation

Elevate Math Grades 7 & 8



- Elevate Math is a 19-day summer intervention program that provides 75 hours of instruction to rising 7th and 8th grade students to ensure that they are ready to succeed in their next-level math course.
- The program also provides 35 hours of Common Core-aligned professional development and coaching for teachers.
- Targets students who are identified as “Nearly Meeting Standards” based on their prior year’s SBAC results or students who are recommended to participate in the program by their teacher.

Next Steps

- Curriculum Adoption
- Ongoing Professional Learning for Teachers and Administrators
- Extended Learning Opportunities for Students
- Community Engagement

Resources

- ◉ [Math Investigations](#)
- ◉ [YouCube](#)
- ◉ [Silicon Valley Math Initiative](#)
- ◉ [Khan Academy](#)
- ◉ [Inside Mathematics](#)



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