



# PMS Parent Info Night- 6.3.14

For Current 6<sup>th</sup> & 7<sup>th</sup> Grade Pre-Algebra Students



# Information on Common Core Math

- Please make sure you visit the Piedmont Unified School District homepage for our Common Core Information as well as our Helpful FAQ Page.
- <http://www.piedmont.k12.ca.us/communications/common-core-math-implementation-fa>
- <http://www.piedmont.k12.ca.us/wp-content/uploads/2014/03/CCMathFAQ.pdf>

# May 28<sup>th</sup> Board of Ed Decisions:

- 1. Piedmont Middle School will offer three new courses: CC-6 Math, CC-7 Math, and CC-8 Math beginning in 2014-15.
- 2. Students currently in Algebra 1 through AP Calculus AB will continue in the current 1997 CA Mathematics Standards classes, with teachers embedding Common Core standards as appropriate.
- 3. PUSD will continue to provide pathways for students to take AP Calc AB *and* Calc BC.

# May 28<sup>th</sup> Board of Ed Decisions:

- 4. The Common Core math progression pathways will include ***at least*** one opportunity to compress at PMS and ***at least*** one opportunity to compress at PHS/MHS, with the nature of the compression opportunities to be determined in 2014-15 for implementation in 2015-16.
- 5. 6th grade students currently in Math 6 will proceed to CC-7 Math.
- 6. Students entering 6<sup>th</sup> grade in 2014-will proceed to CC-6 Math.
  - Students who had math enrichment in 5<sup>th</sup> grade will be clustered in groups of 12-15 amongst 5 sections of CC-6 Math.

# May 28<sup>th</sup> Board of Ed Decisions:

- 7. 6<sup>th</sup> & 7<sup>th</sup> grade students **currently in Pre-Algebra** will proceed to CC-8 Math with the option to “opt out of CC-8 Math” and take Algebra 1 (1997) with a signed acknowledgment with the understanding:
  - The PMS, PHS, and MHS math departments do not recommend the “opt out path” as it is not Common Core aligned.
  - Students on this path will receive limited exposure to the CCSS. Teachers will embed CCSS as appropriate.
  - SAT and AP tests are expected to change to align with CCSS
  - Depending on the number of students who opt out of CC-8 Math, instruction in Algebra 1 (1997) may occur at PHS, resulting in the student missing an elective course at PMS due to differing bell schedules.

# 8 Mathematical Practices

## (College and Career Readiness Standards)

Standard for Mathematical Practice	Student Friendly Language
1. Make sense of problems and persevere in solving them.	I can try many times to understand and solve a math problem.
2. Reason abstractly and quantitatively.	I can think about the math problem in my head first.
3. Construct viable arguments and critique the reasoning of others.	I can make a plan, called a strategy, to solve the problem and discuss other students' strategies too.
4. Model with mathematics.	I can use math symbols and numbers to solve the problem.
5. Use appropriate tools strategically.	I can use math tools, pictures, drawings, and objects to solve the problem.
6. Attend to precision.	I can check to see if my strategy and calculations are correct.
7. Look for and make use of structure.	I can use what I already know about math to solve the problem.
8. Look for and express regularity in repeated reasoning.	I can use a strategy that I used to solve another math problem.

# What is CC-8?

- A college preparatory class that combines Pre-Algebra, Algebra 1, Geometry, and Statistics concepts into one integrated course.
- Instead of simply memorizing mathematical procedures, algorithms, and computational formulas, students are given the opportunity to think conceptually and explain and apply them in novel situations.
- CC8 is the prerequisite course to CCAlg which includes some current Algebra 2 standards.

# 1997 CA Math Standards vs. Common Core Math Standards – CC8/CC Alg

Grade 8 Algebra 1 (1997 Standards)	
<b>All Algebra Content</b>	
	Powers and Radicals
	Int + Variable Exponents
	Absolute value
	Linear Equations
	Intercepts
	Equation of a Line
	Parallel/Perpendicular
	Graphically Solve Linear Eq
	Operations with mono-polynomials
	Factoring Algebraic Fractions
	Quadratic Equations
	Functions
	Range + Domain
	Quadratic Graphs + Complete Sq.

## Key

Grade 5 (1997 Standards)
Grade 6 (1997 Standards)
Grade 7 (1997 Standards)
Grade 8 Algebra 1 (1997 Standards)
Geometry (1997 Standards)
New Common Core Content

Grade 8 CC	
<b>Real Numbers</b>	
	Irrational Numbers
<b>Expressions and Equations</b>	
	Exponents
	Powers
	Scientific Notation
	Connections (Lines and Linear Eq)
	System of Linear Equations
	Graphically Solve Systems of Linear Eq
<b>Geometry</b>	
	Congruence
	Scaling
	Rotations
	Pythagorean Theory Proofs
<b>Functions</b>	
	Define/Compare Functions
	Non-Linear Functions
	Construct Functions
<b>Statistics and Probability</b>	
	Scatter Plots
	Line of Best Fit
	Frequencies

Algebra I CC	
	Int + Variable Exponents
	Powers and Radicals
	Units
	Operations with mono-polynomials
	Create Equations (One Variable)
	Create Equations (Two Variables)
	Factoring Algebraic Functions
	Graphically Solve Linear Equations
	Quadratic Equations
	Systems of 1 Linear, 1 Quad Equation
	Range + Domain
	Rate of Change of Function
	Build Functions
	Inverse Functions
	Exponential Functions
	Statistics and Probability
	Std. Dev, Interquartile Ranges
	Scatter Plot
	Slope + Intercept



# Choice of Pathways for Current 7<sup>th</sup> Graders in Pre-Algebra

# Current 7<sup>th</sup> Grade Pre-Algebra ... CC-8 Math Path

13-14		14-15		15-16
7 <sup>th</sup> Grade - <b>Pre-Algebra</b>	→	8 <sup>th</sup> Grade – <b>CC8 Math</b>	→	9 <sup>th</sup> Grade – <b>CC Algebra I* or Math 1**</b>
16-17		17-18		18-19
10 <sup>th</sup> Grade – <b>CC Geo* or Math 2**</b>	→	11 <sup>th</sup> Grade – <b>CC Alg 2* or Math 3**</b>	→	12 <sup>th</sup> Grade – <b>Math Analysis</b>

\*= Traditional Model

\*\*= Integrated Model

In the current math sequencing, 7<sup>th</sup> grade students in *Pre-Algebra* were on track to take *AP Calculus AB* their senior year. Under the new Common Core sequencing, we would have to develop a compressed course to get students to *AP Calculus AB/BC* their senior year. We maintain that a path to AP Calculus is required.

# Possible Compression for CC-8 Math Path

13-14		14-15		15-16
7 <sup>th</sup> Grade - <i>Pre-Algebra</i>	→	8 <sup>th</sup> Grade – <i>CC8 Math</i>	→	9 <sup>th</sup> Grade – <i>Alg1 &amp; Geo*</i> or <i>Math 1A**</i>
16-17		17-18		18-19
10 <sup>th</sup> Grade – <i>Geo &amp; Alg2*</i> or <i>Math 2A**</i>	→	11 <sup>th</sup> Grade – <i>Math Analysis or Math 3A**</i>	→	12 <sup>th</sup> Grade – <i>AP Calculus AB/BC</i>

\*= Traditional Model

\*\*= Integrated Model

Please note that this is just one EXAMPLE of how compression could look at the high school level. It is a Board directive that PHS/MHS will include at least one opportunity to compress, with the nature of such compression opportunities to be determined in 2014-15 with implementation in 2015-16.

# Current 7<sup>th</sup> Grade Pre-Algebra ... Algebra 1 (1997) Path

13-14	14-15	15-16
7 <sup>th</sup> Grade - <i>Pre-Algebra</i>	→ 8 <sup>th</sup> Grade – <i>Alg1 (1997)</i>	→ 9 <sup>th</sup> Grade – <i>Geo (1997)</i>
16-17	17-18	18-19
10 <sup>th</sup> Grade – <i>Alg 2 (1997)</i>	→ 11 <sup>th</sup> Grade – <i>Math Analysis</i>	→ 12 <sup>th</sup> Grade – <i>AP Calculus AB/BC</i>

By choosing this math sequence, students will be able to progress into AP Calc AB/BC by their senior year. Students following this path will continue on receiving instruction using the 1997 standards with teachers embedding Common Core Standards as appropriate.

# Choice of Pathways for Current 6<sup>th</sup> Graders in Pre-Algebra

# Current 6<sup>th</sup> Grade Pre-Algebra ... CC-8 Math Path

**13-14**

6<sup>th</sup> Grade - ***Pre-Algebra***

**14-15**

7<sup>th</sup> Grade – ***CC8 Math***

**15-16**

8<sup>th</sup> Grade – ***CC Alg1\**** or  
***Math1\*\****

**16-17**

9<sup>th</sup> Grade – ***CC Geo\**** or  
***Math 2\*\****

**17-18**

10<sup>th</sup> Grade – ***CC Alg2\****  
or ***Math 3\*\****

**18-19**

11<sup>th</sup> Grade – ***Math Analysis***

**19-20**

12<sup>th</sup> Grade – ***AP  
Calculus AB/BC***

\*= Traditional Model

\*\*= Integrated Model

# Possible Compression for 6<sup>th</sup> Grade Pre-Algebra...

## CC-8 Math Path

13-14		14-15		15-16
6 <sup>th</sup> Grade - <i>Pre-Algebra</i>	→	7 <sup>th</sup> Grade – <i>CC8 Math</i>	→	8 <sup>th</sup> Grade – <i>CC Alg1 &amp; CC Geo* or Math 1A**</i>
16-17		17-18		18-19
9 <sup>th</sup> Grade – <i>Math 2A (CC Geo &amp; CC Alg2)</i>	→	10 <sup>th</sup> Grade – <i>Math 3A (CC Alg2 &amp; Math Analysis)</i>	→	11 <sup>th</sup> Grade – <i>AP Calculus AB</i>
19-20				
12 <sup>th</sup> Grade – <i>AP Calculus BC</i>				

\*= Traditional Model                      \*\*= Integrated Model

Please note that this is just two EXAMPLES of how compression could look at the high school level. It is a Board directive that PHS/MHS will include at least one opportunity to compress, with the nature of such compression opportunities to be determined in 2014-15 with implementation in 2015-16.

# Current 6<sup>th</sup> Grade Pre-Algebra ... Algebra 1 (1997) Path

**13-14**

6<sup>th</sup> Grade - ***Pre-Algebra***

**14-15**

7<sup>th</sup> Grade – ***Alg1 (1997)***

**15-16**

8<sup>th</sup> Grade – ***Geo (1997)***

**16-17**

9<sup>th</sup> Grade – ***Alg 2 (1997)***

**17-18**

10<sup>th</sup> Grade – ***Math Analysis***

**18-19**

11<sup>th</sup> Grade – ***AP Calculus AB***

**19-20**

12<sup>th</sup> Grade – ***AP Calculus BC***



# Process and Due Date to “Opt Out”

- To opt out of CC-8 Math, parents of students currently enrolled in Pre-Algebra must submit to Piedmont Middle School a written (either hardcopy or by email) and signed request indicating their informed consent that:
  - The PMS, PHS, and MHS math departments do not recommend this “opt out” path as it is not aligned with the Common Core State Standards in Mathematics.
  - Students on this “opt out” path will receive limited exposure to the CCSS.
  - SAT and AP tests are expected to change to align with the CCSS.
  - Depending upon the number of students who opt out of CC-8 Math, instruction in Algebra 1 (1997) may occur at PHS, resulting in the student missing an elective course at PMS due to differing bell schedules.

Because of the complex scheduling issues involved in providing this option, requests must be received by the school no later than **Monday, June 9<sup>th</sup> – 4pm**. Requests may be addressed to:

Mr. Ryan Fletcher

740 Magnolia Avenue

Piedmont, CA 94611

[RFletcher@piedmont.k12.ca.us](mailto:RFletcher@piedmont.k12.ca.us)

If you have questions about this, please contact me at [rfletcher@piedmont.k12.ca.us](mailto:rfletcher@piedmont.k12.ca.us)

# Questions for Math Department?

➤ Time was given for parents to ask questions.

# Note from Mr. Fletcher:

6/4/13

Dear Parents,

During the presentation last night, requests for additional resources were made as well as a question that needed further clarification. I have included the additional resources in the next few slides as well the answer to the question in an effort to best support you in this decision making process.

Cheers,

Ryan Fletcher, Principal

# SpringBoard Curriculum

- At last night's meeting, a parent requested information about SpringBoard, the CCSS curriculum PMS has been piloting. Here is a link to the SpringBoard math curriculum that is published by The College Board:
- <http://springboardprogram.collegeboard.org/mathematics/>

# CCSS Math Standards vs. 1997 CA Math Standards

- A Parent requested copies of both the Common Core Standards in Mathematics and the 1997 CA Math Standards. I have attached both documents below:
  
- Common Core Math Standards (Adopted by the State of CA in 2013):
  - <http://goo.gl/jvi7GZ>
  
- 1997 CA Math Standards:
  - <http://goo.gl/kXjW6q>

# Question Raised by a 6<sup>th</sup> Grade Parent

Last night a parent of a 6<sup>th</sup> grader asked the following question:

“If I choose for my student to take the recommended path of CC8 but only a few of the 6<sup>th</sup> grade families choose this path, will my child be in jeopardy of needing to take CC Algebra at PHS because of low enrollment for the 15/16 school year.”

Answer: “We anticipate that we will be able to accommodate them so that students will be able to take CC Algebra at PMS. If it becomes an issue as enrollment numbers get finalized, we will contact parents accordingly to discuss course selection options.”