

# **Mathematics Department**

K - 12 Curriculum Review 2018 - 2023



### **Math Review Team**

High School Department Chairs: Steven Danley and Amy Wright

Middle School Department Chairs: Pam Garner and John Venner

Elementary School Department Chairs: Justin Fachet and Megan Stevens

Director of Curriculum: Dr. Michael Donnelly

Elementary Principal: Scott Davis

Input from all elementary teachers and secondary math teachers



### **Progress Review**

# A look at the previous 5 - year plan (2013-2018)

Implement PA Common Core Content and Mathematical Practice Standards

Examine and align our systematic approach to student assessment, interventions, and enrichment

Increase communication, collaboration and alignment across buildings and levels

Examine and align use of resources to maximize their effectiveness and efficiency



### **MISSION**

The goal of the K - 12 Palisades School District math department is for students to reach their full potential by understanding, applying and transferring math skills to their lives.

From proficiency of mathematical standards and practices to resolving unique problems, students will employ mathematical reasoning with confidence and persistence while finding accurate and reasonable solutions to problems.

PALISADES school district INSPIRED TO LEAD...PREPARED TO SUCCEED

**Elementary Buildings:** 

Everyday Mathematics 4 (K-5) mathematics

**Learning Support** 

Math intervention

Khan Academy 3-5





#### Middle School:

Program	6 <sup>th</sup> Grade	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade	9 <sup>th</sup> Grade
On-Level	Math 6	Math 7	Pre-Algebra	Algebra I
Accelerated	Math 7	Pre-Algebra	Algebra I	Geometry
Accelerated	Pre-Algebra	Algebra I	Geometry	Algebra II



#### High School:

Level 2	Level 1	Honors
Algebra 1A and Algebra 1B	Algebra 1	Algebra 2
Geometry	Geometry	Advanced Algebra Trigonometry
Algebra 2-2	Algebra 2	AP Calculus AB
Algebra 3	Advanced Algebra Trigonometry	AP Statistics

Electives - Intro to Statistics, AP Statistics,
PreCalculus, Calculus, AP Calculus AB
Intro to Computer Science, AP Computer Science A

Non-Math Elective - SAT Math



# **Highlights**

#### **Elementary-**

- All buildings are departmentalized in grades 4 & 5
- Khan Academy implemented in grades 3-5

#### PALMS-

- Construction of Canvas courses aligned with PA Core Standards
- Flexible student placement and placement adjustment based on MAP data and advancement opportunities provided during the school year and in the summer.



# Highlights

#### High School-

- Offer three Advanced Placement math courses:
   Calculus AB, Statistics, Computer Science A
- All sophomores take the PSAT
- Juniors now have the opportunity to take the SAT at Palisades during the school day - offered once a year in the Spring



### Course Placement

#### Transition to the MS is based on:

- Placement into Math 6, Math 7 or Pre-Algebra.
- Course placement based on MAP & PSSA scores.
- Placement challenges offered through summer program
- Placement reviewed after Fall MAP



#### Transition to the HS is based on:

- 8th grade current course and grade,
- Teacher recommendation,
- 8th grade MAP scores (Fall/Winter),
- 7th grade PSSA scores





K - 12 Collaboration / Communication

#### Measurable Goal

By the end of the five-year plan, each teacher of mathematics will have participated in the peer observation process during which they will have received feedback during a walkthrough that will ultimately enhance instruction.



### **Bucket #2**

K - 12 Curriculum and Alignment to PA Core Standards

#### Measurable Goal

All courses and levels will be reviewed to ensure that the scope and sequence is aligned to PA core standards. Additionally, focus skills are established. Elementary - Everyday math program aligned to PA core; Middle School - Canvas courses mapped to PA core; High School - Canvas courses mapped to PA core

### Bucket #3



Increase student achievement

#### Measurable Goal

Students will demonstrate an increase in their growth as reported through a variety of metrics as defined by the department.





Mathematical Literacy Competency

#### Measurable Goal

All teachers will have professional learning opportunities to enhance their understanding of best practice literacy approaches and how those can be applied in the math classroom.





Instruction and assessment practices

#### Measurable Goal

Each level (elementary, middle and high) will use both formative and summative assessment results to guide discussions that will impact and modify instruction.

### **Bucket #6**



Technology

#### Measurable Goal

All levels (elementary, middle and high) will increase online opportunities that differentiate mathematics instruction to meet the needs of diverse learners.



### 2018 - 2023 goals by level

# **Collaborative Goals Guiding Document**



# **Next Steps...**

#### Pilot a program at the K - 8 level

- Fall 2018 Review curriculum programs that encompass K 8 scope and sequence
- Winter 2018 Participate in presentations of selected curriculum
- Spring 2018 Finalize and recommend pilot for 2019-2020

#### <u>Investigate alternative assessments</u>

 Review possible formative assessments that tie directly to PA core and PSSA tests (CDTs, MAP)

#### Instructional materials

2018-2019 - Research and select new instructional materials at the High School