



San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE - UPDATED 8/31/17 ADDED SESSION

GRADES K-12 MATH TEACHERS

San Joaquin Math Teachers' Circle

A Problem Solving Community for K-12 Grade Math Teachers

COME DISCOVER THE BEAUTY AND JOY OF
MATHEMATICS!

* Explore fun math topics *

* Enrich your problem solving and subject matter knowledge *

* Network with other math teachers *

Join other San Joaquin County math teachers for 6-meetings during the 2017/2018 school year. Each meeting will be facilitated by a guest mathematician and will engage teachers in interesting and intriguing problems. There is no cost to join and a light dinner will be provided at every meeting.

All sessions are 4:30 - 6:30 p.m. and will be held at the Wentworth Education Center, Island Room.

No cost for participation

September 14, 2017

October 24, 2017

December 5, 2017

January 25, 2018

March 8, 2018

April 19, 2018

Registration Deadline:
September 11, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=674>

FLYER

<http://workshops.sjcoe.org/Uploads/816201712093291741.pdf>



San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE - UPDATED 8/31/17 ADDED SESSION

GRADES K-12 ADMINISTRATORS

Mathematics Professional Learning for Administrators

What does 21st century mathematics learning look like?

It looks significantly different from the rule-based instruction that most of us are familiar with. Students need to engage in thoughtful conceptual learning experiences that help them develop their skills in communication, critical thinking, creativity and collaboration.

Come hone your skills to become a better instructional leader and deepen your understanding of the vital student actions that inform the support you provide to your classroom teachers.

Cost: \$125 per person

OCTOBER 23, 2017

Registration Deadline:
October 12, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=678>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711544817305.pdf>



San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE -

GRADES K-2

Building Number Fluency

Helping students develop fluency with their math facts is arguably one of the most important goals for teachers. Most of us have vivid memories of learning math facts through timed tests, drills, and flash cards. For many, these techniques resulted in the “I’m bad at math” mentality.

There are different approaches that have the promise of greater student engagement and success. In this one-day session, we will explore the following:

- What does fluency mean?
- What approaches to building fluency with facts, help our students become confident and competent mathematical thinkers?
- What does meaningful practice mean?

Participants will learn powerful ways to support students as they develop mathematically robust, flexible understandings of facts and beyond.

Together, let’s change the mentality to “I’m good at math!”

Cost: \$125 per person

August 28, 2017

***Registration Deadline:
August 17, 2017***

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=669>

FLYER

<http://workshops.sjcoe.org/Uploads/816201712152267341.pdf>

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE -

GRADES K-2 continued

Number Talks... *A Powerful Strategy*

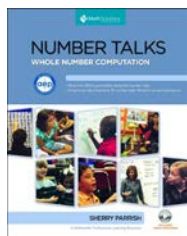
Building Fluency, Understanding and Evidence of Thinking through NUMBER TALKS...

- What are Number Talks?
- Why are they so important?
- What are the guiding principles of Number Talks?
- How do I enact them in my classroom?
- How do Number Talks build fluency (automaticity, flexibility, strategies and accuracy) and conceptual understanding?

Participants will learn how to shift from teaching and learning by telling, to teaching and learning by using purposeful problems and intentional discourse. Participants will learn guiding principles for enacting Number Talks and talk moves that help manage productive discussion in math classes.

Number Talks are a great way to dramatically transform teaching and learning in the mathematics classrooms!

Book included with registration:



*Number Talks:
Whole Number Computation, Grades K-5:
A Multimedia Professional Learning
Resource*

Author: Sherry Parrish

Cost: \$185 per person

December 4, 2017

**Registration Deadline:
November 21, 2017**

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=683>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711541329916.pdf>



San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE -

GRADES K-5

Developing Rich Mathematical Tasks

The mathematical tasks that children experience shape the way they view mathematics. Children might see math as a subject of right or wrong based on procedures and memorization. Or, children might view math as a time of problem solving through communication and collaboration where their creativity in thinking is valued. Rich mathematical tasks engage students in Standards for Mathematical Practices while building content knowledge and critical thinking skills. Participants will learn:

- What makes a problem cognitively demanding?
- What types of math tasks better support our children's critical thinking and conceptual understanding?
- How can we ensure that level of rigor (DOK) is maintained throughout the task as we guide our kids to construct their own knowledge and they learn what they are expected to learn?
- How to modify textbook problems into more cognitively demanding questions and create their own tasks.

As we provide plenty of thoughtful and conceptual learning experiences via rich tasks to our kids, we begin to not only cultivate sophisticated math minds but also develop the 21st century skills.

Cost: \$250 per person

February 13 & 14, 2018

Registration Deadline:
February 2, 2018

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=680>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711532657555.pdf>



San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE -

GRADES 3-5

Building Number Fluency

Helping students develop fluency with their math facts is arguably one of the most important goals for teachers. Most of us have vivid memories of learning math facts through timed tests, drills, and flash cards. For many, these techniques resulted in the “I’m bad at math” mentality.

There are different approaches that have the promise of greater student engagement and success. In this one-day session, we will explore the following:

- What does fluency mean?
- What approaches to building fluency with facts, help our students become confident and competent mathematical thinkers?
- What does meaningful practice mean?

Participants will learn powerful ways to support students as they develop mathematically robust, flexible understandings of addition and subtraction facts and beyond.

Together, let’s change the mentality to “I’m good at math!”

Cost: \$125 per person

August 31, 2017

***Registration Deadline:
August 23, 2017***

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=670>

FLYER

<http://workshops.sjcoe.org/Uploads/82201711143815845.pdf>

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE -

GRADES 3-5 continued

Number Talks... *A Powerful Strategy*

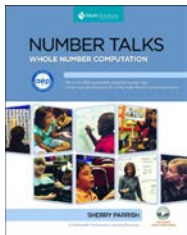
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- What are Number Talks?
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Book included with registration:



Number Talks:
Whole Number Computation, Grades K-5:
A Multimedia Professional Learning
Resource

Author: Sherry Parrish

Cost: \$185 per person

December 5, 2017

Registration Deadline: *November 21, 2017*

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=685>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711541329916.pdf>

San Joaquin County Office of Education
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GRADES 3-7

Understanding the Fraction Progression

Traditionally, fractions have been taught as if they are in a “different galaxy” and fraction instruction has long been viewed as a problem area.

“The ultimate underlying principle is you want kids to understand that fractions are numbers,” said William G. McCallum, a mathematics-education professor at the University of Arizona, in Tucson, and one of the lead writers of the common standards. “They’re new, but they’re not in a different galaxy.”

In this session, participants will explore the following:

- What are the significant shifts in teaching fractions in the California math standards for the 21st century?
- Why is the number line important and how can it be used to help develop understanding and fluency?
- What other representations support student learning?

Participants will study the fractions progression, engage in a variety of tasks and activities, and learn how to develop fraction sense as well as how to implement effective instruction on fraction skills, concepts, and application in conjunction with the Standards of Mathematical Practice.

Cost: \$250 per person

November 16 & 17, 2017

***Registration Deadline:
November 6, 2017***

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=679>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711520379941.pdf>

San Joaquin County Office of Education
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GRADES 6-8

NUMBER TALKS...

A Powerful Strategy

**Building Growth Mindset and Fluency through
NUMBER TALKS**

“Students come to classrooms fearing and avoiding math and, worse, thinking they are no good at it. Believing that mathematics is mostly about using procedures correctly, they have learned to focus on getting the right answer, whether or not the process makes sense to them. Many students don’t expect math to make sense at all. The result is that students learn to disengage their reasoning-and even distrust it.”

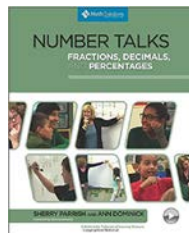
*Excerpt from Making Number Talks Matter
by Ruth Parker and Cathy Humphreys
(book included with registration)*

How do we change this mindset?

The **Number Talks** are a powerful change agent for shifting student and teacher mathematical beliefs and understanding. Participants will learn how to shift from teaching and learning by telling, to teaching and learning by using purposeful problems and intentional discourse.

Participants will learn guiding principles for enacting Number Talks and talk moves that help manage productive discussion in math classes. Number Talks are a great way to dramatically transform teaching and learning in the mathematics classrooms!

Book included with registration:



Number Talks:
Fractions, Decimals, and Percentages:
A Multimedia Professional Learning Resource

Author: Sherry Parrish

Cost: \$185 per person

October 12, 2017

**Registration Deadline:
October 2, 2017**

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=682>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711541329916.pdf>

San Joaquin County Office of Education
Mathematics Professional Learning Opportunities
- 2017/2018 SCHEDULE -

GRADES 6-8 continued

Developing Rich Mathematical Tasks

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- How to modify textbook problems into more cognitively demanding questions and create their own tasks.

As we provide plenty of thoughtful and conceptual learning experiences via rich tasks to our kids, we begin to not only cultivate sophisticated math minds but also develop the 21st century skills.

Cost: \$250 per person

January 24 & 25, 2018
Registration Deadline:
January 12, 2018

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=681>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711503474854.pdf>



San Joaquin County Office of Education
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GRADES 6-12

**Using Technology in the
Math Classroom**

*Technology Tools to Increase Student
Engagement and Inquiry in the 1:1 Mathematics
Classroom*

This workshop is for those teaching in a 1:1 environment (students with their own computers OR a classroom with access to a cart of computers for each student) or will be moving in that direction. Now that you have computers for every student in your classroom, what are the best practices for their use and the best available tools that students and teachers can use? In this workshop, we will look at a variety of the very best applications for math and dive into trying them live. From Desmos & Geogebra, which create rich mathematical playgrounds for instruction, to GAFE and other free student engagement tools, you will leave this workshop with plenty of resources to take back to your classroom.

Cost: \$250 per person

October 30 & 31, 2017
Registration Deadline:
October 19, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=684>

FLYER

<http://workshops.sjcoe.org/Uploads/816201711494848511.pdf>



San Joaquin County Office of Education
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GRADES 6-12 – continued

NEW ADDITION

Robert Kaplinsky:

Implementing Problem Based Lessons

This one-day session with Robert Kaplinsky will help participants understand what real world problem-based lessons are all about and why it is so critical that they be used with our students. The session will focus on hands-on classroom implementation from both the teacher and students' perspectives.

Depth of Knowledge as well as using Open Middle problems to build procedural skills and conceptual understanding will also be explained.

Participants will leave with access to hundreds of free problems that are ready for student implementation.

Cost: \$195 per person

March 22, 2018
Registration Deadline:
March 8, 2018

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=690>

FLYER

<http://workshops.sjcoe.org/Uploads/83120174060281600.pdf>