

# Summer Institute

## Eureka Math Summer Institute San Jose, CA June 20 – 21, 2016

These workshops are designed for teachers with experience implementing Eureka Math as a primary instructional resource and require participation in prerequisite Eureka Math PD sessions. Please examine the session descriptions and prerequisites before registering for this event.

### REGISTRATION

Please visit our website [to register](#) for this event or for more information on the full range of [Eureka PD offerings](#).

The cost is \$200 per participant per session.

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### AGENDA

Monday, June 20

Continental Breakfast/ Check-in will be held from 8:00 AM–8:30 AM.  
Sessions will be held from 8:30 AM to 3:30 PM.  
Lunch will be held from 12:00 PM to 1:00 PM.

K-2: Engineered Teaching Sequences  
3-5: Engineered Teaching Sequences  
6-12: Engineered Teaching Sequences

#### Engineered Teaching Sequences

Teachers are engineers! Teachers think about how to “engineer” or “craft” sequences of problems that efficiently and appropriately address varied student errors identified through formative assessments. The mathematical focus for the Engineered Teaching Sequences workshops is fractions! Participants in each grade-session will analyze and practice with materials for instant and short-term intervention.

K–2: The focus is on the addition, subtraction, composition, and decomposition of “like units” (hundreds, tens, and ones), which provides the foundation for understanding both fraction equivalence and the addition and subtraction of fractions.

3-5: The focus is on building deeper understanding of and fluency with fraction equivalence and the addition, subtraction, and multiplication of fractions.

6-12: In Grades 6–12, the focus ranges from all operations with fractions to fractions and rational numbers embedded within formulas, linear equations, and non-linear equations.

## AGENDA (CONTINUED)

Tuesday, June 21

Continental Breakfast/ Check-in will be held from 8:00 AM – 8:30 AM

Sessions will be held from 8:30 AM to 3:30 PM.

Lunch will be held from 12:00 PM to 1:00 PM.

K-2: Foundational Math

3-5: Foundational Math

6-12: Foundational Math

### Foundational Math

A solid foundation must be in place! Each of the Foundational Math workshops is designed to increase teachers' pedagogical content knowledge of mathematics—what is foundational to their grade level or how their grade level is foundational to that of future grades.

**K–2:** The focus is on the connections between the primary grades' work with properties, whole numbers, measurement, and geometry and students' later work with fractions. Teachers deepen their commitment to Eureka Math as they develop an appreciation for the coherence of elementary mathematics. In the process, many teachers lose their fear of fractions and become more sophisticated mathematically.

**3-5:** The focus is on building deeper understanding of and fluency with foundational place value lessons from grade K – 2. This allows teachers to deepen their pedagogical content knowledge and also empowers them to effectively and appropriately remediate student errors at their grade-level. The session oscillates between lower and upper elementary so that strategies are relevant to current instruction.

**6-12:** In Grades 6–12, the focus is on building deeper understanding of and fluency with foundational mathematics relevant to Grades 6 through 12, thus empowering teachers to effectively and appropriately remediate student errors while also deepening their pedagogical content knowledge. The session oscillates between elementary, middle, and high school mathematics so that strategies are relevant to current instruction. Furthermore, middle school teachers gain an appreciation for the foundational role their instruction plays in high school mathematics.

**Prerequisites:** Focus on Fluency and Preparation and Customization of Eureka Math Lessons.