

# MATH PROFESSIONAL LEARNING

## November 4, 2015

Building Number Sense in the Primary Grades  
Target Audience: K-2 teachers, district math leaders

This interactive, hands-on workshop will focus on teaching strategies that can be used to build number sense in all primary children while also developing a deeper understanding of grade-level state math standards.

Participants will learn...

- how to use ten frames, dot cards, number bonds, hundred charts, the Rekenrek & other math manipulatives
- ways to use these tools to help students develop the ability to visualize problems & think through strategies for solving problems
- strategies to help students recognize patterns & relationships
- how to help students form the habit of looking for multiple approaches to solving a problem & communicate their understanding

Click below to Register Online by October 28, 2015

<http://goo.gl/3npvpn>

## December 10, 2015

Teaching Statistics in Middle School: What you need to know!  
Target Audience: 6th-8th grade math teachers, math leaders

This one-day workshop is designed to provide middle school teachers with content knowledge necessary to teach the statistics required by our middle school state standards. We will solve problems and also explore ways to help our students become 'data thinkers' by learning how to formulate statistical questions, collect and analyze data and interpret the results.

Topics include:

- probability: single & compound events, models, chance events
- analyzing & interpreting data: measures of center and variability, univariate and bivariate data, graphs, plots, tables
- random sampling

Click below to Register Online by December 3, 2015

<http://goo.gl/mxJwAc>

## January 13, 2016

Teaching Statistics in High School: What you need to know!  
Target Audience: 9th-12th grade math teachers, math leaders

This one-day workshop is designed to provide high school teachers with content knowledge necessary to teach the statistics required by our high school state standards. We will solve problems and also explore ways to help our students become 'data thinkers' by learning how to formulate statistical questions, collect and analyze data and interpret the results.

Topics include:

- interpret categorical & quantitative data: normal distribution, measures of center and spread, tables, plots, creating models, linear regression
- making inferences & drawing conclusions: random processes, sampling, inference
- probability: independence, conditional probability, expected value, compound events, permutations & combinations

Click below to Register Online by January 6, 2016

<http://goo.gl/NpdiTz>

## February 16, 2016

Computational Strategies That Develop Deep Comprehension and Number Fluency  
Target Audience: 4th-6th grade teachers, district math leaders

A first step toward more effective math instruction is to move away from an emphasis on teaching computation as a series of rote rules and memorization of basic facts. This hands-on workshop will focus on developing student comprehension of computation through conceptual understanding of what to do and why. We will explore multiple strategies for solving computation problems so that we can better meet all student needs.

Goals:

- learn strategies to develop students who are not only capable of solving computation problems but truly understand computation
- help students to apply their thinking to new problem situations
- learn ways to teach place value understanding and the properties of operations
- explore composing and decomposing numbers, splitting or branching numbers, compensation, open number lines, the area model for multiplication of whole numbers and fractions
- investigate strategies that will lead to greater understanding of number operations and fact fluency

Click below to Register Online by February 9, 2015

<http://goo.gl/bZMJh5>

**Location:** CESA 9, Tomahawk office

**Cost:** \$75 per person for School Improvement Members  
\$175 for Non-members  
(includes lunch and materials)

**Time:** 9 a.m. – 3 p.m. (Registration prior to 9 a.m.)

**Presenter(s):** Carole Foreman, Math Consultant/Coach  
[Linda Myers](#), CESA 9 Math Consultant/Coach,  
Assoc. Director School Improvement

