

CESA 8 Office
223 W Park St
Gillett, WI 54124

9:00 AM—3:30 PM
each day

CESA 8 Curriculum Instruction and Assessment Department Presents:

2nd Semester Math Workshops with *Carole Foreman*



Workshop Descriptions

Grades K-2: **Developing Effective Fraction Instruction for Kindergarten through Second Grade**

This hands-on workshop will focus on instruction that can be used to build deep conceptual understanding of fractions in the primary grades. In this workshop we will look at the current research on how children learn fractions developmentally. A firm foundation in fractions in the primary grades is necessary for students who will be required to do fractional computation beginning in third grade. Workshop activities will focus on developing initial fraction concepts and understanding fractions as numbers.

Grades 3-5: **Developing Effective Fraction Instruction for Third through Fifth Grade**

This hands-on workshop will focus on instruction that can be used to build deep conceptual understanding of fractions in third through fifth grade. In this workshop we will examine the research on the learning progressions in the domain of fractions. Workshop activities will focus on understanding fractions as numbers using number lines and other strategies. We will also examine operations with fractions and how teachers can help students understand why computational procedures with fractions make sense.

Grades K-2: **Building a Strong Foundation in Geometry in the Primary Grades**

This hands-on workshop will focus on instruction in the primary grades that will develop geometric thinking in all students. We will closely examine the Van Hiele Levels of Geometric Thought Model, which is the most influential factor in the American geometry curriculum. This model is a five-level hierarchy of ways of understanding spatial ideas. In order for students to understand geometric ideas, each student must progress through the levels. The levels are sequential, but not age dependent. Geometric experience is the greatest single factor influencing advancement through the levels. In this workshop teachers will experience activities that will permit students to explore, talk about, and interact with content at the next level, while increasing their experience at their current level.

Grades 3-6: **Effective Geometry Instruction in Third, Fourth, and Fifth Grade**

This hands-on workshop will focus on instruction in the primary grades that will develop geometric thinking in all students. We will closely examine the Van Hiele Levels of Geometric Thought Model, which is the most influential factor in the American geometry curriculum. This model is a five-level hierarchy of ways of understanding spatial ideas. In order for students to understand geometric ideas, each student must progress through the levels. The levels are sequential, but not age dependent. Geometric experience is the greatest single factor influencing advancement through the levels. In this workshop teachers will experience activities that will permit students to explore, talk about, and interact with content at the next level, while increasing their experience at their current level.

Grades K-2: **Developing Algebraic Reasoning in the Primary Grades: Patterns and Relationships**

This hands-on workshop will focus on instruction that will help students make sense of problems by seeing patterns and relationships among numbers. The importance of seeing patterns and being able to analyze patterns is outlined in Math Practice Standard 7- Look For and Make Use of Structure and Math Practice Standard 8-Look For and Express Regularity in Repeated Reasoning. This workshop will examine strategies and activities that will develop algebraic reasoning in primary students.

Grades 3-5: **Algebraic Reasoning in Third, Fourth, and Fifth Grade: Patterns and Relationships**

This hands-on workshop will focus on instruction that will help students make sense of problems by seeing patterns and relationships among numbers. The importance of seeing patterns and being able to analyze patterns is outlined in Math Practice Standard 7- Look For and Make Use of Structure and Math Practice Standard 8-Look For and Express Regularity in Repeated Reasoning. This workshop will examine strategies and activities that will develop algebraic reasoning.

Cost: \$50.00 per participant per class for CESA 8 Curriculum Instruction and Assessment School Districts.
\$100.00 for all other members

Registration: All registration will be made through our online system which can be found at www.myquickreg.com, or go to the CESA 8 webpage and click on the red link at the bottom of the page.

Registration Deadline: Five days before workshop date

Information: Eric Larsen, elarsen@cesa8.k12.wi.us, or Betty Kaliebe, bettyk@cesa8.k12.wi.us

February 13, 2013
Grades K-2: **Developing Effective Fraction Instruction for Kindergarten through Second Grade**

February 20, 2013
Grades 3-5: **Developing Effective Fraction Instruction for Third through Fifth Grade**

February 27, 2013
Grades K-2: **Building a Strong Foundation in Geometry in the Primary Grades**

March 6, 2013
Grades 3-6: **Effective Geometry Instruction in Third, Fourth, and Fifth Grade**

March 20, 2013
Grades K-2: **Developing Algebraic Reasoning in the Primary Grades: Patterns and Relationships**

March 27, 2013
Grades 3-5: **Algebraic Reasoning in Third, Fourth, and Fifth Grade: Patterns and Relationships**

All activities will focus on developing deeper understanding of Common Core State Standards in the grade levels listed.