Pre-K–Grade 2

NCTM 2010 Regional Conference & Exposition • Denver, CO • October 7-8, 2010

The NCTM Regional Conference and Exposition in Denver offers over 200 presentations focused on mathematics education. The following is a small sampling of the sessions and gallery workshops that will be offered at NCTM's Regional Conference for educators who work with students in pre-kindergarten through grade 2. For additional presentations please visit the **Online Conference Planner** at **www.nctm.org/denver.**

Making Addition and Subtraction Concepts Meaningful

Thursday, October 7 • 8:30 am - 10:00 am

How do we help children develop deep understanding of addition and subtractions concepts? This presentation will describe how language is the bridge for this support, using stories, concrete resources, and pictorial representation. Participants will create resources to facilitate meaning making.

Singapore Math in the Primary School Classroom

Thursday, October 7 •8:30 am - 10:00 am

In kindergarten through second grade, Singapore Math students develop number sense and place-value concepts, which allow them to solve mental math addition and subtraction problems that most adults cannot solve. Through the use of manipulatives and pictures, students finishing the second-grade Singapore Math textbooks have confidence over numbers.

Developing Number Sense Using a Two-Color Abacus, or Rekenrek

Thursday, October 7 • 10:30 am - 12:00 pm

Asking students to make the leap from counting to memorizing addition facts may hinder their understandings and fluency with basic facts by eliminating number sense. This interactive presentation will focus on using a two-color abacus, or rekenrek, to develop number sense and facilitate students' movement from the counting stage to derived facts.

Shuffling into Math: Primary School Math Games

Thursday, October 7 • 10:30 am - 12:00 pm

Come prepared to play card and dice games that help your primary school students achieve success in basic numeration, operations, place value and graphing. Excellent take home ideas, reproducible game boards, students' samples, and more will be shared. Great for regular and after school programs.

Fostering Number Sense among At-Risk Kindergartners

Thursday, October 7 • 12:30 pm - 1:30 pm

Targeted number sense training and computer-based, structured-discovery learning of the $n+0/0+n = n$ and $n+1/1+n$ = the number after n patterns significantly improved at-risk kindergartners' mathematical achievement. Fluency with combinations involving 0 or 1 should be a primary goal for all kindergartners.

A Real Hands-On Approach to Teaching Place Value

Thursday, October 7 • 2:00 pm - 3:00 pm

The audience will participate in activities designed to develop a deep understanding of place value. Manipulatives based on the most powerful representation of ten will be used to develop strong number sense and efficient mental strategies.

Geometry for Young Children in the Primary Grades

Thursday, October 7 • 2:00 pm - 3:00 pm

This presentation will share how the geometric and spatial knowledge of preschoolers can be further expanded by describing, representing, and navigating their school environment through investigations, discussions, and playful activities, and in a climate that encourages risk taking, discourse, and reasoning.

Place Value Has Real Value: Build Early Concept Development with Engaging Models, Interactive Activities

Thursday, October 7 • 2:30 pm - 4:00 pm

Participants will work with conceptual and procedural place-value activities focused on developing students' number sense and mathematical fluency. Differentiated approaches to concept development and practice will be included. Attendees will discuss examples of to students' related common errors and misunderstandings.

Building Links between Addition and Subtraction: Concepts and Number Facts

Thursday, October 7 • 3:30 pm - 4:30 pm

Addition and subtraction are closely linked. This presentation will demonstrate strategies that can be used to reinforce the connection between these operations and to develop flexible thinking. It will also show practical ways to develop number facts for both operations through the use of visual materials and games.

Building Strong Early Numeracy Development: Skills and Strategies That Work

Friday, October 8 • 10:30 am - 12:00 pm

This presentation will focus the cycle of learning. Through collaborative examination of oral numeracy assessments and videotape samples, participants will explore individual students' understanding of basic number skills. Using students' responses, they will create instructional practices that deepen students' number sense.

Developing Number Sense for Primary School Students

Friday, October 8 • 2:30 pm - 4:00 pm

Participants will learn how the skills of decomposing and composing numbers help develop fluency with math facts. They will also learn how games and other activities—developed as accommodations for special-needs students—can help all students understand place value, addition, and subtraction.

Engaging Young Children with Challenging Mathematics

Friday, October 8 • 2:00 pm - 3:00 pm

Let's explore ways to pose challenging mathematics problems to young children. Hear how mathematics arose from various classroom activities; see the problems that were generated and the children's solutions. Then, uncover some related mathematics problems lurking in your favorite lesson. Leave with a packet of problems and strategies to find more.

Visual Discrimination: Seeing and Learning Mathematics

Friday, October 8 • 3:30 pm - 4:30 pm

The use of visual reasoning is a powerful tool for making sense of mathematics. Come examine activities designed to have children use their visual abilities while learning ideas in number and operation, geometry, patterns, and measurement.