

Pre-K–Grade 2

NCTM 2010 Regional Conference & Exposition • Baltimore, MD • October 14-15, 2010

The NCTM Regional Conference and Exposition in Baltimore will offer 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/baltimore.

Books Alive through Math

Thursday, October 14 • 8:00 am - 9:00 am

Learn how to sharpen the focus of math by integrating writing and literature. Using hands-on activities, challenge the students to think more critically about math through literature, and align curriculum with the standards. Participants will develop samples of fun activities correlated with a variety of books.

Teaching Geometry to the Littlest of Learners

Thursday, October 14 • 12:30 pm - 1:30 pm

What are the four “big ideas” that every teacher needs to spend time introducing and reinforcing when geometry is being taught? These will be shared as participants involve themselves in activities and children’s literature. Connections to art and movement will also be emphasized. After all, they’re little and they need to move.

Geometric Transformations with Young Children

Thursday, October 14 • 2:00 pm - 3:00 pm

This session will show how to engage students actively as they learn about geometric transformations (flips, slides, and turns). Hands-on activities connecting geometry and art will be explored. Participants will see a tessellation project, based on a photograph of a child, from start to finish.

Big Numbers with Little Kids

Thursday, October 14 • 2:30 pm - 4:00 pm

Learn how to help young children understand large numbers and place value without difficulties. This workshop will engage the audience in activities that help students show numbers, estimate values, and group units.

Differentiated Mathematics Instruction: Meeting the Challenges

Friday, October 15 • 8:00 am - 9:00 am

Learn how to identify and teach specific academic needs of all students through targeted instruction, flexible grouping, content modification, and adjustments to levels of cognitive demand. To explain differentiating further, the session will explore mathematical concepts that build foundations and extend learning through students' work samples.

Activities That Integrate and Connect Mathematics to Other Disciplines through Problem Solving

Friday, October 15 • 8:30 am - 10:00 am

Participants will experience hands-on activities that integrate mathematics to science, language arts, and social studies through problem solving. Participants will receive handouts with all information of resources used.

An Instructional Coaching Approach to Implementing Response to Intervention (RtI) in Grades K–2 Mathematics

Friday, October 15 • 9:30 am - 10:30 am

This session will describe the process and results of a Tier 1 and 2 RtI model focused on improving students' achievement in grades K–2 mathematics using instructional coaching. Participants will explore the advantages and challenges of implementing instructional coaching from the perspectives of teachers, coaches, and administrators.

A Real Hands-On Approach to Teaching Place Value

Friday, October 15 • 9:30 am - 10:30 am

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.

Developing Early Numeracy

Friday, October 15 • 10:30 am - 12:00 pm

Participants will have many hands-on opportunities to practice early numeracy activities that can become routines or stations in the mathematics classroom. Using these specific activities in a structured manner develops early numeracy concepts that are essential for higher-level understanding of the number system.

Bingo! Developing Algebraic Thinking through Basic Addition and Subtraction Facts

Friday, October 15 • 12:30 pm - 2:00 pm

This session will explore how Japanese textbooks develop algebraic thinking as well as skills proficiency in young children by looking for patterns in the basic addition and subtraction facts. It will include video footage of an actual lesson using the game Bingo that was developed through lesson study.

The Power of Class Routines for Grades Pre-K–3 and Up

Friday, October 15 • 12:30 pm - 1:30 pm

Learn how to implement Calendar Math, Numbers of the Day, Problems of the Week, Data Day, and more to fit more math in your day. See how these routines develop, connect, and reinforce mathematical ideas like numeracy, money, patterning, problem solving, data collection and analysis, and much more!

Elementary School Student's Misconceptions about Mathematics: Some Causes and "Cures"

Friday, October 15 • 2:00 pm - 3:00 pm

This session will explore some common error patterns and misconceptions that elementary school students have about each content area in mathematics. The speakers will share possible reasons why these may occur, vignettes where these have been seen, and activities that can help prevent and eliminate them. Students' work samples will also be shared.