

## NORTHWEST MATHEMATICS CONFERENCE REGISTRATION

Please see complete registration information on the adjacent page.

Registration Fee	(Before Oct 1)	(After Oct 1)
Members of Sponsoring Organization	\$110	\$135
Non Member	\$130	\$155
Full Time Student	\$30	\$30

If you do not pre-register, on-site registration will be available in the Red Lion on the River, Ballroom Foyer during the following times:

Thursday: 8:00 AM - 7:00 PM, 8:30 PM - 9:30 PM

Friday: 7:30 AM - 4:00 PM

Saturday: 7:30 AM - 11:00 AM

Pre-registered participants may pick up their conference packets in the registration area during the above hours. On-site registration does not include lunch Friday or conference tote bag. Nametags will be proof of registration and should be worn at all conference sessions, workshops, mini-courses, and events. Requests for cancellation received before October 4, 2005 will be subject to a \$15 handling fee. No refunds after October 4, 2005.

For information about the Northwest Mathematics Conference, contact:

Conference Chair: Phil Bartsch: [pbartsch@ipns.com](mailto:pbartsch@ipns.com)

Conference Chair: Winnie Miller: [millerwl@comcast.net](mailto:millerwl@comcast.net)

Program Chair: Jackie Nissen: [davidnissen@comcast.net](mailto:davidnissen@comcast.net)

### INSTITUTES

Institutes are full-day, single topic courses that will explore many aspects of that topic. Assessment, communication, collaboration, and problem solving will be connected throughout the day. Institutes involve a hands-on experience with materials provided by the speaker(s) that the participants can take with them for use in their classrooms. Admission is **by ticket only and has a \$50 fee** that includes Thursday lunch. Participants must purchase tickets prior to attending the institute.

### THURSDAY EVENING OPENING SESSION AND RECEPTION

Members of the Oregon Council of Teachers of Mathematics invite you to attend an informal reception to meet, greet, and mingle with conference speakers, participants, and council members immediately following the Thursday evening Opening Session in the Washington/Clark Rooms, featuring **Edward Burger; Williams College, Williamstown, MA.**

### FRIDAY LUNCHEON

The Friday luncheon will be held at the Jantzen Beach on the River Hotel from 11:00 AM to 1:15 PM Friday, October 14, 2005 BY TICKET ONLY. Lunch is included free in your registration packet if you pre-register by October 1st.

### SATURDAY BREAKFAST

The Saturday breakfast keynote will feature John Van de Walle, master educator and author, Virginia Commonwealth University, Richmond, VA. The Breakfast Keynote requires advanced purchase. The cost of the breakfast will be \$25.

## SESSIONS, WORKSHOPS, MINI-COURSES

**SESSION** (60 minutes) represents a common format where the speaker relates his or her ideas to an audience. The speaker may use audiovisual equipment, technology, and handouts, and he or she may include audience participation. Rooms are set theater style and vary in size.

**WORKSHOP** (90minutes) allow participants to have extensive, hands-on experiences and to leave with supporting materials. Workshops, set in round-table format, will be limited to 30-36 participants.

**WORK SESSION** (90 minutes) allow participants to have an extensive interactive experience and leave with supporting materials. Work sessions will be set in theater style and seat up to 100 people.

**MINICOURSE** (120 minutes) allow for a more in-depth examination of topic, and participants will leave with supporting materials. Workshops, set in round-table format, will be limited to 30-36 participants.

**MATH-A-RAMA** On Friday, October 13, elementary and middle school teachers will have the opportunity to attend twelve different sessions ( six in the morning and six in the afternoon.) In the morning, (8:30-11:30 a.m) the themes will include Number, Operations, Reasoning. In the afternoon (1:00-4:00 p.m.) the theme will be Probability and Statistics. The six 25 minute sessions in the morning will each be repeated on the half hour, so participants may attend all six sessions in any order. Participants who do not want to attend every Math-a-Rama session in the morning or afternoon may enter and leave during the breaks between sessions.

### **SPEAKER BY GRADE LEVEL**

#### **GENERAL INTEREST**

General Interest Opening Keynote Address Thursday Evening **Featured Speaker**

Burger, Edward; Williams College, Williamstown, MA

Some Thoughts on What to Teach and How Not to Teach It: Here we will explore some recent experiments in inspiring students to be creative and active through mathematics. Wild departures from conventional wisdom will be confessed and demonstrations of both the high-tech and no-tech varieties will be included.

General Interest, Breakfast Closing Session Saturday morning **Featured Speaker**

Van de Walle, John; Virginia Commonwealth University, Richmond, VA

A Problem-based Approach Reaches Every Child: Since every classroom is diverse, the issue of reaching every child is always an issue. This talk will contrast the benefits of using a student-centered, problem-based approach with those of a more directed approach to instruction from the perspective of serving children who may be slower to learn as well as those who are typically quick to catch on to ideas.

General Interest Work Session **Featured Speaker**

Van de Walle, John; Virginia Commonwealth University, Richmond, VA

Computational Fluency Should Replace the Traditional Algorithms: Explore reasons why the old, traditional algorithms serve us poorly, suggestions for alternative instructional approaches for powerful, flexible alternatives, and the advantages of flexible methods over the traditional approaches.

General Interest Work Session

Webber, Will; Whatcom Community College, Bellingham, WA

Stellations, Stellations, Stellations: In recent years the meaning of the word "stellation" has been hijacked. Explore the amazing world of stellations as it was meant to be.

General Interest Session

Brown, Cathy; Oregon Department of Education, Salem, OR

Latest in Oregon's Mathematics Assessment: The latest information from the Oregon Department of Education will be discussed. Questions will be gladly answered.

General Interest Session **Featured Speaker**

Johnson, Jerry; Western Washington University, Bellingham, WA

Humor in the Mathematics Classroom--Freud Would be Proud: Humor can be used to motivate students to learn mathematics. The session will explore a wide variety of humor in many areas of mathematics. Come and smile, groan, enjoy, perhaps laugh.

General Interest Session **Featured Speaker**

Lott, Johnny; University of Montana, Missoula, MT

Can (or Should) State Standards be Standardized? With a population in transition, would standardized standards help us reach every child mathematically?

General Interest Session **Featured Speaker**

Lott, Johnny; University of Montana, Missoula, MT

How to Reach Every Child through PROBLEMS.

General Interest Session

Marrongelle, Karen; Portland State University, Portland, OR

Oregon Mathematics Leadership Institute: First Year Lessons Learned.

General Interest Session

Juana McDonald; Newberg School District, SIOP Staff

Mathematics Instruction and ELL Students: How do you develop language and target content instruction for ELL learners? We will look at current research and practical strategies.

General Interest Session

Slavit, David; Washington State University Vancouver, Vancouver, WA

Reaching Every Teacher through Professional Learning Communities: Ideas for constructing professional learning communities to support teachers' efforts to enhance their instructional effectiveness.

General Interest Session **Featured Speaker**

Tang, Greg; Author, Belmont, MA

Ka-Chunk! An Intuitive Approach to Arithmetic: Wouldn't it be great if there was a single concept that made adding, subtracting, multiplying, and dividing intuitive and easy to do? Well there is! Join best-selling author Greg Tang (The Grapes of Math) in exploring a common sense approach to developing numerical fluency and strong computational and problem-solving skills. You'll be surprised at how enjoyable math can be when it just makes sense!

General Interest Session **Featured Speaker**

Tang, Greg; Author, Belmont, MA

Math Literacy - The Next Frontier: Did you ever feel like you were missing the "math gene?" Well it wasn't missing - it was just waiting to be discovered! Join best-selling author Greg Tang (The Grapes of Math) in exploring an amazingly simple yet effective way to think about numbers, arithmetic, and problem-solving. Discover how poems, art and even art history can make math engaging, enlightening, even exciting. Math will never be the same!

General Interest Workshop

Higgins, Karen; Oregon State University, Corvallis, OR

Promoting Discourse in the Mathematics Classroom.

General Interest Workshop

Webber, Will; Whatcom Community College, Bellingham, WA

A Large Project with Polyhedra: Each participant will build a polyhedra. Then all will be assembled into one large object. Discussion will include Platonic, Achimedean and Johnson polyhedra.

Research into Practice Workshop

Gummer, Gummer; Center for Classroom Teaching and Learning, Portland, OR

Validating the NWREL Mathematics Problem-Solving Model: Results of an NSF-funded research project that examines the effectiveness of incorporating practices into mathematics problem solving instruction and assessment.

Teacher Education Session

Gummer, Gummer; Center for Classroom Teaching and Learning, Portland, OR

Variations on a Theme of Professional Development in Mathematics: Title IIB Mathematics and Science Partnerships in the Northwest overview.

## **PRE-KINDERGARTEN THROUGH GRADE 5**

Pre-School Workshop

Anderson, Nancy; Making Math Count, Salem, OR

"CHEAP Math"-Concrete Highly Engaging Activities for Preschool Math: Materials will address Head Start, current Standards and assessment.

K-2 Work Session

Cotter, Joan; Activities for Learning, Hutchinson, MN

Use visualization to help children develop number sense, learn place value and master facts through strategies.

K-2 Work Session **Featured Speaker**

Sutton, Kim; Creative Mathematics, Arcata, CA

Developing Number Sense in Early Learners

K-2 Session

Dumont, Rhe'al; OCCDSB, Nepean, ON, Canada

Math Software for the K-2 Classroom: See examples of software designed by teachers

K-2 Session **Featured Speaker**

Greenes, Carole; Boston University, Boston, MA

Artful Guidance: Methods for Developing Young Students' Understanding of the Big Ideas of Mathematics.

K-2 Session

Neufeld, Evelyn; San Jose State University, San Jose, CA

CLOCKS: They are not just for telling time. A variety of clocks and activities will be used to explore the possibilities.

K-2 Workshop

Dennis Adams, Portland, OR

Penguins: An Integrated Theme for First and Second Grade

K-2 Workshop

Blanke, Barbara; California Math Council, San Luis Obispo, CA

"Buggy" for Algebraic Thinking and Numerical Power: Use a "bug collection" and various visual models to promote reasoning and numerical power.

K-2 Workshop

Cotter, Joan; Activities for Learning, Hutchinson, MN

Teach geometry basics with a drawing board and tools.

K-2 Workshop

Currah, Joanne; Author/Consultant, Edmonton, Alberta, Canada

Power Play: How to overcome drill and kill strategies plus why students really do learn by playing Box Cars games.

K-2 Workshop

Easterly, Darla; Silver Lake Elementary, Everett, WA

Math for ALL: Strategies and Activities that EXCITE! Explore multiple strategies, learn, practice, and create easy-to-use activities that promote computational fluency to build confidence in our struggling students.

K-2 Workshop

Ettlich, Sherry; Southern Oregon University, Ashland, OR

Counting, Counting, and More Counting: A collection of fun activities to build counting and computational abilities.

K-2 Workshop

Grace, Ellen; Consultant, Albuquerque, NM

Math-Science-Literature Explorations: From Picture books to problem solving and inquiry. Hands-on workshop using children's literature as a springboard. Handouts, materials, and bibliography included.

K-2 Workshop

Hustoles, Mary Jo; Wright Group/McGraw-Hill

Explorations:--Maximizing limited resources: Independent, small-group activities that are informal and open-ended, using rotating stations for small groups of students and provide efficient use of sets of manipulatives.

K-2 Workshop

Muri, Mari; Project to Increase Mastery of Mathematic and Science, Wesleyan University, Middletown, CT

Computational Fluency: Games that make the practice of skills fun, interesting, and improve student achievement on high-stakes tests. Directions for preparing all games will be available to participants.

K-2 Workshop

Rose, Terry; Shoreline School District, Shoreline, WA

Teaching Basic Facts via Thinking Strategies

K-2 Workshop

Smith, Dana; Forest Hills Elementary, Lake Oswego, OR

The Primary P's: Probability, Problem Solving, and Projects: This hands-on interactive, workshop will provide a variety of lessons, activities, games, and ideas to teach these important topics.

K-2 Workshop

Songaylo, Vince; Windsor Elementary, Cheney, WA

Go for the Gold: Come see and make activities that support the 2006 Winter Olympics Games. Lots of math and ways to integrate, too!

K-2 Workshop

Willmore, Craig; Wright Group/McGraw-Hill, Salt Lake City, UT

Data, Probability, & Statistics: Daily routines and activities to help children become fluent in using and understanding charts, graphs, and probability.

K-3 Mini-Course

Calkins, Trevor; Power of Ten Educational Consulting, Victoria, B.C., Canada

Geniuses don't use Flashcards: This hands-on brain compatible active session will explore developing number sense using ten-frames, games calendar time and graphing.

K-3 Workshop

Budinich, Valerie; Tiffany Park Elementary, Renton, WA

Math Makes Sense! Practical, and easy ideas for teaching math fluency. Leave with activities designed for arming students with multiple addition and subtraction strategies.

K-3 Workshop

Budinich, Valerie; Tiffany Park Elementary, Renton, WA

Math Makes Sense! Designed for new teachers (1-3 years experience), this workshop offers hands-on practical, and easy ideas for teaching math fluency.

K-3 Workshop

Reed, Kathy; Consultant, Gresham, OR

Every child enjoys a good book. We'll use literature to reach mathematics that meet the standards. Come prepared to have fun doing math while sharing wonderful books. Activities that cross the curriculum add to students' learning and teachers' effectiveness.

K-3 Workshop

Songaylo, Vince; Windsor Elementary, Cheney, WA

New Ways with Coins and Cash: Come learn about ideas and activities to help children learn about and count money.

K-4 Session

Kirby, Neal; Centralia SD, Centralia, WA

Math a Minute Math Facts Mastery: A great supplement to Everyday Math and other concept based curricula.

K-5 Work Session **Featured Speaker**

Sutton, Kim; Creative Mathematics, Arcata, CA

Building a Math Program that Motivates

K-5 Session

Cooke, Jackie; Oregon Council of Teachers of Mathematics, Vancouver, WA

Looking at a Lesson Study Project.

K-5 Math-a-Rama

Beatrice Brown, Game Value, Shelton, WA

Math Games You Can Make: Math Games and Manipulatives to use and create a fun experience for the teaching of math skills and facts. Some of these ideas & techniques can be applied to subjects other than math. Fee:\$5.00

K-5 Session

Downs, Darci; Highland School District, Burien, WA

Mathematics Coach: Job embedded learning and meeting the individual needs of teachers.

K-5 Workshop

Belles, Teresa; Everett School District, Everett, WA

Implementing Best Practices in the Elementary Resource Room Using Investigations: Strategies for bringing students to standard, write IEP goals and objectives and leave with several Make and Takes!

K-8 Workshop

Rigelman, Nicole; George Fox University, Newberg, OR

Developing Foundations for Algebraic Thinking: A focus on equality and relational thinking in K-8

K-8 Session

Julie Ditton, Math Consultant, New Jersey School District for A.U.S.S.I.E.

Manipulatives for Young Mathematicians: Mathematical tools should make mathematics in school resemble mathematics in the real world. The variety of tools available should develop skills in effective use and in choosing the proper tool for each problem.

#### 2-5 Session

Debbie Strong, Everett Public Schools, Everett, WA

Investigations and Pressing for the Mathematics: A focus on Investigations to increase the mathematical understanding of the students while still ensuring that the basic skills are integrated and practiced.

#### 2-5 Workshop

Willoughby, Stephen; University of Arizona, Tucson, AZ

Thinking Needn't Hurt: Activities and games to develop basic skills and higher order thinking without trauma.

#### 2-6 Session

Dolan, Dan; PIMMS, Wesleyan University, Middletown, CT

Teach Computation with the Left-Handed Method: Let's get rid of borrowing, carrying, and Gizinto.

Teaching computational fluency based on number sense is easier, makes sense to students, is number-based rather than digit-based, and promotes

#### 2-6 Workshop

Claus-McGahan, Elly; Sound Decisions Consulting, Tacoma, WA

Math Club to Spark the Imagination: This is a great forum for introducing children to all sorts of math challenges. Puzzles, math art, problem solving, geometric explorations and games are the backbone of math club.

#### 3-10 Session

Hunter, Glen; OCTM, WSMC, NCTM, MAA, AMS

Busters, Statistics, Gulliver's Travels, and Linear Equations: Proving/disproving the myth from Gulliver's Travels that "twice around the thumb is once around the wrist". A linear regression from a graphing calculator will also be looked at.

#### 3-12 Work Session

Harpel, Bryan; Frontier Middle School, Vancouver, WA

How to Really Teach Math Through Writing: Effectively teach students to write in the math classroom.

#### 3-5 Math-a-Rama

Jan Hill, North Powder, OR

M & M's and Math: Use M & M's to teach a fraction and statistics unit. Investigate mean, mode, median, and range.

#### 3-5 Work Session

Lokting, Karen; Karen Lokting Education, Beaverton, OR

Algebra - Engaging, Relevant, Standards-Based: Meaningful ideas to explore and represent patterns and functions with tables, variables, equations and graphs.

#### 3-5 Institute

Anderson, Nancy; Making Math Count, Salem, OR

Why Comes Before X - Making Sense of Algebra in the Intermediate Grades: Why do numbers work the way they do? When students construct their own understanding of how numbers work together, they develop different levels of thinking. These thinking habits become tools to use as they search for the why in mathematics. Pattern blocks, tiles, cubes, and toothpicks will provide many problems that can be accessed at students' various learning levels. These problems will allow them (and us) to search for meaning and knowledge in mathematics using patterns and relationships in context.

#### 3-5 Session

Buschman, Larry; Jefferson Elementary School, Jefferson, OR

Share and Compare: Helping children become better problem solvers in mathematics.

#### 3-5 Session

Chiotti, Erica; Terra Linda Elementary, Beaverton, OR  
Math Across the Curriculum: Connecting math to social studies, literature and science.

3-5 Session

Cooke, Jackie; Oregon Council of Teachers of Mathematics, Vancouver, WA  
Focus on Fractions in Elementary Instruction.

3-5 Session

Gillespie, Janet; Portland Public Schools, Portland, OR  
Making Every Day Count: Explore calendar math with visual models to develop critical concepts and math language-a link to the Standards.

3-5 Session

Knapp, Brenda; Terra Linda Elementary, Beaverton, OR  
Math Celebrations: Ways to celebrate math throughout the year, includes games, activities, and contests.

3-5 Session

Lokting, Karen; Karen Lokting Education, Beaverton, OR  
Multiplication Mania: Meaningful ideas and strategies to help students develop, understand, apply and retain multiplication concepts.

3-5 Workshop

Bernhard, Cathy; Mathematics Consultant, Beaverton, OR  
It's All in the Cards: Teaching Math with a Deck of Cards.

3-5 Workshop

Burnett, James; ORIGO Education, San Ramon, CA/Morayfield, Queensland, Australia  
Geometry and Visual Thinking: Supplement the geometry strand by including experiences that promote the mental manipulation of two-dimensional shapes: interesting, challenging and visually stimulating.

3-5 Workshop

Burnett, James; ORIGO Education, San Ramon, CA/Morayfield, Queensland, Australia  
Fundamentals: Discover new fun games for developing a range of mental strategies to promote "computational fluency" and why mental computation is important.

3-5 Workshop

Currah, Joanne; Author/Consultant, Edmonton, Alberta, Canada  
All "Decked Out" with Box Cars Games: Roll the dice and deal with fun, math, strategies and more

3-5 Workshop

Easterly, Darla; Silver Lake Elementary, Everett, WA  
Math for ALL: Strategies and Activities that EXCITE! Explore multiple strategies, learn, practice, and create easy-to-use activities that promote computational fluency to build confidence in our struggling students.

3-5 Workshop

Libeskind, Shlomo; University of Oregon, Eugene, OR  
Implementing the NCTM "Reasoning and Proof Standards".

3-5 Workshop

Rossmann, Jo; Beaverton School District, Beaverton, OR  
3-D DRAWING will capture their imagination! A great format for spatial visualization

3-5 Workshop

Varley, Mary Kay; Ft. Worth Country Day School, Ft. Worth, TX

Multiplying Students' Success in Multiplication with Multiple Strategies! Help students find success in multiplication by incorporating arrays, literature, and connections to other disciplines.

3-5 Workshop

Marilyn Jackson, Newberg, OR

Lessons designed to help students develop an understanding of measurement concepts related to the overland expedition of the Lewis and Clark's Corps of Discovery. Problem-solving will be used to describe the world in which we live.

3-6 Workshop

Willmore, Craig; Wright Group/Mcgraw-Hill, Salt Lake City, UT

Data, Probability, & Statistics: Daily routines and activities to help children become fluent in using and understanding charts, graphs, and probability.

3-8 Work Session

Gould, Mike; Roseburg, OR

Adding is Adding is Adding: How to discover computational strategies.

3-8 Session **Featured Speaker**

Greenes, Carole; Boston University, Boston, MA

Developing Algebraic Reasoning through Explorations in Number, Geometry, Measurement, and Data Analysis.

3-8 Session

Maier, Gene; The Math Learning Center, Portland, OR

Why a Minus Times a Minus is a Plus: An illustrated math talk for elementary teachers.

3-8 Session

Rasmussen, Steven; Key Curriculum Press, Emeryville, CA

Using The Geometer's Sketchpad® with Elementary and Middle School Students Investigate powerful models for developing number sense, understanding measurement, and pre-algebraic thinking.

3-8 Workshop

Anderson, Nancy; Making Math Count, Salem, OR

Hands On Equations: Making Algebra Child's Play.

3-8 Workshop

Boldrin, Pam; Wash. State Math Helping Corps, Renton, WA

Flip-Flop-Fold...Hands On Geometry! Enjoy being engaged with polygons...see and create congruence and symmetry. "Make and take" activities will provide practice with concepts and vocabulary.

3-8 Workshop

Geschel, Mary; Suntex International, Easton, PA

Learn practical, fun ways to strengthen mental math, problem solving, and pattern sensing skills playing the "FAMILY of 24® GAMES" ranging from addition to algebra.

3-8 Workshop

Lane, Deborah; Math Helping Corps, Olympia, WA

What? A look at reform Mathematics-Algebra. Why? Traditional vs Constructivist. How?

3-8 Workshop

Maynard, Doug; Educational Games.biz, Woodland, WA

Number Zones: A fast paced game of probability and chance that students love. Concepts included are range, median, mode, bell curve, experimental vs theoretical probability and more.

3-8 Workshop

Maynard, Doug; Educational Games.biz, Woodland, WA  
All-Star Math: Encourage your students to do math. All-Star Math is a five games in one educational game that is designed to help students learn their operations.

#### 3-8 Workshop

McGuire, Nancy; San Marcos Middle School, San Marcos, CA  
Taking Math to the Extreme: Use soccer, football, and baseball for mathematics instruction for all students. Solve problems and practice basic facts, integers, fractions, algebra and more.

#### 3-8 Workshop

Miller, Jim; Cle-Elum-Roslyn High School, Cle Elum, WA  
Teaching Fractions with Understanding.

#### 3-8 Workshop

Nilles, Sara; Mountain View Middle School, Newberg, OR  
Come participate in hands-on, visual, ready to use strategies for working with mathematics and English language learners. Many resources will also be shared.

#### 3-9 Session

Mitchell, Trudy; The Math Learning Center, Portland, OR  
Folding a Circle: Vocabulary and understanding for ALL students.

#### 4-8 Work Session

Calkins, Trevor; Power of Ten Educational Consulting, Victoria, B.C., Canada  
Visual tools Make a Difference: Use hundredths squares to investigate fractions, decimals, percents, division, and prime factors. Connections to data analysis will be demonstrated.

#### 4-8 Session

Fung, Maria; Western Oregon University, Monmouth, OR  
Getting Students to Write and Solve Their Own Story Problems: Peer editing, poster presentation of solutions, peer assessment, and publishing of best problems will be discussed.

#### 5-10 Work Session

Maletsky, Evan; Montclair State University, Upper Montclair, NJ  
Using some Simple Activities in Geometry to put some very Big Numbers in Every Child's Hands.

#### 5-10 Workshop

Lapp, Madaline; Oregon Council of Teachers of Mathematics, Roseburg, OR  
Advanced Unit Origami: Build a complex structure (200+ pieces) in a cooperative group. For those who have had some experience with origami.

#### 5-10 Workshop

Robinson, Bob; Consultant, Everett, WA  
Pyramids, Prisms, Platonics and Other Pursuits: Construct and investigate 3-D figures including dipyramids, anitprisms, and other investigations.

#### 5-10 Workshop

Swarat, Nancy; Umatilla High School, Umatilla, OR  
Unit Origami Boxes: Involve your students in the mathematics of paper folding. There is a box for any level.

#### 5-8 Workshop

Brannan, Dick; Marilyn Burns Education Associates, Sausalito, CA  
Fostering Algebraic Thinking for All Students.

#### 6 Mini-Course

Stine, Mary Ann; Curriculum Specialist, Everett Public Schools, Everett, WA  
Strengthening the Connected Mathematics Classroom environment to develop independent, confident, and reflective learners. Grade 6

6-10 Mini-course

Clary, Kim; Roseburg High School, Roseburg, OR 97470

Modeling the Seafloor: Hands-on, real-life math. Use measurement, computation, representation, & visualization to make physical model of seafloor sector.

6-10 Session

Claus-McGahan, Elly; Sound Decisions Consulting, Tacoma, WA

Math Endorsement Program for Teachers in the Field: What Might it Look Like?

6-12 Session

Enneking, Marjorie; Portland State University, Portland, OR

Helping parents understand what's needed in math for students to have success in college and work.

6-12 Session

Pitre, Michel; OCCDSB, Nepean, ON, Canada

Math Software to Help your Students Get It.

6-12 Session

Rasmussen, Steven; Key Curriculum Press, Emeryville, CA

Technology for Math Visualization: Insight with The Geometer's Sketchpad®: Explore new visual insights into mathematics in areas that range from operations with numbers to complex analysis.

6-12 Session

Samek, Linda; Western Baptist College, Salem, OR

Using the Mathematics Teaching Cycle to Enhance Student Assessment and Lesson Planning.

6-12 Workshop

Mabbott, Art; Seattle Schools, Seattle, WA

Tetrahedron Kites and the Mathematics embedded within.

6-12 Workshop

Samek, Linda; Western Baptist College, Salem, OR

Understanding Measures of Center: Connecting number sense, statistics and geometry.

6-12 Workshop

Sandoz, Patty; OCTM, LaGrande, OR

You are starting a bungee jump business--a thrilling ride without concussion or sudden death! A 3 part activity: investigation, test jump, and letter.

6-14 Session

McKenney, Jill; Lane Community College, Eugene, OR

Open doors to science, health occupations and other technical fields through mathematics.

6-16 Session

Nowlin, Don; Eastern Washington University, Cheney, WA

Precision: The forgotten part of the measurement standard. "What's the right answer, teacher?"

6-16 Workshop

Shaughnessy, Mike; Portland State University, Portland, OR

Reasoning about Variation in Sampling and Datasets in Context: Examine your and your students', thinking.

6-8 Work Session

Fulton, Brad; Mistletoe Elementary, Redding, CA  
Math Games that Motivate and Educate.

6-8 Work Session

Fulton, Brad; Mistletoe Elementary, Redding, CA  
Developing Proportional Reasoning with Understanding.

6-8 Work Session

Niess, Maggie; Oregon State University, Corvallis, OR  
Scaffolding Students Learning in Algebra and Pre-algebra with Spreadsheets.

6-8 Work Session

Stine, Mary Ann; Curriculum Specialist, Everett Public Schools, Everett, WA  
Implementing CMP in your building, classroom, and/or district. A panel discussion to discuss and share ideas and recommendations about effective CMP

6-8 Institute

Lethe, Laura; Salem School District, Salem, OR  
Many times our lowest students are not exposed to important content because they haven't mastered "the basics." This workshop will focus on activities from all math strands that you can use with this population. Participants will engage in activities involving 3-D geometry, algebra concepts, measurement, statistics and probability, and yes - even calculations and estimations! Help your low level students become excited about math and want to learn!

6-8 Mini-Course

Stine, Mary Ann; Curriculum Specialist, Everett Public Schools, Everett, WA  
Strengthening the Connected Mathematics Classroom environment to develop independent, confident, and reflective learners. Grade 8

6-8 Session

Barasch, Richard; Portland Public Schools, Portland, OR  
Favorite Geometry Activities for Middle School.

6-8 Session

Brezinski, Millie; NMEA/WEA, Nine Mile Falls, WA  
Effective Strategies for Introducing Math Vocabulary: Strategies, games, & ideas for improving student understanding of math vocabulary.

6-8 Session

Brezinski, Millie; NMEA/WEA, Nine Mile Falls, WA  
Effective Organizational and Grouping Strategies in the Math Classroom: Strategies for effectively grouping and organizing students for success in the math classroom.

6-8 Session

Brezinski, Millie; NMEA/WEA, Nine Mile Falls, WA  
Ideas for Communicating and Supporting Parents: Ideas to enable parents to successfully support their child during the mathematical process and become an educational partner with their child's teacher.

6-8 Session

Cove, Crescent; Cheney School District, Cheney, WA  
Engaging Reluctant Adolescents in Math 101: Reaching middle level learners using integration, projects, and technology.

6-8 Session

Fulton, Brad; Mistletoe Elementary, Redding, CA

Managing the Math Classroom for Maximum Effectiveness.

6-8 Workshop

Baguley, Bruce; St. Paul Lutheran School, Wenatchee, WA  
Solve, Graph, and Explore Algebraic, Set, T-table, and Cartesian Representations of Linear Equations using Manipulatives to Relate the Four Representations: CD with class materials provided.

6-8 Workshop

Baguley, Bruce; St. Paul Lutheran School, Wenatchee, WA  
Prove the Unique Prime Factorization Theorem and Irrationality of the Square Root of 2 with Manipulatives and see Three Applications to Math Problems.

6-8 Workshop

Balka, Don; Saint Mary's College, Notre Dame, IN  
Activities with Random Digits: With and Without Multiplication.

6-8 Workshop

Billstein, Rick; The University of Montana, Missoula, MT  
Mathematics Activities for Middle Grades Mathematics.

6-8 Workshop

Chamberlin, Ruth; ESD 113, Olympia, WA  
Taking the Mystery out of the Unknown: Building Algebraic Sense.

6-8 Workshop

Engelhardt, John; Southern Oregon University, Ashland, OR  
Geometry Activities Incorporating Tactile, Visual, Verbal, Numeric and Symbolic Approaches.

6-8 Workshop

Head, Virginia; College Prep Mathematics, Grand Prairie, TX  
Factoring with a Standards Based Program: No rules allowed!!

6-8 Workshop

Head, Virginia; College Prep Mathematics, Grand Prairie, TX  
Graphing as a Connecting Thread to Algebra.

6-8 Workshop

Hoey, Brian; CPM Educational Program, Sacramento, CA  
Using Integer Tiles and Games to Teach Math.

6-8 Workshop

Kralovec, Sandy; The Math Learning Center, Portland, OR  
Differentiated Teaching Strategies in the Middle School Math Classroom: Ideas to help meet the needs of all.

6-8 Workshop

Kruczek, Klay; Western Oregon University, Monmouth, OR  
The Mathematics of Doodling: We will introduce Euler Circuits and Euler Paths from Graph Theory. Can we draw any pathway without lifting a pencil?

6-8 Workshop

Lane, Deborah; Math Helping Corps-Office of Superintendent of Public Instruction, Olympia, WA  
Using TI-73's as an Assessment Tool.

6-8 Workshop

Leslee Pelton, University of Victoria, Victoria, BC

Getting Wise to the Ways of Advertising: This workshop will discuss ways that graphs and statistics can be used to mislead consumers and give tips on how to correctly interpret the information presented.

#### 6-8 Workshop

Thompson, Helga; Aims Education Foundation, Dallas, OR

A New Look At Line: Real-world situations modeled by linear functions will be presented. Participants will work through and be given student ready activities that introduce and expand on working with lines in algebra, pre-algebra and middle school.

#### 6-8 Workshop

Reg Wappoups, Evergreen Jr High, Redmond, WA

Has middle school mathematics gone to the dogs? Yes! Sorting, counting, number systems, models, it's all there!

#### 6-9 Workshop

Bell, Jennifer; Waluga Jr. HS, Lake Oswego, OR

Talking through Transformations: Discover the way translations, reflections, and rotations affect the coordinates of a figure. Engage your students in effective group work.

#### 7 Mini-Course

Stine, Mary Ann; Curriculum Specialist, Everett Public Schools, Everett, WA

Strengthening the Connected Mathematics Classroom environment to develop independent, confident, and reflective learners. Grade 7

#### 7-12 Workshop

Frost, Joyce; Lake Washington High School, Kirkland, WA

A Picture is Worth a Thousand Words: But that's only 2-D. Build fascinating space tessellating polyhedra puzzles which extend and apply geometric properties, concepts, and constructions.

#### 7-12 Workshop

Miller, Jim; Cle-Elum-Roslyn High School, Cle Elum, WA

Constructivist approach to teaching the linear model.

#### 7-14 Session

Johnson, Jerry; Western Washington University, Bellingham, WA

An Album of Mathematical Gewgaws, Vagaries, and Whimsicalities: To most people, mathematics is considered to be the most rational of the sciences. Yet, mathematics--its concepts, its problems, and its history-- is filled with oddities that ca

#### 8-10 Workshop

Burak, Marge; Waldport High School, Waldport, OR

The Pattern and Function Connection: Explore a strong resource of movement from concrete to abstract linear modeling.

#### 8-10 Workshop

Webber, Ronda; Cottonwood Learning Center, Bellingham, WA

Spirographs: Pretty pictures using least common multiples, greatest common divisors, ratio & more.

#### 8-12 Work Session

Isaak, Steve; Las Vegas, NV

Absolute Value-- a Functional Approach: Investigate the absolute value function and then complete calculator based laboratories to identify patterns within the general form.

#### 8-12 Session

Lytton, Tricia; North Eugene High School, Eugene, OR

Add a Little STEAM to Your Curriculum: Information about project-based work that expose students to a wide range of engineering --civil, mechanical, chemical, bioengineering. (Project Lead the Way).

8-12 Session

Pitre, Michel; OCCDSB, Nepean, ON, Canada  
Algebra 1 Software to Help your Students Get It.

8-12 Session

Serra, Michael; Key Curriculum Press, Emeryville, CA  
Discovery Learning in Geometry

8-12 Workshop

Isaak, Steve; Las Vegas, NV  
Families of Functions: A variety of both functions and situations will be discussed. Possible assessment items will be incorporated throughout this presentation.

8-12 Workshop

Maness, Claudia; CORD, Waco, TX  
Shuffleboard, Racecars and Reaction Times: Find the Algebraic Connection.

8-12 Workshop

Maness, Claudia; CORD, Waco, TX  
Discover the Properties of a Rhombus: Participants will construct a rhombus using manila folders and brads and use it to discover its properties. Other geometry activities will be experienced.

9-12 Work Session

Libeskind, Shlomo; University of Oregon, Eugene, OR  
A Course in Geometry using Sketchpad: Challenge all students with experiences that address Oregon's CIM, and NCTM "Reasoning and Proof Standard".

9-12 Work Session

Robinson, Jo Anne; Washington State Mathematics Council, Everett, WA  
Making Molehills out of Mountains: Blending TI technology with cooperative group learning to meet algebraic needs of students.

9-12 Session

Adsit, Lynn; Lake Washington High School, Kirkland, WA  
Powerful Problems: Problems that can be introduced at the Algebra 1 level, then revisited, deepened, and enriched at subsequent levels through calculus/statistics.

9-12 Session

Boehm, Rick; Prairie High School, Battle Ground, WA  
An overview of four years of High School math using US Dept of Ed Exemplary Program: College Preparatory Mathematics.

9-12 Session

Boswell, Laurie; The Riverside School, Lyndonville, VT  
Non-linear Data Sets and Functions: The great dig for Algebra 2 and Pre-Calculus.

9-12 Session

Crossfield, Don; Roseburg High School, Roseburg, OR  
Shrink and Grow: A gentle look at mathematics through these lenses. The power of thinking of shapes and numbers as dynamic rather than static.

9-12 Session

Gray, Virginia; Southern Oregon University, Ashland, OR

Wisdom of the Ancients: Math history activities for the classroom.

9-12 Session

Kintz, Nick; West Linn High School, West Linn, OR

Smartboard demonstration on how to maximize results in math instruction using visual technology

9-12 Workshop

Balka, Don; Saint Mary's College, Notre Dame, IN

Conjecturing and Reasoning about Geometry.

9-12 Workshop

Mabbott, Art; Seattle Schools, Seattle, WA

Spherical Geometry: Meeting the Standards by playing with beach balls and straw triangles.

9-12 Workshop

Mikles, Chris; CMP Education Program, Athol, ID

Using the Area Model to Teach Multiplying and Dividing Polynomials: Look at the relationship between dimensions and area of a rectangle.

9-12 Workshop

Mikles, Chris; CMP Education Program, Athol, ID

Proof! Finally a Logical Approach: Experience flowchart and arrow diagrams, problem solving and reasoning skills.

9-12 Workshop

Schjelderup, Kim; Mercer Island High School, Mercer Island, WA

Apps on the TI-83+ and TI-84+ Graphing Calculators: Integrating technology to enhance and support conceptual understanding of mathematics for all students.

9-12 Workshop

Wyatt, Carol; Jesuit High School, Beaverton, OR

Tackling the TI-89: Discover the power in your palm. Learn the basics and beyond with topics from Algebra 1 to PreCalculus.

9-12 Workshop

Wyatt, Carol; Jesuit High School, Beaverton, OR

Statistics Labs Using Mini-Tab, the TI-89 and Excel: Hands on labs covering the unfair games, central limit theorem, confidence intervals, and hypothesis testing.

9-16 Session

Edgell, John; Texas State University, San Marcos, Texas

Impact of Simplexes & Similarity Upon Constructs: Hands-on models will suggest conjectures about similarity with respect to simplexes and subsequent impact upon constructs.

9-16 Session

Nowlin, Don; Eastern Washington University, Cheney, WA

A Non-Routine Solution to a Non-Routine Contest Problem and its Generalization:  $xxxx\dots = 2$  and  $xxxx\dots = a$ .

9-16 Session

Rizzuti, Jan; Bard High School Early College, NYC; Simon's Rock College of Bard, Barrington, MA

Mathematics Curriculum for Under-Represented Students: Explore early college high schools, their mathematics curricula, and how these schools are working for under-represented groups of students.

9-16 Workshop

Specht, Jim; City University, Vancouver, WA

Math Performance Tasks: An interdisciplinary path to build teaching skills