

Problem Solving
Reasoning
Communication
Representations
Connections



Shoot for the Stars:
SOA and Beyond

MCIM Annual Conference

March 9 & 10, 2012

Hotel Roanoke

Roanoke, VA

Certificate of Attendance

This certificate confirms that

attended the VCTM Conference in Roanoke, VA
on March 9 – 10, 2012.

March 9 – 10, 2012

***Beth Williams*, President of VCTM**

VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICS

33rd ANNUAL CONFERENCE

Hosted by

The Blue Ridge Council of Teachers of Mathematics

at

The Hotel Roanoke

Roanoke, Virginia

March 9 – 10, 2012

General Index:

VCTM Executive Board and Conference Chairpersons.....	Pages 2 and 3
General Conference Information.....	Page 4
Maps of Conference Buildings.....	Page 5.
General Conference Schedule	Page 6
Friday Workshops	Pages 7 - 40
Friday Awards Dinner	6:30 – 8:30.... Shenadoah B
Saturday Workshops	Pages 41 - 61
VCTM William C. Lowry Educator of the Year Awardees.....	Page 65
Edward A. Anderson Scholarship Awardees.....	Page 66
PAESMT State Finalist.....	Page 66
Karen D. Michalowicz First Timers Grant Ricipients.....	Page 67
Exhibitors.....	Pages 62 - 64
Session Lead Presenters Listed Alphabetically.....	Pages 75 - 79
Certificate of Attendance.....	Located on back of front cover

VCTM Board Members

Name	Office	Term
Beth Williams	President	2010 - 2012
Carolyn Williamson	Past President	2010 - 2012
Ian Shenk	President Elect and Meetings Committee Chair	2010 - 2012
Lisa Hall	Secretary	2011 - 2013
Paul Webb	NCTM Representative	2011 - 2013
Meghann Cope	Elementary Representative	2010 - 2013
Skip Tyler	Middle School Representative	2011 - 2013
Alfreda Jernigan	Middle School Representative and Math Beauty Contest Chair	2010 - 2012
Cathy Shelton	Secondary School Preresentative and Affiliate Support Committee	2010 - 2012
Lynn Foshee Reed	Secondary School Representative and VETAC Representative	2011 - 2013
Corinne Magee	Math Specialist Representative	2011 - 2013
Joseph Joyner	2 Year College Representative	2011 - 2013
Dr. Lou Ann Lovin	4 Year College Representative	2011 - 2013
Dr. Maria Timmerman	4 Year College Representative	2010 - 2012
Diane Leighty	Treasurer	Appointed
Ruth Harbin Miles	Administrative Assistant to the Executive Board and Membership	Appointed
Jen Hackley	Web Master	Appointed
Dave Albig	Journal Editor	Appointed
Laura Searce	Publicity & Promotions	Appointed
Vandi Hodges	Public Relations	Appointed
Carla Grosz	Karen Dee Michalowicz First Timers Grant	Appointed
Pam Bailey	Professional Development Grant and Membership	Appointed
Debra Delozier	Continuing Education Grant	Appointed
Brenda Barrow	Educator of the Year, Program Chair	Appointed

Vickie Inge	VA Math and Science Coalition Representative	Appointed
Dr. Deborah Wickham	Department of Education Representative	Appointed
Dr, Virginia Lewis	VCTM Resources	Appointed
Dr. Joy Whitenack	Edward A. Anderson Scholarship	Appointed
Margaret Coffee	Exhibit Coordinator	Appointed

VCTM 2012 Conference Committees

Local Organizing Committee:

The Blue Ridge Council of Teachers of Mathematics

Technology: Jonathan Schulz

Volunteers: Jonathan Schulz

Program: Brenda Barrow

Conference Logo: Beth Williams/
Brenda Barrow

Registration: Ruth Harbin Miles

Finance: Diane Leighty

Exhibits: Ian Shenk

Signs: Brenda Barrow

Webmaster: Jennifer Springer

The Blue Ridge Council of Teachers of Mathematics hopes you enjoy the 2012 VCTM Conference here in Roanoke, VA

Thank you, BRCTM, (Local VCTM Affiliate) for helping with the conference!

Officers

President Jonathan Schulz, Montgomery County(jschulz@mcps.org)

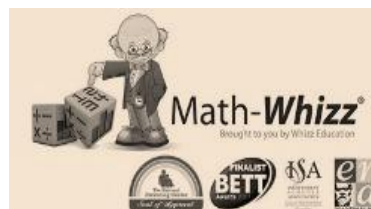
President-Elect Brenda McGrath, Franklin County (brenda.mcgrath@frco.k12.va.us)

Treasurer Brian Austin, Botetourt County(baustin@bcps.k12.va.us)

Secretary Beth Swain, Salem City(bswain@salem.k12.va.us)

Past President Kevin Simms, Salem City(ksimms@salem.k12.va.us)

Thank you, Pearson “Always Learning” and Math Whizz for helping to support the VCTM Conference.



General Conference Information

The Blue Ridge Council of Teachers of Mathematics welcomes you to The Hotel Roanoke for the 2012 Annual VCTM Conference.

The Hotel Roanoke is located off Interstate 64 in Roanoke, VA:

Address: 110 Shenandoah Ave., Roanoke, Virginia 24016 **Phone:** (540) 985-5900

Registration Fee: Registration fee for members is \$120.00. A non-member may join VCTM for one year and register for the conference for a single fee of \$140.00. Full time college students may register for \$40.00. Friday/Saturday breakfast and Friday lunch included in registration fee, On-site registration \$10 more.

Lead presenters registration \$60 but need to renew their membership for \$20.

Sessions: This year all sessions are **75 minutes**. There are no ticketed sessions. Please arrive early to get a seat. The fire code does not allow for anyone to sit on the floor. Maps of the conference buildings that identify the location of session rooms can be found on page 4.

Commercial Exhibits: Exhibits will be open in Roanoke Ballrooms C and D on Friday from 8:00 a.m. to 5:00 p.m. and on Saturday from 8:00 a.m. to 12:00 p.m. As you walk through the exhibit halls, please take a moment to thank the exhibitors, without whom our conference would not be possible. Everyone who collects the signatures of six exhibitors on the card provided at registration will be entered into a drawing for numerous door prizes! The drawing will take place Friday afternoon at 4pm. Be sure to check out the VCTM table to see if you are a winner!

Breakfast and Lunch: A free continental breakfast will be available for paid conference attendees on Friday and Saturday mornings from 7:30 to 10:00am in the foyer outside of Roanoke Ballroom D. On Friday, a free box lunch is provided for paid conference attendees from 12:00 to 1:30 pm in the foyer outside of Roanoke Ballroom D or Crystal Ballroom foyer.

Membership Meeting: The annual membership meeting will be held from 12:45 - 1:05 in the Washington Room.

Affiliate Caucus and Board Members Breakfast on Saturday: Affiliate officers have been invited to a breakfast from 8:00-9:30 am on Saturday in the Shenandoah B Room. Enjoy networking with other affiliate leaders and sharing affiliate activities and issues. Pick up your breakfast outside of Roanoke Ballroom D/North Entry Foyer and bring it to Shenandoah B.

Dinner and Awards on Friday Night:

On Friday night a ticketed Awards dinner will be held to recognize the William C. Lowry Outstanding Mathematics Educators of the Year, the recipient of the Presidential Award for Excellence in Mathematics and Science Teaching, and the 2012 Edward A. Anderson scholarship recipients. Tickets are \$30 for the Banquet. We have limited seating, so please purchase your tickets at the registration desk when you check in if you have not already done so. Dinner will be held in Shenandoah B at The Hotel Roanoke from 6:30 – 8:30 pm.

This is where the hotel room map will be.

VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICS 33rd Annual Conference

General Conference Schedule

THURSDAY, MARCH 8

4:00 p.m. – 8:00 p.m. Registration Desk Open

FRIDAY, MARCH 9

7:00 am – 4:00 pm	Registration Desk Open North Entry Foyer
8:00 am – 5:00 pm	Vendor Exhibits Open Roanoke Ballroom D and C
7:30 am – 10:00 am	Continental Breakfast Available North Entry Foyer
8:15 am – 9:30 am	Concurrent Sessions
9:45 am – 11:00 am	Concurrent Sessions
11:15 am – 12:30 pm	Concurrent Sessions
12:00 pm – 1:30 pm	Lunch Available North Entry Foyer or Crystal Ballroom Foyer
12:45 pm – 1:05 pm	Membership Meeting (Washington Room)
1:30 pm – 2:45 pm	Concurrent Sessions
3:00 pm – 4:15 pm	Concurrent Sessions
4:30 - 6:00 pm	Cash bar and light refreshments North Entry Foyer
6:30 pm – 8:30 pm	Friday Awards Banquet Shenandoah B

SATURDAY, MARCH 10

8:00 am – 10:00 am	Registration Desk Open North Entry Foyer
8:00 am – 12:00 pm	Vendor Exhibits Open Roanoke Ballroom D
7:30 am – 10:00 am	Continental Breakfast Available Hotel North Entry Foyer
8:00 am – 9:30 am	Affiliate Caucus Breakfast Shenandoah B - Pick up your breakfast in the Hotel North Entry Foyer and come to the meeting.
8:15 am – 9:30 am	Concurrent Sessions
9:45 am – 11:00 am	Concurrent Sessions
11:15 am – 12:30 pm	Concurrent Sessions

FRIDAY, MARCH 9, 2011 Conference Program Overview

Room (Capacity LCD Projector, Doc Cam, Wi-Fi)	<u>8:15-9:30</u>	<u>9:45-11:00</u>	<u>11:15-12:30</u>	<u>1:30-2:45</u>	<u>3:00-4:15</u>
Higher Ed Center Computer Lab across the street from The Hotel Roanoke	Computer Lab Session # 1 Elizabeth Barnes - Grade band general audience ALEKS Math Software Program	Computer Lab Session # 2 Open	Computer Lab Session # 3 Michael Neff – Wise County Schools Grade Bands: 6 - 8, 9 – 12 The Magic Geometry Garden, an exciting lesson using Geometer's Sketchpad	Computer Lab Session # 4 Rudy Neufeld - Neufield Learning systems Inc. – Senior Author Co-presenters – Leaders from a number of school districts - Grade Bands 6 – 8 Take Math Out of the Box! Go Deep to Teach with Understanding	Computer Lab Session # 5 Wanita Jane Thomas - Charlottesville City Schools Grade Bands: 9 – 12 Blended Learning in Geometry
Shenandoah A 60 LCD/ Doc Cam Wi-Fi	# 1 Colleen Watson Grade Band 6 - 8 James Madison University Beyond M&M's and Cheerios: Making Data Collection and Analysis Fun!	# 20 - Ann Wallace JMU Grade Band: 3 – 5 Context Vs. Key Word Approach to Solving Problems	# 39 Melissa Tilashalski –Virginia Tech Grade Bands 6 – 8, 9-12 Using Algeblocks to Discover Perimeter, Area, Surface Area and Volume	# 59 Open	# 79 Open
Crystal Ballroom E 90 LCD/ Wi-Fi	# 2 Open	# 21 Diane Leighty - UVA – SCPS Grade Band 9 –12 The Mathematics Capstone Course	# 40 Candie C. George Mecklenburg County Grade bands Pre-K – 2, 3 –5, 6 – 8 Aligning the stars to Make Math Fun and Exciting!	# 60 Open	# 80 Dr. Agida Manizade Co-presenters: Stephanie Brady, Dr. Laura Jacobson, Patsy Dickerson, Levi Jaynes – Radford University Grade Bands: 9 – 12, Higher Ed Lessons Learned: Radford University Mathematics and Science Partnership Project
Appalachian 60 LCD/ Doc Cam Wi-Fi	#3 Alfreda Jernigan – VCTM Academy Sample Presentation Grade band: 6 -8	# 22 Pat Gabriel – VCTM Academy Sample Presentation Grade band; 9 –12 Is That Normal?	# 41 Heather Smith-Reeps Co-presenter: VCTM Academy Jennifer Hackley Math Coaches, Staunton City Schools Grades K-2	# 61 Brenda Barrow “VCTM Academy” Grade band: 3 - - 5 Sample presentation – Data Does Help to Determine Decisions	# 81 Brenda Barrow, Old Dominion University Grade Band: 3-5 Melodies, Methods, and Models that Make Math Marvelous and Meaningful

	8:15 – 9:30	9:45 – 11:00	11:15 – 12:30	1:30 – 2:45	3:00 – 4:15
<p>Pocahontas</p> <p>90</p> <p>LCD/</p> <p>Doc Cam Wi-Fi</p>	<p># 4</p> <p>Jennifer Suh, GMU - Grade Bands: Preservice/Inservice</p> <p>Co-presenters: Padmanabhan Seshaiyer – GMU, Jill San Marcos – GMU,</p> <p>Michael Hunt – GMU</p> <p>Collaborative Learning For Teachers: Pre-service and Practicing Teachers Deepening Math Content Knowledge through Lesson Study</p>	<p># 23</p> <p>Jennifer Suh, Padmanabhan Seshaiyer GMU -</p> <p>Pre-k – 2</p> <p>Building Foundations for Number Sense: Sharing Rich</p>	<p># 42</p> <p>Clara Hauth, Co-presenters: Jo-Anne Carra and Linda Gillen Fairfax County Public Schools Grade Band 6 – 8 Taking the “Testiness” Out of High Stakes Assessments</p>	<p># 62</p> <p>Michele Bowman Co-presenter: Nikki Wright; Fairfax County Public Schools</p> <p>Grade Bands: 3 –5, 6 –8</p> <p>“Base”ic Math</p>	<p># 82</p> <p>Nikki Wright – GMU – COMPLETE – Fairfax County Public Schools 83</p> <p>Co-presenters: Michele Bowman, April Cooke, Eileen Donahue, Jeanette O’Malley – All from the GMU – COMPLETE (FCPS)</p> <p>Grade Bands: 6 – 8</p> <p>Developing Flexibility in Student Problem Solving Strategies Using fractions</p>
<p>Roanoke Ballroom A</p> <p>100 LCD/</p> <p>Doc Cam Wi-Fi</p>	<p># 5</p> <p>Lucy Rutecki - Fairfax County Public Schools</p> <p>Co-presenter: Rebecca Grimm – FCPS, Sophia Vega – Alexandria Public Schools, Katelyn Collier – APS, Margaret Hoffer – APS</p> <p>Pre-K – 2, 3 – 5</p> <p>Using Lesson Study to Improve Mathematics Instruction in Grades 2 – 3</p>	<p># 24</p> <p>Carol Knight Mathematics Supervisor</p> <p>Prince William County Schools</p> <p>Grades: 3 - Algebra I</p> <p>Representations for Multiplication that Work from 3rd grade to Algebra 1</p>	<p># 43</p> <p>Padmanabhan Seshaiyer; Toni M. Smith GMU, Co-presenters: Joe Adelman, Fairfax County Public Schools; Jennifer Suh, GMU;</p> <p>Nathalia Piexoto, GMU Grade Bands: 9 –12</p> <p>Expeditions in Science, Technology, Engineering, education, and Mathematics (ESTEEM)</p>	<p># 63</p> <p>Courtnee Austin Petersburg Public Schools Co-presenters: ???????</p> <p>Grade Bands: General Interest</p> <p>Professional development That Works: Teachers Share Their Lesson Study Journeys</p>	<p># 83</p> <p>Sarah DeLeeuw</p> <p>NCTM</p> <p>Grade band: 6 – 8</p> <p>Using</p> <p>Games to Encourage and Enhance Students’ Learning in the Middle Grades</p>
<p>Roanoke Ballroom B</p> <p>100 LCD/</p> <p>Doc Cam Wi-Fi</p>	<p># 6</p> <p>OPEN</p>	<p># 25</p> <p>Kathleen Judge Math Coach, Rippon Middle School</p> <p>Co-Presenters: Sara McLaughlin, Math Coach, Graham Park Middle School, Patty McGraw, Math Coach Beville Middle School Prince William County Schools, Grade Bands 4-6, 6-8 Target audience: Teachers Grade 6; Beyond Invert and Multiply... Strategies for Representing Multiplication and Division of Fractions</p>	<p># 44</p> <p>DEBBIE WICKHAM</p> <p>VDOE</p> <p>Keynote speaker Elementary Feature Arithmetic, Algebra, and the Process Skills: <i>The SOL and Beyond</i></p>	<p># 64</p> <p>64 Art Stoner A+ Tiles- 100 Boards for grades 2-12! Explore properties of real numbers, patterns, sequences, linear equations and more.</p>	<p># 84</p> <p>Victoria Bohidar Co-presenters: Kimberly Bender, Kathryn Munson – Chesterfield County Public Schools</p> <p>Grade Bands: Pre-K – 2, 3 – 5</p> <p>Algebra: The Missing Variable in Elementary School Mathematics</p>

<p>Roanoke Ballroom E</p> <p>40 LCD/ Wi-Fi</p>	<p>8:15 – 9:30</p> <p># 7</p> <p>Barbara English - Pre-K - 8</p> <p>Movement & Math: Multiply Students Success</p>	<p>9:45 – 11:00</p> <p># 26</p> <p>Barbara English - GeoMotion Group, Inc</p> <p>Pre – K -12</p> <p>Math Moves Me:</p> <p>Let's Get Ready to NUMBERS</p>	<p>11:15 – 12:30</p> <p># 45</p> <p>David Hartmann Grade Bands: 6 – 8, 9 –12</p> <p>Numeracy Works Tabula – A New Geometry Instruction Tool For Hands-On Learning</p>	<p>1:30 – 2:45</p> <p># 65</p> <p>Mandy Robinson Co-presenters: Pilar Campodonico, Madeline Saylor, Mallori Kirylyuk, Andrea Balarezo, Kelly Desrocher</p> <p>Prince William County Schools and GMU</p> <p>Grade Bands: Pre K – 2</p> <p>Does Order Matter? Exploring the Commutative Property in the Second Grade</p>	<p>3:00 – 4:15</p> <p># 85</p> <p>Daniel E. Schroll Loudon County Public Schools Grade Bands: Pre-K – 2, 3 – 5</p> <p>Learning fractions Cooperatively</p>
<p>Roanoke Ballroom F</p> <p>40 seats</p> <p>34 LCD/ Doc Cam Wi-Fi</p>	<p># 8</p> <p>Alicia Graham</p> <p>Prince Edward County Schools</p> <p>Grade Band:K-5</p> <p>The Why and How of Questioning Strategies</p>	<p># 27</p> <p>Don Balka St. Mary's College, Indiana</p> <p>Using Manipulatives in the Algebra Classroom</p>	<p># 46</p> <p>Dr. Jeffrey J. Steckroth Christopher Newport University</p> <p>Grade Bands: 9 –12 and Higher Ed</p> <p>The AC Method: A Tale of Three Functions</p>	<p># 66</p> <p>Cindy Cooper</p> <p>Co-presenters: Jeff Firman, Kristina Anthony Fairfax County Public Schools and GMU</p> <p>Grade Bands: 6 – 8</p> <p>Exploring Division of Fractions with Sixth Graders</p>	<p># 86</p> <p>Patricia Caldwell- Wilson Mathematics Resource Teacher (LCPS) -</p> <p>Co-presenters: Trudy Fields, Larissa Peluso-Fleming – Loudon County Public Schools</p> <p>Grade Bands: 3 – 5, 6 – 8</p> <p>Modeling fractions: Deepening conceptual Understanding using Visuals and Manipulatives</p>
<p>Roanoke Ballroom G</p> <p>40 LCD/ Doc Cam Wi-Fi</p>	<p># 9</p> <p>Cindy Norton - Grade band 3 – 8</p> <p>Lee County Schools</p> <p>ALGEBRA AT ANY AGE AT ANYTIME!</p>	<p># 28</p> <p>Pamela Haner St. Catherine's School (independent) Grade band 6 - 8</p> <p>Make Math Count</p>	<p># 47</p> <p>Jennifer Orr – Fairfax County Public Schools</p> <p>Co-presenter: Valerie Skinner: GMU Grade Bands: Pre-K – 2</p> <p>Little Ones Learning Math Using Technology</p>	<p># 67</p> <p>Jennifer Orr</p> <p>Fairfax County Public Schools,</p> <p>Grade Band: General Interest</p> <p>Thinking about Thinking: Process and Content Matter</p>	<p># 87</p> <p>Ted H. Hull, University of Texas, Don S. Balka - St. Mary's College – Indiana, Ruth H. Miles Mary Baldwin College - VA Grade band Pre-k -8Visible Thinking in K-8 Classrooms</p>

Roanoke Ballroom H 40 LCD/ Doc Cam Wi-Fi	8:15 – 9:30	9:45 – 11:00	11:15 – 12:30	1:30 – 2:45	3:00 – 4:15
	# 10	# 29	# 48	# 68	# 88
	Chelyse Miller - Virginia Beach City Public Schools	. Chelyse Miller Virginia Beach City Public Schools -	Sue Schulz, Virginia Tech	Priscilla Cessna	Jonathan Schulz Montgomery county Schools
	Co-presenters: Kelly Convirs and Danielle Williams - Virginia Beach City Public Schools	Co-presenter: Kelly Convirs - Danielle Williams	Co-presenter: Jenny Conrad, Montgomery County Public Schools	Co-presenters: Virginia Bolton, Chad Elmer, Jen McPherson, Paul Mills, Tori Violetta: Prince William County Schools	Grades 3 – 5 and 6 – 8
	Grade Bands: 3 – 5 Promoting Small Group	Grade band 3 – 5 Promoting Small Group Instruction Through Guided Math	Grade bands: Pre-K – 2, 3 – 5	Grade Bands: 3 – 5	Analyzing the New Sol Testing Blueprints
	Instruction through Guided Math		Making Guided Math Work	The Staircase Problem Lesson Study	

<p>Crystal Ballroom A 40 LCD/ Doc Cam Wi-Fi</p>	<p>8:15 – 9:30 # 11 Larry Dorf - ldorf@larsontexts.com m Grade band 6 - 8 Blg Ideas Learning</p>	<p>9:45 – 11:00 # 30 Natisha Knight Co-presenter Nakisha Winston, Richmond Public Schools Grade Band 3 - 5 Success with the New Standards</p>	<p>11:15 – 12:30 # 49 Eric Allan West Blacksburg New School Grade Band: 6 –8 and General interest Beyond Sudoku: An Introduction to Japanese Logic Puzzles</p>	<p>1:30 – 2:45 # 69 Nancy A. D. Jones Richmond Public School System Stary Success Through Problem Solving, Reasoning, Communication, Representation, and Connections!</p>	<p>3:00 -4:15 # 89 Kellie Worrell 7th Grade Math Teacher, St. Paul School, Carroll County, VA Grade Band :3- 12 TECHNECESSITY: Why You Can't Reach Today's Learners Without Technology</p>
<p>Crystal Ballroom B 40 LCD/ Doc Cam Wi-Fi</p>	<p># 12 Lori Triplett Grade band 3 – 8 ltrip1266@yahoo.com Box Cars & One- Eyed Jacks – All Hands on Deck - Elementary Math Games</p>	<p># 31 Lori Triplett Grade band Pre-k - 2 boxcars@telus.net ltrip1266@yahoo.com Box Cars & One-Eyed Jacks Shuffling into Math - Primary Math Games</p>	<p># 50 Lori Triplett ltrip1266@yahoo.com boxcars@telus.net Grade band 3 – 8 Box Cars & One- Eyed Jacks Power Play - Games for Teaching Place value Power Play - Games for Teaching Place Value</p>	<p># 70 Rebecca Ward Co-presenter: Branch Wyatt Pronk – Stafford County Public Schools Grade Bands: 3 – 5 Proving the Properties</p>	<p># 90 Beth Moore Co-presenters: Elizabeth Alvarez, Cheryl Ayers, Alise Brooks – Prince William County Schools Grade Bands: Pre–K – 2, 3 – 5 Running Laps and Solving Problems Lesson Study</p>
<p>Crystal Ballroom C 40 LCD/ Wi-Fi</p>	<p># 13 David Plaxco - Virginia Tech Grade Bands: 9 – 12, higher Ed, General Interest Special Case Paper Folding: How Do I Construct a Similar Rectangle?</p>	<p># 32 Kim P. Loucks -and Carolyn Hirst- Loucks Teaching and Learning Connected Grade Bands: General Interest Serious Fun in the Mathematics Classroom</p>	<p># 51 Carolyn Hirst- Loucks Co-Presenter: Kim P. Loucks - Teaching and Learning Connected Grade Bands: General Interest Mathivators: Motivational Tools for success in Mathematics</p>	<p># 71 Gregory Fisher Winston Salem Forsyth County Schools in NC Grade Bands: 6 – 8 and 9 – 12 20 Engaging Activities for any Math Class (5 – 12)</p>	<p># 91 Laura Beller, Curriculum and Instruction Specialist, TTAC @ ODU Co-presenter: Linda Hickey – JMU Grade Bands: Pre-K – 2, 3 – 5, 6 – 8, 9 – 12 Math Coaches....How can we help you?</p>
<p>Crystal Ballroom D 40 seats LCD</p>	<p>#14 Galeet BenZion Fairfax County Public Schools Pre-K – 2 Metacognitive approach for teaching number sense with full inclusion ESOL.</p>	<p>#33 Jen King Henrico High School Grade Band 6 –8, 9 – 12 Flexible Activities for Any Content</p>	<p>#52 Brooke Lancaster – Fairfax County Public Schools Co-presenter: Susan Brooks: Prince William County Public Schools Grade bands: 6-8 Breathe New Life into Your Math Classroom</p>	<p>#72 Vandi Hodges – VCU Co-presenters: Vickie Inge, UVA and William Haver, VCU Grade Bands: Pre-K –2, 3 – 5, 6 – 8, Higher Ed Taking Aim to Help All Teachers Reach Beyond the Stars</p>	<p>#92 Joy Whitenack - VCU Co-presenter: Vickie Inge, UVA Grade Bands: Pre-K – 2, 3 – 5, Higher Ed, General Interest Supporting K-5 Mathematics specialists' work: Some Stories from the Field</p>

--	--	--	--	--	--

Room (Capacity/ LCD Projector, Doc Cam, Wi-Fi)	8:15-9:30	9:45-11:00	11:15- 12:30	1:30-2:45	3:00-4:15
Mill Mountain 50 LCD/ Doc Cam Wi-Fi	# 15 Pam Bailey Grade band 6 – 12 and higher ed Spotsylvania County Schools Rappahannock Region Association Teachers of Mathematics Raise the Rigor in Algebra	# 34 OPEN	# 53 Karen Creech Loudon County Schools Grade bands: 3 –5, 6 –8, General Interest How Square are You? And Proportional Reasoning	# 73 Margaret Coffey Fairfax County Public Schools Grade Bands: 6 – 8, 9 – 12 Beyond Pi: Helping Students Develop an Understanding of Irrational Numbers	# 93 Heather Overstreet Bedford County Schools Grade Bands: 9 – 12 Navigating Statistics with the TI-Nspire
Buck Mountain 60 LCD/ Doc Cam Wi-Fi	# 16 Open	# 35 Barb Freeman - Poquoson Public Schools Grade Band:General interest Math in India	#54 Danielle Steelman - Co-presenter: Penny Parker: Prince William County Public Schools Grade bands: 6 –8 Exploring Measures of Center and Mean as a Balance Point	# 74 Steven Boyce – Virginia Tech Co-presenter: Andrew Nicholas, Virginia Tech Grade Bands: 3 – 5, 6 – 8 Worthwhile iPod Apps	# 94 Lynn Foshee Reed (Grades 9-16) From Feather Boas to Mathematical Dances: What I Learned at the 2012 Joint Mathematics Meetings!
Monroe 70 LCD/ Doc Cam Wi-Fi	# 17 Doug Nichols Grade band 6 - 12 Wythe County Public Schools Soap Opera Math: Students Writing and Solving Word Problems	# 36 Beth MacDonald, Virginia Tech Grade Bands Pre-K – 2, Preservice/Inservice/General Interest Children’s Construction of Number: Building New Ideas about Computational Fluency	# 55 Andrienne R. Setorie Prince William County Schools Grade Bands:PreK-2, 3-5, 6-8, General Interest Count Us In Too! Mathematics Recovery for ALL Students	# 75 Kathleen M. Morris Co-presenter: Andrienne Setorie, Prince William County Schools Prince William County Schools– Grade Bands: Pre-k – 2, 3 – 5!m the New Math Coach! Now What?	# 95 Christine Gault Co-presenter: Tori Violetta – Prince William County Schools Grade Bands: General Interest Accelerating Professional Growth through Lesson Study

Wilson	8:15 – 9:30	9:45 – 11:00	11:15 – 12:30	1:30 – 2:45	3:00 – 4:15
70 LCD/ Doc Cam Wi-Fi	# 18 18 Brynn Cody Wythe County Public Schools Valerie Parr - Fairfax County Public Schools Grade band 9- 12 Using Manipulatives to Verify Trig Identities	# 37 Rachael Cofer , The College of William and Mary Grade Bands 6 – 8 Making Sense of Proportional Reasoning	# 56 Mandy Collier – York County School Division Grade bands: 6 –8, 9 – 12, Higher Ed Using Mobile Devices in the Math Classroom	# 76 Richelle C. R. Dietz Co-presenters: Karen Keene , PhD, Krista Holstein – NC State University Grade Band: 9 – 12 When Will We Ever Use This? Examples of Real World Mathematics	# 96 Dr. Betti C. Kreye – Virginia Tech 96 Co-presenter: Dr. Kris Tilley-Lubbs , Virginia Tech Grade Bands: 6 – 8, Higher Ed Planning effective Mathematics Lessons for English Language Education
Harrison 40 LCD/ Wi-Fi	# 19 Donna Wilder Grade Bands 6- 8,9 –12 In Search of the Critical Pieces	# 38 Ann Drobnis - Fairfax County Public Schools Grade Bands: 6 – 8, 9-12, Higher Ed What's Going on With computer Science Nationally?	# 57 Cheryl Jaffe Education Outreach Liaison with Northrop Grumman Grade Bands: 3 –5, 6 –8 Breaking the Algebra Barrier – with Arithmetic	# 77 Open	
Washington 170 LCD/ Doc Cam Wi- Fi			# 58 Open	# 78 MICHAEL BOLLING Keynote Speaker Secondary Feature	# 97 MICHAEL BOLLING Keynote Speaker Presidential Award Information

Computer Lab Sessions are being held in the
Higher Ed Center across the street from
The Hotel Roanoke.

Held at the Higher Ed Center across the street from

The Hotel Roanoke

Computer Lab Session 1

Elizabeth Barnes -

Grade band general audience

ALEKS Math Software Program

Combining Teacher Instruction, Textbooks, Standards, & Artificial Intelligence to Maximize Student Performance

Reach new heights in delivering math instruction to your students, using the ALEKS Math Software Program, www.aleks.com, that combines your teaching, State and Common Core Standards, your textbook, and an Artificial Intelligence Engine, that will deliver "ready to learn" lessons to students, remediate missing fundamental skill sets, and work with students in "real time". Make valid instructional decisions for individual students and your class, using ALEKS' Comprehensive Reports.

Computer Lab Session 2

OPEN

Computer Lab Session 3 at the Higher Ed Center

Michael Neff – Wise County Schools

Grade Bands: 6 - 8, 9 – 12

The Magic Geometry Garden, an exciting lesson using Geometer's Sketchpad

Participants will be introduced to the interactive software Geometer's sketchpad. They will measure angles, distances, graph, transform, bisect and explore the use of this exciting geometry tool that will enhance classroom instruction. Participants will create a colorful magic rectangular garden, measure the perimeter, area, and cut it dynamically into smaller garden beds to discover the geometry secrets for students hidden inside.

Computer Lab Session 4 at the Higher Ed Center

Rudy Neufeld - Neufeld Learning systems Inc. – Senior Author

Co-presenters – Leaders from a number of school districts - Grade Bands 6 – 8

Take Math Out of the Box! Go Deep to Teach with Understanding

We will develop specific concepts that students have difficulty in understanding and teachers have difficulty in teaching and offer strategies for the teacher to teach with understanding in a wide variety of learning environments. Lessons will involve a variety of resources and technology and will extend to differentiated instruction and RTI.

Computer Lab Session 5 at the Higher Ed Center

Wanita Jane Thomas -Charlottesville City Schools Grade Bands: 9 – 12

Blended Learning in Geometry

Virtual learning is becoming more and more vital to our students and their learning experiences. This session will discuss the development and teaching of a blended and/or virtual course in Geometry. The ideas and concepts can be used with any mathematics course at the high school level. We will discuss setting up a virtual course and using it in the blended setting. We will also look at how the course could be used as a total virtual learning experience.

Hotel Roanoke Sessions

FRIDAY, 8:15 am-9:30 am

Session 1 Shenandoah A

Colleen Watson Grade Band 6 - 8

SCHOOL DIVISION OR AFFILIATION: * James Madison University

Beyond M&M's and Cheerios: Making Data Collection and Analysis Fun!

Let's make statistics fun! Participants will actively engage in a variety of hands-on, data-collection activities to generate data suitable for scatter plots, trend, box-and-whisker plots, bar graphs, histograms, and other descriptive statistics. Handouts with many other activities will be included. Most activities can be modified for all grades

Session 2 Crystal Ballroom E

Open

Session 3 Appalachian

Alfreda Jernigan – VCTM Academy Grade band: 6 - 8

Participants will experience snippets of three different lessons supporting revised mathematics state standards for grades 6 – 8. These lessons are just samples of upcoming lessons and professional development sessions to be offered by VCTM.

FRIDAY, 8:15 am-9:30 am

Session 4

Pocahontas

Jennifer Suh, GMU -

Grade Bands: Preservice/Inservice

Co-presenters: **Padmanabhan Seshaiyer** – GMU, **Jill San Marcos** – GMU,

Michael Hunt –GMU

This session will be lead by a mathematics educator, clinical faculty and pre-service teachers who used Lesson Study to collaborate on teaching mathematics through problem solving and learned more meaningful mathematics. The presenters will share rich problems for modeling and for representing rigorous math content and assessment strategies.

Session 5

Roanoke Ballroom A

Lucy Rutecki - Fairfax County Public Schools Co-presenter: **Rebecca Grimm** – FCPS, **Sophia Vega** – Alexandria Public Schools, **Katelyn Collier** – APS, **Margaret Hoffer** – APS

Pre-K – 2, 3 – 5

Using Lesson Study to Improve Mathematics Instruction in Grades 2 – 3

We will present how we used lesson study to improve our mathematics instruction in our classrooms. Lesson study focuses on collaborative planning, observation, analysis, and reflection of a mathematics lesson. In our lesson study project, we designed with the goal of students using knowledge of place value to compare numbers through estimation. Through an open-ended and authentic task, our students solved a problem through rounding and making combinations of 100. Our broad subject matter goal was for students' understanding of estimation to increase their understanding of place value and number relationships. Our long term goal for student development was for students to be able to clearly express and clarify their ideas through discourse with peers and teachers. We will present how we worked through the lesson study process of planning a problem solving activity, anticipating student responses, observing the actual lesson in a classroom setting, and debriefing about how the lesson went and what adaptations need to be made to improve the lesson. We will finally present how our lesson study experience will help improve the mathematics instruction in our base schools.

Session 6

Roanoke Ballroom B

Open

FRIDAY, 8:15 am-9:30 am

Session 7

Roanoke Ballroom E

Barbara English -

Pre-K - 8

Movement & Math: Multiply Students Success

Gain knowledge of methods to enhance student success while bringing an element of fun into their learning. Children are smiling and laughing. They are jumping, balancing, and moving around on colorful mats with numbers, letters, and the alphabet on them and are being physically active. The latest brain research was used in the development of Learnercise and you can learn how to develop the whole child utilizing different learning styles. The "Movement & Math" workshop is an activity based workshop. 1. Have the opportunity for Fun, Laughter, Learning, Sharing, through math and movement while your shuffle through the Multiplication sevens. 2. Have the opportunity to move to math concepts. 3. Experience multiplication, division, addition and subtraction through rhythm movement. 4. Participate in fun math movement activities

Session 8

Roanoke Ballroom F

Alicia Graham – Prince Edward County Public Schools

Grade Band:K-5

"The Why and How of Questioning Strategies"

This presentation examines "The Why and How of Questioning Strategies" to help teachers understand their importance for student learning. Websites to enhance students' critical thinking and performance on SOL tests will be shown, as well as, participating in a differentiated activity while practicing questioning strategies.

Session 9

Roanoke Ballroom G

Cindy Norton -

Grade band 3 - 8

Lee County Schools

ALGEBRA AT ANY AGE AT ANYTIME!

This algebra readiness session will prepare teachers to develop an understanding of how to facilitate algebraic thinking in the classroom. Lesson plans, hand-outs, resources, and more will be available. Being engaged and participating in this session will excite you to challenge your students to their utmost potential. This session is geared more for 5th-7th grade, but is easily adaptable to other grade levels

Session 10

Roanoke Ballroom H

Chelyse Miller - Virginia Beach City Public Schools

Co-presenters: Kelly Convirs and Danielle Williams - Virginia Beach City Public Schools

Grade Bands: 3 – 5

Promoting Small Group Instruction through Guided Math

"Guided Math" is similar to "Guided Reading" that has been around for year. This model takes the instruction teachers would do anyway and realigns it to be suited for a Guided Math group that the teacher instructs while others are practicing skills on their own. The groups are flexible and based on similar problem-solving strategies, skill development, and level of mathematics understanding. We hope that attendees will be able to leave understanding the basic ideas of Guided Math as well as ideas to strengthen mathematics reasoning and problem solving while other students work on skill development.

FRIDAY, 8:15 am-9:30 am

Session 11

Crystal Ballroom A

Larry Dorf - ldorf@larsontexts.com Grade band 6 - 8

Blg Ideas Learning

Putting the Mathematical Practices into Action

Want your students to make sense of problems and persevere in solving them? Interested in having them make use of structure? How about modeling and repeated reasoning? Games and activities designed to put those mathematical practices into action will be explored in this engaging hands-on workshop!

Session 12

Crystal Ballroom B

Lori Triplett

Grade band 3 – 8 ltrip1266@yahoo.com

Box Cars & One-Eyed Jacks –

All Hands on Deck - Elementary Math Games

Come prepared to play card and dice games that help your students achieve success in all the operations, problem solving, data management and more. Reproducible gameboards, student samples, journal writing ideas and many strategies will be shared. Great for regular, title 1, after school programs and ELL.

Session 13

Crystal Ballroom C

David Plaxco - Virginia Tech

Grade Bands: 9 – 12, higher Ed, General Interest

Special Case Paper Folding: How Do I Construct a Similar Rectangle?

While eating lunch at a fast food restaurant, I stumbled upon a pattern inherent in paper-folding. From this pattern came a question. The solution to the question proved to be very interesting, providing a context for a problem-based exploration that begins with a seemingly innocent question and eventually reaches the Golden Rectangle!

Session 14

Crystal Ballroom D

Galeet BenZion Pre-K – 2

Metacognitive approach for teaching number sense with full inclusion ESOL.

This presentation features a methodology developed at Beech Tree Elementary for catching up K-2 grade immigrants on the Virginia math standards. This fully interactive session demonstrates the integration of mathematics literacy, 2/3D visuals, tactile materials and kinesthetic action in teaching number words and number sense as expressed in mathematical notations and visual models.

FRIDAY, 8:15 am-9:30 am

Session 15 Mill Mountain

Pam Bailey Grade band 6 –12 and higher ed

Spotsylvania County Schools Rappahannock Region Association Teachers of Mathematics

Raise the Rigor in Algebra

Participants will learn/apply the levels of cognitive demand to write a "rich task" that has multiple entry points for students. Rich tasks help to make the concepts being learned relevant and at the same time approachable from the student's existing knowledge. Rule of 5, the 5Es, and the NCTM Process Standards will be incorporated in to the discussions.

Session 16 Buck Mountain

Open

Session 17 Monroe

Doug Nichols Grade band 6 - 12

Wythe County Public Schools

Soap Opera Math: Students Writing and Solving Word Problems

"Brent took a deep breath as he reached for the light switch in the darkened room..." Want to know what happens next? So will your students. Get students excited about reading, writing, and solving their own mathematical word problems.

Session 18 Wilson

Brynn Cody Wythe County Public Schools

Valerie Parr - Fairfax County Public Schools

Grade band 9 - 12

Using Manipulatives to Verify Trig Identities

We know that many of our students are concrete learners, but usually concrete teaching ends with geometry. We have a way to connect manipulative use with one of the complex topics in trigonometry – verifying trig-identities. Students will be able to use this manipulative to justify using properties to verify these identities.

Session 19 Harrison

Donna Wilder Grade Bands 6-8,9 –12

In Search of the Critical Pieces

If your goal is to present lessons that incorporate best practices and research-based strategies that engage all learners, come prepared to explore, dialogue and be actively involved during this session.

FRIDAY, 9:45 am-11:00 am

Session 20

Shenandoah A

Ann Wallace -

JMU

Grade Band: 3 – 5

Context Vs. Key Word Approach to Solving Problems

Can real understanding be fostered if a student is looking for one word to tell what operation is to be used or to accept their first impression before they make a decision or judgment? The goal of this session is to help participants 1. understand key words as situational descriptions and 2. learn that key words do not necessarily tell you what operation to use.

Session 21

Crystal Ballroom

.Diane Leighty - UVA – SCPS

Grade Band 9 –12

The Mathematics Capstone Course

We will discuss this new course, its development, its purpose, and look at the available materials for teaching the course. Participants will be given the opportunity to take an in-depth look at one or more tasks and/or projects created for this course.

Session 22

Appalachian

Pat Gabriel – VCTM and Fairfax County Public Schools

“VCTM Academy” - Sample Presentation

Grade Band: 9 - 12

Is That Normal?

The new Algebra 2 POS requires that students be able to identify the properties of the normal distribution and apply those properties to determine probabilities associated with area under the standard normal curve. In this session we will examine and perform a variety of activities in order to identify these properties, compare sets of normally distributed data using a standard normal distribution and Z scores, represent probability as area under the curve of a standard normal probability and use the graphing calculator and normal probability table to determine probabilities based on Z scores. Be sure to bring your calculator with you.

Session 23

Pocahontas

Jennifer Suh, Padmanabhan Seshaiyer GMU -

Pre-k – 2

Building Foundations for Number Sense: Sharing Rich

Lessons Aligned to the 2009 SOL for K –3 Teachers

In this session a group of experienced K-3 teachers will share rich resources created through Lesson study that focused on the 2009 SOLs. The presenters participated in a math content institute through GMU's Center for Outreach in Mathematics Professional Learning and Educational Technology (COMPLETE) and designed web-based modules that highlights modeling and assessment strategies to share with other Virginia teachers.

FRIDAY, 9:45 am-11:00 am

Session 24

Roanoke Ballroom A

.Carol Knight Mathematics Supervisor

Prince William County Schools

Grades: 3 - Algebra I

Representations for Multiplication that Work from 3rd grade to Algebra 1

Description: See the power of using the same representations for multiplication from 3rd grade to Algebra I. See how they work for wholes, mixed numbers, and polynomials.

Session 25

Roanoke Ballroom B

Kathleen Judge Math Coach, Rippon Middle School

Co-Presenters: Sara McLaughlin, Math Coach, Graham Park Middle School, **Patty McGraw**, Math Coach Beville Middle School Prince William County Schools, Grade Bands 4-6, 6-8 Target audience: Teachers Grade 6;

Presentation Title: Beyond Invert and Multiply... Strategies for Representing Multiplication and Division of Fractions

This session will assist new and experienced 6th grade teachers in deepening their understanding of the new standard 6.4: modeling multiplication and division of fractions. Real-life scenarios set the stage for a variety of ways to graphically represent both operations. Hands-on investigations, discussions, and instructional ideas are presented.

Session 26

Roanoke Ballroom E

Barbara English - Pre – K -12

Math Moves Me: Let's Get Ready to NUMBERS

GeoMotion Group, Inc

This session features method-a-minute activities to reinforce the math concepts you and your students are being held accountable for. You can use math concepts, highlighted with music and movement and generate measurable outcomes. It's a fun and active session so come prepared to be involved. Objectives:As a result of attending this session, participants will: 1. Have opportunities to participate in math and movement activities; 2. Have at least 3 new or enhanced ideas to add to their curriculum and classroom activities; 3. Be apprised of the outcomes and research behind these activities; 4. Be reminded of the brain research about activating the brain for higher level learning; 5. And have opportunities to laugh, learn, and share with Learnercise and "Surfin Through The Sevens.

FRIDAY, 9:45 am-11:00 am

Session 27 **Roanoke Ballroom F**

Don Balka

St. Mary's College, Indiana

Using Manipulatives in the Algebra Classroom

Participants will be involved with several hands-on materials to provide practice on algebra ideas: order of operations, exponents, solving linear and quadratic equations, integer arithmetic, multiplying monomials and binomials, and many others. Materials will be provided.

Session 28 **Roanoke Ballroom G**

Pamela Haner St. Catherine's School (independent)

Grade band 6 - 8

Make Math Count

Learn about the free Mathcounts Club Program where students compete for Silver and Gold Level recognition. These challenging, often cross-curricular activities can be incorporated into the classroom, helping to prepare your students for the new standards. Emphasis will be on number theory, including factors and multiples.

Session 29 **Roanoke Ballroom H**

Chelyse Miller

Co-presenter; **Kelly Convirs - Danielle Williams**

Virginia Beach City Public Schools -

Grade band 3 – 5

Promoting Small Group Instruction Through Guided Math

“Guided Math” is similar to “Guided Reading” that has been around for years. This model takes the instruction teachers would do anyway and realigns it to be suited for a Guided Math group that the teacher instructs while others are practicing skills on their own. The groups are flexible and based on similar problem solving strategies, skill development, and level of mathematics understanding. We hope that attendees will be able to leave understanding the basic ideas of Guided Math as well as ideas to strengthen mathematics reasoning and problem solving while other students work on skill development.

FRIDAY, 9:45 am-11:00 am

Crystal Ballroom A

Session 30

Natisha Knight

Co-presenter **Nakisha Winston**, Richmond Public Schools

Grade Band 3 - 5

Success with the New Standards

Math is fun and in this session, this will be proved beyond a reasonable doubt. Participants will be engaged in activities that focus on the newly introduced standards for grades 3-5. The activities are easily adaptable to promote differentiated instruction

Session 31

Crystal Ballroom B

Lori Triplett Grade band Pre-k -2

boxcars@telus.net ltrip1266@yahoo.com

Box Cars & One-Eyed Jacks Shuffling into Math - Primary Math Games

Come prepared to play card and dice games that help your students achieve success in numeration and place value, patterning, and the operations. Strategies, reproducible game boards, student samples and more will be shared. Ideas for math backpacks too. Great for regular, ELL and title 1 programs.

Session 32

Crystal Ballroom C

Kim P. Loucks -and **Carolyn Hirst-Loucks**

Teaching and Learning Connected

Grade Bands: General Interest

Serious Fun in the Mathematics Classroom

Fun, fun, fun, till our daddy takes our calculator away! Recent research is showing that an element of fun needs to be an integral part of our K –12 instruction in schools. Using humor, a teacher can have it all, the development of knowledge, a spirit of inquiry, and a sense of creativity and conceptual understanding. This sounds like what we want for the mathematics' learning environment.

Session 33

Crystal Ballroom D

Jen King Henrico High School

Grade Band 6 –8, 9 –12

Flexible Activities for Any Content

Come see a multitude of suggestions on how to change how the students practice the content that we're all required to teach. Most of my suggestions can be manipulated to suit any subject area. If students are enjoying the activity they will enjoy learning, and will have a higher chance of remembering it.

We have ideas to improve your students' understanding of place value, addition and subtraction with simple "In the Circle" activities.

FRIDAY, 9:45 am-11:00 am

Session 34

Mill Mountain

Open

Session 35

Buck Mountain

Barb Freeman - Poquoson Public Schools

Grade Band: General interest

Math in India

Hear about observations that I made and math I learned while touring Indian schools and colleges last November. Learn about multiplying by 11 mentally and some uses. Learn about counting in Hindi and other Vedic Math concepts

Session 36

Monroe

Beth MacDonald, Virginia Tech

Grade Bands Pre-K – 2, Preservice/Inservice/General Interest

Children's Construction of Number: Building New Ideas about Computational Fluency

In this session you will observe children counting and discuss the different stages of thinking that are being exhibited. Activities and games centered on number sense and computation will be explored to provide a forum to further discuss why educators need to know what children know about number.

Session 37

Wilson

Rachael Cofer, The College of William and Mary

Grade Bands 6 – 8

Making Sense of Proportional Reasoning

Making sense of proportional reasoning is a difficult concept for students. Participants will learn some of the theory and participate in activities/strategies that can be used with instruction for middle school students for this topic. Making proportional reasoning meaningful will lead to conceptual understanding of topics including fractions, decimals, and percent.

Session 38

Harrison

Ann Drobnis - Fairfax County Public Schools

Grade Bands: 6 – 8, 9-12, Higher Ed

What's Going on With computer Science Nationally? By 2018, IT job growth is projected to outstrip production of computing degrees 3 to 1, and computational skills will be needed for more STEM jobs. I describe a national effort to increase enrollments in computer science with two exciting new underrepresented populations (including girls).

FRIDAY, 11:15 am-12:30 pm

Session 39 Shenandoah A

Melissa Tilashalski -Virginia Tech

Grade Bands 6 – 8, 9-12

Using Algeblocks to Discover Perimeter, Area, Surface Area and Volume

Teachers will participate in an Algeblock activity that allows students to discover area, perimeter, surface area and volume of irregular shapes. Emphasis will be placed on creating engaging classroom discourse, generalizing patterns to formulas, and making connections between concepts. Participants will receive instructions for the activities!

Session 40 Crystal Ballroom E

Candie C. George Mecklenburg County

Grade bands Pre-K – 2, 3 –5, 6 – 8

Aligning the stars to Make Math Fun and Exciting!

Liven up your math classroom! Come join the fun and learn simple, exciting activities to engage your students in mathematics. Activities include grades K – 5 and may even be adapted for middle school math!

Session 41 Appalachian

Heather Smith-Reeps Co-presenter: **Jennifer Hackley**

Math Coaches, VCTM and Staunton City Schools

Grades K-2

“VCTM Academy” - **Sample Presentation**

Using Mathematical Models to Develop Number Sense in

Do you have a rekenrek math rack tucked away somewhere in your classroom, but haven't learned how to use it? Have you printed off sheets of dot cards and ten frames, but aren't sure you're using them correctly? Do you have a hundreds chart that goes unused most days? When working with fractions, are you unsure about which manipulative to use when? Using models as part of your daily mini lesson is one of the most effective ways to help children develop a sense of whole numbers and represent and use numbers in flexible ways. This workshop will teach you how get the most out of these powerful, mathematical models as well as how they connect to math content.

Session 42 Pocahontas

Clara Hauth, Co-presenters: Jo-Anne Carra and Linda Gillen Fairfax County Public Schools
Grade Band 6 – 8

Taking the “Testiness” Out of High Stakes Assessments

This workshop focuses on the creation of theme based comprehensive reviews for end-of-year state assessments. Themes include “Cruisin’ thru Math” and “The Mathematics Road Trip”. The workshop will include instructional strategies, “hands-on” activities and planning tools to help make your review sessions appropriate and successful for all learners.

FRIDAY, 11:15 am-12:30 pm

Session 43 **Roanoke Ballroom A**

Padmanabhan Seshaiyer; Toni M. Smith GMU, Co-presenters: **Joe Adelman**, Fairfax County Public Schools; **Jennifer Suh**, GMU;

Nathalia Piexoto, GMU

Grade Bands: 9 –12

Expeditions in Science, Technology, Engineering, education, and Mathematics (ESTEEM)

This session will introduce the ESTEEM program and will share work that teachers did in their classrooms as part of that program. After having engaged in a week-long summer institute designed to develop their understandings of STEM connections, high-school teachers(1) designed lessons focused on those connections and (2) conducted lesson studies to study the impact of their lessons. Lessons will be shared

FRIDAY, 11:15 am-12:30 pm

Session 44 **Roanoke Ballroom B**

KEYNOTE SPEAKER Deborah Wickham,

VA Dept. of ED

Arithmetic, Algebra, and the Process Skills: *The SOL and Beyond*

I will address certain mathematics SOL K-5 that link arithmetic understandings to algebra and how the process skills impact rigor. Concepts relating to properties, patterns, and functions that rely on arithmetic are explored using problem solving, connections, and representations.

Session 45 **Roanoke Ballroom E**

David Hartmann

Grade Bands: 6 – 8, 9 –12

Numeracy Works Tabula – A New Geometry Instruction Tool For Hands-On Learning

Tabula is a new dynamic geometry program that facilitates learning through manipulation. Attendees will be shown how to use Tabula to explore geometry, test conjectures, model instrument use, and accompany hands-on activities involving folding, cutting, taping, and measuring. Attendees will receive a free Tabula license. More @ numeracyworks.com

FRIDAY, 11:15 am-12:30 pm

Session 46 Roanoke Ballroom F

Dr. Jeffrey J. Steckroth

Christopher Newport University

Grade Bands: 9 –12 and Higher Ed

The AC Method: A Tale of Three Functions

Factoring Quadratic Trinomials where $a > 1$ is easy if one uses the AC Method. Many teachers and students use this method, but few understand why it works. Thanks to a novel graphical approach made possible by dynamic geometry software, the secret of this method has been exposed. The presenter will share his findings both graphically and algebraically to finally answer the question, "Why does the AC Method Work?"

Session 47 Roanoke Ballroom G

Jennifer Orr – Fairfax County Public Schools

Co-presenter: **Valerie Skinner**: GMU

Grade Bands: Pre-K – 2

Little Ones Learning Math Using Technology

Learn ways to use technology (computers, cameras, interactive whiteboards, and document cameras) to help young students (K – 2) build number sense and other mathematical knowledge. Students work samples will be shared as well as movies made by students.

Session 48 Roanoke Ballroom H

Sue Schulz, Virginia Tech

Co-presenter: **Jenny Conrad**, Montgomery County Public Schools

Grade bands: Pre-K –2, 3 – 5

Making Guided Math Work

Small group instruction is often suggested for effective outcomes, but how do you make it work? What are the other students doing while you are working with a small group? A fourth grade teacher and a math specialist explain why and how they structure math groups. Organizational resources will be shared.

Session 49 Crystal Ballroom A

Eric Allan West Blacksburg New School

Grade Band: 6 –8 and General interest

Beyond Sudoku: An Introduction to Japanese Logic Puzzles

Sudoku is just the tip of the iceberg of Japanese logic puzzles! Like Sudoku, these puzzles are easy to learn yet satisfying to solve. Discover such classics as Hashi, Akari, Shikaku, and Slitherlink and see how they can be used as proof-readiness activities that encourage stronger problem-solving and deductive reasoning skills. <http://goo.gl/6gxzS>

FRIDAY, 11:15 am-12:30 pm

Session 50

Crystal Ballroom B

Lori Triplett ltrip1266@yahoo.com boxcars@telus.net

Grade band 3 – 8

Box Cars & One-Eyed Jacks

Power Play - Games for Teaching Place value Power Play - Games for Teaching Place Value

Come prepared to play games that incorporate the use of cards and multi-sided place value dice. Games and strategies focus on: comparing, ordering, and reading large numbers, expanding and rounding numbers, patterning. Reproducible game boards, student samples and many strategies will be taught to help with this important part of the curriculum.

Session 51

Crystal Ballroom C

Carolyn Hirst-Loucks

Co-Presenter: **Kim P. Loucks** - Teaching and Learning Connected

Grade Bands: General Interest

Mathivators: Motivational Tools for success in Mathematics

Consider this: "Students should learn to appreciate the beauty and the joy of mathematics..." Mathivators are designed to do just that! Experience activities, strategies and projects you can use to help motivate your students so that they can truly appreciate and get pleasure from mathematics. Learn ways to expand your repertoire of instructional strategies and support rigorous, successful mathematics instruction.

Session 52

Crystal Ballroom D

Brooke Lancaster – Fairfax County Public Schools

Co-presenter: **Susan Brooks**: Prince William County Public Schools

Grade bands: 6-8

Breathe New Life into Your Math Classroom

Ready for strategies that you can implement immediately into your classroom? Join us to learn about items you can use instantly from make-and-take activities to organization to reproducible differentiated notes. Strengthen your classroom and department by learning effective peer coaching methods in order to take your students to the next level.

FRIDAY, 11:15 am-12:30 pm

Session 53

Mill Mountain

Karen Creech Loudon County Schools

Grade bands: 3 –5, 6 –8, General Interest

How Square are You? And Proportional Reasoning?

This presentation will engage participants in a hands-on activity to answer: HOW SQUARE ARE YOU?" Actively explore the one to one ratio of a square with your peers through in depth discussion that develops proportional reasoning and rational number concepts. Reflect on student thinking during the same lesson through a display of a variety of student samples and lesson study. You will walk away looking at problem solving differently!

Session 54

Buck Mountain

Danielle Steelman -

Co-presenter: **Penny Parker**: Prince William County Public Schools

Grade bands: 6 –8

Exploring Measures of Center and Mean as a Balance Point

Participants will explore activities designed to deepen students' understanding of central tendencies. SOL objective 6.15 will be the focus of the presentation, and participants will leave with prepared lessons to explore these concepts with their students.

Session 55

Monroe

Andrienne R. Setorie

Prince William County Schools

Grade Bands: PreK-2, 3-5, 6-8, General Interest

Count Us In Too! Mathematics Recovery for ALL Students

Participants will be exposed to hands-on, minds-on mathematics strategies that were traditionally used to help Title I Math Recovery and small group pull-out students be successful. They will learn how to use these strategies in a classroom setting to address the needs of students of all ability levels. Information on the Title I Pre, Monthly and Post Assessments will be shared. Teachers will discover how to use Math Recovery assessments to diagnose and provide intervention and instruction to meet the specific needs of their students. Participants will be provided information on the Learning framework in Numbers and how it is used to level students and to provide differentiated instruction to help build strong math foundations. Workshop discussions will focus around: 1. the importance of using questions to understand how children think and reason mathematically, 2. an examination of conceptual vs, procedural knowledge, and 3 the significance of educators reflecting on teaching practices and upon how they can become change agents in their classrooms. Attendees will receive a math packet containing information on sample math activities and task cards, ideas for math stations that develop and promote numeracy, and a list of online resources that promote early numeracy.

FRIDAY, 11:15 am-12:30 pm

Session 56

Wilson

Mandy Collier – York County School Division

Grade bands: 6 –8, 9 – 12, Higher Ed

Using Mobile Devices in the Math Classroom

Participants will learn ways to use iPads, iTouches, and other mobile devices in the classroom to present lessons, assess students, and to communicate to parents. Application such as iAnnotate and i-nigma and websites such as Polleverywhere.com, Socrative.com, todaysmeet.com will be presented. Please bring iPads, laptops, iTouches or any mobile device to use.

Session 57

Harrison

Cheryl Jaffe

Education Outreach Liaison with Northrop Grumman Grade Bands: 3 –5, 6 –8

Breaking the Algebra Barrier – with Arithmetic

Why do the digits of a multiple always add to 9? Students often perceive algebra as disconnected from their prior math learning, yet nothing could be further from the truth. Teachers will investigate techniques to re-organize knowledge of arithmetic, and harvest familiar concepts for the connections that support transfer of skills to algebra.

Session 58 - Open

**LUNCH BREAK Pick up your lunch in Hotel
North Entry Foyer**

**VCTM Annual Meeting 12:45 – 1:05 in
Washington Room**

Notes

FRIDAY, 1:30 pm-2:45 pm

Session 59

Open

Shenandoah A

Session 60

Open

Crystal Ballroom E

Session 61

Appalachian

Brenda Barrow VCTM and Old Dominion University

“VCTM Adacemy” – Sample Presentation

Grade Band: 3 - 5

Data Does Definitely Determine Decisions

Come and participate in activities for collecting data that are fun and real life that you can use with your students to help them see how relevant data collection is to their decision making. Come have fun!

Session 62

Pocahontas

Michele Bowman

Co-presenter: **Nikki Wright**; Fairfax County Public Schools

Grade Bands: 3 –5, 6 –8

“Base”ic Math

There are 10 kinds of people in the world – those who understand base two and those who don’t. Come learn which type you are. See how students work in different number bases to help them better understand our own base ten system. You’ll walk away with ideas and handouts that you can use immediately in your classroom.

Session 63

Roanoke Ballroom A

Courtnee Austin

Petersburg Public Schools Co-presenters:

Grade Bands: General Interest

Professional Development That Works: Teachers Share Their Lesson Study Journeys

Hear from teacher first hand about how they took ownership for their professional learning through lesson study cycles – collaboration with other teachers to plan lessons, exchange best instructional practices and explore effective uses of tech-knowledgey – all to enhance student learning.

FRIDAY, 1:30 pm-2:45 pm

Session 64 Roanoke Ballroom B

Art Stoner A+ Tiles- 100 Boards for grades 2-12!

Explore properties of real numbers, patterns, sequences, linear equations and more.

Attendees will receive free sample materials. This material is associated with specific standards at a variety of grade levels. This is a very "hands-on" presentation with several sample activities that can may the way you present a variety of topics.

Session 65 Roanoke Ballroom E

Mandy Robinson

Co-presenters: **Pilar Campodonico, Madeline Saylor, Mallori Kiryluk, Andrea Balarezo, Kelly Desrocher**

Prince William County Schools and GMU

Grade Bands: Pre K – 2

Does Order Matter? Exploring the Commutative Property in the Second Grade

Prince William County teachers present the lesson study process. Vignette will show second graders exploring the commutative property of addition

Session 66 Roanoke Ballroom F

Cindy Cooper

Co-presenters: **Jeff Firman, Kristina Anthony** Fairfax County Public Schools and GMU

Grade Bands: 6 – 8

Exploring Division of Fractions with Sixth Graders

This session summarizes a lesson study with a problem-based lesson dealing with a measurement context for division with fractions. As teachers, we were interested in how students approach and model unfamiliar situations, and what other mathematical ideas students consider as they begin dividing fractions.

Session 67 Roanoke Ballroom G

Jennifer Orr

Fairfax County Public Schools,

Grade Band: General Interest

Thinking about Thinking: Process and Content Matter

There are four universal patterns in our thinking. These patterns are especially helpful in math. Thinking about identity (what something is and is not), part/whole, and relationships are critical for children developing an understanding of mathematical concepts. This session will discuss these patterns and share videos of teachers using them

FRIDAY, 1:30 pm-2:45 pm

Session 68

Roanoke Ballroom H

Priscilla Cessna -

Co-presenters: **Virginia Bolton, Chad Elmer, Jen McPherson, Paul Mills, Tori Violetta:**
Prince William County Schools

Grade Bands: 3 – 5

The Staircase Problem Lesson Study

As part of the group's lesson study, the group decided to focus on whether or not students shift from simple counting to a more flexible counting in solving a problem. Students were presented with a math problem that involves a growing pattern. The fifth grade students were instructed to figure out how many snap cubes it would take to make 10 steps in a staircase that is one cube wide. Students were asked to figure out the total number of snap cubes without counting the cubes one by one.

Session 69

Crystal Ballroom A

Nancy A. D. Jones Richmond Public School System

Stary Success Through Problem Solving, Reasoning, Communication, Representation, and Connections!

The presentation focuses on facilitating learning utilizing manipulatives, games, activities, and mathematical tasks. Enhance learning of real world experiences incorporating the skills of problem solving, communication, representations, connections, and reasoning. Experience new strategies to strengthen students' ability to master the SOL objectives. Grade band 6 - 8

Session 70

Crystal Ballroom B

Rebecca Ward

Co-presenter: **Branch Wyatt Pronk** – Stafford County Public Schools

Grade Bands: 3 – 5

Proving the Properties

The session will focus on performance based lessons and assessments that will develop the commutative, associative and distributive properties along with how the primary grades set a foundation for these properties with the concept of equality. Through the process standards, these mathematical concepts will be discovered by students.

Session 71

Crystal Ballroom C

Gregory Fisher Winston Salem Forsyth County Schools in NC

Grade Bands: 6 – 8 and 9 – 12

20 Engaging Activities for any Math Class (5 – 12)

This presentation will introduce 20+ activities that can be used in any math classroom for review. The activities are great for getting to students to work problems. Participants will also learn some new math songs and project ideas.

FRIDAY, 1:30 pm-2:45 pm

Session 72

Crystal Ballroom D

Vandi Hodges – VCU

Co-presenters: **Vickie Inge**, UVA and **William Haver**, VCU

Grade Bands: Pre-K –2, 3 – 5, 6 – 8, Higher Ed

Taking Aim to Help All Teachers Reach Beyond the Stars

Mathematics Specialists and Teacher Leaders working together with their principals can make a tremendous difference in student achievement. We will focus on materials that Math Leaders can share with their principals as they collaborate to maintain a school wide focus on Problem Solving, Reasoning, Communication, Representations and Connections.

Session 73

Mill Mountain

Margaret Coffey

Fairfax County Public Schools

Grade Bands: 6 – 8, 9 – 12

Beyond Pi: Helping Students Develop an Understanding of Irrational Numbers

Most students know pi is irrational, but some can't name or describe any other irrational number. We'll explore ways to describe irrational numbers. Then workshop participants will work individually and in groups with geoboards, origami paper, and adding-machine tape to create models that make sense of irrational numbers.

Session 74

Buck Mountain

Steven Boyce – Virginia Tech

Co-presenter: **Andrew Nicholas**, Virginia Tech Grade Bands: 3 – 5, 6 – 8

Worthwhile iPod Apps

Kids love apps, but some “educational” apps are little more than video games. We will share a rubric for evaluating apps and a list of good apps. Participants will engage in gameplay with some favorites. Our focus is on iPod apps supporting the teaching of upper-elementary and middle school SOLs

Session 75

Monroe

Kathleen M. Morris

Co-presenter: **Andrienne Setorie**, Prince William County Schools

Prince William County Schools –

Grade Bands: Pre-k – 2, 3 – 5

I'm the New Math Coach! Now What?

You have agreed to be a math coach in your elementary school. Where do you begin? Members of a Title I Coaching PLC discuss their ongoing journeys in establishing their roles as elementary math coaches, including how they are working to pave the way with administrators and teachers to successfully effect change in teaching and student learning.

FRIDAY, 1:30 pm-2:45 pm

Session 76

Wilson

.Richelle C. R. Dietz

Co-presenters: **Karen Keene**, PhD,

Krista Holstein – NC State University

Grade Band: 9 – 12

When Will We Ever Use This? Examples of Real World Mathematics

We provide authentic examples of mathematics in the real world that can be used in the classroom. The examples employ engineering tools and require students to make decisions about issues in industry, government, or students' daily life. Participants in this session will work on the examples and receive materials for Algebra II and above classes

Session 77

Harrison

Open

Session 78

KEYNOTE SPEAKER

Washington

Michael Bolling,

Mathematics Coordinator, VDOE

Level: K-12

New Mathematics SOL Assessments and Your Classroom
With the implementation of the 2009 Mathematics Standards of Learning (SOL) comes new assessments that reflect the rigor of the new SOL, new content, and new ways for students to show their understanding. This session will highlight supports available from the VDOE, examine the new assessments, and reflect on effective practices for instruction and assessment in the mathematics classroom.

FRIDAY, 3:00 pm - 4:15 pm

Session 79

Shenandoah A

Open

Session 80

Crystal Ballroom E

Dr. Agida Manizade

Co-presenters: **Stephanie Brady, Dr. Laura Jacobson, Patsy Dickerson, Levi Jaynes** – Radford University

Grade Bands: 9 – 12, Higher Ed

Lessons Learned: Radford University Mathematics and Science Partnership Project

In this interactive session, a group of mathematics teachers who participated in Radford University Mathematics and Science Partnership Project and RU faculty will present hands-on & technology-based activities based on VA Mathematics Performance Expectations and SOL objectives related to the Capstone and Geometry courses. All participants will receive CDs with presented activities/handouts.

Session 81

Appalachian

Brenda Barrow, Old Dominion University

Grade Band: 3-5

Melodies, Methods, and Models that Make Math Marvelous and Meaningful

Come have fun and get ideas that will help students be excited about becoming real problem solvers and Math Lovers! Experience activities you can use with your class to make math meaningful, real and fun. Get a packet with many ideas and a free math songs CD.

Session 82

Pocahontas

Nikki Wright – GMU – COMPLETE – Fairfax County Public Schools 83

Co-presenters: **Michele Bowman, April Cooke, Eileen Donahue, Jeanette O'Malley** – All from the GMU – COMPLETE (FCPS)

Grade Bands: 6 – 8

Developing Flexibility in Student Problem Solving Strategies Using fractions

See teacher collaboration in action! Come explore how teachers from different grade levels teamed to create a lesson in which students recognize the changing unit within the problem and how that can be shown numerically with equivalent fractions. Hear the perspectives of 4th – 7th grade math teachers.

FRIDAY, 3:00 pm- 4:15 pm

Session 83 Roanoke Ballroom A

Sarah DeLeeuw – NCTM

Grade band: 6 - 8

Using Games to Encourage and Enhance Students' Learning in the Middle Grades

Gain hands-on experience exploring games and extensions. Walk away with a ready to use collection! Learn how to facilitate guided reflections with your students on the mathematical content and strategies associated with each game

Session 84 Roanoke Ballroom B

Victoria Bohidar

Co-presenters: **Kimberly Bender, Kathryn Munson** – Chesterfield County Public Schools

Grade Bands: Pre-K – 2, 3 – 5

Algebra: The Missing Variable in Elementary School Mathematics

Algebraic thinking begins in kindergarten and progresses throughout elementary school. Explore ways to encourage algebraic thinking through engaging, hands-on activities. The speaker will discuss ideas for using technology while exploring algebra, including Web sites, PowerPoint, and apps for the iTouch.

Session 85 Roanoke Ballroom E

Daniel E. Schroll Loudon County Public Schools Grade Bands: Pre-K – 2, 3 – 5

Learning Fractions Cooperatively

Come explore ways to bring early conceptions of fractions to life with cooperative learning activities. Participants will take away activities that they can use to help all students have a better understanding of fractions.

Session 86 Roanoke Ballroom F

Patricia Caldwell-Wilson Mathematics Resource Teacher (LCPS) -

Co-presenters: **Trudy Fields, Larissa Peluso-Fleming** – Loudon County Public Schools

Grade Bands: 3 – 5, 6 – 8

Modeling fractions: Deepening conceptual Understanding using Visuals and Manipulatives

Even with computational proficiency, students often lack a deep conceptual understanding of fractions. NCTM's Principles and Standards for School Mathematics states that developing mathematics fluency requires a balance and connection between conceptual understanding and computational fluency. This workshop will explore modeling addition, subtraction, multiplication, and division of fractions using area, linear, and set models.

FRIDAY, 3:00 pm- 4:15 pm

Session 87 Roanoke Ballroom G

Ted H. Hull, University of Texas, **Don S. Balka** - St. Mary's College – Indiana, **Ruth H. Miles** - Mary Baldwin College - VA

Grade band Pre-k -8

Visible Thinking in K-8 Classrooms

Do you ever wish your students could read each other's thoughts? Now they can—and so can you! Veteran mathematics educators Ted Hull, Don Balka, and Ruth Harbin Miles will explain why making students' thought processes visible is the key to effective mathematics instruction. They will share a variety of grade-specific problems and instructional strategies for teaching essential concepts such as number sense, fractions, and estimation.

Session 88 Roanoke Ballroom H

Jonathan Schulz Montgomery county Schools

Grades 3 – 5 and 6 – 8

Analyzing the New Sol Testing Blueprints

Description: The Sol Testing Blueprints have been revised along with the 2009 Mathematics Standards of Learning, resulting in significant changes to the structure of the SOL Tests for Spring 2012. This presentation will detail the changes for grades 3 – 8 and highlight their implications for instruction

Session 89 Crystal Ballroom A

Kellie Worrell 7th Grade Math Teacher, St. Paul School, Carroll County, VA

Grade Band :3-12

TECHNECESSITY: Why You Can't Reach Today's Learners Without Technology

Technology is no longer a way to enhance your lessons, but rather has become a necessity for reaching today's learners. Examine why this generation REQUIRES technology to learn, and take home practical, easy implementation strategies to make your classroom relevant and effective with our current generation of learners. Presented by the developer of a math app, BrainStars, which is available on iTunes.

Session 90 Crystal Ballroom B

Beth Moore

Co-presenters: **Elizabeth Alvarez, Cheryl Ayers, Alise Brooks** – Prince William County Schools

Grade Bands: Pre-K – 2, 3 – 5

Running Laps and Solving Problems Lesson Study

We will be presenting the math lessons that were developed and used to address students of all levels which allowed them to participate in inquiry-based activities. The students used different strategies to solve word problems. We will discuss the lesson study process and the need to diversify story problems to illicit inquiry-based thinking.

FRIDAY, 3:00 pm- 4:15 pm

Session 91

Crystal Ballroom C

Laura Beller, Curriculum and Instruction Specialist, TTAC @ ODU

Co-presenter: **Linda Hickey** – JMU

Grade Bands: Pre-K – 2, 3 – 5, 6 – 8, 9 – 12

Math Coaches....How can we help you?

The work of a mathematics coach involves collaboration and reflective practice. In this session you will be introduced to practices and resources designed to assist you as you share strong research based instructional practices that help teachers grow, and improve math learning in their classrooms. You will take away tools designed to aide you as you observe classrooms and help educators reflect on their teaching.

Session 92

Crystal Ballroom D

Joy Whitenack -

Co-presenter: **Vickie Inge**, UVA Grade Bands: Pre-K – 2, 3 – 5, Higher Ed, General Interest

Supporting K-5 Mathematics specialists' work: Some Stories from the Field

In this session we address hoe course activities (e.g., lesson study, conducting building principal interviews, planning and implementing professional development for building teachers) in the Mathematics Specialist Program have supported program participants' daily work as they transition into and continue their work as mathematics specialists.

Session 93

Mill Mountain

Open Heather Overstreet

Bedford County Schools

Grade Bands: 9 – 12

Navigating Statistics with the TI-Nspire

This session will explore the Nspire Navigator in the Statistics classroom. Activities using the Navigator will include using the Nspire and Navigator as a "clicker", presenter, homework collector, and progress monitor

Session 94

Buck Mountain

Lynn Foshee Reed Grade band : 9-16

From Feather Boas to Mathematical Dances: What I Learned at the 2012 Joint Mathematics Meetings!

Come hear about how folk dances demonstrate group theory and how feather boas can be used to illustrate limits. Explore excellent & free resources for blending geometry and the art of M. C. Escher. Learn how to set up a

Pi-athlon as well as a Mathematical Amazing Race for your school. I will share all this and more from the January 2012 Joint Mathematics Meetings in Boston.

FRIDAY, 3:00 pm- 4:15 pm

Session 95

Monroe

Christine Gault

Co-presenter: **Tori Violetta** – Prince William County Schools

Grade Bands: General Interest

Accelerating Professional Growth through Lesson Study

Three years of lesson study packed into one!” During this session the presenters will engage the audience in a discussion on how Lesson Study can benefit all educators and provide the necessary professional development needed in our schools. Lesson Study allows us to peer into the classroom next door and build the Professional Learning Communities desired in our schools.

Session 96

Wilson

Dr. Betti C. Kreye – Virginia Tech 96

Co-presenter: **Dr. Kris Tilley-Lubbs**, Virginia Tech Grade Bands: 6 – 8, Higher Ed

Planning effective Mathematics Lessons for English

Language Education

In this session we will share information learned from collaborative work between mathematics education and second language education pre-service teachers. Effective lesson planning and instructional strategies will be discussed.

Session 97

Washington

Michael Bolling

Mathematics Coordinator, VDOE

Level: K-12

**Presidential Award for Excellence in Mathematics and Science
Teaching – Ready for the Challenge?**

Description: This session will provide an overview of the application process, written and video components, and tips for producing a more competitive application and avoiding common mistakes.

**VCTM Awards Dinner 6:30 – 8:30
Shenandoah B**

SATURDAY, March 10, 2012 Conference Program Overview

Room (Capacity/ LCD Projector, Doc Cam, Wi-Fi)	8:15-9:30	9:45-11:00	11:15-12:30		
Shenandoah A 60 LCD/ Doc Cam Wi-Fi	# 98 Kevin Judd Whizz Education Grade Bands: Pre-K – 2, 3 – 5, 6 – 8 Math Whizz: The perfect digital tutor	# 117 Kevin Judd - Whizz Education Grade Bands: General Interest Solving for X's and whys: Research into Practice	# 136 Suyi Chuang - Loudoun County Public Schools Co-presenter: Kimberly Morrow Leong – GMU Grade Bands: General Interest Making the Most of Classroom Discussion Around and Open Task		
Crystal Ballroom E 90 LCD/ Doc Cam Wi-Fi 90 LCD/ Doc Cam Wi-Fi	# 99 Padmanabhan Seshaiyer - GMU 99 Co-presenter: Jennifer Suh, GMU Grade Band: 6 – 8 Fostering algebraic Connection through Proportional Reasoning	# 118 Leslie Steele Jennifer Suh – GMU, Sarah DeLeeuw – GMU, Padmanabhan Seshaiyer – GMU, – Petersburg City Schools Grade Bands: General Interest Collaboration is the Key to Success!	# 137 Sarah DeLeeuw National Council of Teachers of Math Grade Bands: 3 – 5, 6 – 8 Developing Reasoning and Sense-Making with NCTM's FREE Online Resources		
Appalachian 60 LCD/ Doc Cam Wi-Fi	# 100 Open	# 119 Rudy Neufeld - Neufeld Learning Systems Inc. – Senior Author Grade bands 3 – 5 Build It, Write It, Talk It. Now You OWN IT!!	# 138 Jim Brady - Loudoun County Public Schools Grade band: K-12 Technology: It Might Be Your New Best Friend		

	8:15 -9:30	9:45 – 11:00	11:15 – 12:30		
Pocahontas	# 101	# 120	# 139		
90 LCD/ Doc Cam Wi-Fi	Natalina Bell - Price William County Schools Co-presenters: Kathy Perrow, Alex Erhard, Keisha Smith – PWCS Grade Bands: 6 – 8 Using Lesson Study in Proportional Reasoning	Kimberly Morrow Leong - GMU Grade Bands: 3- 5, 6 - 8 Modeling Multiplication and Division with Fractional and Decimal Numbers	Teresa A. Morrison – Voyager Learning Grade Bands: 3 – 5, 6 – 8 Helping Struggling students Reach Their Star Math Potential		
Roanoke Ballroom A 100 LCD/ Doc Cam Wi-Fi	# 102	# 121	# 140		
	Anne Blevins - Carolina Curriculum Consultant Grade bands: Pre-K – 2, 3 – 5 Don't Forget the M in STEM: A Focus on Literacy in the Math Classroom	121 Amy Hickey – Prince William County Schools Grade Bands: 9 – 12 Z-scores and Standard Deviations and Normal Curves, Oh My!!	140 M. Ashley Harris - Amelia County Public Schools Co-presenter: Dorothy Bradshaw Looking Glass Shapes		
*Roanoke Ballroom B 100 LCD/ Wi-Fi	# 103	# 122	# 141		
	Patricia Freeman - GMU Co-presenter: Linda Gillen - FCPS, Rae Perry – FCPS, Candice Ives – LCPS Grade Bands: 3 –5, 6 - 8 Do the Math! Cognitively demanding tasks that reveal the algebra in arithmetic	Amy S. Lamb - Northumberland County Public Schools Co-presenters: Adam Letizia, Javondra Ashton, Gliziel Gonzales Grade Bands: 9 – 12 Implementing the Senior Math Capstone Course	Jarrod Lisker Powhatan County Schools Co-presenter: Lisa Simonick, Lois Paris – Powhatan County Schools Grade Bands: 9 – 12, Preservice/Inservice, General Interest Are You Nspired?		
Roanoke Ballroom E 40 LCD/ Doc Cam Wi-Fi	# 104	# 123	# 142		
	Kyle T. Schultz - JMU Grade Bands: 6 – 8, 9 – 12 Using Geometric Patterns to Develop Students' Algebraic Thinking	Niki Schieck – Harrisonburg City Public Schools Grade Bands: 3 – 5 Making computation Concrete	144 Heather Topper Loudon County Public Schools Co-presenter: Miriam Morgan – Grade Bands: Pre-K – 2, 3 – 5 Stretch Your Brain with Daily Math Warm-Ups!		

	8:15 – 9:30	9:45 – 11:00	11:15 – 12:30		
<p>*Roanoke</p> <p>Ballroom F</p> <p>34 LCD/ Wi-Fi</p>	<p># 105</p> <p>Jessica Lee Saultz ExploreLearning</p> <p>Grade bands: 3 – 5, 6 – 8, 9 – 12</p> <p>Using Online Simulations to Improve Conceptual Understanding in Math</p>	<p># 124</p> <p>Jessica Lee Saultz - ExploreLearning</p> <p>Grade Bands: Pre-K – 2, 3 – 5, 6 – 8</p> <p>A Video Game That Makes Math Fun: Reflex Math</p>	<p># 143</p> <p>Jeff Bird Salem City Schools</p> <p>Co-presenter: Beth Swain</p> <p>Grade Bands: 9 – 12</p> <p>Computer Math: Meeting the SOLs with Alice</p>		
<p>*Roanoke</p> <p>Ballroom G</p> <p>40 LCD/ Wi-Fi</p>	<p># 106</p> <p>Jamie Gadley - Fairfax County Public Schools</p> <p>Co-presenters: Lindsay Blanchard – FCPS, Larissa Peluso – LCPS, Sonya Bradley – LCPS</p> <p>Grade Bands: 3 – 5, 6 – 8, Preservice/Inservice</p> <p>Teaching Rational Numbers and Proportional Reasoning in the Middle Grades: The Mango Problem</p>	<p># 125</p> <p>Sharon Huber - Chesapeake City Public Schools</p> <p>Co-presenter: Charlotte Riddick - Chesapeake City Public Schools ret. & TCTM</p> <p>Grade Bands: 3 – 5. 6 – 8</p> <p>Meaningful Math Games the SMART Way</p>	<p># 144</p> <p>Angela Culley Charlottesville City Schools</p> <p>Grade bands; 3 – 5, 6 – 8, 9 – 12</p> <p>Moving Beyond Multiple-Choice: Preparing Virginia students for Technology Enhanced Items (TEI)</p>		
<p>Roanoke</p> <p>Ballroom H</p> <p>40 LCD/ Doc Cam Wi-Fi</p>	<p># 107</p> <p>Open</p>	<p># 126</p> <p>Debbie Delozier - Stafford County Public Schools</p> <p>Grade Bands: 3 – 5</p> <p>What's All the Talk About? Putting the Process Standards into Practice</p>	<p># 145</p> <p>Jeremy Utt</p> <p>Secondary speakers – Catherine Schaefer and Regina Harris</p> <p>Grade band 6 – 8</p> <p>Title: Relatively Speaking- Activities to promote proportional reasoning</p>		

<p>*Crystal Ballroom A 40 LCD/ Wi-Fi</p>	<p>8:15 – 9:30 # 108 Patti Schneider - Hanover County Public Schools Co-presenter: Elyse Coleman- Hanover County Public Schools Grade Bands: 3 – 5 Building on Place Value</p>	<p>9:45 – 11:00 # 127 Allison Tait and Shelly Pine Frederick County Public Schools Grade Band: 9 - 12 Using the Process Standards</p>	<p>11:15 – 12:30 # 146 146 Natisha Knight - Richmond Public Schools Grade Bands: 3 – 5 MATH: What is it good for?</p>	
<p>Crystal Ballroom B 40 LCD/ Doc Cam Wi-Fi</p>	<p># 109 Kristine Vester - MathScience Innovation Center Grade Bands: 6 – 8 Waterproof This! Imagine an outfit that is completely “waterproof.” Is it possible?</p>	<p># 128 Katherine Meints GMU and Prince William County Schools Grade Bands: 3 – 5, 6 – 8, 9 – 12 (Early) Algebra for All</p>	<p># 147 Katherine Meints Prince William County Schools and GMU Grade Bands: Pre-K – 2, 3 – 5, 6 – 8, 9 – 12, Preservice/Inservice G-HOMies</p>	
<p>Crystal Ballroom C 40 LCD/ Doc Cam Wi-Fi</p>	<p># 110 Debbie Crawford - Frederick County Public Schools Co-presenter: Larry Burner – Frederick County Public Schools – Grade Bands: 3 – 5, 6 – 8 Differentiation: Parallel Tasks and Open-ended Problems</p>	<p># 129 Linda Gillen - Fairfax County Public Schools 129 Co-presenters: Steve Klarevas – FCPS, Rae Perry – FCPS, Candice Ives – LCPS Grade Bands: 6 – 8 The Ichiro Problem, an Introduction to Rate of Change</p>	<p># 148 Cheryl Hall New Kent County Public Schools 148 Co-presenter: Lois Wright - New Kent County Public Schools Grade Bands: 6 – 8 Rational or Not?</p>	
<p>Crystal Ballroom D /Shenandoah B 40 LCD/ Doc Cam Wi-Fi</p>	<p># 111 Shenandoah B Affiliate Breakfast with VCTM Board</p>	<p># 130 Crystal Ballroom D Laura Briggs Loudoun County Public Schools Grade Bands: K-5 Elementary App-tastic Math Centers</p>	<p># 149 Crystal Ballroom D Marc Seeman Spotsylvania County Public Schools Grade Bands: 3 – 5 Using Arrays and Clusters to Solve Multiplication Problems</p>	

Room (Capacity/ LCD Projector, Doc Cam, Wi-Fi)	8:15-9:30	9:45-11:00	11:15-12:30		
Mill Mountain 50 LCD/ Doc Cam Wi-Fi	# 112 Dr. Virginia V. Lewis - Longwood University Grade Bands: 6 – 8, Preservice/Inservice Student Answer choices on the Middle School SOL Mathematics Assessments	# 131 Karen Dorgan – Mary Baldwin College Grade Bands: Pre-K – 2, 3 – 5 Learning Trajectories: Paths to Success!	# 150 Anita Lockett - Fairfax County Public Schools Grade Bands: 6 – 8 Rules of Engagement		
Buck Mountain 60 LCD/ Doc Cam Wi-Fi	# 113 113 Volkan Sevim - VCU Grade Bands:9 – 12 Helping Sudents Develop Conceptual Understanding of Quadratic Functions in Algebra	# 132 Dr. Maria Timmerman Longwood University Grade Bands: Pre –K – 2, 3 – 5, Pre- service/Inservice Do Students Understand If They Select the Correct Response?	# 151 151 Meredith Zirkle - Frederick County Public Schools/Dowell J. Howard Center Co-presenter: Tom Withers Grade Bands: 9 – 12 Constructing Geometry to Make It Real Life		
Monroe 70 LCD/ Doc Cam Wi-Fi	# 114 Donna Stofko - Prince William County Schools - Grade Bands: Pre–K – 2, 3 – 5 Implementing Response to Intervention in Elementary Mathematics	# 133 Ann McManus - Didax Co-presenters: Linda Wood, Mallori Kiryluk, Andrea Balarezo, Kelly Desrocher, Madeline Saylor from Yorkshire Elementary School in Prince William County Schools	# 152 Wendy Hageman Smith Longwood University Grade Bands: 6 – 8 Developing Mathematical Reasoning Through Collaborative Discovery		

SATURDAY, 8:15 am- 9:30 am

Session 98

Shenandoah A

Kevin Judd Whizz Education

Grade Bands: Pre-K – 2, 3 – 5, 6 – 8

Math Whizz: The perfect digital tutor

Math-Whizz is the most engaging and effective online math tutoring program available. Using fun animation and games with a diagnostic assessment and prescriptive lessons. Math-Whizz motivates students, teaches math skills and concepts, reinforces prior learning and provides teachers with easy to understand and valuable reports of students strengths, weaknesses and growth. Correlated to the SOLs and perfect for RTI, the program is entirely web-based so that students can login from anywhere. All participants will receive a free trial of Math-Whizz for their students.

Session 99

Crystal Ballroom E

Padmanabhan Seshaiyer - GMU 99

Co-presenter: **Jennifer Suh**, GMU

Grade Band: 6 – 8

Fostering algebraic Connection through Proportional Reasoning

This session will present a collection of rich lessons developed by participants who took part in a math content institute at GMU through the Center for Outreach in Mathematics Professional Learning and Educational Technology (COMPLETE). The focus of the lessons will focus on the 2009 mathematics SOL emphasizing fractions and proportional reasoning.

Session 100

Appalachian

Open

Session 101

Pocahontas

Natalina Bell - Price William County Schools

Co-presenters: **Kathy Perrow, Alex Erhard, Keisha Smith** – PWCS

Grade Bands: 6 – 8

Using Lesson Study in Proportional Reasoning

We adapted instruction using Lesson Study techniques to facilitate student understanding of proportional reasoning. The instruction was student driven. They used manipulatives, drawings, and diagrams to demonstrate their proportional reasoning strategies.

SATURDAY, 8:15 am-9:30 am

Session 102 **Roanoke Ballroom A**

Anne Blevins - Carolina Curriculum Consultant

Grade bands: Pre-K – 2, 3 – 5

Don't Forget the M in STEM: A Focus on Literacy in the Math Classroom

Inquiry Math can grow both your students' literacy skills and mathematical understanding using notebooks and manipulatives. Discover how pairing effective hands-on materials and notebooking can improve students understanding of abstract ideas while building a robust math covocabulary. Participants will explore Math Out of the Box lessons, developed by Clemson University's College of engineering and Science, while focusing on the new math Common core State Standards. Investigations in fractions, geometric figures, and algebraic patterns are just some of the topics that will be discussed during the session. Classroom materials will be provided.

Session 103 **Roanoke Ballroom B**

Patricia Freeman - GMU

Co-presenter: **Linda Gillen** - FCPS, **Rae Perry** – FCPS, **Candice Ives** – LCPS

Grade Bands: 3 –5, 6 - 8

Do the Math! Cognitively demanding tasks that reveal the algebra in arithmetic

Participants in a GMU summer institute focused on lesson study and Number and Number sense content will share the results of the lesson studies and share their tasks with you. You will not only hear about how collegial collaboration affected their growth as teachers. You will also hear how the use of cognitively demanding, inquiry based tasks or actually 'doing math' helped their students see themselves as young mathematicians. Come be a 'young mathematicians' and leave with a task or two to use next week!

Session 104 **Roanoke Ballroom E**

Kyle T. Schultz - JMU

Grade Bands: 6 – 8, 9 – 12

Using Geometric Patterns to Develop Students' Algebraic Thinking

We will work together to explore visual patterns of geometric shapes and how these patterns can be characterized algebraically. Discussion of our work on a progression of activities helpful for developing these skills, using algebraically. Discussion of our work will focus on a progression of activities helpful for developing these skills, using multiple representations to characterize patterns, and optimizing discussion of different methods and solutions.

SATURDAY, 8:15 am-9:30 am

Session 105

Roanoke Ballroom F

Jessica Lee Saultz ExploreLearning

Grade bands: 3 – 5, 6 – 8, 9 – 12

Using Online Simulations to Improve Conceptual Understanding in Math

Learn how online simulations help teachers take advantage of research-proven instructional strategies and help students of all ability levels develop conceptual understanding in math and science. Teachers can supplement and enhance instruction with powerful interactive visualizations of concepts. Students can manipulate key variables, generate and test hypotheses, and engage in extensive “what-if” experimentation. The presenter will demonstrate Explore Learning’s online simulation, that they call “Gizmos”. The Gizmo library includes over 450 simulations, all with inquiry-based lessons, correlations to state standards, formative assessment and real-time reporting for teachers.

Session 106

Roanoke Ballroom G

Jamie Gadley - Fairfax County Public Schools

Co-presenters: **Lindsay Blanchard** – FCPS, **Larissa Peluso** – LCPS, **Sonya Bradley** – LCPS

Grade Bands: 3 – 5, 6 – 8, Preservice/Inservice

Teaching rational Numbers and Proportional Reasoning in the Middle Grades: The Mango Problem

The purpose of this lesson study was to teach a research lesson in middle grade mathematics classroom that provided multiple access points for students to engage in problem-solving with rational numbers. Framing of the question as well as manipulatives provided, we found, were integral to students’ ability to construct, represent, and communicate understanding. The implications of the research are relevant to a variety of problem-solving experiences presented in mathematics classrooms

Session 107

Roanoke Ballroom H

OPEN

SATURDAY, 8:15 am-9:30 am

Session 108 Crystal Ballroom A

Patti Schneider - Hanover County Public Schools

Co-presenter: **Elyse Coleman**- Hanover County Public Schools

Grade Bands: 3 – 5

Building on Place Value

What does a million look like? Do your children really understand how very large a million really is? This presentation will include several activities for place value to illustrate the magnitude of what a million is, how to make and write a million and other large numbers. You will come away from the session with many lessons and activities on teaching place value conceptually so that your students will understand the numbers better.

Session 109 Crystal Ballroom B

Kristine Vester - MathScience Innovation Center Grade Bands: 6 – 8

Waterproof This! Imagine an outfit that is completely “waterproof.” Is it possible?

Participants will investigate and compare how different fabrics absorb water by measuring the area of the water stain and comparing their data on a graph, Will each fabric absorb a different amount of water? As participants work to determine whether or not fabric can become “waterproof,” they will test different hydrophobic fabric treatments. Can you surpass the fabric treatments nanotechnology has enabled?

Session 110 Crystal Ballroom C

Debbie Crawford - Frederick County Public Schools

Co-presenter: **Larry Burner** – Frederick County Public Schools –

Grade Bands: 3 – 5, 6 – 8

Differentiation: Parallel Tasks and Open-ended Problems

Explore parallel tasks and questions to engage all of your students in learning math through problem solving. Practice modifying existing tasks to differentiate your instruction. Take away a link to over 50 tasks for grade 5 through Algebra 1 that you can use now!

Session 111 Shenandoah B

. **Cathy Shelton** Affiliate Breakfast with the VCTM Board

SATURDAY, 8:15 am-9:30 am

Session 112

Mill Mountain

Dr. Virginia V. Lewis - Longwood University

Grade Bands: 6 – 8, Preservice/Inservice

Student Answer choices on the Middle School SOL Mathematics Assessments

The results are in and your students were prepared! Why did they select incorrect answers? The results of the study of the 2007 and 2008 released tests that generated possible explanations as to why students would select each distracter will be shared. Participants will discuss the implications of the results of the study for instruction.

Session 113

Buck Mountain

Volkan Sevim - VCU

Grade Bands: 9 – 12

Helping Students Develop Conceptual Understanding of Quadratic Functions in Algebra

Instead of teaching students how to solve different types of problems on quadratic functions, this session offers a variety of teaching methods and activities that can help students to think and reason mathematically about quadratic relations and develop a deeper understanding of functions. The activities are based on research on quadratic functions and SOL.

Session 114

Monroe

Donna Stofko - Prince William County Schools -

Grade Bands: Pre-K – 2, 3 – 5

Implementing Response to Intervention in Elementary Mathematics

Participants will gain an understanding of current research around RtI for mathematics. The presenter will share specific research-based recommendation and examples for implementing RtI in mathematics. Opportunities will be provided for audience participation and discussion related to these recommendations.

Session 115

Wilson

OPEN

Session 116

Harrison

OPEN

SATURDAY, 9:45 am-11:00 am

Session 117

Shenandoah A

Kevin Judd - Whizz Education

Grade Bands: General Interest

Solving for X's and whys: Research into Practice

Based on brain research of how students learn and process information, this session will engage participants in practical ways to embed research into their classroom.

Session 118

Crystal Ballroom E

Leslie Steele, – Petersburg City Schools

Jennifer Suh, **Sarah DeLeeuw** – GMU, **Padmanabhan Seshaiyer** – GMU,

Grade Bands: General Interest

Collaboration is the Key to Success!

Learn how George Mason University collaborated with Petersburg City Public Schools to provide a forum for teachers to collaborate with each other – to plan lessons, exchange best instructional practices and explore effective uses of technology – to ultimately promote algebraic thinking.

Session 119

Appalachian

Rudy Neufeld - Neufeld Learning Systems Inc. – Senior Author

Grade Bands: 3 – 5

Build It, Write It, Talk It...Now You OWN IT!!

We will explore methods to “hook” students with different abilities to deeper conceptual understanding in mathematics. We will model specific lessons addressing concepts within the grade 3 to 5 math curriculum involving a variety of resources. We will model all 3 tiers in an inclusive RTI model of differentiated instruction.

Session 120

Pocahontas

Kimberly Morrow Leong - GMU

Grade Bands: 3- 5, 6 - 8

Modeling Multiplication and Division with Fractional and Decimal Numbers

What makes division so challenging, and how can students make sense of it through modeling? In this session we will use students' current understanding of multiplication to build strong models for division, which apply to whole numbers, but are even clearer for operations with fractions and decimals. You will receive activities to use in class, but more importantly a new “lens” to view your current materials

SATURDAY, 9:45 am-11:00 am

Session 121

Roanoke Ballroom A

Amy Hickey – Prince William County Schools

Grade Bands: 9 – 12

Z-scores and Standard Deviations and Normal Curves, Oh My!!

If you're feeling a little anxious about teaching the new statistics standards or you just want to focus your statistic activities to be more student-centered, join this session to help students build statistical meaning of data, explore research and brain-based strategies tailored to the new standards of learning in Algebra I, Algebra II and Algebra functions Data Analysis. Participants will experience strategies and activities that promote active learning and engage students to promote conceptual understanding of z-scores, normal curves, and more. Explore different strategies that will meet the needs of a diverse classroom and take them down that yellow brick road to a higher level of understanding.

Session 122

Roanoke Ballroom B

Amy S. Lamb - Northumberland County Public Schools

Co-presenters: **Adam Letizia, Javondra Ashton, Gliziel Gonzales**

Grade Bands: 9 – 12

Implementing the Senior Math Capstone Course

Northumberland County Public Schools implemented the Senior Math Capstone Class this school year. We are the first division in Virginia to offer this class year-round with the pilot materials provided by our affiliation with the UVA project associated with writing this curriculum. We would like to share student work samples, implementation details, lessons, and presentations created by the students in this project-based learning class.

Session 123

Roanoke Ballroom E

Niki Schieck – Harrisonburg City Public Schools

Grade Bands: 3 – 5

Making computation Concrete

Come learn how to make computation skills concrete for all learners. Topics like multi-digit multiplication and division can be difficult for children to understand, but with the help of concrete manipulatives, these skills can come to life!

SATURDAY, 9:45 am-11:00 am

Session 124

Roanoke Ballroom F

Jessica Lee Saultz - ExploreLearning

Grade Bands: Pre-K – 2, 3 – 5, 6 – 8

A Video Game That Makes Math Fun: Reflex Math

Reflex is a revolutionary, game-based system that helps students of all ability levels to develop instant recall of their basic math facts (addition, subtraction, multiplication, and division). Educators can monitor their students' progress with intuitive and powerful reports. Students will have access anywhere and anytime as long as they have internet connection.

Session 125

Roanoke Ballroom G

Sharon Huber - Chesapeake City Public Schools

Co-presenter: **Charlotte Riddick** - Chesapeake City Public Schools ret. & TCTM

Grade Bands: 3 – 5. 6 – 8

Meaningful Math Games the SMART Way

Children of all ages love to play games and when the Smartboard is added, classroom instruction pops. Imagine motivated students practicing, applying and reinforcing math skills! Come learn and play interactive math games to experience the fun students can have while applying math concepts. Participants will receive a CD of the games and templates.

Session 126

Roanoke Ballroom H

Debbie Delozier - Stafford County Public Schools

Grade Bands: 3 – 5

What's All the Talk About? Putting the Process Standards into Practice

Student learning of mathematics is enhanced in a learning environment that is built around collaboration focused on making sense of mathematical ideas. The role of the teacher will be explored as we take a look at video examples of productive math talk in the 3 -5 classroom. Participants will learn about talk moves and how they can be used in assessing student understanding.

SATURDAY, 9:45 am-11:00 am

Session 127

Crystal Ballroom A

Allison Tait and Shelly Pine

Frederick County Public Schools

Grade Band: 9 - 12

Using the Process Standards

Two high school teachers who attend conferences in order to gather something to do tomorrow to engage uninterested students share what they have created and learned. Come share and learn.

Session 128

Crystal Ballroom B

Katherine Meints GMU and Prince William County Schools

Grade Bands: 3 – 5, 6 – 8, 9 – 12

(Early) Algebra for All

The expectation that students take algebra early is a reality.

Given this reality, students may be better served by being exposed early to algebraic reasoning and pre-algebraic thinking processes and strategies using representations, communication and context as framework.

Session 129

Crystal Ballroom C

Linda Gillen - Fairfax County Public Schools 129

Co-presenters: **Steve Klarevas** – FCPS, **Rae Perry** – FCPS, **Candice Ives** – LCPS

Grade Bands: 6 – 8

The Ichiro Problem, an Introduction to Rate of Change

On which day does the brother who starts with less money, have more money in his wallet? That is the question of The Ichiro Problem. Come see the results of a lesson study in which eighth grade students solved this very problem with pictures, tables, symbols, graphs and words.

Session 130

Crystal Ballroom D

Laura Briggs Loudoun County Public Schools

Grade Bands: K-5 Elementary

App-tastic Math Centers

Learn about iPad apps and strategies for engaging elementary students. Learn fun ways to use the iPad for differentiation, review, practice, and RTI interventions.

SATURDAY, 9:45am-11:00 am

Session 131

Mill Mountain

Karen Dorgan – Mary Baldwin College

Grade Bands: Pre-K – 2, 3 – 5

Learning Trajectories: Paths to Success!

The concept of a leaning trajectory is one that is highlighted in the Common Core. But just what is a learning trajectory, and how might you apply one to support achievement of the goals set in the Virginia Standards of Learning? In this session, participants will examine trajectories developed by others and will work with other participants to develop their own.

Session 132

Buck Mountain

Dr. Maria Timmerman - Longwood University

Grade Bands: Pre –K – 2, 3 – 5, Pre-service/Inservice

Do Students Understand If They Select the Correct Response?

Participants will examine the meaning behind correct and incorrect student responses to multiple-choice test items, including released Grade 3 SOL assessments. We will focus on conceptual models and procedural strategies that explain why students select each response. Follow-up questions will be used to identify the depth of student understanding

Session 133

Monroe

Ann McManus - Didax

Co-presenters: **Linda Wood, Mallori Kiryluk, Andrea Balarezo, Kelly Desrocher, Madeline Saylor** from Yorkshire Elementary School in Prince William County Schools

Using Assessment Data to Improve Elementary Instruction

This session will focus on how teachers and administrators have used formative assessment data to support student learning in grades k – 2; improving their understanding of how children learn mathematics and impacting their teaching practices. Elementary math specialists and classroom teachers will describe their implementation of Kathy Richardson’s assessing Math Concepts program and the success they have had with their students.+

Session 134

Wilson

Carrie Persing - MathScience Innovation Center Grade Bands: 6 – 8

Taking Math Into Space

Take your students to the moon and beyond by incorporating lessons from NASA and Honeywell Space Academy. Educators will engage in hands-on activities that incorporate math, science, engineering, and space that can be used in the classroom immediately. Participants will also learn about available scholarships to attend Space Academy in Huntsville, Alabama.

Session 135 Harrison

OPEN

SATURDAY, 11:15 am-12:30 pm

Session 136

Shenandoah A

Suyi Chuang - Loudon County Public Schools

Co-presenter: **Kimberly Morrow Leong** – GMU Grade Bands: General Interest

Making the Most of Classroom Discussion Around and Open Task

You've tried an "open task" in your classroom, and while you see that some students learned from it, many did not. Before you abandon this teaching strategy, join us to learn how to prepare for the task before class even starts! Learn to carefully orchestrate conversation, and maximize student progress toward the learning goal. You will leave this session with a great task, and a guide for planning and executing it.

Session 137

Crystal Ballroom E

Sarah DeLeeuw

National Council of Teachers of Math

Grade Bands: 3 – 5, 6 – 8

Developing Reasoning and Sense-Making with NCTM's FREE Online Resources

Capitalize on student interest in technology with NCTM's E-examples, apps from Illustrations and Calculation Nation games. Target both Content Standards and Standards for Mathematical Practice. Walk away with ready-to-use, engaging ideas to incorporate online interactives for teaching and learning.

Session 138

Appalachian

Jim Brady - Loudoun County Public Schools

Grade band: K-12

Technology: It Might Be Your New Best Friend

Not technology for technology's sake. Technology for the students' sake! Come for a little taste of how an iPad can help you assess mathematical reasoning, how a QR code can help a student get focused help at home, how interactive whiteboards can make algorithms come alive, and how you can potentially "flip" your classroom on its head and into being a more productive environment.

Session 139

Pocahontas Teresa

A. Morrison – Voyager Learning

Grade Bands: 3 – 5, 6 – 8

Helping Struggling students Reach Their Star Math Potential

Participants will experience research-based intervention strategies, explore materials and discuss ways to effectively implement Tier II and Tier III interventions for struggling math students.

SATURDAY, 11:15 am-12:30 pm

Session 140

Roanoke Ballroom A

M. Ashley Harris - Amelia County Public Schools

Co-presenter: **Dorothy Bradshaw**

Looking Glass Shapes

Teaching shapes to students are very important and is a skill that they6 will build on in the future. In this presentation, we will be demonstrating several strategies to teaching the basic geometric shapes. We will be implementing several different representations to reach all the different kinds of learners you will have in your classroom

Session 141

Roanoke Ballroom B

Jarrod Lisker Powhatan County Schools

Co-presenter: **Lisa Simonick, Lois Paris** – Powhatan County Schools

Grade Bands: 9 – 12, Preservice/Inservice, General Interest

Are You Nspired?

Powhatan County is a participant in the TI Nspire Elearning Backpack pilot initiative through the VDOE. In this session we will explore the TI Nspire CX calculator. If you have not had the opportunity to see what this new technology can do, this is the session for you. Come get Nspired!

Session 142

Roanoke Ballroom E

Heather Topper Loudon County Public Schools

Co-presenter: **Miriam Morgan** –

Grade Bands: Pre-K – 2, 3 – 5

Stretch Your Brain with Daily Math Warm-Ups!

Begin your math class by engaging your students with interactive math warm-ups that will get their brains going! Participants will be introduced to several warn-up activities that can be easily incorporated into their classroom routine. A flipchart will be emailed to all present at the session.

SATURDAY, 11:15 am-12:30 pm

Session 143 Roanoke Ballroom F

Jeff Bird Salem City Schools

Co-presenter: **Beth Swain**

Grade Bands: 9 – 12

Computer Math: Meeting the SOLs with Alice

Alice is a computer programming language that uses three dimensional objects and drop and drag programming to help engage students in introductory computer programming. This presentation will explore how Alice may be used as a tool to help students learn to how to design, write, test and debug a program while meeting the Virginia Computer Math standards of Learning.

Session 144 Roanoke Ballroom G

Angela Culley Charlottesville City Schools

Grade bands; 3 – 5, 6 – 8, 9 – 12

Moving Beyond Multiple -Choice: Preparing Virginia students for Technology Enhanced Items (TEI)

The Virginia Standards of Learning assessments will include TEIs this school year. Will your students be ready? In this session, Charlottesville City Schools (CCS) will share their approach to preparing administrators, teachers, and students for success. Utilizing interactive whiteboard software, CCS teachers and specialists have created sample items that simulate the TEI experience. Throughout the school year, teachers will incorporate these items into instruction, challenging students to extend their thinking beyond what is typically required by multiple-choice assessments. Non-technology based approaches to preparing students for the TEIs will also be discussed

Session 145 Roanoke Ballroom H

Jeremy Utt

Secondary speakers – **Catherine Schaefer and Regina Harris**

Grade band 6 – 8

Title: Relatively Speaking- Activities to promote proportional reasoning

Description: The presentation will involve the demonstration of a variety of situations and problems designed to develop an understanding of proportional reasoning. Focus is on moving students from concrete, to representational, then to abstract understanding. Classroom-ready materials will be provided to workshop attendees.

SATURDAY, 11:15 am-12:30 pm

Session 146

Crystal Ballroom A

Natisha Knight - Richmond Public Schools

Grade Bands: 3 – 5

MATH: What is it good for?

Students are always asking, “Why do I need to learn this?” Participants who attend this session will participate in activities and use resources that have real-world applications. Topics such as fractions, basic computation skills, order of operation, and problem solving will be explored

Session 147

Crystal Ballroom B

Katherine Meints Prince William County Schools and GMU Grade Bands: Pre-K – 2, 3 – 5, 6 – 8, 9 – 12, Preservice/Inservice

G-HOMies

Explore Geometric Habitats of Mind that give teachers a focus for analyzing student thinking as they engage in rich geometry tasks from the Fostering geometric Thinking Toolkit (with permission from Mark Driscoll of EDC). Participants will explore a rich task (accessible to K – 12 grade teachers) and analyze students reasoning, proof, and problem solving on the same task in relation to the G-HOMies

Session 148

Crystal Ballroom C

Cheryl Hall New Kent County Public Schools 148

Co-presenter: **Lois Wright** - New Kent County Public Schools

Grade Bands: 6 – 8

Rational or Not?

In this session, Rational or Not, participants will explore the real number system using technology, music, games and graphic organizers.

Session 149

Crystal Ballroom D

Marc Seeman Spotsylvania County Public Schools

Grade Bands: 3 – 5

Using Arrays and Clusters to Solve Multiplication Problems

By using arrays with clusters students will be able to create a representation and communicate their understanding of multiplication.

SATURDAY, 11:15 am-12:30 pm

Session 150

Mill Mountain

Anita Lockett - Fairfax County Public Schools

Grade Bands: 6 – 8

Rules of Engagement

The presenter will share individual, partner and cooperative group activities that actively engage students in the learning of mathematics. The activities promote the use of discussion of math terminology, problem solving, and have students moving about the room. Participants will leave with a variety of materials that can be adapted for any classroom or math topic.

Session 151

Buck Mountain

Meredith Zirkle - Frederick County Public Schools/Dowell J. Howard Center

Co-presenter: **Tom Withers**

Grade Bands: 9 – 12

Constructing Geometry to Make It Real Life

We are piloting a program at Dowell J. Howard Center where students in the Geometry class are going into Carpentry and learning where the Geometry concepts are applying to real life applications of Carpentry. Students are completing projects while learning about the concepts of Geometry and Carpentry.

Session 152

Monroe

Wendy Hageman Smith – Longwood University

Grade Bands: 6 – 8

Developing Mathematical Reasoning Through Collaborative Discovery

Carefully designed activities enhance classroom discourse as a means of collaborative discovery. I provide two field-tested examples developed under a grant funded by the Department of education. I explain how these examples implement the NCTM Standards and show how middle school teachers can design similar activities to develop mathematical reasoning in their students.

Session 153.

Wilson

Stephen (Steve) R. Rose -

Fairfax County Public Schools

Grade Bands: 9 – 12

Computer Number Systems

We will discuss number systems as they relate to computer science. We will discuss radix number systems, binary , octal, decimal and hexadecimal number systems and the conversions between them, show how negative numbers are represented in computers, show addition of two numbers in these number systems. Packet handout provided.

Exhibitor Directory

A+ Compass

www.apluscompass.com

ABC Designs by Claire

Aissac Labs

<http://Aissaclabs.com>

ALEKS Corporation

www.aleks.com

Box Cars & One-Eyed Jacks

www.boxcarsandoneeyedjacks.com

Carnegie Learning

www.carnegielearning.com

Carolina Biological Supply Company

www.carolinacurriculum.com

Casio America, Inc.

www.casio.com

CORD Communications

www.cordcommunications.com

Didax Inc.

www.didax.com

EAI Education

www.EAleducation.com

EasyWorksheet.com

www.easyworksheet.com

Educators Outlet

www.educatorsoutlet.com

ETA Cuisenaire

www.etaquisenaire.com

ExploreLearning

www.explorelearning.com

First in Math

www.firstinmath.com

GeoMotion Group

www.geomotiongroup.com

Glencoe McGraw-Hill

www.glencoe.com

Great Source, Rigby, Steck-Vaughn ; Specialized Curriculum –

Houghton Mifflin Harcourt

www.hmhpublish.com

Houghton Mifflin Harcourt/Holt McDougal

www.hmhco.com

MacMillan/McGraw-Hill

www.mheonline.com

Math Teachers Press

www.movingwithmath.com

MIND Research Institute

www.mindresearch.net

Neufeld Learning Systems, Inc.

www.neufeldmath.com

Northpoint Horizons

www.northpointhorizons.com

Numeracy Works

www.Numeracyworks.com

Pearson (Prentice Hall)

www.pearsonschool.com

Pearson (Scott Foresman)

www.pearsonschool.com

Peoples Education

www.PeoplesEducation.com

Texas Instruments, Inc.

<http://education.ti.com>

Triumph Learning – iCORE, SOL Coach, Options & Buckledown

www.triumphlearning.com

Voyager Learning

www.voyagerlearning.com

Whizz Education

www.whizz.com

**VCTM 2012 William C. Lowry Mathematics Educator of
the Year Awardees**

Elementary

Rebecca Ward

**Kate Waller Barrett Elementary School – Stafford County
Schools**

Math Specialist

Chelyse Miller

Lynnhaven Elementary School - Virginia Beach City Schools

Middle School

Darcy Cupp

Warren County Middle School – Warren County Schools

High School

Michael Neff

Union High School – Wise County Schools

College/University

Dr. Judith Ink

Regent University

Committee members: Cindy Norton, Beth Williams, Betti Kreye, Alice Wakefield, Monica Brogan,
Barb Freeman, Carolyn Keen, Sue McKinney, Brenda Barrow – Committee Chair

The 2012 VCTM Edward A. Anderson Scholarship Grant Awardees

The Scholarship Committee has selected two worthy scholarship recipients
for the VCTM Ed Anderson Scholarship Grant.

Elizabeth Paige Aaron,

Averett University

Rachel Lanae Morgan,

Liberty University

The Presidential Award for Excellence in Mathematics and Science Teaching

State Finalist

Kimberly Riddle

Chancellor High School

Spotsylvania County Schools

Karen Dee Michalowicz First Timers Grant

Recipients

NCTM

Nicholas Kilpatrick

4th grade teacher at Churchill Road Elementary School in McLean, VA

VCTM -

Andrienne Setorie

Title I Elementary Mathematics Teacher at BelAir Elementary School in
Woodbridge, VA

VCTM

Denise Atkins

Math Resource Teacher at Jouett Elementary School in Mineral, VA

VCTM

Galeet BenZion

ESOL teacher for 2nd & 3rd graders at Beech Tree Elementary School in
Falls Church, VA

VCTM 2012 Math Beauty Contest

The theme of the VCTM 2003 spring conference was “Mathematics: A Universal Network of Beauty.” Johnny Lott, President of NCTM, commented in his address to participants that he liked the conference title and thought it might be nice to have a Mathematics Beauty Contest. After some discussion the publicity committee for VCTM thought that Johnny Lott’s idea might be a way to publicize VCTM and also give students throughout Virginia a chance to show their problem solving ability in “beautiful ways.”

VCTM has decided to sponsor the contest for the seventh year and is offering students the opportunity to submit solutions to problems. The committee will receive entries **by mail only**. No e-mails or faxes will be accepted. **Each entry must have two 3”x 5” index cards attached with the following information on each one: name, address, phone, E-mail (if there is one), school, address of school, school phone number and grade level for the contest. Please place all of this same information on the actual paper as well.** If the index cards are not included the entry will be disqualified. We had over 1,300 entries the first year so it is important that students follow the procedures. One of the index cards for each person will be placed in a container and one entry will be drawn from each group. The entry that is drawn must have a correct solution and must show the logical, sequential development of the solution. A paragraph fully explaining the thinking involved and the problem-solving strategies used is required. The committee will not be looking for just algorithms to be used, but will be concentrating on the development of the solution. Students are encouraged to construct their own knowledge in order to solve the problem. Students should also be encouraged to proofread their work so that there are no careless mistakes that would disqualify their solutions.

The problems are for students to work. They are **not** intended as family exercises or classroom exercises where everyone works on them together. If a student needs to have someone read the problem to him/her, that is acceptable, but all work should be the student’s work. We want to encourage thinking and the use of problem solving strategies. Solutions do not have to be “beautiful” works of art. That is not what we are emphasizing in this contest. Work should be neatly done and should be legible. The process and thinking used to arrive at a correct solution are the “beautiful” aspects of this contest. Students at all levels may work the problems using any strategy that is meaningful to them and that arrives at a correct solution. We **are not** looking for a “my way or the highway” type solution. It is important to explain the thinking that has occurred during the acquisition of the solution, so a paragraph stating this must be included. Parent or another adult may need to write the paragraph **that the student dictates** at the k - 2 levels or for those who need special accommodations because of disabilities.

You will find the problems for the various levels attached. Math supervisors and math contact people please distribute these to each of your schools. **April is Math Month** and we would like to announce the winners on May 30th in order to give students **the entire month of April** to solve the problems and send in their entries. If you could distribute these to the appropriate contacts for each of your schools during the month of March that would give students enough time to solve the problems and mail them, so that they can be postmarked by May 5th. One winner will be selected for each level. The names of the winners will be posted on the VCTM

website. Winners will be notified by mail. Each winner will receive a framed certificate and a \$25.00 Walmart Gift Card and a pizza party for their class. Remember entries must be postmarked by May 5, 2012 and **must be submitted by mail only.** **No emails will be accepted.**

Questions may be addressed to Brenda Barrow at themathlady@cox.net or 757 – 617 - 0984.

Please call only if you do not have access to email.

Each grade level group has a different person who will be receiving the entries. Please be careful to send the entry to the correct contact person. If a middle school student would like to enter the category for ninth – Algebra I he/she is welcome to do so, but he/she must send the entry to the contact person for the ninth – Algebra I group.

We are looking forward to having many “beautiful” entries for this “Mathematics Beauty Contest.” Mathematics truly is a beautiful subject and we want the world to know it.

Thank you for your help in distributing these and in making this a success.

Publicity Committee of VCTM

Check vctm.org for the winners after May 25th. After May 25th there will be a certificate of participation that those who entered the contest can download from the vctm.org website.

Problems for the 2012 VCTM Math Beauty Contest

K – 2 Send k – 2 entry to: Donna Weaver – Suburban Park Elementary School
310 Thole St. Norfolk, VA 23505

Please create a pattern that is either a growing or repeating pattern or both. Please be sure to tell what your thinking was by writing a paragraph explaining your thoughts about your creation of the pattern. Students who are not able to write the paragraph may dictate it to an adult who can write exactly what the student says. We wish you the best. We look forward to your entry. **Be sure to include a paragraph that fully explains your thinking.**

Remember to attach two 3” X 5” index cards to your entry with your name, address, phone,

E-mail (if you have one), school name, school address, school phone and grade level on them. Also write this information on your actual entry. **It must be postmarked by May 5, 2012.** Contact Brenda Barrow at themathlady@cox.net or call 757 – 617 - 0984 if you have questions. **E-mail is preferred.**

Please only use the phone number if you do not have access to e-mail. Visit vctm.org for winners after May 25th.

3rd – 5th Grade

Send 3rd – 5th entry to: **Gail Englert - 239 Duke Street -Unit 307 Norfolk, VA 23510-0922**

Neil decided that he needed to improve his basketball game. He had heard that his favorite NBA player would throw 100 free throws in a row each day for practice, so Neil tried it for five days. He kept track of the number of successful shots he made each day. Each day he sank six more than the day before. At the end of the fifth day, he had made 100 successful shots. How many baskets did Neil score on each of the five days? Remember there are many ways to solve this problem. Use problem solving strategies such as draw a picture, guess and check, look for a pattern, make a chart or table. There is only one correct answer for the number of basketball shots scored each day.

Be sure to include a paragraph that fully explains your thinking and problem-solving strategies.

Remember to attach two 3" X 5" index cards to your entry with your name, address, phone,

E-mail (if you have one), school name, school address, school phone and grade level on them. Also write this information on your actual entry. **It must be postmarked by May 5, 2012.** Contact Brenda Barrow at themathlady@cox.net or call 757 – 617 - 0984 if you have questions. **E-mail is preferred.**

Please only use the phone number if you do not have access to e-mail. Visit vctm.org for winners after May 25th.

6th – 8th

Send 6th – 8th entry to: **Alfreda Jernigan – P.O. Box 10527 Norfolk, VA 23513**

The Jones children went to the grocery store with their mother. They saw that there were cars, motorcycles and 18-wheelers big trucks in the parking lot. They asked their mom if they could count them and she said that they could. She helped them count. When they finished counting they figured out that there were 4 times as many motorcycles as 18-wheeler trucks and 5 times as many cars as motorcycles. They figured out that there were 212 wheels on all the vehicles combined. How many cars were there? How many motorcycles were there and how many 18-wheeler trucks were there? The children liked to make up problems that they could share with their family and friends and get them to figure them out. They thought it was like working a puzzle. They had fun doing this. See if you can figure out their problem. **Be sure to include a paragraph that fully explains your thinking and problem-solving strategies.**

Remember to attach two 3" X 5" index cards to your entry with your name, address, phone,

E-mail (if you have one), school name, school address, school phone and grade level on them. Also write this information on your actual entry. **It must be postmarked by May 5, 2012.** Contact Brenda Barrow at themathlady@cox.net or call 757 – 617 - 0984 if you have questions. **E-mail is preferred.**

Please only use the phone number if you do not have access to e-mail. Visit vctm.org for winners after May 25th.

9th – Algebra I

Send 9th – Algebra I entry to: **Brenda Barrow 1311 E. Bayview Blvd Norfolk, VA 23503**

Mark cashed a check for \$323.00. He asked the cashier for \$20 bills, \$10 bills, \$5 bills and \$1 bills. He got $\frac{1}{2}$ as many \$10 bills as \$20 bills and $\frac{1}{4}$ as many \$5 bills as \$20 bills and $\frac{2}{3}$ as many \$1 bills as \$20 bills. He put the 29 bills that the cashier gave him in his wallet. How many of each bill did Mark get from the cashier?

Be sure to include a paragraph that fully explains your thinking and problem-solving strategies.

Remember to attach two 3" X 5" index cards to your entry with your name, address, phone,

E-mail (if you have one), school name, school address, school phone and grade level on them. Also write this information on your actual entry. **It must be postmarked by May 5, 2012.** Contact Brenda Barrow at themathlady@cox.net or call 757 – 617 - 0984 if you have questions. **E-mail is preferred.**

Please only use the phone number if you do not have access to e-mail. Visit vctm.org for winners after May 25th.

Above Algebra I

Tom and his family went on a vacation. They drove a total of 1500 miles. They traveled for 6 days. On the 2nd day they drove 1.5 times as many miles as they did on the first day. On the 3rd day they drove 1.25 as many miles as they did on the first day. On the 4th day they drove the same amount of miles as on the 3rd day. On the 5th day they drove $\frac{1}{3}$ as many miles as they did on the second day and on the 6th day they drove the same number of miles as day 2 and day 5 combined. How many miles did they drive each day?

Send Above Algebra I entry to: **Connie Shepard - 109 Whitehall Ct. Williamsburg, VA 23188**

Be sure to include a paragraph that fully explains your thinking and problem-solving strategies.

Remember to attach two 3" X 5" index cards to your entry with your name, address, phone,

E-mail (if you have one), school name, school address, school phone and grade level on them. Also write this information on your actual entry. **It must be postmarked by May 5, 2012.** Contact Brenda Barrow at themathlady@cox.net or call 757 – 617 - 0984 if you have questions. **E-mail is preferred.**

Please only use the phone number if you do not have access to e-mail.

Visit vctm.org for winners after May 25th.

ENJOY THE CHALLENGE!

Thank you, MATH LOVERS, for entering the contest! Each grade level group has a different person who will be receiving the entries. Please be careful to send the entry to the correct contact person. If a middle school student would like to enter the category for ninth – Algebra I he/she is welcome to do so, but he/she must send the entry to the contact person for the ninth – Algebra I group. We are looking forward to having many “beautiful” entries for this “Mathematics Beauty Contest.” Mathematics truly is a beautiful subject and we want the world to know it.

Thank you for your help in distributing these and in making this a success.

Alfreda Jernigan - Chair of the VCTM Math Beauty Contest Committee

Contact People: K – 2nd Donna Weaver – Suburban Park Elem. School

310 Thole St. Norfolk, VA 23505

3rd – 5th Gail Englert - 239 Duke Street - Unit 307 Norfolk, VA 23510-0922

6th – 8th Alfreda Jernigan – P. O. Box 10527 Norfolk, VA 23513

9th – Algebra I Brenda Barrow - 1311 E. Bayview Blvd Norfolk, VA 23503

Above Algebra I Connie Shepard - 109 Whitehall Ct. Williamsburg, VA 23188

In order to assure that all entries have been received, the winners will be selected on May 17, 2012. Winners will be notified by May 25th.

Check vctm.org for the winners after May 25th. After May 25th there will be a certificate of participation that those who entered the contest can download from the vctm.org website.

VCTM 2013 William C Lowry Mathematics Educator of the Year Nomination Form

To: VCTM Members

From: Brenda P. Barrow

Virginia Principals

VCTM William C. Lowry Mathematics Educator of the Year Committee

Math Department Heads

1311 E. Bayview Blvd.

University Department Heads/Deans

Norfolk, VA 23503

Email: themathlady@cox.net

Phone: 757 – 617 - 0984

Each year the Virginia Council of Teachers of Mathematics may recognize a classroom teacher on the elementary, middle, secondary, university and math specialist/coach level for his/her outstanding work in the field of mathematics. One teacher selected from each of the five categories may be awarded the VCTM William C. Lowry Mathematics Educator of the Year Award. All awards will be announced in the spring of 2013

Past winners and current elected VCTM Board members are **not** eligible for nomination.

The qualifications for this award are as follows:

- * The nominee must be a current member of VCTM.
- * The nominee must have a minimum of five years teaching experience and be a current classroom teacher, work with students as a math resource teacher or be a math specialist.
- * The nominee must have made notable accomplishments in teaching mathematics.
- * The nominee may be nominated by a sponsor or may make a self-nomination. (Anyone who is a member of VCTM, a school division superintendent, a school principal or headmaster, a supervisor, director of instruction, a college dean or department head or the president of any NCTM affiliated group may sponsor a candidate.)
 - Details about the nomination and information needed from the nominee will be mailed to the nominee.

You are encouraged to nominate an outstanding mathematics educator that you feel is deserving of this award.

Complete the form below and return it to the address on the form. Electronic nominations are acceptable.

The awards committee will contact the nominee upon receiving the nomination to request additional information.

Nominations must be **postmarked no later than Oct. 1, 2012 or electronically submitted no later than Oct. 5, 2012.**

Nomination Form

VCTM 2013 William C. Lowry Mathematics Educator of the Year Award

Nominee information – Please **PRINT or TYPE**.

Date: _____
Name of Nominee: _____

Home Address: _____ Email: _____

_____, VA _____ Home phone: (____) _____

Nominee's Position and School: _____

Nomination Category: Elementary ____, Middle ____, High ____, University ____, Math Specialist ____

Nominee's School Address: _____

_____, VA _____ School phone: (____) _____

Sponsor Information - Please **PRINT or TYPE**.

Name: _____ Position or Title: _____

School Division, College or University: _____

Business Address: _____

Phone: (____) _____ Email: _____

A letter of recommendation **DOES NOT** have to accompany the nomination. The nominee will ask that you submit a letter to him/her that can be included in the response packet with the other two letters of recommendation that he/she must submit.

Nominations must be **postmarked on or before October 1, 2012** or **electronically submitted on or before October 5, 2012**

Please mail to: Brenda P. Barrow 1311 E. Bayview Blvd. Norfolk, VA 23503

Electronic nominations are welcome. Send to: Brenda Barrow at this email address. themathlady@cox.net

THANK YOU FOR MAKING THE NOMINATION!

**Thank you for attending the 33rd Annual VCTM
Conference.**

**Make plans to attend the 34th Annual VCTM
Conference at The Founders Inn in Virginia
Beach next year.**

**Remember to have your students enter the
VCTM 2012 Math Beauty Contest being held
during the month of April which is MATH
MONTH!**

**Remember to nominate someone for the 2013
VCTM William C. Lowry Mathematics Educator of
the Year Award.**

VCTM 2012 Conference Session Overview by Lead Speakers Alphabetically

Austin, Courtnee - Session 63 – Hotel Roanoke

Bailey, Pam - Session 15 – Hotel Roanoke

Balka, Don - Session 27 – Hotel Roanoke

Barnes, Elizabeth - Computer Session 1 at Higher Ed Center across the street from hotel

Barrow, Brenda - Session 61 – Hotel Roanoke

Barrow, Brenda - Session 81 – Hotel Roanoke

Bell, Natalina - Session 101 – Hotel Roanoke

Beller, Laura - Session 91 – Hotel Roanoke

BenZion, Galeet - Session 14 – Hotel Roanoke

Bird, Jeff - Session 143 – Hotel Roanoke

Blevins, Anne - Session 102 – Hotel Roanoke

Bohidar, Victoria - Session 84 – Hotel Roanoke

Bolling, Michael - Session 78 – Hotel Roanoke KEYNOTE SPEAKER

Bolling, Michael - Session 97 – Hotel Roanoke KEYNOTE SPEAKER

Boyce, Steven - Session 74 – Hotel Roanoke

Bowman, Michele - Session 62 – Hotel Roanoke

Brady, Jim - Session 138 – Hotel Roanoke

Briggs, Laura - Session 130 – Hotel Roanoke

Cessna, Priscilla - Session 68 – Hotel Roanoke

Chuang, Suyi - Session 136 – Hotel Roanoke

Cody, Brynn - Session 18 – Hotel Roanoke

Cofer, Rachael - Session 37 – Hotel Roanoke

Coffey, Margaret - Session 73 – Hotel Roanoke

Collier, Mandy - Session 56 – Hotel Roanoke

Cooper, Cindy - Session 66 – Hotel Roanoke

Crawford, Debbie - Session 110 – Hotel Roanoke

Creech, Karen - Session 53 – Hotel Roanoke

Culley, Angela - Session 144 – Hotel Roanoke

DeLeeuw, Sarah - Session 83 – Hotel Roanoke
DeLeeuw, Sarah - Session 137 – Hotel Roanoke
DeLozier, Debbie - Session 126 – Hotel Roanoke
Dietz, Richelle - Session 76 – Hotel Roanoke
Dorf, Larry - Session 11 – Hotel Roanoke
Dorgan, Karen - Session 131 – Hotel Roanoke
Drobnis, Ann - Session 38 – Hotel Roanoke
English, Barbara - Session 7 – Hotel Roanoke
English, Barbara - Session 26 – Hotel Roanoke
Fisher, Gregory – Session 71 – Hotel Roanoke
Freeman, Barb - Session 35 – Hotel Roanoke
Freeman, Patricia - Session 103 – Hotel Roanoke
Gabriel, Pat - Session 22 – Hotel Roanoke
Gadley, Jamie - Session 106 – Hotel Roanoke
Gault, Christina - Session 95 – Hotel Roanoke
George, Candie - Session 40 - Hotel Roanoke
Gillen, Linda - Session 129 – Hotel Roanoke
Graham, Alicia - Session 8 – Hotel Roanoke
Hall, Cheryl - Session 148 – Hotel Roanoke
Haner, Pam - Session 28 – Hotel Roanoke
Harris, M. Ashley - Session 140 – Hotel Roanoke
Hartman, David - Session 45 – Hotel Roanoke
Hauth, Clara - Session 42 – Hotel Roanoke
Hickey, Amy - Session 121 – Hotel Roanoke
Hodges, Vandi - Session 72 – Hotel Roanoke
Huber, Sharon - Session 125 – Hotel Roanoke
Hull, Ted - Session 87 – Hotel Roanoke
Jaffe, Cheryl - Session 57 – Hotel Roanoke
Jernigan, Alfreda - Session 3 – Hotel Roanoke
Jones, Nancy A. D. - Session 69 – Hotel Roanoke

Judd, Kevin - Session 98 – Hotel Roanoke

Judd, Kevin - Session 117 – Hotel Roanoke

Judge, Kathleen - Session 25 – Hotel Roanoke

King, Jen - Session 33– Hotel Roanoke

Knight, Carol - Session 24 – Hotel Roanoke

Knight, Natisha - Session 30 – Hotel Roanoke

Knight, Natisha - Session 146 – Hotel Roanoke

Kreye, Betti Dr. - Session 96 – Hotel Roanoke

Lamb. Amy S. - Session 122 – Hotel Roanoke

Lancaster, Brooke - Session 52 – Hotel Roanoke

Leighty, Diane - Session 21 – Hotel Roanoke

Leong, Morrow Kimberly - Session 120 – Hotel Roanoke

Lewis, Dr. Virginia - Session 112 – Hotel Roanoke

Lisker, Jarrod - Session 141 – Hotel Roanoke

Lockett, Anita - Session 150 – Hotel Roanoke

Loucks, Carolyn Hirst - Session 51 – Hotel Roanoke

Loucks, Kim - Session 32 – Hotel Roanoke

Manizade, Dr. Agida - Session 80 – Hotel Roanoke

McDonald, Beth - Session 36 – Hotel Roanoke

McManus, Ann - Session 133 – Hotel Roanoke

Meints, Katherine - Session 128 – Hotel Roanoke

Meints, Katherine - Session 147 – Hotel Roanoke

Miller, Chelyse - Session 10 – Hotel Roanoke

Miller, Chelyse - Session 29 – Hotel Roanoke

Moore, Beth - Session 90 – Hotel Roanoke

Morris, Kathleen - Session 75 – Hotel Roanoke

Morrison, Teresa A. - Session 139 – Hotel Roanoke

Neff, Michael - Computer Session 3 at Higher Ed Center across the street from hotel

Neufeld, Rudy - Computer Session 4 at Higher Ed Center across the street from hotel

Neufeld, Rudy - Session 119 – Hotel Roanoke

Nichols, Doug - Session 17 – Hotel Roanoke

Norton, Cindy - Session 9 – Hotel Roanoke

Orr, Jennifer - Session 47 – Hotel Roanoke

Orr, Jennifer - Session 67 – Hotel Roanoke

Overstreet, Heather - Session 93 – Hotel Roanoke

Persing, Carrie - Session 134 – Hotel Roanoke

Plaxco, David - Session 13 – Hotel Roanoke

Reed, Lynn Foshee - Session 94 – Hotel Roanoke

Reeps, Heather Smith - Session 41 – Hotel Roanoke

Robinson, Mandy - Session 65 – Hotel Roanoke

Rose, Stephen - Session 153 – Hotel Roanoke

Rutecki, Lucy - Session 5 – Hotel Roanoke

Saultz, Jessica Lee - Session 105 – Hotel Roanoke

Saultz, Jessica Lee, Session 124 – Hotel Roanoke

Schieck, Niki - Session 123 – Hotel Roanoke

Schneider, Patti - Session 108 – Hotel Roanoke

Schroll, Daniel - Session 85 – Hotel Roanoke

Schultz, Kyle T. - Session 104 – Hotel Roanoke

Schulz, Sue - Session 48 – Hotel Roanoke

Schulz, Jonathan - Session 88 – Hotel Roanoke

Seeman, Marc - Session 149 – Hotel Roanoke

Seshaiyer, Padmanabhan - Session 43 – Hotel Roanoke

Seshaiyer, Padmanabhan - Session 99 – Hotel Roanoke

Setorie, Andrienne - Session 55 – Hotel Roanoke

Sevin, Volkan - Session 113 – Hotel Roanoke

Smith, Wendy Hageman - Session 152 – Hotel Roanoke

Steckroth, Dr. Jeffrey - Session 46 – Hotel Roanoke

Steele, Leslie - Session 118 – Hotel Roanoke

Steelman, Danielle - Session 54 – Hotel Roanoke

Stofko, Donna - Session 114 – Hotel Roanoke

Stoner, Art - Session 64 – Hotel Roanoke

Suh, Jennifer - Session 4 – Hotel Roanoke

Suh, Jennifer - Session 23 – Hotel Roanoke

Tait, Allison - Session 127 – Hotel Roanoke

Thomas, Wanita Jane - Computer Session 5 at Higher Ed Center across the street from hotel

Tilashalski, Melissa, Ann - Session 39 – Hotel Roanoke

Timmerman, Dr. Maria - Session 132 – Hotel Roanoke

Topper, Heather - Session 144 – Hotel Roanoke

Triplett, Lori - Session 12 – Hotel Roanoke

Triplett, Lori - Session 31 – Hotel Roanoke

Triplett, Lori - Session 50 – Hotel Roanoke

Utt, Jeremy - Session 145 – Hotel Roanoke

Vester, Kristine - Session 109 – Hotel Roanoke

Ward, Rebecca - Session 70 – Hotel Roanoke

West, Eric Allen - Session 49 – Hotel Roanoke

Whitenack, Joy - Session 92 – Hotel Roanoke

Wickham, Deborah - Session 44 – Hotel Roanoke – KEYNOTE SPEAKER

Wilder, Donna - Session 19 – Hotel Roanoke

Wilson, Patricia Caldwell - Session 86 – Hotel Roanoke

Worrell, Kellie - Session 89 – Hotel Roanoke

Wright, Nikki - Session - 83 – Hotel Roanoke

Zirkle, Meredith - Session 151 – Hotel Roanoke

Thank all of you and your co-presenters for speaking at the conference. We hope you will plan to speak at our 34th Annual Conference at The Founders Inn in Virginia Beach in March, 2013.

NOTES

Shoot for the Stars: SOL and Beyond

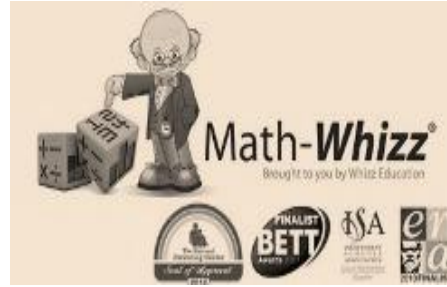
The Blue Ridge Council of Teachers of Mathematics hopes that you have enjoyed “Shoot for the Stars: SOL and Beyond” and will travel home with many new ideas and professional connections. Thank you for joining us this year at the 2012 Annual Conference here in Roanoke.

Next year we hope you will join us at the 2013 Annual Spring Conference in Virginia Beach, Virginia at The Founders Inn. We encourage you to not only attend but to present at this conference and share your ideas with your colleagues. Check the VCTM website frequently for dates and for speaker proposal forms. Our web address is www.vctm.org.

If your email address changes, please notify Ruth Harbin-Miles at smilesalot4u2@yahoo.com. We communicate with members via email and we do not want you to miss any communication about VCTM activities. So please let us know if your email address changes.

**ALWAYS
LEARNING**

PEARSON



Thank you, Pearson “Always Learning” and Math Whizz for your support of the VCTM Conference.