

Northeastern Oklahoma Mathematics and Science Teacher Association



**Second Annual Meeting
January 31, 2004
9:00 AM – 3:00 PM
Northeastern State University
Tahlequah, OK**

Sponsored in part by the College of Math, Science, and Nursing; Northeastern State University; and NSU MASTEP, a National Science Foundation Funded Program

NOMSTA Officers and Board

President: Timmie Spangler
*President- Elect: Lance Phillips
*Past President: None
*Membership Secretary: Stacy Ezell
Newsletter Editor: Rebekah Ham
Webmaster: April Adams

Mathematics Division
Workshop Chair: Carrie Steele and Patti Allen
*Elementary: Shelley Gantt
*Middle School: Sharon Gleese
*High School: Shiranjini Jeyarajah
*College/University: Steven Wilkinson

Science Division
Workshop Chairs: Melissa Parnell and Tammie Delmedico
*Elementary: Kathy Coleman
*Middle School: Renae Shoate
*High School: Cherinell Riley
*College/University: Monica Macklin

* Indicates Board Members

Please say thank you to our
conference materials sponsors:

CPO Science
NSU Bookstore
NSU MASTEP
Northeastern State University
National Science Teacher Association
Oklahoma Science Teacher Association
SCIMAST/SEDL
Texas Instruments

Northeastern Oklahoma Mathematics and Science Teacher
Association (NOMSTA)

First Annual Meeting

January 31, 2004

9:00 am - 3:00 pm

Northeastern State University, Tahlequah, OK

Sponsored in part by

College of Math, Science and Nursing, Northeastern State University and
NSU MASTEP, a National Science Foundation funded program

Conference Overview

8:30 - 9:00 am	Pick up Packets On-Site Registration	Reception area of NET Auditorium
9:00 - 9:15 am	Welcome Welcome to NSU (<i>Dr. April Adams</i> , College of Math Science and Nursing) Introduction of Officers and Board (<i>Timmie Spangler</i> , President) Conference Information (<i>Lance Phillips</i> , President-Elect) and NOMSTA Candidates	NET Auditorium
9:15 - 10:00 am	"No Child Left Behind: The Perspective of the National Science Teacher Association," Presentation by <i>Lynn Young</i> , Director of Division XIII of the National Science Teacher Association	NET Auditorium
10:15 - 11:15 am	Session I Workshops	2 nd and 3 rd Floors, UC
11:25 am - 12:25 pm	Session II Workshops	2 nd and 3 rd Floors, UC
12:35 - 1:50 pm	Lunch and NOMSTA Meeting in which officers and board members will be elected. Address by Incoming President. Lunch is provided for pre-registered attendees and presenters at no additional charge.	Ballroom, 2 nd Floor, UC
2:00– 3:00 pm	Session III Workshops	2 nd and 3 rd Floors, UC
3:00 – 4:00 pm	NOMSTA Board Meeting	Birch (Morgan) Room, 3 rd Floor, UC

Session I Mathematics Workshops (10:15 - 11:15 am)

IM1 (IS1) General Interest Mathematics Floor, UC

Ballroom Lounge, 2nd

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: Vicki Anderson, Sondra Baker, Victoria Bangle, Rita Breashears, Michelle Camacho, Vickie Chamberlain, Zolene Chancellor, Sherry Collins, Mary Coombes, Carolyn Davis, P. A. Engel, Marybeth Flusche, Kerry Goode, Shiranjini Jeyarajah, Steve Hardy, Peggy Hart, Darron Hummingbird, Vicky Hurst, and Cherinell Riley, and Skyleen Willingham.*

IM2 General Interest Mathematics

Birch (Morgan) Room, Third Floor, UC

Tessellations, Dr. *Deborah Carment, Northeastern State University.* The participants will create a variety of tessellations- tilings of the plane.

IM3 Middle School Mathematics

Redbud Room, 3rd Floor, UC

Filling and Wrapping – Three Dimensional Measurements, *Carrie Steele, Kansas Public Schools.* Participants will explore the surface areas and volumes of rectangular prisms and cylinders in depth. We will be using the Connected Math Curriculum.

IM4 Middle School and High School Mathematics

Room 222, 2nd Floor, UC

EXCEL – An Amazing Graphing Calculator, *Dr. Wendell Wyatt, Northeastern State University.* Participants will learn how to use Excel to graph number relations and functions using a variety of examples.

Session I Science Workshops (10:15 - 11:15 am)

IS1 (IM1) 2nd Floor, UC

General Interest Science

Ballroom Lounge,

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: Vicki Anderson, Sondra Baker, Victoria Bangle, Rita Breashears, Michelle Camacho, Vickie Chamberlain, Zolene Chancellor, Sherry Collins, Mary Coombes, Carolyn Davis, P. A. Engel, Marybeth Flusche, Kerry Goode, Shiranjini Jeyarajah, Steve Hardy, Peggy Hart, Darron Hummingbird, Vicky Hurst, Cherinell Riley and Skyleen Willingham.*

IS2 Elementary Science

Ballroom C, 2nd Floor, UC

Waste Race, *Kay Frank, Solid Waste Institute of Oklahoma.* Join a relay race (walking) to classify trash items as reusable, recyclable, compostable, disposable or household hazardous waste. Intro. to other trashy activities.

IS3 Middle School Science and High School Dogwood Room 3rd Floor, UC
Energy and the Rollercoaster, *Winston Hoskins, CPO Science*. Where do you scream the loudest on a rollercoaster? Where does it move the fastest? In this workshop you will use an electronic timing system to measure the speed of a marble as it moves up and down a rollercoaster. In the process, you will develop a practical, hands-on understanding of the law of conservation of energy. The nature of potential energy, kinetic energy, and other forms of energy will be explored and discussed.

IS4 Middle School and High School Science 223, 2nd Floor, UC
Physical Science Make-N-Take, *Marty Peters, Tulsa Public Schools*. Participants will produce inexpensive devices for demonstrating or exploring physical science.

Session II Mathematics Workshops (11:25 am - 12:25 pm)

IIM1 (IIS1) General Interest Mathematics Ballroom Lounge, 2nd Floor, UC

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: Veta Dill, Marjean Dowling, Stacy Ezell, Rebekah Ham, Gayla Hatfield, Debra Hayes, Jenean Hendrickson, Jeff Hedger, Karl Hutchison, Jim Keene, Jeff Lawrence, Lori Layer, Thomas Lilies, and Faye Miller.*

IIM2 Elementary and Middle School Mathematics Dogwood, 3rd, Floor, UC
Blending Literature and Mathematics: Exploring the Possibilities, *Dr. Martha Parrott, Becky Burrows, and John Dodd, Northeastern State University*. This session examines how to integrate mathematics and literature in elementary and middle school classrooms. Specific books and uses of children's literature will be discussed.

IIM3 (IIS4) Elementary and Middle School Mathematics Redbud Room, 3rd Floor UC
The Classroom is for the Birds, *Dr. Amy Smith, Northeastern State University*. This hands-on workshop is designed to help you integrate birds into your classroom and across your curriculum. Guaranteed to be a hoot.

IIM4 Middle School and High School Mathematics Room 222, 2nd Floor, UC
Hands-on Algebra to Teach Basic Operations on Integers, *Lexy Taylor, Tahlequah Public Schools and Chelly Nelson, Northeastern State University*. Lessons will be taught using 3 developmental stages from the concrete to the abstract level of thinking: 1. using manipulatives, 2. sketching, and 3. games.

Session II Science Workshops (11:25 am - 12:25 pm)

IIS1 (IIM1) General Interest Mathematics Ballroom Lounge, 2nd Floor, UC

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: Veta Dill, Marjean Dowling, Stacy Ezell, Rebekah Ham, Gayla Hatfield, Debra Hayes, Jenean Hendrickson, Jeff Hedger, Karl Hutchison, Jim Keene, Jeff Lawrence, Lori Layer, Thomas Lilies, and Faye Miller.*

IIS2 Elementary, Middle School and High School Science Room 223, 2nd Floor UC

The Physics/Engineering of the Paper Airplane, *Dr. Calvin Cole, Northeastern State University.* A hands-on investigation of the physics and engineering behind making a paper airplane and making it fly properly. Both typical and realistic paper aircraft will be used.

IIS3 (IIM4) Elementary and Middle School Science and Mathematics Redbud Room, 3rd Floor UC

The Classroom is for the Birds, *Dr. Amy Smith, Northeastern State University.* This hands-on workshop is designed to help you integrate birds into your classroom and across your curriculum. Guaranteed to be a hoot.

IIS4 Middle School Science Birch (Morgan) Room, 3rd Floor UC

How dense is your soda? *Timmie Spangler, Depew Public Schools and Cherinell Riley, Tahlequah Public Schools.* We will compare the densities and volume of diet and regular sodas.

IIS5 Middle School and High School Science Ballroom C, 2nd Floor, UC

Concentration, Diffusion, and Toxicity, *Dr. Nikki Hanegan, SEDL.* An integrated mathematics and science unit for understanding the risk of bioterrorism. Hands-on activity, free materials.

Lunch and NOMSTA Meeting, UC Ballroom (12:35 - 1:50 pm)

Lunch requires a ticket. All presenters and pre-registered participants should have received a ticket. All tickets that have not been picked up by lunch time will be distributed to participants who registered on-site on a first come first served basis at 12:25 pm in front of the UC Ballroom. **There will be a NOMSTA Meeting immediately after lunch in the Ballroom. All attendees are invited to join and participate in the meeting. Membership is free. At this meeting, we will elect officers and board members.**

Session III Mathematics Workshops (2:00 3:00 pm)

IIIM1 (IIIS1) General Interest Mathematics and Science Ballroom Lounge, 2nd Floor, UC

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: Laura Lisa Everley, DeShawn McCrary, Steven Moreau, Nancy Ogle, Janet Polson, Barbara Ross, Renae Shoate, Timothy Smythe, Elizabeth Sonnenfeld, Sarah Sousa, Timmie Spangler, Cory Steele, Shasta Wallace, Julie Williams, Sharon Williams, and Jan Yang.*

IIIM2 (IIIS2) Elementary, Middle, High School and College Mathematics and Science Ballroom C, 2nd Floor, UC

Steamer, *Dr. Nikki Hanegan, SEDL.* Educational activities for all students and teachers of science. Come learn about our Pacific Ocean Adventures

IIIM3 Elementary and Middle School Mathematics Birch (Morgan) Room 3rd Floor, UC

Modeling Number Relations- Seeing, Experiencing, Understanding, *Dr. Wendell Wyatt, Northeastern State University.* Participants will experience visual and tactile representations of GCD, LCM, arithmetic sequences, averages, percentage problems, rate problems, and other number relations.

IIIM4 Middle School and High School Mathematics Dogwood, 3rd Floor, UC

Amazing Card Trick, *Dr. Joan E. Bell and Dr. Darryl Linde, Northeastern State University.* A card trick will motivate the exploration of permutations. The large relative size of a permutation will be discussed. Audience will practice the card trick.

IIIM5 High School Mathematics Room 223, 2nd Floor, UC

Analytical Geometry with the Graphing Calculator, *Shiranjini Jeyarajah, Northeastern State University.* This presentation is an introduction to analytical geometry (ellipse, circle, parabola, hyperbola...) using graphing calculators.

Session III Science Workshops (2:00 3:00 pm)

IIIS1 (IIIM1) General Interest Mathematics and Science Ballroom Lounge, 2nd Floor, UC

Where in the World Can You Go to Meet with Mathematics and Science Teachers? and Purchasing Equipment and Supplies for Your Classroom: What You Can Buy and How Can You Use It? *A Presentation by NSU MASTEP Participants: , Laura Lisa Everley, DeShawn McCrary, Steven Moreau, Nancy Ogle, Janet Polson, Barbara Ross, Renae Shoate, Timothy Smythe, Elizabeth Sonnenfeld, Sarah Sousa, Timmie Spangler, Cory Steele, Shasta Wallace, Julie Williams, Sharon Williams, and Jan Yang.*

IIS2 (IIM2) Elementary, Middle, High School and College Mathematics and Science Ballroom C, 2nd Floor, UC

Steamer, *Dr. Nikki Hanegan, SEDL*. Educational activities for all students and teachers of science. Come learn about our Pacific Ocean Adventures

IIS3 Middle School Science Redbud Room 2nd Floor, UC

PLT Energized! (Project Learning Tree), *Christina Stallings, Oklahoma Forestry Services and Gina Lagaly, ECO-Motion/OKIEE*. Project Learning Tree has added an award-winning energy education component. Integrating energy concepts, music, interactive video, and hands-on activities. Kids love it!

IIS4 High School and College Science Room 222, 2nd Floor, UC

Teaching Physics with Physlets, *Dr. Terry Bradfield, Northeastern State University*. A brief introduction to Physlets and some examples of their use in a classroom setting.

Spread the word about NOMSTA!

Membership forms are on the NOMSTA web site:

<http://arapaho.nsuok.edu/~NOMSTA>