



# MONTANA MATHEMATICS

A Publication of the Montana Council  
of Teachers  
of Mathematics

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## President's message

Welcome to the newsletter after a one issue absence. Our fantastic newsletter is again being printed for our membership by some energetic folks from Great Falls. I would like to thank Kathje Dalton, Kurt Shepherd and Mary Aspinwall for agreeing to take on this task. I know that the newsletter will be in good hands. On behalf of the MCTM membership, I would also like to also thank Terri Dahl, Marcia Anderson and Joyce Miller for their great work over the past seven years. Volunteers such as these are what make the MCTM a great organization.

The weather may be turning colder, but math in Montana is heating up. We are so lucky to have teachers who are willing to work hard so the rest of us may benefit. I would like to highlight a few of the great happenings in Montana mathematics.

Linda Horst is the go-to person for the Professional Development Academy this summer. Remember the focus is number sense and is geared toward K-6 teachers. We are lucky to have Angel Greenley and Nina Miller as instructors for this class. Their years of experience (for such young teachers) is so valuable for this great opportunity. There is an application printed elsewhere in this newsletter. My friend Barney will have a couple more things to say about this academy.

Jean Howard, Dick Seitz, Gary Bauer, and Jennie Lubeck are pushing ahead with the COMET grant. What a fantastic opportunity for the teachers of Montana! A quick over view is that these four folks have written a grant that allows the training of a core group of teachers in Montana. They will be presented some quality content and given some pedagogy to further their teaching skills. There will be 25 teachers in each of the grade bands K-5, 6-8 and 9-12. The 25 teachers and two facilitators for each group will meet for two weeks this summer and for one week in the summer of 2006. Each group will have their own two-week session at Canyon Ferry (MLC). We are so lucky to have people to write these grants, Montana teachers to serve as facilitators and Montana teachers willing to give up some of the summer and to learn more about quality mathematics instruction.

Good news! Terry Sourhada and Peter Fong are now officially employed by Kendall/ Hunt and MCTM. They are revising the SIMMS materials to get them ready for publication and distribution. These two fine teachers have gone through a lot but are now on payroll. We are indebted to them for the time, effort and perseverance. As you might remember, Kendall/Hunt has agreed to market the SIMMS materials.

Lisa Scott, Angel Greenley, Ellen Rose, and Allyson Mike have again put on an amazing Leadership Conference. When everything goes as smoothly as this last one, we forget how much work goes into the planning. Both MCTM and MSTA are so very fortunate to have these dedicated individuals as members of our organizations.

And finally, congratulations to Terry Sourhada and Johnny Lott as winners of the Dean Preble Award. These are two truly deserving teachers.

Again, I am blessed to be part of MCTM. You don't know how great it is to be part of a group that cares so dearly about the education of our students.

*Jim Hamling*

## WE CARE!

Periodically we will send our members fast updates on approaching deadlines and opportunities via email. If you have changed your email address since you registered as an MCTM member please send an update to Deb Wickum: [debwickum@hotmail.com](mailto:debwickum@hotmail.com)

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### MSTA/MCTM Leadership Conference

This year the Leadership Conference was hosted in Bozeman, MT at the Holiday Inn on January 7-8, 2005. It was a very informative and exciting conference. Freta Parkes was our keynote speaker. She is from Palestine, Texas and is a professional educator and school board member. Her presentation was from the book, "A Framework for Understanding Poverty" written by Ruby K. Payne, Ph.D. Freta was entertaining and provided the audience with important items, related to our students of poverty. She gave us resources and case studies. She also talked about "hidden rules" among the classes, patterns of generational poverty, and family structure. Freta opened my eyes to possible reasons for students of poverty to turn in homework late or not at all. She helped me realize how these students think and what motivates them. This was probably one of the best presentations I have seen in education. If you ever have an opportunity to see Freta present, take full advantage of it!

Margaret Bowles from the Office of Public Instruction gave an update on a "highly qualified" teacher. OPI met with the Department of Education and presented the HOUSSE for Montana. This essentially states that if a teacher meets the requirements set by the state of Montana for certification, then they are highly qualified. The DOE has until the middle of January to respond with a report. As soon as OPI knows more, then we will know more. For more information, check <http://www.opi.state.mt.us>. There is a monthly newsletter at this website called the JUMP newsletter. It will provide current information.

Jim Hamling and Todd Morstein gave the State-of-the-State presentations for Math and Science. Math and Science continue to be concerned about the MontCAS test. Math is in place for 4<sup>th</sup>, 8<sup>th</sup> and 10<sup>th</sup> grade. Spring 2006, 3<sup>rd</sup>, 5-7<sup>th</sup> grade math will be added to the testing. Science is beginning to plan for the MontCAS test. This pilot is scheduled for the spring 2008.

Pam Koterba was in charge of MEA/MFT convention mentoring. She encouraged all of us to do a presentation or a poster presentation at the convention in Missoula this fall. There are forms available at [www.mea-mft.org/edcon](http://www.mea-mft.org/edcon). Please send your completed applications to Deb Johnson, 4275 DJ Drive, Missoula, MT 59803.

Jean Howard presented the open forum. The participants shared their concerns in education and offered potential solutions. These concerns and suggested solutions were written on postcards and sent to our senate and house representatives. We are planning on this being a yearly event. We need to be heard by our legislators!

The breakout sessions were outstanding. I would like to give a special thanks to those presenters. These topics and presenters included; Building Success in Title I School-Jenny Combs & Carol Blades, Math Curriculum for the Success of Native American Students-Trivian Rides the Bear & Roxanne Not Afraid, A Look at eMSS-Larry Bice, Sue Kocyba & Elizabeth Swanson, Teaching Native American Culture Through Science and Technology Activities-Ivy Merriot & Leon Rattler, Meaningful Math & Science Assessment-Leanne Yenny & Anne Keith, National Board Certification-Margaret Bowles, Writing in Math-Angel Greenley, Strategies to Assess for Learning in Your Classroom-Beth Thomas & Mary Wren, Information and Discussion on MT's NCLB Criterion Referenced Test (MontCAS)-Kathy Hill & Yvonne Gebhardt.

Alyson Mike and Lisa Scott talked about nominating outstanding secondary teachers in Math and Science to apply for the Presidential Award. The award is for \$10,000.00 and an all expense paid trip to Washington D.C. for the winner and their spouse. For more information and the nomination forms, go to [https://www.ehr.nsf.gov/pres\\_awards/](https://www.ehr.nsf.gov/pres_awards/).

I want to thank Ellen Rose, Angel Greenley and Alyson Mike for the help in planning and hosting the Leadership Conference. I also want to thank the presenters, the participants for attending and the school districts for contributing their funds to send people from their districts. Without the wonderful teachers in Montana this would not be possible.

Lisa Scott  
Leadership Co-Chairperson

## MATH CONTEST NEWS!

There are many changes taking place for the 2005 Math Contest to be held in YOUR area in March of this year.

BILLINGS:	MARCH 1 <sup>ST</sup> (4 PM)
BOZEMAN:	MARCH 31 <sup>ST</sup> (4:30 PM)
BUTTE:	MARCH 16 <sup>TH</sup> (9:30 AM)
GLASGOW:	MARCH 8 <sup>TH</sup> (3:45 PM)
GRASSRANGE:	TBA
GREAT FALLS:	MARCH 5 <sup>TH</sup> (8:30 AM)
HAVRE:	TBA
KALISPELL:	TBA
MILES CITY:	MARCH 14 <sup>TH</sup> (2:30 PM)
MISSOULA:	TBA
SIDNEY:	MARCH 14 <sup>TH</sup> (4:00 PM)

If you have any questions about the Changes outlined below, please contact

Satinee Lightbourne, State Math Contest Director via e-mail: [satinee\\_lightbourne@gfps.k12.mt.us](mailto:satinee_lightbourne@gfps.k12.mt.us)

THESE CHANGES, WE FEEL MAKE THE CONTEST BETTER FOR STUDENTS AND EASIER FOR THE DIRECTORS

- STUDENTS WILL NO LONGER NEED TO PICK THE EVENTS THEY WILL COMPETE IN. (see lists and topics below)
- STUDENTS WILL COMPETE AT THEIR GRADE LEVEL (but will be allowed to compete at higher levels if desired, except for the 12C level, at which only 12<sup>th</sup> graders can compete.
- SOME REGIONAL SITES WILL NO LONGER OFFER THE TEAM TEST due to one or more of the following reasons: space no longer allows for this test, students do not take it seriously, proctors have complained that is too hard to monitor, and/or scheduling is a nightmare and coaches don't follow the rules and let their students go with whichever team they choose. SITES WHO STILL OFFER TEAM TESTS WILL GROUP THEIR TEAMS AS 7-8, 9-10 AND 11-12.
- MOST SITES WILL BE REGISTERING OVER E-MAIL USING EXCEL watch the mail for a postcard with an address to get your registration file.
- DEADLINES FOR RECEIVING FEES WILL NOT BE A POSTMARK DEADLINE, BUT A "RECEIVED BY" DEADLINE SO BE SURE TO GET YOUR CHECK IN THE MAIL AT LEAST A WEEK BEFORE THE "RECEIVED BY" DEADLINE OR YOU WILL NOT BE ALLOWED TO PARTICIPATE EVEN IF YOU SEND YOUR REGISTRATIONS BY THE REGISTRATION DEADLINE.
- BE SURE TO REGISTER YOUR STUDENTS BY THE

GRADE LEVEL AT WHICH THEY WISH TO COMPETE. If Suzie Q is a genius 7<sup>th</sup> grader and wants to take the 9<sup>th</sup> grade tests, then register her as a 9<sup>th</sup> grader. The only students allowed to register for the 12C are those SENIORS who are competing for the scholarship. An 11<sup>th</sup> grader can "practice" these tests just as in the past by registering for 11C.

The following are the topics and tests for each grade level:

Registered AS:	Will Take:
7 <sup>th</sup> Grade	Seventh Grade, Pot Luck
and	Number Concepts
8 <sup>th</sup> Grade	Pot Luck, Number Concepts, Dimensions and
Shapes	
9 <sup>th</sup> Grade	Dimensions and Shapes, Solving
Problem	
and Applied Math	
10 <sup>th</sup> Grade	Problem Solving,, Applied Math, and Intermediate
Math	
11 <sup>th</sup> -12 <sup>th</sup> A	Intermediate Math, Advanced, Finite
11 <sup>th</sup> - 12 <sup>th</sup> B	Advanced Math, Finite, Senior
11 <sup>th</sup> - 12 <sup>th</sup> C	Senior, Finite and Scholarship

**(Seniors who wish to qualify for the scholarships will need to register as GRADE: 12C)**

**Suggested test topics may include but are not limited to the following:**

**Seventh Grade Topics:** Order of Operations, fractions, decimals, rounding and estimation, solving simple algebraic equations, classification of figures.

**Pot Luck Topics:** Similarity, numeracy, coordinate geometry, integer applications, patterns, fractions, formulas, probability, graph interpretation, solving two-step algebraic equations.

**Number Concepts Topics:** Percent, ratio, proportion, numeracy, number patterns, basic statistics

**Dimensions and Shapes Topics:** Perimeter, area, volume, applications, unit analysis, pythagorean theorem

**Problem Solving Topics:** Data analysis, linear functions, scientific notation, exponential growth, patterns, deductive reasoning, matrix operations, variation.

**Applied Math Topics:** Percent, area, volume, probability, price computations, geometry, functions, distance, midpoint, angles, parallel lines, perpendicular lines.

**Intermediate Math Topics:** Variation, inequalities, dimensional analysis, linear and quadratic expressions and equations, statistics, linear algebra, patterns

*Continued on page 4*

statistics, graph theory, matrix applications, series and sequences, regression, correlation

**Senior Topics:** Complex numbers, conic sections, patterns, step and polynomial functions, vectors, parametric equations, limits, optimization problems.

**Scholarship Topics:** Conic Sections, linear programming, combinations and permutations, graph theory, sequences and series, limits, parametric equations, optimization problems, derivatives, integrals

**Some sites will offer the Team Tests**

**7-8 Team Topics:** selected from topics on Seventh, Pot Luck, Number Concepts, Dimensions and Shapes

**9-10 Team Topics:** selected from topics on Dimensions and Shapes, Problem Solving, Applied Math and Intermediate Math.

**11-12 Team Topics:** selected from topics on Intermediate Math, Advanced Math, Finite, and Senior

**Scholarships for the amount of \$200 are awarded to the top senior girl and top senior boy at each region. Regional winners compete via their scores for state scholarships of an additional \$500 each.**

## Jeanne Hoskins is the Winner of the Trip to Anaheim, CA for the NCTM Convention!

MCTM hosted a membership drive. Every member that recruited a new member was entered twice into a drawing for a trip to the NCTM Conference in Anaheim, CA on April 6, 2005 through April 9, 2005. (See <http://www.nctm.org> for more details about the conference.) Jeanne is an elementary teacher in West Yellowstone.

Jeanne will receive paid registration at the NCTM member rate of \$180, four nights at a hotel at approximately \$100/night, an airline ticket estimated at \$500 and food expenses of \$25/day for four days.

The winner of the trip to Anaheim was drawn at the Leadership Conference in Bozeman on January 8, 2005. Jeanne was selected by generating a random number on a TI-92 calculator after it has been randomly seeded.

There will be another chance to win a trip to a NCTM Conference. The contest will begin in September of 2005. This trip will be to St. Louis, MO on April 26-29, 2006. So, get ready to recruit new members!

Congratulations Jeanne!

## What Is Mathematical Literacy to You?

Johnny W. Lott  
The University of Montana

For five days this week, I have been at Banff Centre outside Calgary working with a group of 24 individuals on the meaning of numeracy, or mathematical literacy, and how it can be improved in the world. This was an important time to be here thinking about this because the results of the PISA test were released in Paris. PISA stands for Program for International Student Assessment. PISA is coordinated by the Organization for Economic Cooperation and Development (OECD), an intergovernmental organization of industrialized countries. PISA was begun in 2000) and focuses on 15-year-olds' capabilities in reading literacy, mathematics literacy, and science literacy. PISA includes measures of general competencies such as learning strategies. It emphasizes skills that students have acquired and is administered every three years. PISA 2003 focused on mathematics literacy and reported on problem-solving skills. You can download the full report at <http://nces.ed.gov/surveys/pisa/>.

On this report as on TIMSS, United States students do not fare well compared to other countries. Though this is a single test, the US does have a history of not stacking up well when compared with other countries. Major questions are why and what could be done about it. These questions are also being asked in other countries, because overall, scores are not fantastic. And these questions bring me back to mathematical literacy and what it means to you in Montana. Please think about the following and let me know what you think.

1. Mathematical literacy could be improved by changing the curriculum in elementary school. If you agree, how should it be changed?
2. Mathematical literacy could be improved by changing the mathematics requirements for prospective elementary teachers. If you agree, how should it be changed?
3. Mathematical literacy could be improved by requiring all students to have four years of mathematics in high school. If you disagree, how much should all take?
4. Mathematical literacy could be improved by requiring all post secondary students to take a mathematical literacy course regardless of their major. If you disagree, how should a general education mathematics requirement be determined?
5. Mathematical literacy cannot be taught by a mathematics department. If you agree with this, who should teach it?

Thank you for considering this small questionnaire. Please email me at [jlott@mso.umt.edu](mailto:jlott@mso.umt.edu) with your responses. If there is enough response, I will report results back to you later—as-

**Quotes and Jokes from the Classroom Teacher!**

If you have a quote or joke to share with our membership, please Email them to [scottl@billings.k12.mt.us](mailto:scottl@billings.k12.mt.us).

Genre: Educational Jokes

This past fall semester, at Duke University, there were two sophomores who were taking Organic Chemistry and who did pretty well on all of the quizzes, midterms, labs, etc. Going into the final exam, they had solid "A's."

These two friends were so confident going into the final that the weekend before finals week (even though the Chem. final was on Monday), they decided to go up to University of Virginia to a party with some friends. So they did this and had a great time. However, they ended up staying longer than they planned, and they didn't make it back to Duke until early Monday morning. Rather than taking the final then, they found Professor Aldric after the final and explained to him why they missed it. They told him that they went up to Virginia for the weekend, and had planned to come back in time to study, but that they had a flat tire on the way back and didn't have a spare and couldn't get help for a long time. So they were late getting back to campus. Aldric thought this over and agreed that they could make up

the final on the following day. The two guys were elated and relieved. So, they studied that night and went in the next day at the time that Aldric had told them.

He placed them in separate rooms, handed each of them a test booklet and told them to begin. They looked at the first problem, which was something simple about free radical formation and was worth 5 points.

"Cool" they thought, "this is going to be easy." They did that problem and then turned the page.

They were unprepared, however, for what they saw on the next page.

It said: (95 points) "Which tire?"

Submitted by Jenny Combs

Teacher: "Who would you like to see as president? Bush or Kerry?"

Student: "Kerry, it would be neat to have a woman president."

Teacher: "Mr. Kerry is a man"

Student: "Oh, I thought that was a first name"

After trying to grasp a tougher concept in math a light flashed for a student.

Student 1: "I got it!! I understand what you said!"

Student 2: "Boy, you must have a lot of space for math in your head."

Quotes from Jim Hamling's classroom

**MCTM Board Meeting Update**

On Jan.6, 2005 the MCTM Board convened for the winter meeting in Bozeman. The list of reports from various committees and project directors was long. They included the COMET Project which is aimed at professional development for K-12 teachers to improve content knowledge, teaching strategies, and assessment methods. The STARS Project is also alive and well with workshops in the planning stages in Power, Belgrade and at the MLC. A contract was finally signed with Kendall-Hunt for the revision of the SIMMS materials into a four-year curriculum as well as rearranging the order in which some of the topics are presented. The membership drive was a huge success, bringing the MCTM current membership to a total of 511. The Montana Science Institute is officially dissolved and the facility at Canyon Ferry is now being fully managed as the Montana Learning Center. They have their own website [www.montanalearning.org](http://www.montanalearning.org) - you really should check it out. All meetings end with each board member listing their duties and responsibilities to fulfill before they meet again.

This is just a very short summary of the meeting. Full minutes cannot be published until reading and approval at the next official board meeting, scheduled for June 12, which will be followed by a retreat for brainstorming and creating a vision for the next two years for the MCTM. Contact your regional director if you have ideas that you would like considered as part of that plan. You can access approved meeting minutes as well as the MCTM By-Laws, Policy Manual and Procedures Manual on the MCTM website [www.montanamath.org](http://www.montanamath.org).

## ASK BARNEY



### 1. Barney, what did you do for the holidays?

I am so glad you asked. I just kicked back in my insulated doghouse and read some good books. Of course, I had to rent a couple of DVD's. Isn't that Incredible Journey series just about the best bunch of movies ever produced?

### 2. Have you seen the results in the paper of the Program for International Student Assessment? I am really worried. Should I be?

I, too, read the results in the Great Falls paper. This test is a measure used to assess the literacy rates every three years of 15-year old students from around the world. The U.S. scored below the international average in total math literacy and below average in every specific area tested, from geometry and algebra to statistics and computation. When compared with all 39 nations that produced scores the U.S. was below 23 countries, above 11, and about the same as four others. Should you be worried? Yes! But now the good news... if you do not like these results, stick around and there will be another test with different results out soon that will make us look better. On the 15<sup>th</sup> of December, the Billings Gazette reported the findings for TIMMS (Trends in Mathematics and Science Study). They reported that the U.S. is above average across the board.

I know that the United States has some great math teachers and that the Montana teachers rank right along with the best of the best. But, are we continuing to attract the best teachers? I am not sure I can answer that in the affirmative. We have many university students who care about making a difference in education. Unfortunately, when a math student has a possibility of making 20 some thousand dollars as a beginning teacher or 40K+ as an engineer, they take the practical route. As an education community, we need to encourage our students to pursue education as a profession. We need to give that extra push. We can make a difference.

I know I am going on and on, but I believe in education and I believe in the math education in Montana. I hope all of the readers of this humble column are doing their best to improve their skills. We cannot rely on what we did ten years ago as an acceptable method

of instruction. We need to attend workshops and conferences, and talk with other teachers. The MCTM Professional Development Academy, highlighting number sense, is a great opportunity for K-6 teachers. Our local school districts are making it so easy to not go to the fall conference. They are providing many, many chances for local in-service. I heard of one district that allowed Cowboy Poetry as an acceptable option for a PIR day. Now I love CB poetry, but for a math teacher to improve his/her skills? (Sorry about the ranting). As dedicated math teachers of Montana, we need to find ways to improve our skills.

### 3. Tell me more about the Academy this summer. The \$400 seems like a lot of money!

There is a flier in this publication that explains most of the details. But I have it on good authority from Linda Horst that if you are not staying at Canyon Ferry Institute (now known as the Montana Learning Center) the costs can be reduced. There are three options. 1) Lodging, meals and attendance : \$400 2) Meals and attendance : \$300 or 3) Noon meal, and attendance \$250. Add \$25 to each option for a non-MCTM member this academy is going to be a great learning experience. "The Barney" highly recommends it.

Deadline for March Newsletter is

**March 10, 2005**

e-mail articles to

kathje\_dalton@gfps.k12.mt.us

**January 2005 MCTM Update  
SIMMS Integrated Mathematics**

**Dissemination Project**

This article has little, directly, to do with SIMMS IM but I want to share my impressions anyhow.

I just returned from the joint MCTM/MSTA Leadership Conference in Bozeman. On Friday the keynote speaker was Freta Parkes from Palestine, Texas. She is a consultant for a company called aha! and spoke about a “must read” book, “A Framework for Understanding Poverty”, by Dr. Ruby K. Payne.

The book, and Parkes’ presentation, was designed to help us understand the nature of poverty. There were numerous highlights that spoke to me about how children of poverty are affected and how it impacts education. Mrs. Parks began by asking what “face we saw” when she mentioned ‘poverty’. Nearly everyone raised their hand when she proposed that most of us saw American Indians. Of course she reminded us that poverty is everywhere and is represented in all races and geographic regions. I found that a good reminder since many of our students across Montana come from poverty and it is incumbent upon us as educators to understand the ramifications in our classrooms.

Parkes has agreed to return for the Leadership Conference next year to do “part 2” which will address more directly how we, as educators, can be more effective with our students. Mark early January now and plan to attend.

If there is anything I can do to help in your adoption or implementation plans, please contact me at [gbauer@montana.edu](mailto:gbauer@montana.edu) or 1-800-693-4060.

Gary Bauer, Director  
SIMMS IM Dissemination

**MCTM Membership Form**

PLEASE FILL IN THIS INFORMATION AND MAIL WITH  
CORRECT AMOUNT OF MONEY TO:  
Deb Wickum, Box 78, Chester, MT 59522 DebWickum@hotmail.com

ANNUAL DUES PERIOD IS:  
September 1 through August 31

Name \_\_\_\_\_

Address change

Address \_\_\_\_\_

New membership

\_\_\_\_\_

Renewal

Phone No. \_\_\_\_\_ e-mail \_\_\_\_\_

Contribution to MCTM Endowment (Scholarships & Professional Development Academy): \$5  \$10  \$25

- Regular \$15
- 2 years \$25
- Student \$8
- Retired (no charge)
- MCTM/MSTA \$26
- Institutional \$30
- 10 years \$100
- Life \$150

- College
- High School
- Middle School/Jr. High
- Elementary
- Other \_\_\_\_\_

**Professional Development Academy**  
**Building Number Sense**  
**Elementary Math (K-6)**

Sponsored by  
 Montana Council of Teachers of Mathematics (MCTM)

**This workshop is designed to improve number sense instruction in grades K-6. Emphasis will be placed on the need for building number sense to help students become flexible, fluent thinkers. Participants will be broken into 2 grade level bands, (K-2 and 3-6). Other topics to be included are computation, geometry and measurement.**

**Presenters:** Nina Miller, K-6 Math Coach  
 Angel Greenley, K-6 Math Coach

**When:** July 5<sup>th</sup>, 2005 – July 8<sup>th</sup>, 2005 (Tuesday-Friday)

**Where:** The Montana Learning Center at Canyon Ferry Lake, outside of Helena.

**What:**

- \* Four days of quality in-service on number sense instruction
- \* On-site meals and lodging for four days and nights included.
- \* Packet of ideas to use with students.
- \* Renewal Units through OPI.
- \* Credits will be available through the University of Montana.
- \* A great time at Canyon Ferry Lake!

Participants will pay a fee of \$400 for MCTM members or a fee of \$425 for non-members. Registrations are due **March 1, 2005** with your non-refundable \$100 deposit. Balance must be paid by check or PO by May 1<sup>st</sup>. If a minimum of 25 participants do not register, the \$100 deposit will be refunded. (The cost is \$300 MCTM member or \$325 nonmember if you will not be staying at the Montana Learning Center)

Return or email your registration:

Linda Horst  
 2221 Lyndale Lane      OR      Email: horstl@billings.k12.mt.us  
 Billings, MT 59102

\*\*\*\*\*

Name \_\_\_\_\_

School \_\_\_\_\_ Grade Level \_\_\_\_\_

School Address \_\_\_\_\_ Phone \_\_\_\_\_

Home Address \_\_\_\_\_ Phone \_\_\_\_\_



## The Montana Learning Center at Canyon Ferry Lake

### Learning at the Lake

**[www.MontanaLearning.org](http://www.MontanaLearning.org)**

Montana Learning Center (MLC), a demonstration site and **Think Tank** for all Montana, proudly announces the completion of the Montana Science Institute dissolution/merger.

January 1, 2005 begins the MLC journey to provide **an environment where children and adults explore powerful ideas** enabling them to think beyond traditional learning to examine a variety of philosophies, models, visualizations, and develop decision making for a modern world.

The MLC vision is to be a **World Class Institute** creating a renaissance in thinking where all individuals **experience thinking and doing** while exploring mathematics, art, literature, philosophy, science, and music.

**THANK YOU, MCTM, FOR YOUR SUPPORT** with people, programs and money.

As of January, scheduled **student programs** include:

**Camp Discovery** for elementary students July 20-23, August 6-11;

**Young Naturalist** Adventurers for middle school students June 19-21, July 25-28; and

**Mind Games** in June for all ages.

If you have a program idea please contact MLC, [jkhoward@MontanaLearning.org](mailto:jkhoward@MontanaLearning.org)

As of January, scheduled **teacher programs** include:

MCTM Big Sky STARS **assessment** workshop, February 11-12

Teachers Teaching Technology, **T<sup>3</sup>**, April 30 pre-conference on Algebra

**Wheels in Motion** class June 13-17

MCTM **Board** Meeting and Visions Retreat, June 12-14

MCTM Professional Development Academy, **Building Number Sense** K-6 July 5-8

MCTM **COMET** program, Design Team February 18-20, High School June 20-30 July 1, Middle School July 11-22, Elementary August 1-12

MCTM **Math Contest** Writing TBA

If you have a program idea please contact MLC, [jkhoward@MontanaLearning.org](mailto:jkhoward@MontanaLearning.org)

New programs are in the works. Look for programs, opportunities, and a virtual tour of the facility at [www.MontanaLearning.org](http://www.MontanaLearning.org)

If you have any questions, ideas, want to volunteer, sign up for a program, please contact **Jean Howard**, Montana Learning Center at Canyon Ferry Lake, 7653 Canyon Ferry Road, Helena, 59602, 406-475-3638  
[jkhoward@MontanaLearning.org](mailto:jkhoward@MontanaLearning.org)

## Nominations Sought for the 200X Dean Preble Memorial Award for Outstanding Teachers of Mathematics

The Dean Preble Memorial Award for Outstanding Teachers of Mathematics is an annual recognition of teachers of mathematics at all levels in mathematics education. MCTM wishes to recognize an elementary (grades K-8), a secondary (grades 5-12), and a collegiate teacher of mathematics who have made significant contributions to the teaching and learning of mathematics.

### **The Award**

This award is given in memory of our colleague Dean Preble, who passed away from cancer in the fall of 1998. Dean was recognized for his unfailing support for mathematics education in the state of Montana. His dedication to the mathematics teaching profession, his love of his students, his involvement in state and national mathematics organizations, and his devotion to the improvement of mathematics education in were unparalleled.

One of Dean's wishes was to establish an annual award to recognize outstanding teachers of mathematics in Montana. In keeping with this wish, MCTM has created the Dean Preble Memorial Award for Outstanding Teachers of Mathematics. The award will consist of an inscribed plaque and a \$100 stipend for the recognized teachers, to be awarded at the MCTM annual meeting in October.

### **Award Criteria**

- Any member of MCTM may submit a nomination. Current members of the MCTM Board may not be nominated for this award.
- The nominee must be a current MCTM member.
- The nominee must have taught mathematics in Montana.
- The nominee must have a record of significant and consistent contributions to the teaching and learning of mathematics.
- The nominee must demonstrate a concern for her/his fellow teachers of mathematics.
- The nominee must demonstrate a willingness to continue to grow and improve as a teacher of mathematics.
- The nominee must demonstrate an extraordinary ability to engage students in the learning of mathematics.
- The nominee must have a record of participation in professional activities involving mathematics.

### **Nomination Procedure**

Nominations must be submitted in writing and consist of a maximum of two, double-spaced, typewritten pages. The nominations should directly address the criteria. The name, address, telephone number, and present position of both the nominee and the nominator must be included.

Deadline for submissions for the 2005 Dean Preble Memorial Award is June 15, 2005. Nominations can be sent or e-mailed to:

Cliff Bara  
231 Sunrise Lane  
Troy, MT 59935

T<sup>3</sup> Regional Conference

**Building the Power of Algebra with Technology**

Date: 29 April – 1<sup>st</sup> May 2005

**Montana Learning Center, MLC**

7653 Canyon Ferry Road  
Helena, MT 59602-9788

**Helena High School, HHS**

1300 Billings Avenue  
Helena, MT 59601

**MLC Pre-Conference Hours:**

Friday, April 29 – 9:00am to 4:00pm

**HHS Conference Hours:**

Saturday, April 30 – 9:00am to 4:00pm

Sunday, May 1 – 9:00am to Noon **REGISTRATION FORM**

Name \_\_\_\_\_ E-mail \_\_\_\_\_

School \_\_\_\_\_ Work phone \_\_\_\_\_

Home Address \_\_\_\_\_ Home phone \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

**Select a grade band or area of interest:**

Elementary       Middle (6-8)       High (9-12)

**Pre-conference Registration Fees by March 15<sup>th</sup>:**

\$100 MCTM/MSTA members (includes room and board) OR

\$130 (includes one year MCTM/MSTA joint Membership, room, and board)

**Pre-conference Registration Fees after March 15<sup>th</sup>:**

\$120 (includes board & room) MCTM/MSTA members OR

\$150 (includes board, room and one year MCTM/MSTA joint Membership)

Conference Registration Fees by March 15<sup>th</sup>

\$55 MCTM/MSTA members (includes a swell T-shirt and refreshments) OR

\$85 Non-members (includes one year MCTM/MSTA joint Membership, a swell T-shirt and refreshments)

Conference Registration Fees after March 15<sup>th</sup>:

\$75 MCTM members (includes a swell T-shirt and refreshments) OR

\$105 Non-members (includes one year MCTM/MSTA joint Membership)

**Volunteer Discount** (\$40 off registration): Available to pre-registered participants. Volunteers are asked to assist with conference needs. Please select your preference.

Registration    Equipment    Exhibit area    Other

Total Enclosed \$ \_\_\_\_\_

Please make checks payable to The Montana Learning Center

Send this completed registration for, along with your fee to

**Jean Howard**

7653 Canyon Ferry Road  
Helena, MT 59602-9788  
(406) 475-3638 fax 475-3871

Contact [jhoward@MontanaLearning.org](mailto:jhoward@MontanaLearning.org) if you have other questions.

**MCTM NEWSLETTER****Great Falls Public Schools**

Great Falls High School

1900 2nd Ave. S

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Montana Mathematics is a newsletter published for all members of the Montana Council of Teachers of Mathematics. The publication comes out 5 times/ year and is free to all members of the MCTM. Any information pertaining to MCTM can be sent to Kathje Dalton at Great Falls High School, 1900 2nd Ave S, Great Falls, Montana 59401. All entries will be reviewed.