Thursday

7:00-9:00 pm    Session:  1
Ballroom B        Feb. 3, 2005
Grade Level:      K-12

Speaker(s): Micheline Hickenbotham, Facilitator
             SDSTA President-Elect

Title:  Science Sharing Session

Sharing lessons and activities will be the focus of this session. Bring 25 copies of your favorite activity or lesson.

7:00-9:00 pm    Session:  2
Ballroom C        Feb. 3, 2005
Grade Level:      K-12

Speaker(s): Chuck Holmstrom, Facilitator
             SDCTM President

Title:  Math Sharing Session

Sharing lessons and activities will be the focus of this session. Bring 25 copies of your favorite activity or lesson.

7:00-8:00 pm    Session:  3
Symposium         Feb. 3, 2005
Grade Level:      K-C

Speaker(s): Jerry Loomer
             AAPT Student Produced Videos

Title:  AAPT Videos

Teachers are invited to view and judge the entries in the SD Student Produced Science Video Program. Student videos are less than five minutes long, each, and the top video will be invited to submit to the national AAPT Competition.

Friday

8:30-10:20 am    Session:  4
Ballroom A        Feb. 4, 2005
Grade Level:      K-12

Speaker(s): Marilyn Rindfuss, Featured Speaker
             Harcourt

Title:  Improving Student Performance on Mathematics and Science Assessments

Classroom strategies designed to improve student performance on all of the assessments they face will be the focus of this session. While examples will come primarily from mathematics, strategies and activities will be generic. Handouts will be provided, and the entire presentation will be available to those who request it via email.

8:30-9:20 am    Session:  5
Ballroom B        Feb. 4, 2005
Grade Level:      K-4

Speaker(s): Cindi C. Chandler
             BHSU

Title:  Why is Subtraction So Hard? And What You Can Do About It!

Participants in this session will leave with a better understanding of why subtraction is so difficult for elementary students. Classroom activities will also be discussed.
Friday 8:30 am
8:30-9:20 am Session: 6
Ballroom C Feb. 4, 2005
Repeat of # 72
Grade Level: K-8
Speaker(s): Donna M. Uttenhove
Harcourt School Publishers
Title: Motivating Students: Math and Science are FUN!
Games, strategies, and motivational tools to stimulate students to learn math & science--vocabulary, facts, graphs, and more.

8:30-4:20 Session: 7
Salons Feb. 4, 2005
Grade Level: K-12
Participants: Partners in Outdoor Education
Title: The Outdoor Education Journey
This display of outdoor education programs available in SD is a partnership between non-profit organizations, outdoor education programs, educational destinations, and the BHSU-NSTA Student Chapter. These students will help participants learn and find out about many environment and outdoor programs available in SD as well as learning materials and field trip ideas. The first thirty participants will receive a free backpack filled with new ideas and materials. Hands-on and fun activities will provide teachers with a flavor of these curricula.

Friday 8:30 am
8:30-9:20 am Session: 9
Church A Feb. 4, 2005
Grade Level: 6-8
Speaker(s): Amy Helfrich
Holt, Rinehart Winston
Title: Don't Just Teach-'em--Reach'em
Using graphing calculators and other technology to enliven your middle school math classroom. Walk away with multiple activities! Door Prizes!

8:30-9:20 am Session: 10
Church B Feb. 4, 2005
Repeat of # 90
Grade Level: 5-7
Speaker(s): Sheryl M. Beglinger
Comprehensive Center Region VI
Title: Take the Fear Out of Fractions
Learn some techniques that will make fractions meaningful to your students.

8:30-9:20 am Session: 10A
Church C Feb. 4, 2005
Grade Level: All
Speaker(s): Laura Causey
Title: Teaching Science and Math With Foldables
Learn to create easy-to-make, three-dimensional, interactive graphic organizers that will help students be actively engaged in learning. These study strategies will help students understand, organize, remember and apply new information. Sponsored by Glencoe-McGraw Hill

8:30-9:20 am Session: 8
Symposium Feb. 4, 2005
Grade Level: 6-12
Speaker(s): Ken Graupmann
Kadoka School
Title: Severe Weather, Hurricanes & Tornadoes
Project Atmosphere modules from AMS will be given to each participant.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Room</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tr>
<td>8:30-10:20 am</td>
<td>Session: 11</td>
<td>Church C</td>
<td>Cheri Eck</td>
<td>Probability Fun &quot;Die&quot; Mentals</td>
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<td>8:30-10:20 am</td>
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<td>9:30-11:20 am</td>
<td>Session: 14</td>
<td>Ballroom B</td>
<td>Penny Roberts, Featured Speaker Muhlenberg County School System</td>
<td>Movies, Music &amp; More</td>
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<tr>
<td>8:30-10:30 am</td>
<td>Session: 13</td>
<td>YWCA</td>
<td>Dianne Miller</td>
<td>PLT Focuses on Developing Critical Thinking Skills</td>
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<td>9:30-11:20 am</td>
<td>Session: 15</td>
<td>Ballroom C</td>
<td>Jay Trobeck, Featured Speaker KELO-TV</td>
<td>Weather Anomalies in South Dakota</td>
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<td>8:30-10:30 am</td>
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<tr>
<td>9:30-11:20 am</td>
<td>Session: 16</td>
<td>Symposium</td>
<td>Jeffrey Palmer, et al DSU</td>
<td>Transition from High School to College Mathematics</td>
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</tbody>
</table>

 enhanced your mathematics classroom by integrating movie clips, music, literature, and more! Have students begging to come to your mathematics class.

This is a soil painting class with an 80/20 ratio of soil science to art concepts. Participants are introduced to the important role that soil has in our everyday lives as well as basic art. The lesson culminates with the opportunity to paint with SD soils.

PLT doesn't try to teach what to think, it stresses how to think about environmental issues. We will give you tools and activities to help teach how to think about our environment. Our material is classroom friendly, requiring little preparation time, few materials, and are in alignment with state curriculum objectives and guidelines.
Friday  
9:30 am

9:30-11:20  
Session: 18  
Church B  
Feb. 4, 2005
Repeat of # 64
Grade Level:  
5-9
Speaker(s):  
Sheryl M. Beglinger
Comprehensive Center Region VI

Title:  
Double Digit Multiplication Madness
Did you know that there are 9 ways of doing double-digit multiplication? Come and have some fun.

9:30-10:20  
Session: 18A  
Church C  
Feb. 4, 2005
Grade Level:  
K-6
Speaker(s):  
Nancy Barondeau

Title:  
Linking Writing to Math and Science
A variety of ways to increase students conceptual knowledge of math and science through writing will be explored. Nancy Barondeau is Director of field experience at NSU.

Friday  
9:30 am

9:30-11:20  
Session: 19  
Church D  
Feb. 4, 2005
Grade Level:  
7-12
Speaker(s):  
Scott Fossum
Tech Prep/Mitchell

Title:  
What's HOTT is South Dakota?
Strategies, best practices, and resources will be shared by Tech Prep around the HOTT (Health Occupations for Today and Tomorrow) Theme.

Friday  
9:30 am

9:30-11:20 am  
Session: 20  
Feb. 4, 2005
Mobile Science Lab  
Grade Level:  
K-12
Speaker(s):  
Jerry Opbroek, Bob Vanderlinde, Judy Vondruska & Julie Olson
SD Mobile Science Lab

Title:  
Science Activities with Vernier Lab Probes
Can technology help students learn science? You decide! This session will provide participants with the opportunity to explore how Vernier probes can be used to investigate scientific principles in physical science, earth science, biology, chemistry, and physics. Over 10 probe types are available: including motion, force, EKG, microphone, radiation and many more.

Friday  
10:30 am

10:30-11:20 am  
Session: 21  
Feb. 4, 2005
Ballroom A  
Grade Level:  
6-8
Speaker(s):  
Amy Helfrich
Holt, Rinehart & Winston

Title:  
Labs, Puzzlers. . . And more Labs!
Combine motivating activities that challenge and focus students' science thinking throughout the day with Holt's Science Puzzlers, Twisters and Teasers, and great lab ideas for the middle school classroom. Limited complimentary resource material will be provided . . . Plus door prizes and give-aways!

Friday  
10:30 am

10:30-11:20  
Session: 22  
Church A  
Feb. 4, 2005
Grade Level:  
K-12
Speaker(s):  
Sandi Ransom & Lori Keleher
Wolsey-Wessington Elementary

Title:  
Celebrating National Metric Week…
…and other ideas to add "PIZZA"Z to your math curriculum while meeting the standards.
**Friday**  
10:30 am

**10:30-11:20 ADD**  
Church C  
Grade Level: K-5  

Title: **Minds in Motion**

Speakers(s): Kris Malloy & Jacque Herrboldt  
Enhance student learning through movement. Get your students up and moving while reinforcing the core content standards for grades K-5. Attend this session and be one of the first to receive this valuable resource.

---

**Friday**  
10:30 am

**10:30-11:20 am**  
YWCA  
Grade Level: 7-12  

Speaker(s): Larry Browning  
SDSU

Title: **PTRA-Help for Teachers of Physics and Physical Science**

Physics Teacher Resource Agents Program, sponsored by the American Association of Physics Teachers, provides training, resources and stipends for participants in its summer programs. You can learn more about this program and the upcoming workshop (Brookings, July 11-15). Previous participants are encouraged to attend.

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**Friday**  
11:45 am

**11:45-1:10 pm**  
Arena  
Grade Level:

Speaker(s): Mark Farrand & Chuck Holmstrom

---

**LUNCH**

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**Friday**  
1:30 pm

**1:30-2:20 pm**  
Ballroom A  
Grade Level: 9-12

Speaker(s): Amy Helfrich  
Holt, Rinehart & Winston

Title: **Labs, Labs, and More Labs . . . For High School!**

New labs for every high school science class you teach! Make learning fun with the latest labs for Biology, Chemistry, and Physical Science. Limited complimentary resource materials will be provided. Plus door prizes and give-aways!

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**Friday**  
1:30 pm

**1:30-2:20 pm**  
Ballroom B  
Grade Level: K-C

Speaker(s): Jennifer R. Neuhauser  
SD Dept. of Education

Title: **"We’re the DOE and We’re Here to Help"**

This presentation will give a brief overview of the Office of Curriculum, Technology and Assessment, highlighting new staff and programs.

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**Friday**  
11:45 am

**11:45-1:10 pm**  
Arena  
Grade Level:

Speaker(s): Eleanor M. Thomas  
Holt, Rinehart Winston

Title: **Mathematics in Context (MiC): Exploring Algebra in the Middle Grades**

MiC is a Standards Based Curriculum being used in South Dakota's Middle School Math Initiative. Discover how algebra is learned by describing relationships between variables in a variety of representations, connecting those relationships and using algebra as a tool to solve problems that occur in the real world.
Friday 1:30 pm

1:30-4:20 pm  Session: 29
Salons  Feb. 4, 2005
Grade Level:  K-12

Speaker(s): Micheline Hickenbotham  
Black Hills State University

Title: The Outdoor Education Journey

A partnership between a non-profit organization, outdoor education programs, educational destinations, and the BHSU/NSTA Student Chapter will help participants learn and find out about many environment and outdoor programs available in SD and other states as well as learning material and field trip ideas for classroom teachers. Each participant will receive a free backpack filled with new ideas and materials.

1:30-2:20 pm  Session: 30
Symposium  Feb. 4, 2005
Grade Level:  all

Speaker(s): Nancy Berkas, Featured Speaker  
NCTM Regional Representative

Title: NCTM: Working For, And With You!

As the Regional Affiliate Services Committee Representative, Nancy Berkas is the personal link between SDCTM and the NCTM headquarters. Come, listen, discuss and make suggestions.

1:30-2:20 pm  Session: 31
Church A  Feb. 4, 2005
Grade Level:  9-12

Speaker(s): Bob Schuh & Cindy Kroon  
McIntosh High School/Montrose High School

Title: Addressing a Few Math Standards Using the TI-83 and Activities

Topics of the session include piecewise graphing, inequalities, reflections, translations, dilations, histograms, box-and-whisker plots, regression equations and scatterplots. TI-83 calculators provided. Beginners are welcome. Will be followed with a second session (# 41) that has different activities.
Friday 1:30 pm

1:30-3:20 pm  Session: 35
YWCA  Feb. 4, 2005
Grade Level:  8-12

Speaker(s):  Marilyn Rindfuss, Featured Speaker
  Mathematics Consultant

Title:  A Non-Standard Approach to Absolute Value Standards

This session will focus on an alternate approach to teaching absolute value equations and inequalities that will allow virtually all students to achieve success with this difficult topic. Two additional algebra "shortcuts" will be introduced that can allow teachers to spend more time on the big issues in algebra courses. Handouts will be provided, and additional materials will be sent to teachers who request them via e-mail.

Friday 2:30 pm

2:30-3:30 pm  Session: 37
Ballroom A  Feb. 4, 2005
Grade Level:  all

Speaker(s):  Nancy Berkas, Featured Speaker
  NCTM Regional Representative

Title:  Powerful Practices in Mathematics and Science

Developed under the direction of Drs. Carpenter and Romberg at the University of Wisconsin, this research-based CD-Rom product will be explored by and distributed to all participants.

Friday 1:30 pm

1:30-3:20 pm  Session: 36
Mobile Science Lab  Feb. 4, 2005
Repeat of # 89
Grade Level:  5-9

Speaker(s):  Jerry Opbroek, Bob Vanderlinde
  SD Mobile Science Lab

Title:  Crime Scene Analysis (Criminalistics) for Grades 5-9

CSI-South Dakota!!! Learn how to develop a forensic science activity where students analyze blood type, perform a chemical analysis on a mysterious substance found at the crime scene, and identify ink from a ransom note. It's great science and students get excited about playing the role of a CSI agent.

Friday 2:30 pm

2:30-4:20 pm  Session: 38
Ballroom B  Feb. 4, 2005
Grade Level:  K-5

Speaker(s):  Penny Roberts, Featured Speaker
  Muhlenberg County School System

Title:  How Well Do You Know Your Math Students?

Create a student profile by using a variety of authentic assessments in your mathematics classroom. Really get to KNOW your students as mathematicians.

Friday 2:30 pm

2:30-3:20 pm  Session: 39
Ballroom C  Feb. 4, 2005
Grade Level:  7-12

Speaker(s):  Bob Pacyga
  Prentice-Hall

Title:  Prentice Hall's Newest Technology in Science

This will be a presentation on Prentice Hall's newest interactive technology in the Science Classroom.
Friday

2:30-3:20 pm  
Session: 40  
Symposium  
Feb. 4, 2005  
Grade Level: K-12  

Speaker(s): Anne Thompson  
SD Dept. of Education  

Title: Telescopes and Astronomy Opportunities at SDSU  

Twenty teachers will have the opportunity to build and buy a quality refractor telescope and eyepiece for about $50. In addition you can learn about how to become involved with SDSU's remote observatory.

Friday

2:30-3:20 pm  
Session: 41  
Church A  
Feb. 4, 2005  
Grade Level: 9-12  

Speaker(s): Bob Schuh & Cindy Kroon  
McIntosh High School/Montrose High School  

Title: What's Up in SD Mathematics  

A review of the "new" SD Mathematics Content Standards and state-wide math initiatives.

Friday

2:30-3:20 pm  
Session: 42  
Church B  
Feb. 4, 2005  
Grade Level: K-12  

Speaker(s): Ken Graupmann  
Kadoka Schools  

Title: Addressing a Few Math Standards Using the TI-83 and Activities  

This session will cover topics and activities which were not covered in Session 31. Attendance at Session 31 is not a prerequisite.

Friday

3:30-4:20 pm  
Session: 43  
Church D  
Feb. 4, 2005  
Grade Level: 7-12  

Speaker(s): Larry Browning, Judy Vondruska  
SDSU  

Title: Telescopes and Astronomy Opportunities at SDSU  

Twenty teachers will have the opportunity to build and buy a quality refractor telescope and eyepiece for about $50. In addition you can learn about how to become involved with SDSU's remote observatory.

Friday

2:30-3:20 pm  
Session: 44  
Church B  
Feb. 4, 2005  
Grade Level: 6-8 & C  

Speaker(s): Eleanor M. Thomas  
Holt, Rinehart Winston  

Title: Mathematics in Context (MiC): Building Number Sense Using Models as Tools  

MiC is a Standards Based Curriculum being used in South Dakota's Middle School Math Initiative. Learn how concepts of magnitude, order, computation, and relationships among numbers and their representations are developed gradually and integrated with other number representations using models to support understanding.

Friday

3:30-4:20 pm  
Session: 45  
Symposium  
Feb. 4, 2005  
Grade Level: 6-12  

Speaker(s): Tom Merrill  
Yankton Middle School  

Title: Science Olympiad  

Team competition in Science, Math, & Engineering.
<table>
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<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Details</th>
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<tbody>
<tr>
<td>46</td>
<td>Stereographic Vision and the Pulfrich Effect</td>
<td>3:30-4:20 pm</td>
<td>YWCA</td>
<td>11-C</td>
<td>Dan Van Peursem (USD)</td>
<td>Participants will have an opportunity to learn about strategies and resources that help to integrate math into a contextual environment and CTE courses. We will demonstrate the Pulfrich Effect and describe it with a mathematical model involving parametric linear equations.</td>
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<td>47</td>
<td>Science Inquiry in a K-12 Classroom: Examples from DLESE</td>
<td>3:30-4:20 pm</td>
<td>Church B</td>
<td>K-C</td>
<td>Brant G. Miller (Douglas Middle School)</td>
<td>DLESE is the Digital Library for Earth Systems Education. Inquiry in your classroom is easy with the right materials. Learn how to access dozens of high quality inquiry lessons, activities and modules through a free website.</td>
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<tr>
<td>48</td>
<td>Journaling from Elementary to College</td>
<td>3:30-4:20 pm</td>
<td>Church C</td>
<td>5 &amp; C</td>
<td>Marvin E. Gamble (USD)</td>
<td>I will discuss how elementary 4th and 5th grade students are journaling with preservice college students in a math for elementary teachers course.</td>
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<tr>
<td>50</td>
<td>AAPT Business Meeting</td>
<td>3:30-4:20 pm</td>
<td>Boardroom</td>
<td>All</td>
<td>Jerry Loomer (Rapid City Central)</td>
<td>SD Section of the American Association of Physics teachers annual meeting.</td>
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<td>51</td>
<td>Vitamin C Analysis of common Foods and Drinks</td>
<td>3:30-4:20 pm</td>
<td>Mobile Science Lab</td>
<td>5-9</td>
<td>Jerry Opbroek, Bob Vanderlinde (SD Mobile Science Lab)</td>
<td>Which has more Vitamin C - an orange, a grapefruit, a kiwi or a tomato? The answer might surprise you! During this session you will experimentally determine the Vitamin C content of a variety of fruits and vegetables using titration. This lab can be adapted for students in grades 5 through college. Lab extensions will be discussed.</td>
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<td>Time</td>
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<td>Friday</td>
<td>4:30 pm</td>
<td>Salons</td>
<td>All</td>
<td>Mark Farrand, President</td>
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<td>Title: <strong>SDSTA Business Meeting</strong></td>
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<td>Friday</td>
<td>4:30 pm</td>
<td>Symposium</td>
<td>All</td>
<td>Chuck Holmstrom, President</td>
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<td>Title: <strong>SDCTM Business Meeting</strong></td>
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<td>Friday</td>
<td>5:00 pm</td>
<td>Lobby area</td>
<td>All</td>
<td>Judy Vondruska, Ron Dyvig, Jerry</td>
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<td>SDSU &amp; SD Mobile Science Lab</td>
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<td>Title: <strong>Star Party-Friday Night</strong></td>
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<td></td>
<td>The SDSU Fillbrandt Observatory,</td>
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<td>the Badlands Observatory and the</td>
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<td>Mobile Science Lab will jointly</td>
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<td>host a star party Friday evening</td>
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<td>(weather permitting). Learn to</td>
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<td>identify the major constellations,</td>
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<td>view Saturn and a variety of deep-</td>
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<td>sky objects. Several telescopes</td>
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<td>and pairs of binoculars will</td>
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<td>be available for participant use.</td>
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<td>Participants are encouraged to</td>
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<td>bring their own telescopes and</td>
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<td>binoculars as well.</td>
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**BANQUET**

Dr. Rick Melmer, the Secretary of the Department of Education for South Dakota, will be the banquet speaker. Dr. Melmer will address his assessment of and vision for mathematics and science education in South Dakota.

**Friday Evening**

*After the Banquet*

*TBA*

*Grade Level: All*

*Speaker(s): Judy Vondruska, Ron Dyvig, Jerry Opbroek, SDSU & SD Mobile Science Lab*

*Title: **Star Party-Friday Night***

The SDSU Fillbrandt Observatory, the Badlands Observatory and the Mobile Science Lab will jointly host a star party Friday evening (weather permitting). Learn to identify the major constellations, view Saturn and a variety of deep-sky objects. Several telescopes and pairs of binoculars will be available for participant use. Participants are encouraged to bring their own telescopes and binoculars as well.
<table>
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<tr>
<th>Time</th>
<th>Event</th>
<th>Details</th>
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<tbody>
<tr>
<td>7:00 am</td>
<td>Presidential Awardee Breakfast</td>
<td>All past and present awardees (math and science) are invited to join us for breakfast. Dutch treat??</td>
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<tr>
<td>8:30 am</td>
<td>Simulation of Sonar/Radar Surface Mapping</td>
<td>Participants will collect depth data from a model planetary surface and use it to create a color-coded surface map and a 3-D surface model using MS-Excel. Applications to earth and space science will be discussed.</td>
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<td>8:30 am</td>
<td>Writing Classroom Assessments</td>
<td>Three criminals are on the loose, and YOU are needed for the case. Use probability within a real-life context to determine which criminal is guilty.</td>
</tr>
</tbody>
</table>

Speaker(s): Diana McCann & Ramona Lundberg
President Award Coordinators

Title: Presidential Awardee Breakfast

Speaker(s): Judy Vondruska, SDSU & SD Mobile Science Lab

Title: Simulation of Sonar/Radar Surface Mapping

Speaker(s): Penny Roberts, Featured Speaker
Muhlenberg County School System

Title: Math Detectives Needed!

Speaker(s): Marilyn Rindfuss, Featured Speaker
Mathematics Consultant

Title: Writing Classroom Assessments

This session will examine the attributes of high quality mathematics and science problems/questions. Examples, checklists, and resources will be provided and discussed, and the entire presentation will be made available to those participants who request it by e-mail.
### Saturday 8:30 am

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-10:20 am</td>
<td>63</td>
<td>Church A</td>
<td>7-C</td>
<td>Rocky Von Eye</td>
<td><strong>TI Interactive Integrated Computer</strong></td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Dakota Wesleyan University</td>
<td><strong>Software for Math and Science</strong></td>
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<td>This is a program that enables high school</td>
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<td></td>
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<td>and college students and teachers to</td>
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<td>investigate ideas in mathematics and</td>
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<td>science. There are interactive</td>
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<td></td>
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<td>lessons that encourage exploration,</td>
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<td>visualization, data analysis, and writing.</td>
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<td>Students will improve problem-solving</td>
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<td>skills while creating great-looking</td>
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<td>homework papers.</td>
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<tr>
<td>8:30-10:20 am</td>
<td>64</td>
<td>Church B</td>
<td>5-9</td>
<td>Sheryl M. Beglinger</td>
<td><strong>Double Digit Multiplication</strong></td>
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<td></td>
<td>Comprehensive Center Region VI</td>
<td><strong>Madness</strong></td>
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<td>Did you know that there are 9 ways of</td>
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<td>doing double-digit multiplication? Come</td>
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<td></td>
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<td>and have some fun.</td>
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<tr>
<td>8:30-9:20 am</td>
<td>65</td>
<td>Church C</td>
<td>4-C</td>
<td>Ken Graupmann</td>
<td><strong>Become a Scool School &amp; Work with NASA</strong></td>
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<td>Kadoka Schools</td>
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<td>Several NASA Programs will be presented</td>
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<td>that teachers can use in their classroom.</td>
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<td>There will also be information on NASA</td>
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<td>workshops.</td>
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</tbody>
</table>

### Saturday 8:30 am

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:20 am</td>
<td>67</td>
<td>YWCA</td>
<td>All ages</td>
<td>Becky Umenthum</td>
<td><strong>Easy Origami</strong></td>
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<td>Belle Fourche Middle School</td>
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<td>Learn to make an origami book and a magic</td>
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<td>ring. These projects are quick and easy</td>
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<td>to do.</td>
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<tr>
<td>8:30-9:20 am</td>
<td>68</td>
<td>Church D</td>
<td>5-12</td>
<td>Julie Olson &amp; Jerry Opbroek</td>
<td><strong>&quot;WOW&quot; Demonstrations in Physical Science</strong></td>
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<td>Mitchell Senior High</td>
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<td>Easy demonstrations to stimulate inquiry</td>
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<td>and introduce physical science units.</td>
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<td>Easily found or made equipment.</td>
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</tbody>
</table>

### Saturday 8:30 am

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<th>Title</th>
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<tbody>
<tr>
<td>9:30-10:20 am</td>
<td>69</td>
<td>Ballroom A</td>
<td>10-12</td>
<td>Joel D. Rauber</td>
<td><strong>Adding Vectors with MS-Word</strong></td>
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<td>Dept. of Physics, SDSU</td>
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<td>This is a workshop on the use of MS-Word</td>
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<td>for adding vectors. Participants will</td>
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<td>learn the basics of using the drawing</td>
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<td>package for the addition of vectors via</td>
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<td>the &quot;head-total&quot; method and/or magnitude-</td>
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<td>direction methods without the need for</td>
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<td>trigonometric calculation.</td>
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</tbody>
</table>
Saturday  9:30 am

9:30-10:20 am  Session:  70
Ballroom C  Feb. 5, 2005
Grade Level:  9-C

Speaker(s): Michael L. Round  
Theory of Constraints for Education

Title: The Joy of Math

The powerful thinking process of the Theory of Constraints will be used to demonstrate how massive improvement rapidly is possible for all students.

9:30-10:20  Session:  17
Church C  Feb. 5, 2005
Grade Level:  9-12

Speaker(s): Karen Tuttle  
Dakota Wesleyan University

Title: Oh Beans! Weighted Averages Are Just Too Hard to Teach

Using beans, bowls and cups we will take the participants through an activity that teaches about weighted averages. (Bring your calculator.)

9:30-10:20 am  Session:  72
Church D  Feb. 5, 2005
Repeat of # 6
Grade Level:  K-8

Speaker(s): Donna M. Uttenhove  
Harcourt School Publishers

Title: Motivating Students: Math and Science are FUN!

Games, strategies, and motivational tools to stimulate students to learn math & science--vocabulary, facts, graphs, and more.

Saturday  9:30 am

9:30-10:20 am  Session:  73
YWCA  Feb. 5, 2005
Grade Level:  3-C

Speaker(s): Becky Umenthum  
Belle Fourche Middle School

Title: Unit Origami

Learn to fold an origami "unit" and then put the units together to make cubes and other shapes.

9:30-10:20 am  Session:  74
Mobile Science Lab  Feb. 5, 2005
Repeat of #51
Grade Level:  5-9

Speaker(s): Jerry Opbroek, Bob Vanderlinde  
SD Mobile Science Lab

Title: Vitamin C Analysis of common Foods and Drinks

Which has more Vitamin C - an orange, a grapefruit, a kiwi or a tomato? The answer might surprise you! During this session you will experimentally determine the Vitamin C content of a variety of fruits and vegetables using titration. This lab can be adapted for students in grades 5 through college. Lab extensions will be discussed.

Saturday  10:30 am

10:30-11:20 am  Session:  75
Symposium  Feb. 5, 2005
Repeat of # 45
Grade Level:  6-12

Speaker(s): Tom Merrill  
Yankton Middle School

Title: Science Olympiad

Team competition in Science, Math, & Engineering.
Saturday  
10:30 am

10:30-11:20 am  
Session: 78
Church D  
Feb. 5, 2005
Grade Level: 5-12
Speaker(s): Ken Graupmann  
Kadoka Schools
Title: Hands on Plastic
Work with a plastic scientific investigation kit and receive information on how to obtain a kit.

10:30-11:20 am  
Session: 76
Church A  
Feb. 5, 2005
Grade Level: 9-12
Speaker(s): Rocky Von Eye  
Dakota Wesleyan University
Title: Matrices, Calculators, and Fantasy Basketball Leagues
We will enter data from basketball statistics into matrices and predict scores using matrix multiplication.

Saturday  
10:30 am

10:30-11:20 am  
Session: 77
Church B  
Feb. 5, 2005
Repeat of # 23
Grade Level: 1-6
Speaker(s): Sheryl M. Beglinger  
Comprehensive Center Region VI
Title: Advanced Origami
Learn to fold the "bow tie" unit to make an open cube and other shapes. I'll also have directions for some boxes and a pyramid that you can make.

10:30-11:20 am  
Session: 66
Church C  
Feb. 5, 2005
Grade Level: 9-12
Speaker(s): Sheila E. McQuade  
O'Gorman High School
Title: Geometry Make & Take
A make and take session for teachers who teach on a budget. Participants will not only receive the patterns/ideas for several of my home-made geometry aids, but will also be provided with the materials to have several ready to use on Monday.

Saturday  
NOON

12:00-1:00 pm  
Session: 80
Ballrooms  
Feb. 5, 2005
Grade Level: All
Speaker(s): Chuck Holmstrom & Mark Farrand
Title: A Multitude of Math Games
Come take a break and have some fun playing many different math games.

Saturday  
1:30 pm

1:30-3:20 pm  
Session: 81
Ballroom A  
Feb. 5, 2005
Grade Level: K-5
Speaker(s): Penny Roberts, Featured Speaker  
Muhlenberg County School System
Title: Help Students Become Better Readers in Your Mathematics Classroom
Students can become better readers AS YOU TEACH essential mathematics skills and concepts. Learn strategies for teaching mathematics vocabulary, text styles, reflection on learning, and more.
Saturday

1:30-2:20 pm  
Session: 82  
Ballroom B  
Feb. 5, 2005  
Grade Level: 7-12

Speaker(s): Brandy Fenega  
Watertown Senior High School

Title: Interactive Graphic Organizers

Come and look at some simple and fun ways to help students organize and remember key concepts.

1:30-2:20 pm  
Session: 83  
Ballroom C  
Feb. 5, 2005  
Grade Level: 6-12

Speaker(s): Steve Caron  
Aberdeen Central

Title: Summer Standards Course Wrapup

The participants from the Standards course taken at USDSU this summer will present their lessons incorporating the standards.

1:30-2:20 pm  
Session: 84  
Salons  
Feb. 5, 2005  
Grade Level: K-C

Speaker(s): Melissa H. Horton, Featured Speaker  
Wildlife Experiences, Inc.

Title: Let's Get Wild

Experience a truly "wild" presentation by Wildlife Experiences! They will have live birds for an up close and personal meeting. The focus of the presentation will be on the variety of birds found on our planet and their places in their native habitats. Birds are important indicators of environmental health, and thus are a natural way to discuss issues such as endangerment, environmental poisons and natural resource conservation. We will also discuss our school programs and how you can schedule them for your classroom.

1:30-2:20 pm  
Session: 85  
Symposium  
Feb. 5, 2005  
Grade Level: 5-8

Speaker(s): LeRoy Henderson  
BHSU

Title: Virtual Circulatory System

Experience real-life demonstrations and observations of the heart and circulatory system.

1:30-3:20 pm  
Session: 86  
Church A  
Feb. 5, 2005  
Grade Level: 7-12

Speaker(s): Bob Pacyga  
Prentice-Hall

Title: Prentice Hall's Newest Technology in Science

This will be a presentation on Prentice Hall’s newest interactive technology in the Science Classroom.

1:30-3:20 pm  
Session: 87  
Church B  
Feb. 5, 2005  
Grade Level: 9-12

Speaker(s): Monica K. Knuppe & Rose McClaskey  
Custer High School

Title: Pulley Lab—with modifications for SpEd

Compares and contrasts a fixed pulley to a block and tackle. Shows the relationship between force, distance & work. Uses graphing to interpret the results.

1:30-2:20 pm  
Session: 23  
Church C  
Feb. 5, 2005  
Repeat of # 77  
Grade Level: 1-6

Speaker(s): Sheryl M. Beglinger  
Comprehensive Center Region VI

Title: A Multitude of Math Games

Come take a break and have some fun playing many different math games.
Saturday  1:30 pm

1:30-2:20 pm  Session: 88
Church D  Feb. 5, 2005
Grade Level:  9-12
Speaker(s):  Jerry Loomer
Rapid City Central

Title:  Fire Up with Model Rocketry

Participants will build, launch, and take home a reusable model rocket. They will receive curriculum materials and practical suggestions on fitting model rocketry into your present curriculum. You may bring your children to assist you in rocket building.

Saturday  1:30 pm

1:30-3:20 pm  Session: 91
Mobile Science Lab  Feb. 5, 2005
Repeat of # 36
Grade Level:  5-9
Speaker(s):  Jerry Opbroek, Bob Vanderlinde
SD Mobile Science Lab

Title:  Crime Scene Analysis (Criminalistics) for Grades 5-9

CSI-South Dakota!!! Learn how to develop a forensic science activity where students analyze blood type, perform a chemical analysis on a mysterious substance found at the crime scene, and identify ink from a ransom note. It's great science and students get excited about playing the role of a CSI agent.

Saturday  2:30 pm

2:30-3:20 pm  Session: 92
Church C  Feb. 5, 2005
Repeat of # 10
Grade Level:  5-7
Speaker(s):  Sheryl M. Beglinger
Comprehensive Center Region VI

Title:  Take the Fear Out of Fractions

Learn some techniques that will make fractions meaningful to your students.

Saturday  1:30 pm

1:30-2:20 pm  Session: 89
YWCA  Feb. 5, 2005
Grade Level:  4-12
Speaker(s):  Pamela M. Zubke
Waubay High School

Title:  Maury Project:  Pressure Blocks

Use Pressure blocks to explore air pressure and ocean currents. Handouts provided.

Saturday  1:30 pm

1:30-2:20 pm  Session: 90
Board Room  Feb. 5, 2004
Grade Level:  9-12
Speaker(s):  Dr. Jeff Palmer & Chuck Holmstrom

Title:  Summer Statistics & Probability Course Wrapup

The participants from the Statistics & Probability course taken at USDSDU this summer will present their lessons incorporating the standards.
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<th>Speaker(s)</th>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:30-3:20</td>
<td>92A</td>
<td>Ballroom B</td>
<td>7-12</td>
<td>Cheryl Deese</td>
<td>Explore Guided Inquiry Program</td>
<td>Explore how curriculum can foster the development of critical thinking skills and content knowledge through a guided inquiry approach. Sponsored by Herff-Jones.</td>
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<tr>
<td>2:30-3:20</td>
<td>93</td>
<td>Ballroom C</td>
<td>9-12</td>
<td>Jay H. Berglund</td>
<td>Barbie Bungee Jumping</td>
<td>Participate in a classroom activity to create a mathematical model needed to design a bungee jump for a Barbie doll using rubber bands for the bungee cord. Bring your graphing calculator.</td>
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<tr>
<td>2:30-3:20</td>
<td>94</td>
<td>Salons</td>
<td>K-C</td>
<td>Melissa H. Horton, Featured Speaker</td>
<td>Let's Get Wild</td>
<td>Experience a truly &quot;wild&quot; presentation by Wildlife Experiences! They will have live birds for an up close and personal meeting. The focus of the presentation will be on the variety of birds found on our planet and their places in their native habitats. Birds are important indicators of environmental health, and thus are a natural way to discuss issues such as endangerment, environmental poisons and natural resource conservation. We will also discuss our school programs and how you can schedule them for your classroom.</td>
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<td>2:30-3:20</td>
<td>94A</td>
<td>Church D</td>
<td>all</td>
<td>Vanya Munce, Huron Middle School</td>
<td>Geometry for Middle School Using String Art Designs</td>
<td>This is an overview of a geometry project culminating in the design and production of a string art project.</td>
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<tr>
<td>2:30-3:20</td>
<td>95</td>
<td>YWCA</td>
<td>8-9</td>
<td>Monica K. Knuppe &amp; Rose McClaskey</td>
<td>Light Lab Stations</td>
<td>This is a set up of stations made of easy to find materials to investigate the properties of light. This would be excellent for new teachers or teachers of limited materials.</td>
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<td>2:30-3:20</td>
<td>96A</td>
<td>Church D</td>
<td>all</td>
<td>Denyse Barrett</td>
<td>Meth- Signs &amp; Symptoms</td>
<td>A presentation on the dangers of Meth and signs &amp; symptoms of users and labs.</td>
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</tbody>
</table>
Saturday  2:30 pm

2:30-3:20 pm  
YWCA  
Grade Level:    7-12  

Speaker(s):  Pamela M. Zubke  
Waubay High School  

Title:  Maury Project:  Shallow Water Ocean Waves  

Explore shallow water ocean waves. Bring an empty paper towel tube (or two). Handouts provided.

Saturday  3:45 pm

3:45-5:30 pm  
Board room  

Facilitators:  Mark Farrand & Chuck Holmstrom  

Title:  Joint Conference Board Meeting