## Wisconsin Conference

## Educational

 Fair

March 30, 2008
WISCONSIN ACADEMY
COLUMBUS, WISCONSIN

## GOALS AND OBJECTIVES:

* To promote interest in learning in Adventist schools
* To provide opportunities to share knowledge
* To promote unity among schools
* To promote K-12 Adventist education in Wisconsin
* To reinforce the relationship between Creator and creativity

Intelligent people are always ready to learn. Their ears are open for knowledge.
Proverbs 18:15, New Living Translation Bible
The wise are mightier than the strong, and those with knowledge grow stronger and stronger.
Proverbs 24:5, New Living Translation Bible
"God entrusts [all] with talents and inventive genius, in order that his great work in our world may be accomplished. The inventions of human minds are supposed to spring from humanity, but God is behind all."

- Ellen G. White, Special Testimonies on Education, p. 7
"God is the author of science. Scientific research opens to the mind vast fields of thought and information, enabling us to see God in His created works. Ignorance may try to support skepticism by appealing to science; but instead of upholding skepticism, true science contributes fresh evidence of the wisdom and power of God. Rightly understood, science and the written Word agree, and each sheds light on the other. Together they lead us to God by teaching us something of the wise and beneficent laws through which He works."
-Ellen G. White, Counsels to Parents, Teachers, and Students, p. 426


## STUDENT PARTICIPATION

In the spirit of educational exploration, it is expected that each student and teacher participating in the Educational Fair will familiarize himself or herself with this handbook.

Failure to adhere to these guidelines will be reflected in the judges' evaluation of projects. For your convenience several checklists have been included with this material, which we hope will prove useful.

## CURRENT SCIENCE FAIR COMMITTEE

Ken Kirkham, Marshall Bowers, Jody Marsh, Arlen Mekelburg, Doug Flahaut, Tola Ewers, Linda Rosen, Keith Hatcher and Carol Driver
Science Fair Guidelines updated: 12/19/2007

It is time to make plans for the upcoming Wisconsin Conference Educational Fair, March 30, 2008. If you follow the guidelines and suggestions in this booklet carefully, you will find the experience exciting and rewarding.

It is best to go through the booklet with your teacher, page by page, and then discuss how you will participate in the fair. After you have chosen the category and subject, follow the guidelines for researching and exhibiting your results.

Ribbon awards will be given to each participant. Of course, judges will only give a first place award to participants who have an OUTSTANDING exhibit and have followed all the rules carefully. You will want to use the checklists that are found in the appendices of this booklet to make sure that you will qualify. Judges will be judging the exhibits beginning at 10:45 a.m. The displays will need to stay in place until after the closing prayer at the end of the day. If displays are taken down early they will not receive a ribbon.

All exhibitors will receive scholarships to Wisconsin Academy in their W.A. passbooks.
Andrews University will again be providing $\$ 2,000$ in scholarships. These will be given at the discretion of the Educational Fair Committee to the students who plainly show that solid research and creative thought went into their display.

To save time on fair day and to be sure we have enough tables for everyone, we are requiring you to pre-register. Please return the registration form by February 15, 2008. No late registrations will be accepted. Students are required to mail or fax their own registration form. Teachers, school secretaries and parents may show the student how to mail or fax the form but may NOT do it for them.

This year we will again be bringing in Ben Roy, Science Zone Director. He will have another program that will be as exciting as the ones he has presented in the past.

We hope that you will enjoy your project and preparation for this special fair. It is our hope that your respect, admiration and love for the Creator of the universe, who is also the Author of all knowledge and the laws of science, will be greatly enhanced.

Sincerely,

Ken Kirkham
Superintendent of Education
KK/cd

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## A TYPICAL EDUCATIONAL FAIR PROJECT



# PROJECT TYPES, LEVELS AND SUBJECTS 

## Types

Two types of student involvement are allowed. Projects will be entered and judged based on these types:

* INDIVIDUAL

A single student with limited teacher/parent assistance will plan, conduct and display his or her project.

* TEAM

A team of only two students with limited teacher/parent assistance will plan, conduct and display their project. Only one Registration Form is needed for a team.

## Levels

Exhibits will be entered and judged at three grade levels:
Grades 5 and 6
Grades 7 and 8
Grades 9 and 10

## PROJECT CATEGORIES

## Categories: Exhibits may be entered and judged in five categories:

## 1. Social Studies

Students may choose to research any social studies topic including geography, history, government or economics. Projects must make a connection of the topic to the Bible, Christianity or some aspect of Adventism. For example, students might select a country or people group to research and explore an ADRA or Adventist Frontier Missions project in that country or with that people group. Another idea might be to research someone from Adventist history, such as William Miller, Desmond Doss or Sojourner Truth. Students must clearly identify the purpose of their project and explain how the topic is important for today's students. They should ask a question, explore and research the question, and come to a conclusion.

2 Math
Students may choose any math topic to research. This includes, but is not limited to, creating a math-based game, researching famous mathematicians and their work, or researching a mathematical topic. Math subjects include probability, geometry, arithmetic, fractions, measurement and statistics.

## 3. Inventions

Students may choose to research and design a new device or process used to solve problems, improve conditions or fill needs. This can be a new idea or improvement on an existing idea. Student should provide a prototype, a description of how the invention evolved, how it operates, its benefits, and when possible a bibliography.
4. Science Experiment

Students will use the scientific method which includes stating the problem in question form, formulating the hypothesis, testing the hypothesis, recording the data, and stating a conclusion.

## 5. Science Research

Choose a question and hypothesis, and then conduct RESEARCH of written, interviews, video or other material to TEST the hypothesis.

## Question and Hypothesis (Science Experiment and Science Research only)

QUESTION: Think about things in nature, health, computers, etc. which cause you to wonder why or how? (see suggested subjects p. 6 and topics p. 12).
Do use these words to start your hypothesis: WHY, HOW
Don't use these words to start your hypothesis: does, do, can, will
HYPOTHESI S: This is your guess as to the answer to the "why" or "how" before you do the research or experimentation.

Example 1: Question: "Why is the sky blue?"
Hypothesis (your guess): "The sky is blue because oxygen is blue."
Example 2: Question: "Why are so many teenagers developing eating disorders such as anorexia or bulimia?"
Hypothesis: "Eating disorders are related to peer pressure and media influence."
Example 3: Question: "How does birth order affect your temperament?"
Hypothesis: "People play the roles that are expected of them."
Example 4: Question: "How do colors affect consumer choices?" Hypothesis: "Red color packaging is most appealing to consumers."

INCORRECT question/hypothesis:
Question: "Do seashells have calcium carbonate?
Hypothesis: "Yes, I think they do."

## What do I do next?

It will then be necessary to do RESEARCH and/or conduct EXPERIMENTS that will TEST whether your hypothesis (or your guess) is correct or not correct. You need to consider what you can do to TEST your hypothesis.

I MPORTANT NOTE: Do not be disturbed if you find that your hypothesis is not right. Students whose work does not support their hypothesis will be scored just as high as those whose work how's their hypothesis to be acceptable. The purpose of research and experimenting is to find right and wrong answers.

## PROJECT REQUIREMENTS

## The Project...

Should be entirely the work of the student(s) including the logbook/diary, formal report, and exhibit. Project subjects, procedures, format, and ideas may be offered but all decisions and work (including typing) is to be that of the student(s). Only one individual project may be entered. A student may also be part of a team project. Keep the expense of the project to a minimum.

## Logbook/ Diary...

Is required for each project (see examples on pages 22-24). A handwritten, detailed logbook/diary should include dates, times, places of experimentation, materials used, procedures followed, and observation, as well as questions that have occurred to the student as the project progresses. The logbook/diary should include the total time spent on the project, names of others who helped with the project, how they helped and how much time they spent helping. An adult must sign the last page of the logbook/ diary to verify its content.

## Formal Report...

Is required for each exhibit. A short report is required for experiments; a lengthier, and in-depth report is required for all research projects. All reports must by typed by the student(s) doing the exhibit. The report must be in the student's own words. Students should check the report for accuracy and correct spelling. The report should include the following (typed on separate pages):
a. Title Page - the title, student's name, teacher's name, and date of the educational fair
b. Table of Contents - a listing of the contents that follow and their page numbers
c. Question - Here the question are stated along with an explanation of why student decided to answer this question.
d. Hypothesis -- For Science Experiment and Science Research only. Hypothesis are stated along with an explanation of why student decided to test this hypothesis.
e. Materials - This page contains a detailed listing of all materials used in your project. The student(s) should be as specific as possible.
f. Main Body - Detail all the steps taken in testing your hypothesis or steps taken in doing your project. The information should be clear and thorough so that another person could duplicate the investigation just as you did it. Each step includes all observations and supporting graphs, charts, histograms, etc.
g. Conclusion - Analyze the information collected during your study and determine whether the information proves the hypothesis or answers the questions you had to cause you to do your project.

Note: Both the Formal Report and The Logbook must be separate from the display board.

Bibliography - List alphabetically all books, magazines, newspapers, pamphlets, interviews, websites, etc. used in the report. There should be at least three different types of sources and for Research project there should at least as many sources as the highest grade level of the student (grades $5 / 6=6$ sources, grades $7 / 8=8$ sources, grades $9 / 10=10$ sources). Below is an example of a bibliography page showing the correct style for listing different sources.

| Types of Sources | Bibliography |
| :---: | :---: |
| CD-Rom | Author/editor (if given). "Title of Article." Title of Work. Type of medium, version. Place of Publication: Publisher, date. |
| Website | Author's last name, first name. "Title of Document." Type of medium. URL. Accessed day, month, year. <br> Example: <br> Phillips, Richard. "About Today's Date." Online. http://kalama.doe.Hawaii.edu/hern95/rt007/. Accessed 13 March 1997. |
| Encyclopedia | "Title of article". Title of Encyclopedia. Date of publication. Example: <br> "Computer." The Learning Encyclopedia. 1984 ed. |
| Interview | Last name, first name of person being interviewed. Interview. Date of interview. Example: <br> Kirkham, Ken. Interview. January 23, 2006. |
| Periodical | Author's last name, first name. "Title of article". Journal Title. Volume number, pages referenced. <br> Example: <br> Jones, Sandra. "How Insects Behave." Scientific Digest. Vol. XXX(1982), pp. 83-87. |
| Magazine | Author's last name, first name. "Title of article". Magazine Title, date of publication, pages referenced. <br> Example: <br> Richards, Randy. "New Ideas with Computer." Computer Life, March 1986, pp. 5-10 |
| Book | Author's last name, first name. Title of book. Place of publication: publishing company, date of publication. <br> Example: <br> Smith, John. All About Science. New York: Superior Book Company, 1985. |
| Online Periodical | Author's last name, first name. "Article Name". Periodical name. Date of electronic publication. Website address. Date of access. <br> Example: <br> Smith, Susan Lampert. "They Stayed on the Farm." Wisconsin State Journal Online. May 28, 1998. http://www.madison.com/wsj/. May 6, 1999. |
| Newspaper, no author | "Title of article". Date of publication. Title of newspaper, page/section. <br> Example: <br> "New Drug Appears To Sharply Cut Risk Of Death From Heart Failure". July 15, 1993. The Washington Post, p. A12, A19. |

## PROJECT REQUIREMENTS (cont'd)

## Brief Oral Presentation...

is required of all projects. The student(s) displaying the exhibit must be present at the assigned time of judging to give a brief oral presentation of the project and to respond to any questions presented by the judge(s).

Rehearse your oral presentation in advance. You will want to show the judges that you can explain each step that you took and why you took each step. You should be able to explain what you learned from your study and even how you feel about what you learned.

```
Be prepared to answer questions such as these in your oral presentation:
```

* What did you learn? Be specific.
* Explain your project.
* What did you most enjoy about your project?
* What was most difficult about your project?
* To what field does your project apply?
* How does your project relate to the Bible?
* What did you learn about God as the Creator?
* What did you learn about God's love?


## The Exhibit...

Must conform to all size and safety specifications. The display should be clear, legible, organized, and express a degree of originality and creativity. The Exhibit Label ( p .21 ) should be filled out and taped to hang down the front of your table (see p. 5).

## Visual Aides Used in the Exhibit...

Must comply with Adventist standards and federal law. At no time, under no circumstances, with no exceptions, may guns of any type, knives, weapons, explosives, gun shells (empty or not empty), or items with the appearance of the above-mentioned items be brought on the WA campus. This violates the federal laws restricting these items from schools and school grounds. All schools are required to enforce zero tolerance on weapons violations.

When cigarettes, drugs or drug paraphernalia are used as visual aides in a project, the items must be attached to the display board in such a manner that they are unusable if removed from the board. These items may not be displayed on the table in front of the display board. It is suggested that, where possible, pictures be used rather than the actual item.

## EXHIBITS

## General Guidelines

* A project display can be no larger than 30 inches front to back or 48 inches wide or 60 inches high.
* A table will be provided.
* Each exhibitor will be responsible for furnishing all display materials needed for the project.

* Limited electrical source will be provided.
* Safety must be a prime consideration. No flames, caustic materials, volatile liquids, highly combustible materials, poisons, strong acids or bases, or harmful drugs should be displayed.
* The student(s) should be responsible for the total project. Adult involvement should only be supportive. Project subject suggestions can be offered, but must be chosen by the student(s). Reasonable financial assistance can be given. The exhibit should be the work of the student(s).
* Projects are not to be removed from the Fair facility until the awards ceremony is completed.


## Tips for Constructing Exhibits

* Exhibits can be constructed of two to four panels made of sturdy material such as cardboard, pegboard, or wood. Panels should be able to stand and support themselves after being fastened together with tape or hinges.
* All titles should be written or typed neatly and be self-explanatory. The title of the project should be placed across the top of the panels. The title is related directly to the hypothesis or question being asked. Science project subtitles question should follow the scientific method and include such headings as: Problem, hypothesis, experiments, methods, results and conclusion.
* Graphs can be rendered as line, bar or pie graphs. Color graphs have eye appeal and should be encouraged.
* Visual displays, such as photographs, computer graphics and drawings are valuable additions to a panel display.
* Both the formal report and logbook must be separate from the display board.
* Care should be taken with text materials to ensure easy reading (logbook/diary neatly written and formal report typed).
* Exhibits should be designed so that no dangerous conditions exist with the material and equipment on display.
* Participants should label all materials on display. Some wear and tear on the exhibit while open to the public should be expected.


## MISCELLANEOUS



Researching the Topic
During the early stages of research, you should use books that are easy to read to develop an understanding of the basic vocabulary and background information about your topic. You should seek the most current resources available.

When writing to governmental agencies, science institutes, commercial companies and others, be very specific in requesting information and assistance. A set of questions should be prepared in advance when interviewing resource people.

Possible sources of information include: ADRA.org, airports, animal hospitals, botanical gardens, colleges and universities, governmental agencies, hospitals, industries, local libraries, nature centers, telephone books and zoos.

The United States Government Printing Office is an excellent source of printed material. Send a letter indicating your topic area and you will receive a catalog of available books and pamphlets. The address is: U.S. Government Printing Office, Superintendent of Documents, Washington, D.C. 20402.

You may wish to check out additional sources, including your local library reference section, student activity books for the denominational science series, encyclopedias and this website www.exploratorium.edu

## Possible Topics

Let your exhibit be an extension classroom or home activities. Have you ever wondered about why things happen? That would probably be a good place to start.
Here is a list of possible topics but not limited too.

| Science | Science Research | Math | Social Studies | Inventions |
| :--- | :--- | :--- | :--- | :--- |
| Experiment | Volcanoes | The life and works | Natives Americans | New Ideas or |
| Molds | Birds | of Archimedes, | Slavery | improvement on |
| Erosion | Pulse Rate | What is a Mobius | ADRA project | existing ideas. |
| Temperature | Vitamins | Strip? | Religious |  |
| Plant Growth | Populations | What is a | Prosecution |  |
| Mechanical Energy | Insects and Odors | Tessellation? | Middle East |  |
| Food Preserving | Sleep Disorders |  |  |  |

## Working with Live Animals

Projects with animals must be approved by the Wisconsin Academy Science Teacher by
J anuary 28, 2008. They must be conducted with respect for life and an appreciation of humane considerations that would be afforded all animals. The comfort of the animal used in the experiment must be a prime consideration. No experiment using live animals can be attempted unless the animal has been obtained from a reliable source and the following conditions can be assured:
a. Appropriate and comfortable quarters
b. Adequate food and water (please do not bring live bait/food to feed your critter).
c. Humane treatment and gentle handling

If you have any questions regarding the exhibition of live animals, call the Wisconsin Academy science teacher at 920-623-3300.


## WISCONSIN CONFERENCE EDUCATIONAL FAIR 2008 <br> REGISTRATION FORM

Please complete this form, one per entering student OR one per team
and return by February 15, 2008.

## STUDENT'S NAME

$\qquad$
(Please PRINT)
STUDENT PARTNER’S NAME (if applicable) $\qquad$
(Please PRINT)
SCHOOL

| GRADE LEVEL | $\square$ 5/6 | $\square$ 7/8 | $\square$ 9/ 10 |  |
| :--- | :--- | :--- | :--- | :--- |
| T-SHI RT SI ZE: <br> (Select 2 if partners) | $\square$ Small | $\square$ Medium | $\square$ Large | $\square$ X-Large |

CATEGORY - Check only one category below and answer the question and Hypothesis.
$\square$ Experimentation $\quad \square$ Research $\quad \square$ Math $\quad \square$ Social Studies $\square$ Invention

Question, Idea, or Hypothesis $\qquad$

How will you prove/disprove this hypothesis? $\qquad$


Sign up for one of the Academic Adventures to be held after lunch:
Making Music Discoveries, Language Arts Creative Writing J ourney, Math Mysteries, I nvestigating I nventions or Science Awe-Strikers

## First Choice

```
Second Choice
Third Choice
```

$\qquad$

```
Third Choice
```

Each student (or one per team) is required to submit his or her own registration form. Do not ask your parents, teacher, or school secretary to send your form. (You may ask them to show you how.) Entries must be pre-registered and must be postmarked/faxed or e-mailed to cdriver@wi.adventist.org on or before February 15, 2008. No late registrations will be accepted. Mail to: Education Dept., Wisconsin Conf. of SDA, P.O. Box 7310, Madison, WI 53707. Fax: 608-837-9421.
It is your responsibility to make sure the fax goes through.
TEACHER'S SI GNATURE $\qquad$

## TEACHER / STUDENT CHECKLIST $\sqrt{ }$

|  | TO DO LI ST | DUE DATE | COMPLETED <br> DATE |
| :--- | :--- | :--- | :---: |
| 1 | Select Topic |  |  |
| 2 | Form Question \& Question and Hypothesis |  |  |
| 3 | Explore Resources |  |  |
| 4 | Animal Project OK'd by WA Science Teacher | $02-15-08$ |  |
| 5 | Mail, e-mail or fax Registration Form to Conference <br> Education Dept. |  |  |
| 6 | Start Logbook/Diary and Report |  |  |
| 7 | Find materials |  |  |
| 8 | Investigation |  |  |
| 9 | Prepare results |  |  |
| 10 | Plan Display |  |  |
| 11 | Construct Display |  |  |
| 12 | Complete Logbook/Diary and Report |  |  |
| 13 | Prepare Summary | Before 10:00 a.m. |  |
| $03-30-08$ |  |  |  |

## Project \#

$\qquad$ Judge $\qquad$
Grade Level 5 \& 6 $\qquad$ 7 \& 8 $\qquad$ $9 \& 10$ $\qquad$

## PRODUCT

Bibliography included
Variety of sources used and cited
$3 \longrightarrow$

## 35 points possible

Variety of sources used and cited
3
2
no sources cited
10

Use of Visuals to display data- charts, tables,
Outstanding

5
4
good
3
fair
2
no visuals
0

1
Organized, Neat, and grammatically correct for grade level

Very organized and neat
$10 \quad 9 \quad 8$
Logbook, dates, times, materials used, procedures, observation, questions


## CLARITY AND KNOWLEDGE

Question is clear and specific
Very Clear and Specific
$10 \quad 9 \quad 8$
Clear and Specific Hypothesis
Clear and Specific Hypothesis $\begin{array}{lll}10 & 9 & 8\end{array}$ $7 \quad 6$

6
$5 \quad 4$
3
Demonstrates knowledge of subject chosen
Complete understanding
$10-9$
Complete and thorough Scientific Method displayed (step by step)
$\begin{array}{ccccccc}\text { Excellent } \\ 10 & 9 & 8 & 7 & & \text { Adequate } \\ 10 & 6 & 6 & 5 & 4 & 3\end{array}$

| 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Conclusion relevant and supported by data
Fully supported by data
$10 \quad 9 \quad 8$
Grade Level Appropriate -shows own work
Very appropriate
5

## OVERALL PROJ ECT AS A WHOLE

Outstanding
8
7
6
5
4

TOTAL $\qquad$ /100 POINTS

Project \# J udge

Grade Level 5 \& 6 $\qquad$ 7 \& 8 $\qquad$ $9 \& 10$ $\qquad$

PRODUCT
Bibliography included
Variety of sources used and cited 54

Use of Visuals
Outstanding
5
4
good
3

35 points possible
no sources cited
1
0
no visuals
0

Organized, Neat, and grammatically correct for grade level


## CLARITY AND KNOWLEDGE

Topic is clearly stated and investigates a science topic
Clear topic and easy to understand
$\begin{array}{cccccc}10 & 9 & 8 & 7 & 6 & 5 \\ \text { Demonstrates knowledge of subject chosen }\end{array}$
$\begin{array}{cccc}10 & 9 & 8 & 7\end{array}$

| Complete understanding |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 18 | 16 | 14 | 12 | 10 |


| some amount |
| :---: | :---: |

55 points possible
$\begin{array}{llllll}20 & 18 & 16 & 14 & 12 & 10\end{array}$
Easy to Understand and Follow

| Easy to understand |  | 7 | 6 | 5 | 4 | 3 | 2 | Confusing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 8 |  |  |  |  |  |  | 1 | 0 |
| Correct Information |  |  |  |  |  |  |  |  |  |
| Accurate information |  |  |  |  |  |  |  |  | error |
| 109 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

Grade Level Appropriate -shows own work
Very appropriate
5
4
3
Too difficult/easy for this age
2
10

## OVERALL PROJ ECT AS A WHOLE

Outstanding
$\begin{array}{lllll}10 & 9 & 8 & 7\end{array}$

TOTAL $\qquad$

## Social Studies J udging Rubric

Project \# J udge

Grade Level 5 \& 6 $\qquad$ 7 \& 8 $\qquad$ $9 \& 10$ $\qquad$

PRODUCT
Bibliography included
Variety of sources used and cited 54

Use of Visuals
Outstanding
5
4
good
3

## 35 points possible

no sources cited
$1 \quad 0$
no visuals
0

Organized, Neat, and grammatically correct for grade level


## CLARITY AND KNOWLEDGE

Topic is clearly stated and investigates a social studies topic
Clear topic and easy to understand
$\begin{array}{llllll}10 & 9 & 8 & 7 & 6 & 5\end{array}$
$4 \quad 3$
55 points possible

- 5

Demonstrates knowledge of subject chosen and conclusion to question is stated

Complete understanding
$\begin{array}{llll}20 & 18 & 16 & 14\end{array}$

## substantial amount

1210
Easy to Understand and Follow


Grade Level Appropriate -shows own work
Very appropriate
$5 \quad 4$
3
2
Too difficult/easy for this age
10

## OVERALL PROJ ECT AS A WHOLE

Outstanding
8
7
6
5
4
3

## 10 points possible

Needs Improvement
2

## Mathematics J udging Rubric

Project \#
Judge $\qquad$
Grade Level 5 \& 6 $\qquad$ 7 \& 8 $\qquad$ $9 \& 10$ $\qquad$
PRODUCT
Bibliography included
Variety of sources used and cited
5
3

|  |  | no sources cited |
| :--- | :---: | :---: |
| 2 | 1 | 0 |
| fair |  |  |
| 2 | 1 | no visuals |
|  |  | 0 |

Organized, Neat, and grammatically correct for grade level
Very organized and neat


4
3 $\begin{array}{ccc}\text { not organized, errors throughout } \\ 2 & 1 & 0\end{array}$

Logbook, dates, times, materials used, procedures, observation, questions


## CLARITY AND KNOWLEDGE

Topic is clearly stated and investigates a mathematics topic or person
Clear topic and easy to understand
$\begin{array}{llll}10 & 9 & 8\end{array}$
6
5
4

3
55 Points possible

Demonstrates knowledge of subject chosen


Outstanding
109
8
6

3

Confusing
210

Confusing
$\begin{array}{cc}\text { Many } & \text { errors } \\ 1 & 0\end{array}$

## I nvention J udging Rubric



## CLARITY AND KNOWLEDGE

Description of how it evolved
Clear description

| 10 | 9 | 8 |
| :--- | :--- | :--- |

$6 \quad 5$
4
55 points possible

8
7
3
Prototype included with explanation of operation and benefits

$\qquad$ /100 POINTS


## WISCONSIN CONFERENCE EDUCATIONAL FAIR 2008

# EXHIBIT <br> LABEL 

## LOGBOOK/DIARY EXAMPLES

Pages 24-25 were chosen for the Educational Fair Booklet because they are:

\author{

* Neat <br> * Very Detailed <br> * References, Materials, Dates and Times are listed
}


## Sample 1:

Nicole Willer (research) - gave detailed steps as she tested her hypothesis and a very good list of materials.

## Sample 2:

Marlyn Santiago (experiment) - gave detailed information and observations about her project as she built her experiment.


# LOGBOOK/DIARY EXAMPLE <br> (A page from Nicole Willer's logbook, a Milwaukee Jr. Academy student) 

T- Today I mour 30 min pg. 2 candies. The
first one I made was an ice
candle. First I cut up one pound
of wax and melted it. When the
wax was almost all melted I
put in 2 crayons; one pink and
one violet crayon. I then cut
the top off a milk carton
and poured in crushed ice until
it reached the top. Also just
before I put the ice in I put
the wick in. Once the ice was
all in I added the wax, then
it had to harden for one hour.
While the ice candle hardened
I made a wax filled Glass containex
i masmer
The ice candle didn't use up all the wax, so luckilly I didn't have to make wore. I took a wick and put a wick talo on the end. Then I took the wick and put it in a glass jar. Then I filled the glass jar with wax I let the jar sit it looked so cool when it dried; the wax had layered! Light was on topa dark was on the bottom. Unfor tunately my ice condle didn't come out so good that's why I'm going to re do it as soon as I can.

Materlals used: way, wicks,wick taks, book, pot, knife, wooden stick, jar, milk carton
Reference (s) used:
Yaley, Torn Candle Crafting Califorma, Redeling
Yaley Enterpuiscs, 1997

## LOGBOOK/DIARY EXAMPLE

(A page from Marlyn Santiago's logbook, a Milwaukee Jr. Academy student)

Feb. 28
(Ihour) The next day I noticed that the coil was overlapped and it shouldn't overlap, so I unwound it and started all over again but it slipped out of my hand and I gave-up trying by myself.

Feb.29. I tried again to wind the coil around the tube (Ihour) but it did not work. I noticed that the coil hod knots. I tried to get them out but it was not possible, so I left it there.

Mar.12 My Mom and I tried to take out the knots of the ( 3 hours) coil. We tried to wind it around the tube but it did not work, because the tube fell again. So my Dad came and helped us. We were about to finish, When my Dad went to get something to straighten out the last bit of coil, the coil slipped through my sweaty hands. We had to start allover, again? It took us an hour and a half to finish it.

Mar.15. My Dad and I worked on Finishing the radio. (3hows)We had a few ups and downs but we fin ally put the base together. When we fin ished it we tested it. We put one of the antennas on the waterfaucet, the other one in my hand and the earphone in myear. It worked, but I could barely hear the sound. Although. we did recieve the rad waves in the form of static.

# THE TWENTIETH ANNUAL WISCONSIN CONFERENCE <br>  EDUCATIONAL FAIR March 30, 2008 SCHEDULE 

9:30-10:30 a.m.
10:15-10:45 a.m.
10:30-10:45 a.m.
10:45 a.m.

Set up \& buy lunch tickets Judges' orientation (in cafeteria)

Worship by Ben Roy
Judging begins

NOTE: 1. Displays must be in presentation form until 3:15 p.m.
2. Any question about judging must be presented in the Judges Tabulation room before 1:00 p.m. After that scores are final.

12:00-1:00 p.m.
Lunch in the cafe $\$ 5.00$ per person. By ticket only.

1:00-2:00 p.m.
Academic Adventures
Making Music Discoveries
Language Arts Creative Writing Journey Math Mysteries
Science Awe-Strikers
Investigating Inventions
2:00-3:00 p.m.
Presentation by Ben Roy
Science Zone Director
3:00-3:15 p.m. Scholarship presentation and closing remarks
3:15 p.m.
Clean up (volunteers needed)

# SPECIAL FEATURE BEN ROY, SCI ENCE ZONE DI RECTOR 

Ben Roy is the former director of News Channel 9 Science Theatre in Chattanooga, Tennessee. He has the ability to captivate, motivate and inspire students and teachers to be turned-on to science while providing authentic instruction based on science phenomena. Ben's spectacular demonstrations of physical and chemical science all have spiritual applications and point to a
 creator God.

He has been a classroom teacher for grades 1-8 for 28 years. Ben taught science methods for the University of Tennessee at Chattanooga and supervised students in the Alternative Teacher Certification Program. Ben is an adjunct professor at Southern Adventist University and UTC. He also is a Teacher Resource Agent for the American Astronomical Society. He was voted Teacher of the Year for Gordon County Schools, and is the director of a mobile science program called "The Science Zone." Ben holds a current Adventist teaching certificate as well as state certification for both Tennessee and Georgia.


## ARRIVAL AT THE FAIR PROCEDURES

* Upon arrival at the fair, go directly to your assigned table and set up your display before 10:30 a.m. The gym will be open at 9:30 a.m.
* Each student must set up his or her own exhibit. A teacher or parent may assist in setting up the exhibit with the student(s).
* All valuable equipment or materials should be fastened down securely.
* All exhibits must have the EXHI BIT LABEL taped to hang down the front of your table space. Please bring your own tape to affix the label.



## HOT LUNCH ORDERING



Hot lunch will be served in the W.A. cafeteria. The cost is $\$ 5.00$ per person. The menu will be the option of the cafeteria staff.

Lunch on the day of the fair is paid by ticket only. No cash will be accepted at the cafe door. You may purchase lunch tickets on the morning of the fair between 9:30 and 10:30 a.m. in the W.A. gymnasium.

If any student(s), teachers, parents or friends wish to eat there, please call or e-mail the Education Department with the approximate number of lunches needed by March 14 at 10 a.m.

All participants are welcome to bring their own sack lunches if they wish.


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## Special Events this year are five different ACADEMIC ADVENTURES

Please sign up for one of these Academic Adventures on your registration form. The Academic Adventurers are limited to about 20 participants. On your registration form there is a place for your first choice, second choice and third choice.

The Academic Adventurers will be held after lunch and will run for about 40 minutes.

Making Music Discoveries with Clinton Anderson

Language/Arts Creative Writing Journey with Jeannie Buchholz

Math Mysteries
Benjamin Burton


## Science Awe-Strikers with Arlen Mekelburg

Investigating Inventions with Doug Flahaut


