## 2006 Sunrise Science EXPO Student and Parent Information Packet 2006 Science EXPO Project Requirements

Dear Sunrise Parents.

This information packet is to help your student prepare for a significant event in their Science EXPO learning experience - the Inquiry-Based Science Project. This project meets the Washington State Grade Level Expectations (GREs) for your student and helps prepare them for projects they will be required to do in middle and high school. It is our goal at Sunrise to prepare our children to be successful in their academic careers, meet state requirements for science, and enjoy the investigative nature of science. It is to these ends that EXPO was designed.

Parent Project Involvement during the project:

- Safety and supplies please make sure that you are aware and present for specific safety needs your student may have for this project.
- Support and Transport if the student requests your assistance for observation • or transportation (or experimentation) please comply with their specifications but let them do the work. They will be graded on this project.
- Documentation and Congratulations Please take many videos, photos and send • them to others in your family. This is a great event! Enjoy your children.

### EXPO Night Guidelines:

- 1. Please keep main focus on the student scientists by socializing outside the gym.
- 2. Keep small children in check it is a safety issue and shows respect.
- 3. When viewing student work and listening to a presentation, be respectful and attentive listeners TO THAT STUDENT.
- 4. Ask appropriate questions and give supportive statements.
- 5. Ask student's permission to film or photograph their work.
- 6. Move in a respectful manner and view many projects.

The following pages are a working document: Your student is to talk with you about what they want to do for their project. This is the initial phase and very important. At the bottom there will be a place for your signature showing me that you received this packet, listened and talked with your child about the EXPO.

## All Students May Choose Their Own Investigation

- This is the foundation of Inquiry-Based Scientific Investigation.
- By choosing to study, test and present something that they are interested in, they are owners of their project and encourages creative and individual, authentic investigations.
- This allows us as to assess the individual student's understanding of the process of inquiry, study, conclusions and new questions.
- Science EXPO Projects must be something that the student has designed as a result of a question they wish to investigate; it is not to be a project that comes from a book, a kit, the Internet or previous student work.
- Because of this, it is very important that teachers, parents and peers accept and listen carefully to the student's ideas and give positive feedback to their efforts. This is a learning exercise as well as a graded demonstration, <u>not a competition.</u>
- All 5th and 6th grade students will present individual projects.
- All safety and ethical restrictions apply:
  - One Variable tested ONLY!
  - All live animals must be treated with respect and care. No live animals may be brought to the EXPO demonstrations.
  - All investigations must be conducted in a <u>safe manner</u>.
  - No use of bodily fluids may be used in the investigation.
  - No use of harmful chemicals, explosives or corrosives may be brought to the demonstration event.
  - Motorized units or catapults may be brought for <u>display</u> <u>only</u>, but not exhibition during public EXPO viewing.
  - All adult involvement must be in the form of safety, supervision, transportation, guided subject for study (guinea pig) or heavy lifting/high reach assistance only.
  - Only the student may present their findings at the Science EXPO demonstration. No coaching during presentation.

## All Display Boards are standard 36" x 48" Tri-fold units.

- The display boards <u>must be</u> the tri-fold, standard 36"X48" Display Boards supplied by the Sunrise PTA. There is a specific reason that this project requires standard display boards - students may decorate their boards to enhance the project, but they must remain the same dimensions. There will be a small space in front of the boards on the table for demonstrations, journals, models or samples of the investigation.
- Each board must have all components of the investigation according to the Science EXPO Rubric to which it will be graded. (Attached and grade-level specific.)
- The student must also attach the rubric to the back of the completed project and make sure that it has their name on both the scoring sheet and on the front of the project.
- Creativity is encouraged in making the presentation attractive, but everything must be contained on the board in the same format in order to assess the student's understanding of the process - and be project specific. Decorations must make sense.
- The student's grade will be on their understanding of how to apply inquiry-based investigations to something they have an interest in knowing. An EXPO project is not a "report."
- Please do not bring a soda & vinegar volcano to the EXPO. Your student will tell you why it is not considered an inquiry-based investigation.
- All projects are documented and approved through the teachers or science teacher prior to beginning the projects to make sure that the investigation they have chosen can be SAFELY <u>tested</u>, <u>measured and contained within Science EXPO guidelines</u>.

## • Students Presenting Will Be Wearing Lab Coats

- Students must stand beside their project for 10 minutes and discuss their project. The audience is to be attentive and supportive of their presentations. Give them your full attention.
- After their 10 minutes are completed, they are to visit at least three other projects in their grade level and demonstrate how to be respectful listeners and supportive peers.
- Students and parents are encouraged to visit other grade level presentations and offer appropriate remarks or questions.

## 8 Groups - Alphabetical Presentation Times.

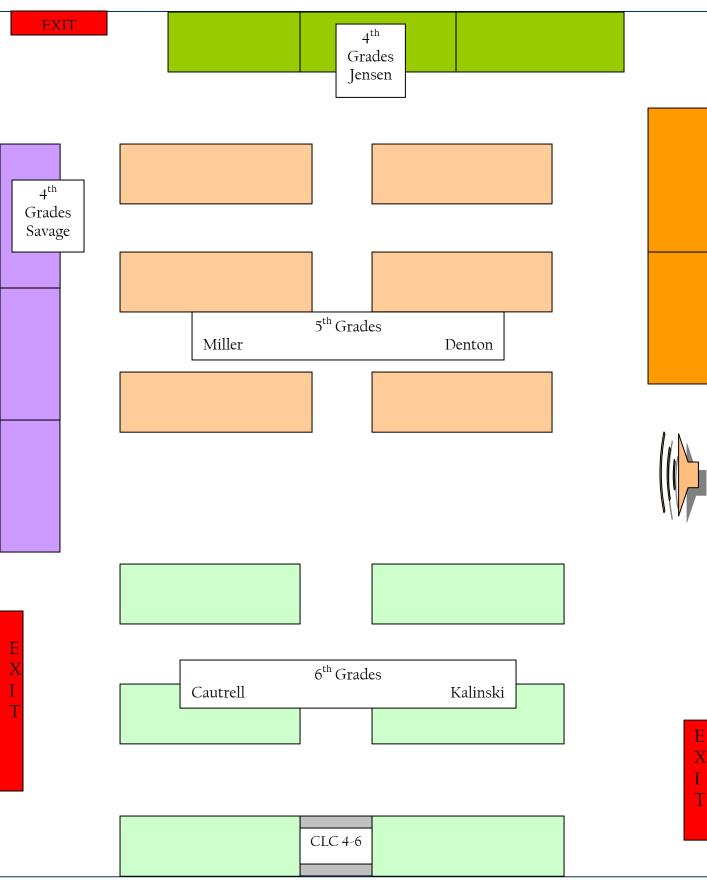
- Welcome and Introduction
- Group 1 (A-C) will present from 6:30 to 6:40 pm
- Group 2 (D-F) will present from 6:40-6:50 pm
- Group 3 (G-J) will present from 6:50-7 p.m.
- Group 4 (K-M) will present from 7-7:10 p.m.
- Group 5 (N-P) will present from 7:10-7:20
- Group 6 (Q-T) will present from 7:20-7:30
- Group 7 (U-Z) will present from 7:30-7:40
- Dismissal and Take-Down by 8 pm with all projects taken to the science lab and placed by teacher name.

# Nothing should take away from the student's work - this is their time to be shine.

- 4<sup>th</sup> and 5<sup>th</sup> Grade Projects to be assessed by Mrs. Barth will be available for pick-up the following Friday. Grades are confidential and will be delivered in sealed envelopes to each classroom. This score will be entered as the Inquiry (EALR 2).
- Science Content grades for 4<sup>th</sup> and 5<sup>th</sup> are determined by FOSS curriculum assessments, classroom observations and lab journals.

### 2006 Sunrise Science EXPO

## Student and Parent Information Packet



MY ROUGH IDEA OF WHAT I WANT TO DO MY EXPO PROJECT ON THIS YEAR:

Parents: Please sign below. If you have a question or comment you can write them here or send me an email at the school.			
Parents:		DATE:	
Students:		DATE:	

This is due by your first science class for the week of March  $6^{th}$ .

That would be: \_\_\_\_\_

#### References

- Saul, Wendy, Dieckman, Donna, Pearce, Charles, & Neutze, Donna, (2005). Beyond the science fair: Creating a kids' inquiry conference. Portsmouth, NH: Heinemann.
- Office of Superintendent of Public Instruction, (2005) Science K-10 grade level expectations: A new level of specificity. Olympia, WA, OSPI, Department of Printing general store: www.prt.wa.gov
- Parker, Verilette A., and Gerber, Brian L., (2002) Performance-based assessment, science festival exhibit presentations, and elementary science achievement, Journal of Elementary Science Education, Spring 2002 v14, il p59(9), Department of Curriculum Instruction, Western Illinois University, Ill.
- Thiel, Janet, Scientific Report Rubric: Cabrillo tidepool study, San Diego
  Unified School District: In 1990 the National Park Service commissioned
  the National Biological Service to study the Cabrillo National Monument
  intertidal zone and adapted for 6<sup>th</sup> grade science fair at Tolt Middle
  School, April 2004.
  Retrieved October 15, 2003, from:
  http://edweb.sdsu.edu/triton/tidepoolunit/Rubrics/reportrubric.html.
- Watson, Jinx Stapleton, Examining Perceptions of the Science Fair Project: content or Process?, School Library Media Research, V6 2003, [Electronic Version] At:http://vnweb.hwwilsonweb.com.offcampus.lib.washington.edu/hww/jumpstar t.jhtml?recid=0bc05f7a67b1790e0e56b64ca80c855a08d02622156be9d4880e0de6ef5 8d7229ee45a74a9e3187f&fmt=H">Watson, J.S. Examining Perceptions of the Science Fair Project: Content or Process? {computer file}. School Library Media Research v. 6 (2003)
- Balas, Andrea K., (1998-01-00) Science fairs in elementary school, Eric Clearinghouse for science mathematics and environmental education, Columbus, OH, ERIC Identifier, ED432444.
- Orr, David W., (2004) Earth in mind: On education, environment and the human prospect, Washington, Island Press.
- Bonnet, Robert L., & Keen, G. Daniel, (1990). Environmental science: 49 science fair projects. New York, NY: TAB BOOKS, Division of McGraw-Hill.
- American Association for the Advancement of Science, (1990), Science for all americans: Project 2061, New York, Oxford University Press
- Elkind, David, (1989) Developmentally appropriate practice: Philosophical and practical implications, [Electronic version], Phi Delta Kappan, 71(2), 113-117.
- Iritz, Maxine Haren, (1987) Science fair: Developing a successful and fun project. New York, NY: TAB BOOKS, Division of McGraw-Hill.
- Bellipanni, Lawrence J., (Dec 1994) The science fair experience: Profile of science fair winners, Mississippi State, MS, ED 395793, SE058379