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- ◆ Canberra Ornithologists Group (COG)
- **◆ Engineers Australia * Canberra Division**
- Minerals Council of Australia
- University of Canberra Division of Communication and Education
- Australian Greenhouse Office
- Questacon National Science and Technology Centre
- Australian Academy of Science

Co-ordinators

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Shields

Woden Plaza Community Centre Inc. (Special Education)

Jacaranda Education Supplies (Early Childhood)

Tuggeranong Rotary (Primary)

SEA*ACT (Secondary)



Objectives of the Science Fair

- 1. To encourage active involvement and interest by students in science.
- To encourage students to pursue their interests in science beyond the boundaries of the classroom.
- 3. To encourage students to undertake planned and controlled investigations in science and report their results in an appropriate manner.
- 4. To encourage students to apply these processes to scientific enquiry to topics that interest them.
- 5. To encourage students to record and present their work for others and in so doing, develop the various skills used in scientific communication.
- 6. To enable the community, including other students and teachers, to see project work done by students in the ACT colleges, school and preschools.

BHP Billiton Science Awards & the SEA*ACT Science Fair

The BHP Billiton Science Awards (BHPSA) have been the premier national awards for scientific research projects by students since 1982. The BHP Billiton Science Awards are a partnership between BHP Billiton, the world's largest diversified resources company, CSIRO, Australia's premier scientific research organisation and the Australian Science Teachers Association (ASTA)

SEA*ACT Science Fair entries of the highest standard will be selected for entry in the national BHPSA finals. There is no extra charge for this.

The 16 National BHPSA Finalists who are also secondary students will be invited to a science camp where they will also be required to present their project as a visual display and with discussion to an audience. The overall winner will win \$3,000.

In addition, up to two entries will then be provided with an opportunity to compete at the International Science and Engineering Fair (ISEF) in USA. See www.scienceawards.org.au for more information.

Prizes

The value of the prizes depends on the total sponsorship and the number of entries received for the Fair.

- For single entries, first, second and highly commended will be awarded in each theme for each age group.
- For group entries, preschools, primary schools and special education will have first and second prizes are awarded for each theme.
- For secondary and post compulsory group entries, all themes will be judged together and there will be first and second prizes awarded.

Entry Fees

Single entry and groups of one to five \$6.00 (GST inclusive) (Maximum 3 per group for potential BHP Billiton Student Awards)

Groups of six or more. \$10.00 (GST inclusive)



Time Line

FRIDAY 21ST AUGUST AND SATURDAY 22ND AUGUST 2009

Entries are to be delivered to <u>Mawson Primary School, Ainsworth Street, Mawson</u> on Friday, 21st August between 3.00pm and 5.30 pm, or on Saturday, 22nd August between 10.00am and 12.00 noon.

SUNDAY, 23RD AUGUST

Judging of entries from 10-12.00p.m. All prize winners will be notified during the week.

MONDAY 24TH AUGUST

Viewing at Mawson Primary School 5.30 pm. Everyone welcome.

MONDAY TO FRIDAY, 24TH - 28TH AUGUST

Display of all entries at <u>Mawson Primary School</u> and will be open to the public. School groups are invited to visit and a contact number will be advertised at a later date.

FRIDAY, 28TH AUGUST

All non-winning entries and Highly Commended entries are to be collected from <u>Mawson Primary School</u> between 2.00 and 5.30 p.m. Winning entries go on display at the Discovery Centre, CSIRO.

Non-winning entries not collected will be disposed of.

FRIDAY, 4TH SEPTEMBER

Prize giving ceremonies at The Discovery Centre, Clunies Ross Street, Black Mountain. 5.15 - 7.30p.m

Judging Criteria

As appropriate to the age group;

Working Scientifically.

As is relevant to the entry, the ability to plan an investigation, conduct an experiment, process data, evaluate findings, use science and act responsibly.

Group entries may include collections (for example involving an understanding of taxonomy), working models and other examples of class work that showcases authentic science teaching in schools. Group entries <u>must include a rationale</u> that explains the scientific principles the student work is demonstrating.

Creativity.

Imaginative presentation.

Skills.

Quality work that is the student's own work.

Clarity.

Presentation of data is clear, logical with easily read titles, labels and written work. The entry communicates the topic/theme. It is strongly recommended that <u>detailed papers of students aiming for BHP Billiton Student Award selection are accompanied by a poster</u>



Prize Giving Ceremonies

The prize giving ceremonies will be held on Friday, **4**th **September** at The Discovery Centre, Clunies Ross, Black Mountain 5.30 to 7.30p.m. All winners will be notified so they can make arrangements to attend their presentation ceremony.

There will be three ceremonies, Early Childhood, Primary, Secondary and Post Compulsory with Special Education. The ceremonies will be arranged according to themes. Winners will be advised of the time of their ceremony.

Hints for Preparing Entries

Note: Choose the correct entry form for the student's level.

- 1. Make sure that the work presents well. Be creative. Posters can be used to support secondary entries.
- 2. Make sure your entry is durable and cannot be damaged during transit.
- 3. Attach all parts in some way. A sensible/acceptable number of parts securely attached. Please note: entrants will not be able to set up a display.
- 4. Label ALL parts clearly so that labels cannot be removed.
- 5. Make sure you have supplied a contact phone number and that the printing of name(s) on the Entry Form and the Identification Label is/are legible. Please note: the name(s) will exactly be shown on any participation or award certificates surnames need to be included.
- 6. Please do not include live creatures in your entry. Departmental policy on keeping animals necessitates this request.
- 7. The submission of mentored entries is encouraged. The use of a mentor will be considered when judging the entry.
- 8. No dangerous materials (e.g. moulds) will be accepted. Photographs may be used.
- 9. If an entry contains some valuable parts that could be lost, entrants may elect to remove such parts from the display either themselves, or through the Science Fair Committee after judging has taken place on Sunday 23rd August. The valuable parts may be collected between 1.00 and 2.00pm on that day. Should this be difficult, parts can be removed from display by request from the entrant.

Hints for parents and teachers

When helping children prepare entries:

- 1. The entry MUST be the student's own work.
- 2. Entries must communicate the category.
- 3. There should be an emphasis on Creativity / Scientific thought / Content matter
- 4. Students may find CSIRO's **CREST** program a useful support when undertaking investigations for SEA*ACT Science Fair. Apart from the support material for you and the students, CREST also provides recognition for all completed projects. For more information go to www.csiro.au/crest or contact phone 6276 6567 or email crest@csiro.au



Delivering Entries

Entries may be delivered to <u>Mawson Primary School, Ainsworth Street, Mawson</u> on Friday, 21st August between 3.00pm and 5.30p.m. or on Saturday, 22nd August between 10.00 am and 12.00 noon.

Please note: Displaying of Entries

A team of people is responsible for accepting entries and physically displaying them. Entrants or their parents or teachers must deliver the entry in a form ready to display. **They will not be able to enter the hall and put up the display** due to the problems of available space. Entries should consist of a sensible number of parts, all attached where possible. All separate parts must display an identification label (bottom section of the entry form). To save time when delivering entries, please have entry forms and labels filled in prior to arrival. Spare forms will be available at the school should they be required.

Themes and Curriculum Links

Participation in the Science Fair provides opportunities for students to participate in the following Essential Learning Achievements as outlined in the *Every chance to learn* Curriculum Framework for ACT Schools Preschool to year 10:

ELA 1: the student uses a range of strategies to think and learn

ELA 2: the student understands and applies the inquiry process

ELA 5: the student contributes to group effectiveness

ELA 6: the student uses Information and Communication Technologies effectively

ELA 19: the student understands and applies scientific knowledge

ELA 20: the student acts for an environmentally sustainable future

The themes for the Science Fair are aligned with ELA 19.

Educating for Sustainability projects are encouraged and can be entered under the most appropriate of the **four themes**:

Earth and Space (Geoscience & Astronomy)

Energy and Force (Physics)

Living things (Biology)

Matter (Chemistry)

Age Groups

Early Childhood. Preschool to year 2

Primary Years 3 to 6

Special Education* All age groups

Secondary/Post Compulsory Years 7 to 12

These 3 categories use the same entry

Use Secondary BHP entry form for this

*PLEASE NOTE: ESL (English as a Second Language) IS NOT included in this category.



Our sponsors and supporters

We are very grateful to all our sponsors, who donated prize monies to support the Science Fair, and supporters, who provided 'in kind' donations such as advertising and the use of venues. This page gives more information about the businesses, community organisations and educational institutes who supported the 2008 SEA*ACT Science Fair.







THE AUSTRALIAN NATIONAL UNIVERSITY

ANU COLLEGE OF SCIENCE





Canberra Ornithologists Group

Birds Education Conservation



2009 SEA* ACT Science Fair (and BHPSA) Entry Form – Secondary/ Post Compulsory Education Only:			
Name of Project:			
Student name:		Date of Birth	
Home address:			
Home phone:	Home email address:		Year level
School:	School Phone:	School fax:	
School address:		Science teacher:	
THEME EARTH AND SPACE Geoscience & Astronomy		ENTRY NUMBER	
ENERGY AND FORCE Physics			
LIVING THINGS Biology			
MATTER Chemistry			
*			
Title of Project/Research			
Name: (Please print neatly)			b
Name of School/College			
Contact Telephone No: Home School			
Number of parts			
Please tick the appropriate boxes			
THEME	_	GROUP/INDIVIDUAL ☐ 6 or more (\$10.00) / ☐ 1-5 people (\$6.00)	
EARTH AND SPACE	Ш	Li o oi more (\$10.0	ло) / ப 1-э реоріе (фо.оо)
ENERGY AND FORCE		AGE GROUPING □ SECONDARY/POST COMPULSORY	
LIVING THINGS			
MATTER		ENTRY NUMBER	



2009 SEA* ACT Science Fair Entry Form -Early Childhood / Primary / Special Education Categories Only Title of Project/Research..... Name: (Please print neatly) NB: Please be accurate: this exact name will appear on certificates! Date of Birth. Name of Preschool/Primary School/Other School's contact email address: Contact phone:Contact fax:Teacher: THEME AGE GROUPINGS: EARTH AND SPACE EARLY CHILDHOOD Preschool – Yr 2 Geoscience & Astronomy ENERGY AND FORCE PRIMARY Physics Yr 3 – Yr 6 LIVING THINGS SPECIAL EDUCATION Biology **ENTRY NUMBER** MATTER Chemistry X......X...ACT Science Fair Identification Label X......X This label must be attached securely and prominently to your entry e.g. on the top right, when it is delivered. Title of Project/Research Name: (Please print neatly) Name of Preschool/Primary School/Other Contact Telephone No: Home School Number of parts Please tick the appropriate boxes THEME AGE GROUPING GROUP/INDIVIDUAL \square 6 or more/ \square 1-5 people EARTH AND SPACE □ EARLY CHILDHOOD ENERGY AND FORCE □ PRIMARY LIVING THINGS □ SPECIAL EDUCATION MATTER



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Rotary Club of Tuggeranong













The Canberra Times

