

## ENTERING THE FAIR

### SECTIONS

Scientific Investigation	Technological Development
Scientific Journalism	Observational Drawing
Scientific Photography	Advertising Poster
Steam Car Challenge	Water Rocket Challenge

Most sections are divided into three levels. 1. Years 7 & 8; 2. Years 9 & 10 3; Years 11 - 13  
The Advertising Poster is for Levels 1 & 2 only. In the Scientific Investigation, Years 7 & 8, and 9 & 10 may be divided into separate levels or combined at the Committee's discretion, depending on entry numbers.

### IMPORTANT STEPS IN SUBMITTING ENTRIES:

1. Decide what you will investigate for your Scientific or Technological project. Entries can be individual or in pairs only
2. Establish what class it is and decide on an entry form to use. Fill in the Entry Form and return it by Wednesday 27th June to the address below
3. All Journalism articles, Photographs, Drawings and Posters must be accompanied by an official entry form and be sent to arrive at the address below by Wednesday 27th June
4. Steam Cars & Water Rockets entries close with all other sections, by Wednesday 27th June

**Entries to** T.E.Stowers  
Fonterra Taranaki Science and Technology Fair  
51a Maratahu Street  
Westown  
New Plymouth, 4310

LATE ENTRIES WILL BE ACCEPTED FOR DISPLAY BUT WILL NOT BE JUDGED

### PROGRAMME

<b>Wednesday 27th June</b>	Entries close for all sections Exhibits in Advertising Poster, Journalism, Observational Drawing and Photography sections handed in for Judging
<b>Monday 23rd July</b>	Setting up student display boards and exhibits, Noon - 4.30 pm
<b>Tuesday 24th July</b>	Setting up student display boards and exhibits,, 8.00 - 9.15 am Judging, 9.30 am - Noon Bus leaves for Puke Ariki, 9.45 am & returns at noon Open to Public - 6.00 - 9.00 pm
<b>Wednesday 25th July</b>	Open to Schools and Public, 9.00 am - 5.00 pm Year 10 Quiz, 12.45 pm in La Mer Lounge Dignitaries' Function, 5.30 - 7.00 pm Removal of displays, 6.30 - 7.00 pm Prizegiving, 7.00 - 8.00 pm

**WEBSITE:** For more information, ideas for projects and to download copies of entry forms, visit the NEXUS site: "[www.nexusresearchgroup.com/science-fair/sci-fair.htm](http://www.nexusresearchgroup.com/science-fair/sci-fair.htm)"

## FONTERRA TARANAKI SCIENCE & TECHNOLOGY FAIR ENTRY DETAILS

23<sup>rd</sup> to 25<sup>th</sup> July 2012

**Tuson Stand  
Pukekura Raceway, New Plymouth**



**Wednesday 27th June** Entries close for all sections  
Exhibits in Advertising Poster, Journalism, Observational Drawing and Photography sections handed in for Judging

### TOPIC DETAILS FOR 2012

**SCIENTIFIC JOURNALISM** - 2012 Topic - "Is mining the seabed a good idea?"  
Write an article that discusses the topic above. The article should be 500 - 3000 words. Your Name, Year Level and School should be written on the top of the first page of your work.

**SCIENTIFIC PHOTOGRAPHY** - 2012 Topic - "Propulsion"  
Photographs may be black and white, or colour and should not exceed a maximum of 175 x 125 mm. Your photograph should be mounted on plain black card 200 x 150 mm. Digital photographs should be of a sufficient resolution and printed on photographic paper. You will need to provide evidence of where, when and on what camera your photo was taken, as well as how it relates to the topic. This will need to be on a postcard sized card that can be displayed with your work. You could use the date feature on your camera. Your Name, Year Level and School should be on a white sticky label and attached to the front of the mounting on the **lower right side**. Only ONE entry per person.

**OBSERVATIONAL DRAWINGS** - 2012 Topic - "Shells"  
Drawings must be done in pencil on A4 paper, with the specimen's name in the lower left corner. It should be a Scientific observational drawing, drawn directly from the observed object or objects with no shading. Dots and lines are allowed. A scale must be shown. The drawing should be mounted on BLACK paper 330 x 240 mm. Your Name, Year Level and School should be on a white sticky label and attached to the front of the mounting on the **lower right side**. Only ONE entry per person.

**ADVERTISING POSTER** - 2012 Topic - "Advertise the 2012 Fair" on a scientific theme background. This year's theme "Caring for our waterways."  
Produce a hand-drawn poster on A4 paper. Posters produced with the aid of a computer will NOT be accepted. It must advertise the Fonterra Taranaki Science and Technology Fair, Pukekura Raceway, Tuson Stand, 23rd to 25th July 2012. Your Name, Year Level and School should be on a white sticky label and attached to the front of the mounting on the **lower right side**. Only ONE entry per person.

**STEAM CAR CHALLENGE:** Build a steam car from a kit purchased for \$15. Race it on exhibition day. Entries for Steam Cars close on Wednesday 27th June.

**WATER ROCKET CHALLENGE:** Make a water rocket using plastic fizzy drink bottle(s). Launch it on exhibition day. Entries for Rockets close on Wednesday 27th June.

## **PRIZES** (Subject to confirmation)

### **SCIENTIFIC INVESTIGATION, & TECHNOLOGICAL DEVELOPMENT:**

*1st Prize \$150, 2nd Prize \$80, Merit \$20*

*(Each of these winners is eligible for the Fonterra Taranaki Science and Technology Best in Fair Prize. - Good senior exhibitors in the above categories may be selected to receive a Scholarship of up to \$1000 to be used for tertiary study in an area of Science or Technology)*

### **POSTER COMPETITION:**

*1st Prize \$10, Merit \$5*

### **BEST IN FAIR :**

*Fonterra Trophy and \$500 cash.*

### **RUNNER UP :**

*Dow Agro Sciences Trophy and \$300 cash.*

### **BEST EXHIBIT Year 9 & 10:**

*Methanex NZ Ltd Trophy.*

### **BEST EXHIBIT Year 7 & 8:**

*Fonterra Trophy.*

### **SPECIAL PRIZES:**

*As specified by Sponsors. (See Separate Prize list)*

### **OBSERVATIONAL DRAWING**

*Vouchers provided by Sponsors*

### **PHOTOGRAPHY, JOURNALISM , STEAM CAR, WATER ROCKETS**

*1st Prize \$50, 2nd Prize \$30, Merit \$20*

## ***RULES AND CONDITIONS FOR EXHIBITORS***

**Read this information carefully and keep this page for reference.**

### **RULES FOR EXHIBITS:**

- 1. CONSTRUCTION:** Exhibits must be durable, safe, self-contained, complete, stable, unit with no part of it attached to the floor, wall or table. and not exceed the maximum size The base of the exhibit may not exceed 75 cm deep by 120 cm wide and 1.5 m high. Oversized exhibits may be accepted with some technology exhibits subject to prior approval.. Moveable parts must be firmly attached. Exhibits must also be designed to be safe from any interference from members of the public. It is the Exhibitor's responsibility to ensure that all valuable parts are securely attached or able to be removed by the Exhibitor for safekeeping when the exhibit is left unattended.
- 2. USE OF MAINS ELECTRICITY:** Any exhibit requiring mains electricity must have a suitable cord 5 metres long with a durable 3 pin plug correctly attached. All parts involving mains electricity must comply with the relevant electrical regulations. The wiring should be carried out by a registered electrician. Exhibitors using mains electricity for high voltage equipment must use an RCD or a suitable isolating transformer to supply electricity to their exhibit to give a greater margin of safety.
- 3. ELECTRICAL SAFETY:** Voltages over 50 volts must have all conductors (wires and switches) completely and securely enclosed by non-conducting materials to prevent any possibility of an observer receiving an electrical shock. Such projects must be safe at all times, which means they must be able to be disconnected or locked when unattended. Nails, tacks, etc must not be used to secure wires because of the possibility of shorting and fire. Correct procedures for securing wires must be observed.
- 4. FIRE SAFETY:** Heating elements must be mounted on a suitable non-combustible support so that there is no possibility of fire. Lamps must be well ventilated to avoid heat build-up and only non-combustible materials used near the lamp. No gas supply is available. An Exhibitor wishing to use gas must seek written permission from the Fair Committee to use any supply of gas. Gas is to be supplied by the exhibitor if approval is given. Please supply full details of the proposed supply: type of gas, size and age of cylinder, use of the gas.
- 5. RADIATION:** Any radio transmitter in working order must comply with the relevant radio transmitting regulations and be licensed. Microwave and high frequency radiation must be safe and have a warning sign. Any damaging radiation (e.g. UV light) must be shielded so viewers could not be harmed. Radioactive materials are permitted only when written

permission has been gained from the Fair Committee and they must comply with the relevant regulations.

- 6. GENERAL SAFETY:** Explosives, including explosive gases, must not be exhibited. Dangerous chemicals (including strong alkalis and acids) are not to be used in any exhibit (if in doubt contact the Science and Technology Fair Committee). All exhibits using liquids of any kind must stand in a leak proof tray. Exhibitors must have sponges, cloths etc to wipe up and remove any spills. No direct water supply is available. Should your exhibit require water you will need to design it so it has its own reservoir. No large pools. It is the responsibility of the Exhibitor to ensure that the area immediately surrounding their exhibit is kept clean, dry and tidy at all times.
- 7. CARE OF ORGANISMS:** Exhibits must comply with the legal requirements found at <http://www.nzase.org.nz/ethics.html> Animals must be housed comfortably, free from stress, secure from interference, and clean. They must be properly fed and cared for. Plants must also be properly cared for. Due care must be taken with microorganisms. No live microorganisms should be present in exhibits at the Fair. Please use photographs of your results.
- 8. GENERAL RULES:** If the judges consider that an adequate standard has not been reached, the Science and Technology Fair Committee reserves the right to withhold any prizes and will not display the exhibit. The Committee also reserves the right to group entry forms where numbers are insufficient in particular classes. The judges and Committee reserve the right to withdraw prizes and promote others in the class if rules are discovered to have been broken. Exhibitors which exceed the maximum group number (i.e. two) will be accepted for DISPLAY ONLY. No judging will be done and no prizes will be awarded for such exhibits. The Committee's decision in all matters is final. **THE COMMITTEE SHALL NOT BE HELD RESPONSIBLE FOR ANY LOSS OR DAMAGES TO EXHIBITS, ALTHOUGH ALL CARE WILL BE TAKEN.** The Fair will be open to the public during which time exhibitors need not be present.

### **CONDITIONS OF ENTRY**

Exhibitors should complete the entry form and have it posted to arrive by the due date, Wednesday 27th June 2012.

- 1. ALL EXHIBITS MUST BE THE WORK OF THE EXHIBITOR(S) ONLY.** Advice may be sought from any source and special components may be purchased. The major constructions must be the exhibitor's. The judges will give credit for simplicity of design and ingenuity. **ALL ASSISTANCE YOU RECEIVE MUST BE CLEARLY ACKNOWLEDGED ON THE EXHIBIT.**
- Exhibitors may set up their exhibits on Monday 23rd July from Noon to 4.30 pm or Tuesday 24th July from 8.00 to 9.15 am.
- Judging will take place from 9.30 am – 12.00 pm on Tuesday 24th July.
- Because sponsors are invited to view the exhibits until 6.30 pm on Wednesday 25th July, no exhibit may be removed in total or in part before that time without Committee approval.
- Exhibits must be removed between 6.30 and 7.00 pm. After prizegiving, uncollected displays may be disposed of.
- An exhibit which has been awarded a prize may not be re-entered in any subsequent Science & Technology Fair unless there has been considerable further development of it.
- Late Entries may be accepted for display only but will not be judged.
- There may be some variation in the prizes as they are awarded at the Sponsor's discretion.