the powerhouse discovery centre
COLLECTION STORES AT CASTLE HILL

OPEN DAY

SATURDAY 11 FEBRUARY 2012

TIME, TELESCOPES & A CHINESE WATER DRAGON

Images from left to right: A young museum visitor meeting the Chinese Water Dragon; Sidereal-time regulator clock, made by William Hardy, 1795 – 1821, Powerhouse Museum Collection (detail); A 'Dragon Paper Puppet' from our make-and-do activity.

Head to the Discovery Centre for our first open day of 2012 when we celebrate time, telescopes and the Chinese Year of the Dragon! Young visitors will enjoy a very special live performance by an amazing Chinese water dragon and our fantastic make-and-do activities. We are very pleased to offer an insightful behind-the-scenes tour, 'Time & Telescopes', with Andrew Jacob, Assistant Curator at Sydney Observatory, viewing a range of time-based museum collection objects and a number of telescopes! Visitors of all ages will also enjoy our interactive demonstration that unlocks the secrets of rocket propelled power and much more!

OPEN DAY PROGRAM ~ 10.00am—4.00pm

Unless otherwise specified, all programs are **free with general admission.**

LIVE PERFORMANCE

In Search of a Chinese Water Dragon | **11.00am** (Duration: 45 minutes)
To mark the start of the 2012 Chinese New Year and the Year of the Dragon, join our dragon carer—the cryptozoologist—for an adventurous interactive performance where young museum visitors will get the special opportunity to become acquainted with a very rare creature, the Chinese Water Dragon. The Chinese Water Dragon is seldom seen and especially not in public! Erth have continually created original live theatre at the forefront of new performance practice. Since its beginnings in 1991, the company has strived to provide audiences with eye-popping visual experiences such as giant puppets, stilt walkers and aerial and flying creatures. Suitable for 3+ years.

MAKE-AND-DO ACTIVITIES

Mini Space Mobile | **10.00am—4.00pm**
Cut out and colour in an alien, satellite, rocket, spaceship and astronaut to assemble and create your very own mini space mobile to take home! Adult supervision and assistance required. Suitable for 3+ years.

Dragon Paper Puppet | **10.00am—4.00pm**
In Chinese tradition the dragon is a creature of myth and legend, a symbol of good fortune and a sign of intense power. For this open day craft activity, young visitors will create their own paper dragon puppet. Adult supervision and assistance is required. Suitable for 3+ years.

Who Ate Who? | **10.00am—4.00pm**
To celebrate the Chinese Year of the Dragon young visitors and their families will have fun learning about the Chinese calendar which marks each year with an animal in a twelve year cycle. Young visitors can then find their families' birth years and corresponding animals. Finally, young visitors can learn about Charles Darwin's theory of natural selection by lining up their families' birth year animals to see 'who ate who' and who is left standing at the end! Adult supervision and assistance is required. Suitable for 4+ years.

OBJECT DEMONSTRATION

Rocket Science | **10.30am** | **1.00pm** (Duration: 30 minutes)
Join Powerhouse volunteers, Hette Mollema and Tom Lockley to discover who invented rockets, how they work, how they are used on planetary missions, or to launch both people and satellites into orbit and what we can learn from them. Young visitors are invited to assist Hette and Tom during this interactive demonstration by helping to build a rocket made from materials including magnets, plastic water bottles, computer chips and a coffee pot plunger! Please note that this demonstration does not include a rocket to take home. Suitable for 5+ years with adult assistance and supervision.

BEHIND-THE-SCENES TOURS

$16 adult / $10 concession, members (includes general admission). Spaces are strictly limited to a maximum of 25 participants per tour, pre-booking is essential. Limited to visitors aged 12+ years. Conditions apply.

Time & Telescopes | **10.30am** (Duration: 60 minutes)
Perfecting the measurement of time has been a human pre-occupation for millennia. Join Sydney Observatory Assistant Curator, Andrew Jacob, as he takes visitors behind-the-scenes to explore stored time-keeping objects in the Powerhouse Collection that illustrate the steady progress made in measuring time through the ages. Highlights of the tour include Governor Brisbane's 1808 Hardy regulator clock, the 'Shortt 49'—the most accurate mechanical clock devised, and the Rubidium atomic clock that disseminated time from Sydney Observatory until the 1980s. The Museum's telescope collection will also be included on the tour, including the 13-inch Melbourne astrograph used to make the first photographic map of the sky, and the long-lost 'horseshoe' telescope mount, invented by Sydney Observatory's own Henry Russell in 1878—the forerunner of the mount used for Australia's largest telescope, the 4-metre Anglo-Australian Telescope. Andrew has worked at Sydney Observatory as a Night Guide for 20 years, gained his doctorate in astronomy in 2008 and wishes there were more hours in the day to research the Museum's Collection!

Magnificent Models and their Makers | **2.00pm** (Duration: 60 minutes)
Model making is a very meticulous process, sometimes taking years to complete one single scale model. Come behind-the-scenes to view highlights of the Powerhouse Museum's extensive, world-class collection of models stored at Castle Hill. The collection includes a wide range of models of engines designed for industrial and agricultural applications, as well as transport-related models including ship, aircraft, road and rail vehicle models, architectural models and rare late 19th century botanical and zoological models. Highlights of the tour include a model of a 3-cylinder aero engine by celebrated Australian aviation inventor, Lawrence Hargrave, a scale model of the paddle steamer *PSS 'Great Eastern'*, a collection of ship, mechanical, and railway models acquired by the Powerhouse Museum between 1938 and 1963; a beautifully detailed Tramcar model (O Type), circa 1955 and a model of a horse-drawn phaeton sulky made by celebrated Australian coach builder, Jacob Emanuel Steenbhom (1881-1956). Late 19th century botanical and zoological models also feature in the collection including teaching models of insects, fruit and plant specimens beautifully crafted from papier mâché by French artisan, Dr Auzoux.

OBJECT SHORT TALK

The Rocket Research Test Vehicle | **12.30pm**
Join Discovery Centre volunteer guide, Fred Gooch, for a fascinating object short talk on one of our favourite objects, the rocket research test vehicle from the Woomera Rocket Range in South Australia. Used for research and development into problems associated with beam riding missiles, this second stage rocket was manufactured in Australia between 1954 and 1956 and was donated to the Powerhouse Museum in 1961 to assist with educating the public in the basics of rocket technology. Make sure you have your eyes looking upwards, because this rocket is hanging from our ceiling!

HIGHLIGHTS TOUR

The Display Store | **12.00pm** | **1.30pm** (Duration: 30 minutes)
Join one of our volunteer guides for an insightful tour focusing on selected objects on exhibition in the Display Store.

SPECIAL EXHIBITION

The Peppin Merino: A Celebration of the Wanganella Merino Stud, NSW | **10.00am—4.00pm**
In the 1800s, the Wanganella Merino Stud, located in Deniliquin, New South Wales, gave the world a spectacular new kind of sheep, the Peppin Merino that was able to thrive in arid environments and grow abundant, high-quality wool. The Peppin Merino became the sheep of Australian folklore and provided inspiration for the Golden Fleece logo, the ram on the 1936 shilling coin and the 1966 decimal currency two dollar note. This special exhibition explores how the extraordinary Peppin Merino came into being, drawing upon the Powerhouse's collection of fleece samples from the 1890s and revealing the extraordinary scientific achievements of the people who bred the Peppin Merino. Proudly presented by FS Falkiner & Sons and developed by the Powerhouse Museum, Sydney, this exhibition was created to mark the 150th anniversary of Wanganella Stud.

FUN ACTIVITIES FOR YOUNG DISCOVERERS

Discovery Trails | **10.00am—4.00pm**
Enjoy our self-completion activity trails that take young visitors on a journey of discovery through the Discovery Centre, focused on critters and creatures, wheels, wings, squiggles and things that fly in the sky. Suitable for 4+ years.

OPENING HOURS:	10.00am—4.00pm.
GENERAL ADMISSION:	$8 adult, $5 child / concession / senior / pensioner, $25 family (2 adults + 2 children) Free admission for Powerhouse Members and children 3 years and under. Additional charges apply for some programs and tours.
PARKING AND ACCESS:	Vehicle and pedestrian entry via **172 Showground Road, Castle Hill.** Alternate entry is also available via TAFE driveway on Green Road. On-site parking available.
FURTHER INFORMATION:	Please visit us at **www.castlehill.powerhousemuseum.com**
BOOKINGS:	Contact us on **02 9762 1300.**

powerhouse museum
science + design

The Powerhouse Discovery Centre, part of the Museum of Applied Arts and Sciences and also incorporating the Powerhouse Museum, Sydney Observatory and the NSW Migration Heritage Centre, is a NSW Government cultural institution.