

QUEENSLAND MUSEUM NETWORK

SCHOOLS PROGRAM HIGHLIGHTS

2018 | SEMESTER ONE





**QUEENSLAND
MUSEUM**
SOUTH BANK



**THE WORKSHOPS
RAIL MUSEUM**
IPSWICH



**COBB+CO
MUSEUM**
TOOWOOMBA



**MUSEUM OF TROPICAL
QUEENSLAND**
TOWNSVILLE



**QUEENSLAND
MUSEUM NETWORK**



**Queensland
Government**



Welcome

Across the Queensland Museum Network we aim to collaborate and connect with our learning communities through dynamic programs and engaging exhibitions.

World-class exhibitions and resources promote the exploration of Queensland's distinctive natural and cultural wonders, and by providing access to the scientists, curators and researchers who work with the State collection, Queensland Museum offers a unique and enduring learning experience.

Housing the state collection also gives Queensland Museum Network the unique opportunity to provide teachers with access to inspirational objects and stories to help bring STEM subjects to life.

Queensland Museum's World Science Festival Brisbane returns in March 2018 and will again deliver an innovative Education Program for schools, both in Brisbane and in selected regional areas. Our ongoing partnership with QGC in the Future Makers program will continue to provide teachers with STEM resources and professional development opportunities.

For our learners further afield the QM Loans service remains an invaluable option for educators and students who cannot visit us at our campuses in Brisbane, Ipswich, Toowoomba or Townsville. Our loans service provides access to collection specimens and resources inside your classrooms.

We invite you to explore our Schools Program Highlights and discover some of the diverse programming we offer for Semester One 2018.

Contact our team to discuss your excursion requirements and keep in touch with us via the website or Learning eNews to see how we can support your teaching practice.

Dr Jim Thompson
Acting CEO and Director Queensland Museum Network

Plan Your Visit

From bus access to arrival procedures, costs, group sizes and lunch package options, we've got your logistical planning information covered.

Bookings are essential for all school and group visits, both Museum facilitated and self-guided, and can be made with us online a minimum of two weeks in advance.

Contact our team to discuss your requirements.

Teacher Previews

Did you know that we offer a number of teacher events and previews to select exhibitions across our whole network of museums?

Use these great opportunities to access the Queensland Museum Network and see how we can meet your needs, assist with your planning and support your teaching.

To find out about upcoming events exclusively for educators, sign up to our Education e-news.

Creative Lab Teacher Professional Development

Our *Creative Lab* Teacher Professional Development workshops focus on linking our collections with Science, Technology, Engineering and Maths (STEM) based curriculum and learning programs.

Creative Lab Teacher PD helps teachers guide their students into an innovative future.

Workshop facilitators lead participants through creative activities, resources and best practice techniques that can be used in the classroom to engage students in STEM subjects.

Creative Lab Teacher PD events connect teachers with Queensland Museum collection objects and resources that link to the Australian curriculum, and give participants the opportunity to connect and interact with STEM professionals.



Free Online Resources

Across the Queensland Museum Network there is an extensive collection of free online resources that have been prepared to assist teachers, whether you're in the museum or in the classroom.

Student worksheets and related teacher notes, units and lesson plans, fact sheets, activities and games, audio story books and videos are all available for download from our website.

Queensland Museum Network Education Reference Group

We value the opinion of teachers and invite your participation as an Honorary Officer as part of our Education Reference Group.

The Education Reference Group provides advice and feedback on learning programs and resources developed by the Network for a variety of student year levels.

For more information, including about benefits and meetings, please contact us at education@qm.qld.gov.au

Education e-news

Sign up for our Education e-news which we send every term. Visit qm.qld.gov.au



Queensland Museum, South Brisbane

Queensland Museum is a museum of natural history, cultural heritage, science and human achievement, highlighting the wonders of Queensland.

We connect students to Queensland, its people and place in the world through exhibitions and learning programs.

We host exclusive international exhibitions that give your students access to some of the world's greatest museum treasures, enhancing learning through experience with real objects.

The Museum offers unique learning experiences that can be facilitated by Museum staff or self-guided with a range of supporting resources.

qm.qld.gov.au





NEW

Perception Deception

Interactive Exhibition | Learning Resources

16 September 2017 – 15 July 2018

Challenge your students to think about how their brain makes sense of the world and how their 'reality' might be different from other people around them.

Students will explore the sensory signals of their brain in a gallery of hands-on exhibitions and develop their science inquiry skills.

Teacher notes and classroom activities with direct curriculum links are available for free download from qm.qld.gov.au.

Perception Deception is developed by Questacon, The National Science and Technology Centre in Canberra.

Audience: Years 4 to 12

Curriculum: Science | Biological Sciences | Physical Sciences

Opening mid 2018: A brand new interactive science gallery. Subscribe to e-news on our website for updates.

Discovery Centre

Interactive Exhibition | Learning Space

FREE

Available All Year

With thousands of objects, animals and fossils at their fingertips, the Discovery Centre is a showcase of the Museum's collection and provides a rich interactive experience for students. Students are encouraged to make close observations, get hands-on with objects and seek answers to their questions.

As part of a self-guided experience teachers can encourage students to:

- Observe live insects and reptiles in the *Creature Feature* zone and learn about life cycles and behaviours
- Touch and interact with museum objects, and use real scientific equipment in the *Active Zones*
- Ask questions and have conversations with our Information Officers

Visit our new biodiversity gallery *Wild State* on Level 4 and download teacher resources online.



Investigating Insects

Facilitated Program

Students will explore live insects and insect specimens just like a museum scientist, and identify the features that make an animal an insect.

They will discover specific adaptations and insect life stages and cycles, and find out why museums collect and study these amazing animals.

Audience: Prep – Year 5

Curriculum: Science | Biological Sciences

Biodiversity and Classification

Facilitated Program

Students will investigate animal biodiversity and the relationships between different species and groups, and consider the importance of taxonomy and how classification has changed over time.

They will classify real specimens from the museum collection, think about evolutionary relationships and explore how Queensland Museum scientists collect, research and describe new species.

Audience: Years 7 – 12

Curriculum: Science | Biological Sciences

Animal Classification

Facilitated Program

Students will compare and recognise relationships between living things.

They will learn how and why Queensland Museum scientists collect, identify and classify animals using visuals, challenges and real specimens.

Audience: Years 3 – 6

Curriculum: Science | Biological Science

Exploring Toys

Facilitated Program

Young students will work as Queensland Museum curators sorting a toy collection.

They will examine shape, age, material, colour, operation and manufacture, and explore the concepts of past, present and future.

They will then work collaboratively to develop and share their own toy exhibition!

Audience: Prep – Year 2

Curriculum: HASS | History, Science | Chemical Sciences

The Workshops Rail Museum, Ipswich

Make history come alive for students with hands-on exhibits, multi-media encounters, colourful stories, huge steam locomotives and massive industrial machinery.

Explore more than 15 larger-than-life exhibits that follow the development of rail transportation in Queensland. Highlights included the diesel and tilt train simulators, model railway and the Museum's collection of locomotives and industrial machinery.

Entry is free for Queensland school students during school hours.

A Teacher's Guide is available for download online, giving an overview of the different Museum zones, discussion questions and topics.

A range of self-led student worksheets aligned with the Australian Curriculum are available for different year levels and learning areas.

theworkshops.qm.qld.gov.au

NEW

Animal Classification

Facilitated Program

Students will compare and recognise relationships between living things.

They will learn how and why Queensland Museum scientists collect, identify and classify animals using visuals, challenges, dichotomous keys and real specimens.

Audience: Years 3 – 7

Curriculum: Science I Biological Science

Introduction to The Workshops Rail Museum

Facilitated Program

FREE

Students will explore our past and present connection to people and places, changes over time, and the significance of the Ipswich Railway Workshops in Queensland.

Audience: Prep – Year 12

Curriculum: HASS I History I Science





Gritty Innovation: The Industrial Revolution and Rail in Queensland

Facilitated Program

FREE

Students will explore the Ipswich Railway Workshops site and the origins of rail in Britain, Australia and here in Queensland.

They will look at the technological innovations that led to the Industrial Revolution, and the significance of railways in the history of Queensland.

Audience: Year 9

Curriculum: HASS I History

Simple Machines

Facilitated Program

Students will investigate the six simple machines with quizzes and challenges about how we use them in daily life.

An additional extension program is also available building gears, levers, pulleys, wheels and axles with LEGO® simple machine kits, exploring push and pull forces and energy transformation.

Audience: Years 2 – 7

Curriculum: Design and Technologies I Processes and Production Skills, Science I Physical Sciences

Wood Workshop

Facilitated Program

Students exercise their physical and creative skills using vices, hammers, nails, bolts and screws to design, build and evaluate their own wooden toy train to take home.

Audience: Prep – Year 7

Curriculum: Design and Technologies, Processes and Production Skills

Heritage Railway Workshops Tour

Facilitated Program

FREE

Step back in time at the Railway Workshops and experience 150 years of living history in these still operational workshops.

This program also explores the anatomy of a steam locomotive and the push and pull forces involved.

Safety requirement: Enclosed footwear.

Audience: Prep – Year 12

Curriculum: HASS I History, Science I Physical Sciences

Cobb+Co Museum, Toowoomba

Cobb+Co Museum is home to the *National Carriage Collection*, Australia's finest collection of horse-drawn vehicles.

As well as Cobb & Co coaches, our collection includes examples of a vast range of vehicles from the horse-drawn era, from farm wagons and delivery carts to the Rolls Royce of carriages, the Landau.

We also feature extensive displays on the natural and cultural history of Toowoomba and the Darling Downs including megafauna found in the region.

cobbandco.qm.qld.gov.au

Energy for Life Discovery Centre

Interactive Exhibition

Available All Year

This interactive centre explores significant energy themes in a way that is fun and challenging and makes students think about how they use energy in their own life.

Audience: Prep – Year 12

Curriculum: Science | Physical Sciences

NEW

Da Vinci's Machines

Exhibition | Learning Resources

9 December 2017 – 27 May 2018

Da Vinci's Machines brings the innovations of Leonardo da Vinci to life, featuring hands-on exhibits reconstructed from illustrations and writings by the mastermind.

Test his amazing machines and explore the physics principles that make them work. See how these inventions have inspired machinery commonly used today.

Audience: Prep – Adult

Curriculum: Science | Science Inquiry Skills, Science | Science as a Human Endeavour | HASS | History





NEW

Museum Explorers

Self-Led Program | Learning Resources

Students choose their own adventure with our new self-led *Museum Explorers* backpacks.

Using activity cards and tools contained within each backpack, students explore museum exhibitions and objects, engaging their senses and applying inquiry skills and processes to make new discoveries about how life has changed for people over the last 100 years.

Audience: Prep – Year 2

Curriculum: HASS | History

Fairy Stones to Gummingurru

Facilitated Program

Explore the artefacts and stories in the Binangar Gallery to learn about the way of life of the Traditional Owners of the Toowoomba region.

Learn to play the game *Burguu Mayta*, and hear the story and significance of the local stone arrangement site at Gunningurru.

Audience: Prep – Year 2

Curriculum: HASS | History

Kabul Dreaming to First Contact

Facilitated Program

Understand the culture and history of the Traditional Owners of the Toowoomba Region through hands-on objects and stories.

Investigate the diversity of Aboriginal culture throughout Queensland before European settlement, and the impact of early settlement upon local Aboriginal people.

Audience: Year 3 – 6

Curriculum: HASS | History

Travelling Back in Time

Facilitated Program

Follow clues as you explore the National Carriage Collection to discover what it was like to live in Australia before motor vehicles.

Audience: Years 3 – 10

Curriculum: HASS | History

Museum of Tropical Queensland, Townsville

The Museum of Tropical Queensland offers permanent exhibitions on the HMS *Pandora*, the Wet Tropics rainforest at Paluma, coral reefs, the deep sea and mangroves, Queensland dinosaurs and fossils and life in the tropics.

Our focus is on researching and interpreting the cultural and natural heritage of tropical Queensland. Enhance a unit of work by getting hands on with real specimens or add a fun and educational experience to your camp itinerary with a visit to the Museum of Tropical Queensland.

Please check our website and Facebook page for more updates about upcoming temporary exhibitions and events.

mtq.qm.qld.gov.au

Pandora Gallery

Exhibition

Available All Year

Your class will be captivated by the stories of the HMS *Pandora*'s mission to recover the mutineers from the infamous *Bounty* and her ill-fated crossing of the Great Barrier Reef in 1791.

Today the *Pandora* is one of the most significant shipwrecks in the Southern Hemisphere with excavations uncovering a wealth of information about British naval life and the Pacific islands the ship visited.

Pandora is a great example of a First Fleet Era ship, local North Queensland history, and the amazing work of maritime archaeologists and museum conservators.

Audience: Prep – Year 12

Curriculum: HASS | History | Senior Ancient History | Senior Modern History





All Aboard! 18th Century Maritime Exploration

Facilitated Program

Students learn about the voyage of HMS *Pandora*, and participate in hands on activities that expose students to the daily chores of different crew members on board an 18th century sailing ship.

Students are then invited to explore the Pandora Gallery to understand the role of maritime archaeology in revealing the past.

This program is ideal for the Year 4 History curriculum as it chronicles the journey of another world navigator, Captain Edward Edwards, and introduces students to life on board a First Fleet era ship.

Audience: Years 4 – 6

Curriculum: HASS | History

Creature Features

Facilitated Program

Students will handle, observe and group museum animal specimens on the basis of their observable features, including birds, reptiles, mammals, fish, amphibians and insects.

This program is suited to mid primary audiences and is designed to complement the Year 3 Biological Sciences curriculum.

Audience: Prep -Year 6

Curriculum: Science | Biological Sciences



100 Million Years Ago

Facilitated Program

Students will role play being a palaeontologist with their own clipboard and data sheet as they tour the Ancient Queensland gallery.

Students will look closely at animals that lived 100 million years ago, identifying what they ate, how they lived, how they protected themselves and compare these to animals alive today.

This program is ideal for early primary audiences and is designed to complement the Year 1 Biological Sciences curriculum and the Primary Connections *Dinosaurs and more* unit.

Audience: Prep – Year 3

Curriculum: Science | Biological Sciences

Taxonomy Tales

Facilitated Program

Students will explore how the marine scientists conduct their research, manage the biodiversity of collections and describe new species.

Students will classify specimens from the collection and consider the contribution of taxonomic classification to our understanding of the natural world.

This program is ideal as an introduction or end activity to units on classification of living things.

Audience: Year 7, Years 11 – 12

Curriculum: Science | Biological Sciences

Extreme Adaptations

Facilitated Program

Students will be introduced to the extreme environments of the deep sea, mangroves and rainforest and some of the unique and fascinating animals that have adapted to call these places home. Students will then be asked to combine their learning and their imaginations to project themselves into the future where they can design new species to populate new planets.

This program is suited for an upper primary audience and uses our extensive environment and taxidermy displays to complement both the Year 5 and Year 6 Biological Sciences curriculum.

Audience: Prep – Year 6

Curriculum: Science | Biological Sciences





Queensland Museum Loans Kits

Recreate the museum experience in your classroom and borrow a QM Loans kit with museum specimens and artefacts that will actively engage your learners.

Our kits support learning for the Australian Curriculum in Science, Humanities and Social Sciences (HASS) and suit a wide range of teaching strategies.

Visit QM Loans online to see what kits are available in Brisbane and across the State.

qm.qld.gov.au

Find kits for learning outcomes

- Use an Australian Curriculum code to find kits by year level for Prep to Year 6.
- Use an Environment, Diversity or Literacy code to find kits for Early Years learning.

Borrow in Brisbane

- Become a subscriber to borrow from QM Loans in Brisbane, or pay a casual rate as you borrow.
- Submit a booking request online, then collect and return your loans at QM Loans at 122 Gerler Road, Hendra.

Borrow in regional Queensland

- A selection of QM Loans kits is available from local libraries and museums throughout regional Queensland, with thanks to our Supporting Partner DB Schenker.
- Find out what is in your local area by checking our schedules online, and then contact your local depot to book kits.
- This service is free, with borrowers responsible for collection and return of loans to the local depot.

Good to know

- A standard loan period is two weeks, with additional fees for longer loans and special orders.
- QM Loans in Hendra is open Monday-Friday from 9am-5pm (with extended opening hours on Monday and Friday to 5.15pm), and closed on weekends and public holidays.



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FUTURE MAKERS



QGC proudly supports *Future Makers*, a program that aims to create a whole-of-life approach to STEM education in Queensland.

BENEFITS TO TEACHERS

Future Makers supports Queensland teachers by running professional development events and creating resources directly connected to the Australian curriculum.

In addition, *Future Makers* works closely with regional schools to connect them with the knowledge and experience of QGC and QMN industry professionals.

These professionals help to encourage better student outcomes by assisting teachers to develop practical STEM lessons and highlighting career pathways.

Teachers can access additional exclusive learning opportunities, including resources, professional development programs and classroom-based activities through a new online learning platform available in 2018.

WANT TO GET INVOLVED?

To find out more, or to learn how you or your school can benefit from involvement with *Future Makers*, visit qm.qld.gov.au/futuremakers.

If you'd like to receive updates on Future Makers activities, email your contact details to futuremakers@qm.qld.gov.au

Future Makers connects school activities with family and community participation through three key areas:

EDUCATION ENGAGEMENT

Connecting teachers, classrooms and schools with real-life industry knowledge, resources and opportunities

Future Makers helps bring STEM subjects to life by connecting students with industry professionals and QMN resources, and offering teachers unique learning and development opportunities.

Programs and activities are directly aligned to the Australian Science Curriculum to improve teachers' STEM teaching skills and help inspire their students to pursue STEM-related careers.

PUBLIC ENGAGEMENT

Bringing wonder and innovation to our community

Future Makers supports major community-based events that encourage Queenslanders to foster a love of STEM.

QGC proudly supports the delivery of the World Science Festival Brisbane Regional Program.

RESEARCH

Evidence for a new approach

Future Makers activities are underpinned by research and evaluation conducted by The University of Queensland's School of Education through its Australian Research Council Linkage Projects grant that seeks to measure the impact of our Curriculum-focused approach.

qm.qld.gov.au/futuremakers

World Science Festival

World Science Festival Brisbane 21–25 March 2018

World Science Festival Brisbane explores and celebrates the entanglement of science and art through a curated program of thought-provoking conversations, inspiring theatrical and cinematic experiences, interactive workshops and engaging hands-on activities.

worldsciencefestival.com.au

Education Program

Along with an extensive program of experiential apprenticeships, the Festival collaborates with industry and the education sector to create important opportunities for young minds to engage with STEM outside the formal classroom environment.

World Science Festival Brisbane's schools program will be held on Thursday 22 March and Friday 23 March 2018.

For latest news and more information visit the World Science Festival Brisbane website.

Regional Program

The Festival's Regional Program in 2018 will again provide Queensland communities the opportunity to get involved locally in the World Science Festival Brisbane.

The programs will engage community members in stimulating and inspiring experiences designed specifically for each location; offering a selection of STEM-related activities such as discussions with leading scientists, workshops, hands-on activities and visual displays.

Visit the Regional Program page on the World Science Festival Brisbane website.



Contact Us



**QUEENSLAND
MUSEUM**
SOUTH BANK

Queensland Museum & Sciencentre

Cnr Grey and Melbourne Streets, South Brisbane 4101
education@qm.qld.gov.au | +61 (0) 7 3840 7608
qm.qld.gov.au



**THE WORKSHOPS
RAIL MUSEUM**
IPSWICH

The Workshops Rail Museum

North Street, North Ipswich 4305
info@theworkshops.qm.qld.gov.au | +61 (0) 7 3432 5100
theworkshops.qm.qld.gov.au



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Cobb+Co Museum

27 Lindsay Street, Toowoomba 4350
inquiries@cobbandco.qm.qld.gov.au | +61 (0) 7 4659 4900
cobbandco.qm.qld.gov.au



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Museum of Tropical Queensland

70 – 102 Flinders Street, Townsville 4810
info.mtq@qm.qld.gov.au | +61 (0) 7 4726 0600
mtq.qm.qld.gov.au



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