QUEENSLAND MUSEUM

World Science Festival Brisbane

SCHOOL PROGRAM 2025

21–30 MARCH 2025

WORLD SCIENCE FESTIVAL BRISBANE SCHOOL PROGRAM

THURSDAY 20 MARCH – SUNDAY 30 MARCH 2025

Presented with QPAC

World Science Festival Brisbane (WSFB) 2025 will ignite your students' imagination and get them excited about tackling all things STEM. Programs have been designed to encourage a strong STEM literacy from Prep-Y12, with links to Queensland curriculum and subjects. We invite you to step out of the classroom and get hands-on with a fun, supportive program that unpacks STEM education for you and your students.

TICKETS

WSFB aims to create accessible opportunities for all students, with a range of events across the full festival dates. Most tickets for the School Program are $10 per student per session. Some events are priced differently, please check the individual show for group booking prices.

SUPERVISION

Adult/Child Ratio

One adult will receive FREE entry to World Science Festival Brisbane education programs for every:

- 3 x students in Prep
- 5 x students in Years 1 to 6
- 10 x students in Years 7 to 10
- 15 x students in Years 11 to 12

Please note you will need to quote adult numbers when purchasing tickets.

STUDENT SUPERVISION

Group supervisors are responsible for students and children while at World Science Festival Brisbane and should remain with their students at all times.

BOOKINGS

School bookings must be made through QTIX Group Sales. To book, please complete the QTIX School Group Booking Request form for each event*, or via the Get Tickets link on the World Science Festival Brisbane website.

**SparkLab* and exhibitions at Queensland Museum should be booked online through Queensland Museum Schools and Groups Bookings. (unless part of an advertised package).

If you have any questions, please phone the Queensland Museum Bookings Officer on (07) 3153 4401 from Monday to Friday 8am–4pm.

RISK ASSESSMENT

We've started the process for you. Download our Risk Assessment Guide

VISITORS WITH INDIVIDUAL NEEDS

At Queensland Museum we aim to provide convenient access to all visitors.

For more information visit the Queensland Museum website or phone Group Bookings on (07) 3153 4401.

EPIC ENGINEERING

Suitable for Y7-Y12

WHEN:
Wednesday 26 March 2025

SESSION TIMES:
10am-11am (Years 7-9)
1pm-2:15pm (Years 9-12)

WHERE:
Concert Hall, QPAC

TICKETS:
$10 per student

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Epic Engineering presents groundbreaking innovation in a multi-media show in QPAC's Concert Hall, featuring inspiring projects that made the impossible possible! From space exploration to deep oceans, the subatomic to monumental mega-structures, delve into the engineering feats that are shaping tomorrow's world.

Epic Engineering uncovers the technological challenges, creative problem-solving and collaborative efforts that drive these extraordinary projects, revealing the bold ideas and teamwork behind achieving the seemingly impossible.

Hosted by Angharad "Rad" Yeo (ABC's *Good Game Spawn Point*), students will uncover the engineering marvels that have amazed the world and demonstrated the incredible possibilities of engineering.

THIS PROGRAM EXPLORES:
Design and Technologies (Year 7 – 10), Science as a Human Endeavour (Year 7 – 10), Earth and Environmental Science (Years 11 – 12), Physics (Years 11 – 12) and links to Engineering General senior syllabus (Years 11 – 12).

CURRICULUM CODES BY YEAR

- YEARS 7/8: AC9TDE8K02, AC9TDE8K03, AC9TDE8K06, AC9S7H01, AC9S8H01
- YEARS 9/10: AC9TDE10K01, AC9TDE10K02, AC9TDE10K03, AC9TDE10K06, AC9S9H02, AC9S10H02, AC9TDE10K01
- YEARS 11/12: ACSES014, ACSES043, ACSES070, ACSES069, ACSPH015, ACSPH059, ACSPH092

LABS UNLOCKED

WSFB extends the hugely popular Labs Unlocked series into the Schools Program for 2025. Students in Years 9 to 12 are invited to step inside some of Brisbane's most exciting labs for an inspiring introduction into genetics, biomedical research and ecological engineering. Register early for these sessions, as spots are very limited.

LABS UNLOCKED: TECHNIQUES TO STUDY CANCER AT TRI

WHEN:
Friday 21 March 2025

Suitable for Y9-Y12

SESSION TIMES:
10am-1:30pm

WHERE:
Translational Research Institute, SPARQ-ed Facility
37 Kent Street, Woolloongabba
(opposite café Catalyst co-located in the building)

TICKETS:
$10 per student (max capacity 24 students)

Experience the world of biomedical research as *Labs Unlocked* opens the doors of the Translational Research Institute (TRI) and SPARQ-ed for students in grades 9-12 with a special hands-on workshop for WSFB.

SPARQ-ed is a unique biomedical educational program for high school students, delivered through a collaboration between the Department of Education and TRI. The facility provides access to cutting-edge research equipment where students will have the opportunity to learn laboratory skills, discuss STEM career pathways with TRI-based research scientists and be part of the TRI ecosystem driven towards Exceptional Science, Healthier Lives.

This year's session will include:

- Students will expose HeLa cells (an immortalised cell line used in scientific research) to varying concentrations to determine conclusions about osmolarity of solutions. Develop skills in pipetting liquids, cell biology and microscopy.
- Meet a Researcher – learn about their career journey in STEM and a chance to ask them questions.
- Tour of TRI – explore the world-class research facilities that TRI has to offer

THIS PROGRAM EXPLORES:

- Years 9-10: Science: Biological Sciences, Science as a Human Endeavour, Science Inquiry Skills, Digital Technologies, STEM Career Pathways
- Senior Secondary Curriculum (Years 11-12): Biology (General Senior Subject), Chemistry (General Senior Subject), Science in Practice (Applied Senior Subject), Health (General Senior Subject)
- Cross-Curricular Links: STEM Learning, Critical and Creative Thinking

LABS UNLOCKED: INTERACTIVE URBAN GREENING WALKING TOURS

Suitable for Y9-Y12

WHEN:
Wednesday 26 March– Friday 28 March 2025

SESSION TIMES:
9:30am-11:30am

WHERE:
Pride Steps, Queensland Conservatorium Griffith University

TICKETS:
$10 per student (max capacity 20 students)

Cities are expanding and temperatures are rising, so how can nature be used to support better ecosystems for our future communities? Ecological engineers are instrumental in enhancing the sustainability of our cities, reducing heat and increasing amenity value using living green infrastructure.

Join experts from Griffith University's Green Infrastructure Research Labs (GIRLS) on a walking tour around South Bank to explore innovative green walls, roofs, street trees and other urban greenery. Students will meet the scientists shaping the future of our city, get hands-on with the tools used to measure how urban design impacts our daily lives, and discover how different fields like urban planning, engineering, and plant science come together to build a better, greener world.

Presented with support from Griffith University.

THIS PROGRAM EXPLORES:

- Years 9-10: Science: Biological Sciences, Science as a Human Endeavour, Science Inquiry Skills
- Years 9-10: Geography: Geographies of Interconnections, Environmental Change and Management
- Years 9-10: Technologies: Design and Technologies
- Years 9-10: Work Studies: Career Pathways in STEM Senior Secondary Curriculum (Years 11-12): Biology (General Senior Subject), Geography (General Senior Subject), Sustainable Places, Emerging Technologies
- Cross-Curricular Links: STEM Learning, Digital Technologies, Critical and Creative Thinking Problem Solving and Innovation,

LABS UNLOCKED: A DAY IN THE LIFE OF A SCIENTIST

Suitable for Y9-Y12

WHEN:
Friday 21 March 2025

SESSION TIMES:
9:30am-2:30pm

WHERE:
QIMR Berghofer Medical Research Institute
300 Herston Rd, Herston

TICKETS:
$350+GST class rate (up to 24 students)

From humble beginnings in 1945, the Queensland Institute of Medical Research, now known as QIMR Berghofer, is one of Australia's most successful medical research institutes, translating discoveries from bench to bedside for a better future of health.

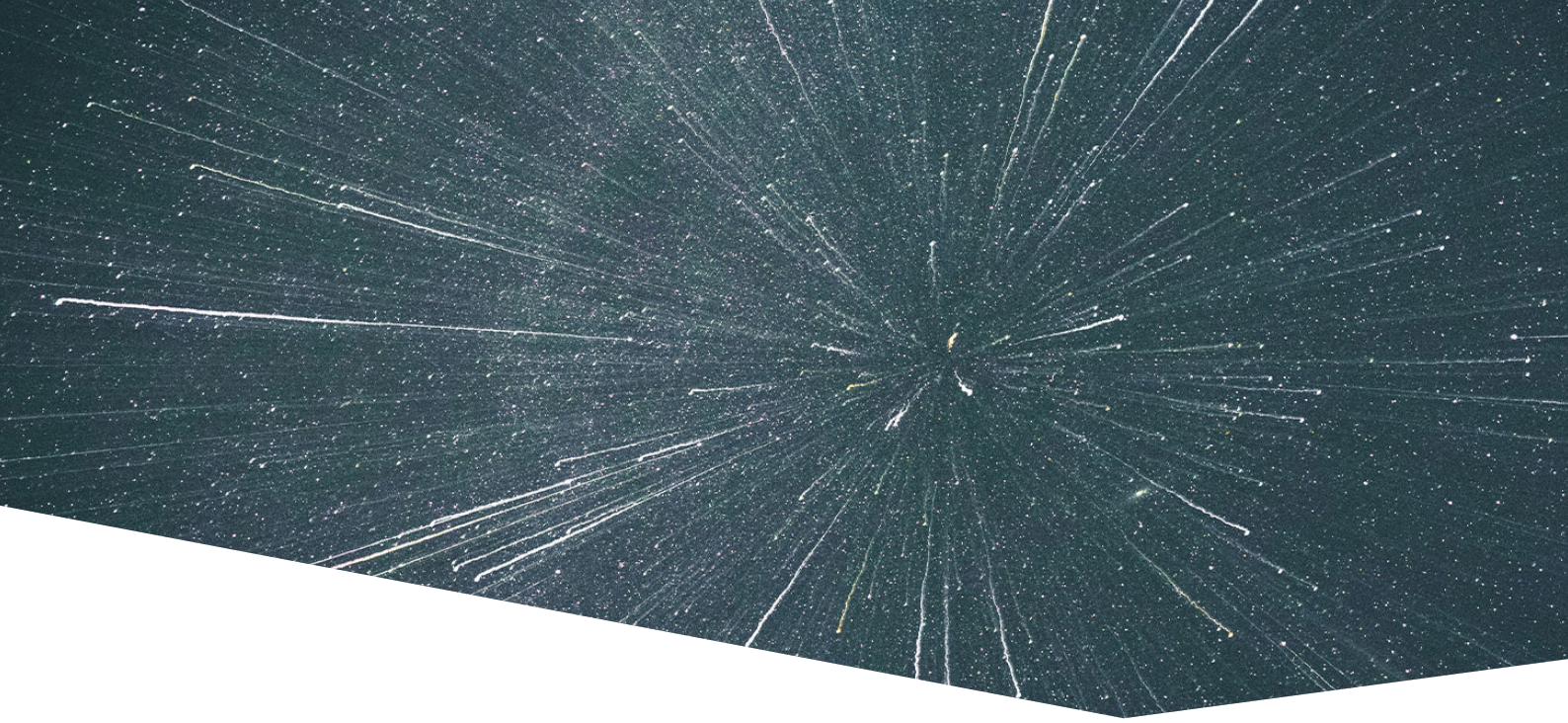
As part of WSFB 2025, students are invited to experience *The Day in the Life of a Scientist*. Step into the Genetics Lab for a hands-on experience while interacting with scientists working in the world of medical research.

During the program, students will:

- Complete a hands-on experimental activity in a state-of-the-art education laboratory
- Hear a talk from researchers working at the forefront of discovery
- Tour the Institute's world-class medical research facilities

THIS PROGRAM EXPLORES:

- Years 9-10: Science: Biological Sciences, Science as a Human Endeavour, Science Inquiry Skills, Work Studies
- Years 11-12: Biology (General Senior Subject) – Cells and Multicellular Organisms, Maintaining the Internal Environment, Heredity and Continuity of Life. Chemistry (General Senior Subject) – Chemical Fundamentals, Structure, Synthesis, and Design. Health (General Senior Subject):
- Cross-Curricular Links: STEM Learning, Design and Technologies,
- Critical and Creative Thinking: Problem Solving and Innovation



5000 EYES: MAPPING THE UNIVERSE WITH DESI

WHEN:
Friday 28 March 2025

Suitable for Y10-Y12

SESSION TIMES:
10:30am-11:30am
11:45am-12:45pm

WHERE:
Sir Thomas Brisbane Planetarium, Mount Coo-Tha

TICKETS:
$10 per student

5000 Eyes: Mapping the Universe with DESI is a visually stunning fulldome film designed to immerse students in the fascinating world of modern astronomy.

It explores the Dark Energy Spectroscopic Instrument (DESI), a cutting-edge tool that's creating the most detailed map of our universe by measuring the spectra of galaxies.

Students in Years 10-12 will experience the largest structures in space like never before, flying through real data collected by DESI.

Join us as we explore the science instrument and people behind this global endeavor, then participate in a Q&A with expert astrophysicist as they answer students burning questions and give insight into the world class research happening in Australia.

Ideal for students interested in science, technology and space exploration, this film is a window into the future of cosmic discovery.

THIS PROGRAM EXPLORES:
Science understanding – Earth and space sciences (Year 10), Physics QCAA Unit 1, QCAA Unit 2, QCAA Unit 3 (Year 11-12) and Earth and Environmental Science QCAA Unit 1, QCAA Unit 2 (Year 11-12).

CURRICULUM CODES BY YEAR

- YEAR 10: AC9S10U04, AC9S10H02
- YEAR 11-12: PHYSICS UNIT 1, EARTH AND ENVIRONMENTAL SCIENCE UNIT 1

ABORIGINAL SCIENCE AND KNOWLEDGE SYSTEMS

WHEN:
Friday 28 March

Suitable for Y4-Y6

SESSION TIMES:
9:30am-10:30am
11:15am-12:15pm
1:00pm-2:00pm

WHERE:
Level 2, Theatre, Queensland Museum, South Brisbane

TICKETS:
$10 per student

Join Uncle Boomerang for *Aboriginal Science and Knowledge Systems*

Explore the wonders of traditional Aboriginal science, where nature and knowledge are deeply connected. Uncle Boomerang will guide students through an exciting discovery of how First Nations people understand the world through connection to Country, the environment, the six seasons, and weather.

Students in grades 4-6 will dive into how science is linked to everything around us—told stories, songs, dances and the star maps in the night sky. You'll explore fascinating topics like chemistry, geology, physics and even the secrets of animals, plants and the stars. Aboriginal science also includes technologies and processes that explain everything from nutrition and health to weather patterns, ecology, and the mysteries of the universe!

THIS PROGRAM EXPLORES:

Science Understanding (Years 4-6), Science as a Human Endeavour (Years 4-6), HASS (Years 4-5)

CURRICULUM CODES BY YEAR:

- YEAR 4: AC9S4U01, AC9S4U02, AC9S4U04, AC9S4H01, AC9HS4K01, AC9HS4K05, AC9HS4K06
- YEAR 5: AC9S5U02, AC9S5U04, AC9S5H01, AC9S5H02, AC9HS5K04, AC9HS5K05
- YEAR 6: AC9S6U01, AC9S6U02, AC9S6H01, AC9S6H02

SPACEBOT SCIENCE

WHEN:

Junior Spacebots
Thursday 20 March 2025: 10:30am
Friday 21 March 2025: 10:30am, 1:00pm
Thursday 27 March 2025:10:30am, 1:00pm

Suitable for P-Y6

Senior Spacebots
Thursday 20 March 2025: 11:45am
Friday 21 March 2025: 11:45am
Thursday 27 March 2025: 11:45am

Suitable for Y7-Y10

WHERE:
Sir Thomas Brisbane Planetarium, Mount Coo-Tha

Explore the fascinating world of space robotics with *SpaceBot Science* at the Sir Thomas Brisbane Planetarium's Cosmic Skydome.

Launch into an immersive journey through the fascinating realm of modern mechatronics and space discovery.

How do space robots gather and analyse data on remote worlds? How have ancient automatons shaped modern science? The inextricable link between astronomy and technology enables us to take science out of this world!

THIS PROGRAM EXPLORES:
Digital Technologies, Science as a Human Endeavour, and Science Understanding Earth and Space Sciences (Years P–6). Science understanding (Year 7-10), Science as a human endeavour (Year 7-10)

CURRICULUM CODES BY YEAR:

- YEARS P–2: AC9TDI2K01, AC9TDIFK01, AC9TDI4K01, AC9S1H01, AC9S2H01, AC9SFH01, AC9S1U02, AC9S2U01
- YEARS 3–4: AC9TDI4K02, AC9S3H01, AC9S4H01, AC9S3H02, AC9S4H02, AC9S3U02, AC9S4U02
- YEARS 5-6: AC9TDI6K01, AC9S5H01, AC9S5H02, AC9S6H02, AC9S5U02, AC9S6U02
- YEARS 7-8: AC9S8U03, AC9S8U04, AC9S7H01
- YEAR 9: AC9S9U03, AC9S9H02
- YEAR 10: AC9S10U04, AC9S10H02

SUPERLUMINAL BY PATCH THEATRE

Suitable for P-Y3

WHEN:
Friday 21 March – Friday 28 March 2025

SESSION TIMES:
Every 20 minutes from 10am-1:20pm

WHERE:
Level 6, Queensland Museum, South Brisbane
(meet at Level 2 Clock Room)

TICKETS:
$10 per student

PACKAGE OPTION:
Extend your stay and book a *SparkLab* experience and receive a discount on each ticket. Students in P-3 will love to get hands-on in Queensland Museum's *SPARKLAB* as part of their WSFB visit. To add a *SparkLab* experience to your booking, enquire with QPAC Groups.

Please note, lighting effects, including flashing lights (no strobe) will be part of this experience. Participants will also touch raw lentils – inform staff of lentil allergies.

This project has been assisted by the Australian Government through Creative Australia, its principal arts investment and advisory body.

A blend of bold visual design, collaborative storytelling and interactive play, WSFB presents Patch Theatre's Queensland debut of this enchanting installation, *Superluminal*.

As children enter *Superluminal*, they receive colour-changing lanterns to use throughout the installation. Guided by a performer, they journey through interactive spaces to reveal hidden animal tracks and discover animals from the past, present and possible future. Children create their own mythical creatures, bring them to life with recorded sounds and spectacular rainbow lighting, and capture their fantastical shadows on a magical glow wall.

Superluminal is an engaging experience designed to ignite children's curiosity. A theatrical installation full of Patch's renowned interactive light play, *Superluminal* investigates nature's extraordinary creatures, systems and beauty, and how time shapes them.

THIS PROGRAM EXPLORES:

- Primary Learning Areas: English, The Arts, Technologies, Science, Humanities and Social Sciences
- Cross-Curriculum Priorities: Aboriginal and Torres Strait Islander Histories and Culture, Asia and Australia's Engagement with Asia, Sustainability
- General Capabilities: Critical and Creative Thinking, Digital Literacy, Ethical Understanding, Intercultural Understanding, Literacy, Numeracy, Personal and Social Capability

WEBUILD: SAFEGUARDING THE PAST. BUILDING THE FUTURE.

WHEN:
21-30 March 2025

Suitable for P-Y12

SESSION TIMES:
9.30am-5pm

WHERE:
Level 2, Queensland Museum, South Brisbane

TICKETS:
FREE, drop-in activity

Visit the Webuild activation to discover the incredible ways engineering is used around the world to safeguard the past and build the future. Explore exhibits with activities for all ages and unlock your inner engineer. Webuild is a leading global player in the construction of large, complex projects for sustainable mobility, hydropower, water and green buildings.

Webuild, and its Australian business, Clough, have delivered challenging, complex and rewarding projects in Queensland for over 50 years. Together they are committed to supporting the future of the state, its communities, and people.

QUEENSLAND MUSEUM EXHIBITIONS

Queensland Museum presents a dynamic program of interactive exhibitions that tell the stories of Queenslanders from prehistoric times to modern day discovery.

- *Discovering Ancient Egypt*
- *Secrets: Objects of Intrigue*
- *Say Our Name: Australian South Sea Islanders*
- *Minerals: Inspirational Treasures from the Earth*
- *Dinosaurs Unearthed*
- *Anzac Legacy Gallery*
- *SparkLab*
- *Discovery Centre*
- *Dinosaur Garden*
- *Wild State*

If you would like to visit any Queensland Museum exhibitions, please book online.

Bookings are essential for all schools and groups. There are charges for select exhibitions. Visit our website for details. If you have any questions about the bookings process, please phone the Queensland Museum Bookings Officer on (07) 3153 4401 from Monday to Friday 8am–4pm.

SPARKLAB, QUEENSLAND MUSEUM

WHEN:
21-30 March 2025

Suitable for P-Y8

SESSION TIMES:
10am, 11.30am, 1pm (75 minute sessions)

WHERE:
Queensland Museum, Level 1, Grey Street, South Brisbane, Queensland

TICKETS:
$11 per student for *SparkLab*, or $10 as part of the *Superluminal* package

Queensland Museum's premier STEM space, *SparkLab* encourages students to feed their inquisitive minds through hands-on, interactive play. At the Maker Space, students can design and build a solution to a real- world challenge, test their ideas, and improve their designs accordingly.

The Science Bar allows students to engage with live experiments, while Science on a Sphere explores subjects ranging from extreme weather events to the surface of Mars.

Supporting Learning Resources: SparkLab Exhibition Guide, Curriculum Links Prep – Year 2/ Year 3 – 4/ Year 5 – 6/ Year 7 – 8, Maker space resources, Activities for the classroom.

THIS PROGRAM EXPLORES:
- Years Prep - 8: Science, Technologies and Mathematics, and support students to develop their general capabilities in Literacy, Numeracy, and Critical and Creative Thinking

SCIENCE ON A SPHERE, *SPARKLAB*

WHEN:
21-30 March 2025

Suitable for P-Y8

SESSION TIMES:
10am, 11.30am, 1pm (75 minute sessions)

WHERE:
Queensland Museum, Level 1, Grey Street, South Brisbane, Queensland

TICKETS:
$11 per student for *SparkLab*, or $10 as part of the *Superluminal* package

Science on a Sphere has so much for you to explore! Marvel at the beauty of our blue planet with an image of the Earth compiled by NASA satellite imagery. Watch real-time clouds move across our planet and spot the moment when a cyclone begins to form. Then blast-off to outer space to visit Mercury, Saturn and beyond.

Science on a Sphere is a huge 1.8m diameter sphere suspended in the centre of SparkLab. It uses the latest digital technology from satellites and ground-based instruments to project over 570 global, environmental and planetary datasets onto its surface. Explore swirling ocean currents, animal migrations, plate tectonics, earthquakes, Jupiter's moons and much more at the touch of a screen.

Developed by researchers at the National Oceanic and Atmospheric Administration (NOAA) in the United States, this technology helps users to visualise and understand the wonder of the world around us and Earth's place in the solar system.

Exploring Science on a Sphere

Discover what you can explore by visiting Science on a Sphere datasets and choose how you explore when you visit *SparkLab*:

- Self-led exploration: Follow your curiosity with the touchscreen kiosk to investigate our Earth, take a trip to Mars, visit Venus or circle the Sun.
- Facilitated exploration: Join one of our regular facilitated Science on a Sphere exploration sessions where you can ask questions, share your observations and build on new ideas with our SparkLab Learning Officers.
- Science on a Sphere App: Continue your exploration anywhere with the SOS Explorer™ Mobile app version of Science on a Sphere, now freely available for download.

PREP-YEAR 5 SCHEDULE

START	THURSDAY 20 MARCH		FRIDAY 21 MARCH			TUESDAY 25 MARCH		WEDNESDAY 26 MARCH		THURSDAY 27 MARCH			FRIDAY 28 MARCH			
9:30															Aboriginal Science and Knowledge Systems	
9:45																
10:00		*SparkLab*		Superluminal (sessions every 20 mins)	*SparkLab*	Superluminal (sessions every 20 mins)	*SparkLab*	Superluminal (sessions every 20 mins)	*SparkLab*		Superluminal (sessions every 20 mins)	*SparkLab*		Superluminal (sessions every 20 mins)		*SparkLab*
10:15																
10:30	Spacebot Science		Spacebot Science							Spacebot Science			Spacebot Science			
10:45																
11:00																
11:15															Aboriginal Science and Knowledge Systems	
11:30		*SparkLab*			*SparkLab*		*SparkLab*		*SparkLab*			*SparkLab*				*SparkLab*
11:45																
12:00																
12:15																
12:30																
12:45																
13:00		*SparkLab*	Spacebot Science		*SparkLab*		*SparkLab*		*SparkLab*	Spacebot Science		*SparkLab*	Spacebot Science		Aboriginal Science and Knowledge Systems	*SparkLab*
13:15																
13:30																
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14:00																
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14:45																
15:00																

YEAR 6–8 SCHEDULE

START	THURSDAY 20 MARCH		FRIDAY 21 MARCH		WEDNESDAY 26 MARCH		THURSDAY 27 MARCH		FRIDAY 28 MARCH	
9:30									Aboriginal Science and Knowledge Systems (Y4-6)	
9:45										
10:00		*SparkLab*		*SparkLab*	Epic Engineering (Y7-Y9)	*SparkLab*		*SparkLab*		*SparkLab*
10:15										
10:30	Spacebot Science (P-Y6)		Spacebot Science (P-Y6)				Spacebot Science (P-Y6)			
10:45										
11:00										
11:15									Aboriginal Science and Knowledge Systems (Y4-6)	
11:30		*SparkLab*		*SparkLab*		*SparkLab*		*SparkLab*		*SparkLab*
11:45	Spacebot Science (Y7-Y10)		Spacebot Science (Y7-Y10)				Spacebot Science (Y7-Y10)			
12:00										
12:15										
12:30										
12:45										
13:00		*SparkLab*	Spacebot Science (P-Y6)	*SparkLab*		*SparkLab*	Spacebot Science (P-Y6)	*SparkLab*	Aboriginal Science and Knowledge Systems (Y4-6)	*SparkLab*
13:15										
13:30										
13:45										
14:00										
14:15										
14:30										
14:45										
15:00										

YEAR 9-12 SCHEDULE

START	THURSDAY 20	FRIDAY 21 MARCH			WEDNESDAY 26 MARCH		THURSDAY 27 MARCH	FRIDAY 28 MARCH	
9:30		Labs Unlocked: A Day in the Life of a Scientist (Y9-Y12)				Labs Unlocked: Interactive Urban Greening Walking Tours (Y9-Y12)	Labs Unlocked: Interactive Urban Greening Walking Tours (Y9-Y12)		Labs Unlocked: Interactive Urban Greening Walking Tours (Y9-Y12)
10:00			Labs Unlocked: Techniques to Study Cancer at TRI (Y9-Y12)						
10:15									
10:30								5000 Eyes: Mapping the Universe with DESI (Y10-Y12)	
10:45									
11:00									
11:15									
11:30									
11:45	Spacebot Science (Y7-Y10)			Spacebot Science (Y7-Y10)			Spacebot Science (Y7-Y10)	5000 Eyes: Mapping the Universe with DESI (Y10-Y12)	
12:00									
12:15									
12:30									
12:45									
13:00					Epic Engineering (Y9-Y12)			5000 Eyes: Mapping the Universe with DESI (Y10-Y12)	
13:15									
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14:30									
14:45									
15:00									

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