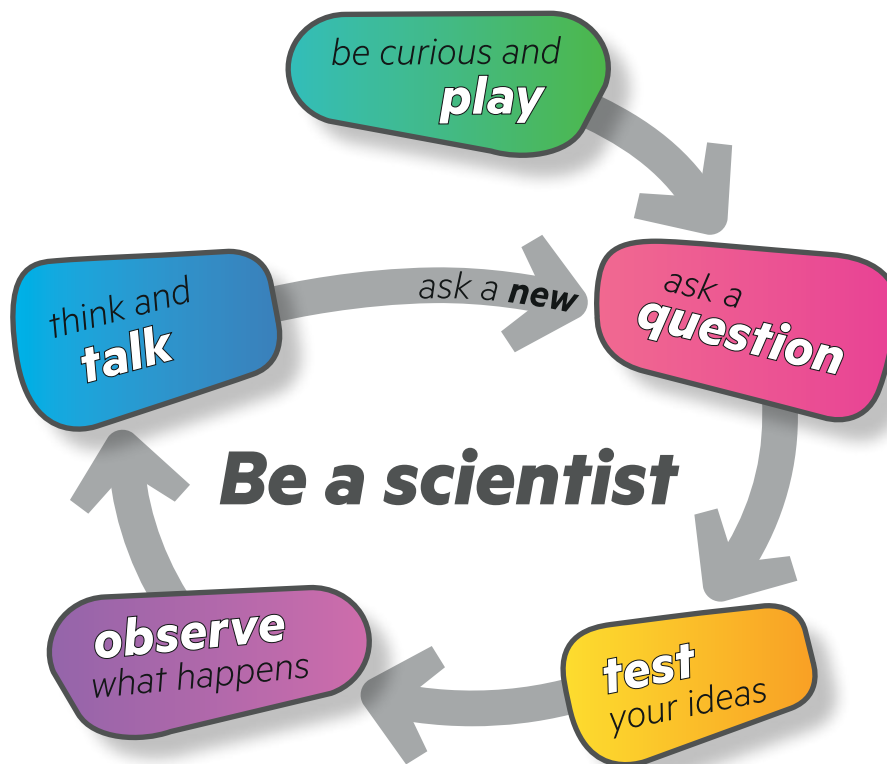


SCIENCECENTRE

Exhibition Guide



Follow your curiosity

Ignite your imagination at the **Museum of Tropical Queensland Sciencecentre**.

Follow your curiosity and bring out your inner scientist as you question, investigate and wonder about the world around you. Think creatively as you test new ideas to solve problems while exploring 20 interactive exhibits and discover how science, technology, engineering and maths (STEM) affect your everyday world.

Be a scientist


As you play and investigate in **Sciencecentre**, you are using lots of the same skills that scientists, engineers and mathematicians use in their everyday.

Explore your **curiosity** as you **play**.

Ask **questions**, **test** out your ideas and make **observations**.

Design, **build** and **make** using your imagination.

Share your thinking with others and build on new ideas and questions.

 Information	TARGET AGE: 6–13 years	LOCATION: Mezzanine Level, Museum of Tropical Queensland
	CONTENT: Sound Perception Forces Energy Structures Maths Design	

Sciencentre highlights

What creative solutions can we imagine to solve complex problems?

One problem can have multiple solutions. Experiment with different solutions to achieve the same result at **Soma cube** and **Pack the parcels**. Think logically, observe carefully and experiment to solve the puzzle as you **Build a die**.

How do architects, engineers and other designers 'see' an object in order to build it? Challenge yourself to plan ahead and see in three dimensions to solve the **Tower of Brahma** and get **Four in a row**.

Team up with a friend and investigate how mirrors can be used to create confusing optical illusions with **Disappearing Body**.



What can our senses tell us about our world?

How can we use them to explore and test new ideas?

Play with sound as you create music with **Thongaphone**. Explore the advantages of a steady hand for working with delicate objects as you challenge yourself on the **Steadiness tester**.

Do we all perceive the world the same way? **Read with your fingers** and **Feel the Difference** to investigate how your sense of touch can help you understand the world around you.

Humans can throw objects with remarkably high speed and accuracy when compared to other animals. Test the speed and accuracy of your throw at **Bullseye!** Do you improve with practice?



How can working together help us solve problems, create new designs and change our world?

Test your teamwork and communication as you try to separate your rope from your teammate's without removing your hands from the wrist bands. Can you get **Free or knot?**

Experience how we can cleverly use forces to give us an advantage with **Gravity Run** and **Build an Arch**, then team up to explore how small changes in design can produce different results.

It is possible to create a huge number of different patterns with just a few basic shapes. Explore and design pattern variations of your own in **Tile art**. What patterns can you see in the world around you?



Make the most of your visit

MTQ Sciencentre is an active, social and hands-on space – start exploring from any exhibit.

Things to do at an exhibit:

- What do you see, feel, notice as you play?
- Change something – Try out different settings, add in new pieces to test, or move in a different way and see what happens.

Things to think or talk about at an exhibit:

- What can you explore and test?
- What do you think is happening and why?
- What do you find interesting about what is happening?

Further challenges:

- What new questions do you have?
How could you find out more?
- Have you seen or experienced anything similar in your everyday life?
- How might people find this useful in their work or life?

Use the exhibit panels to further guide your exploration and to find out more about what is happening. **Explore More** by using the keywords at the bottom of each panel to do your own research, and discover how science, technology, engineering and maths is useful in our everyday lives.

Museum links

Use your STEM knowledge and skills as you explore the rest of the Museum and your everyday world.

Follow your curiosity, ask questions, look closely and make observations, and test out your ideas. View changes in diving engineering and design through time in **Heritage of Helmets**, located inside the Pandora Gallery on Level 1.

You can investigate the sensory capabilities and adaptability of your body in the **Sciencentre**, but how do creatures of the deep sea sense and adapt to their extreme environment? Discover the creatures that inhabit this apparently hostile environment and their interesting adaptations for surviving extreme cold, dark and pressure in **The Deep Sea** on Level 2.

Visit **Discover Tropical Queensland** on Level 2 and experience how our vision underwater is different to fish and other marine creatures in the interactive exhibit, **Fishy Vision**.

Explore more and test new methods and ideas with the Queensland Museum Network's online learning resources.

