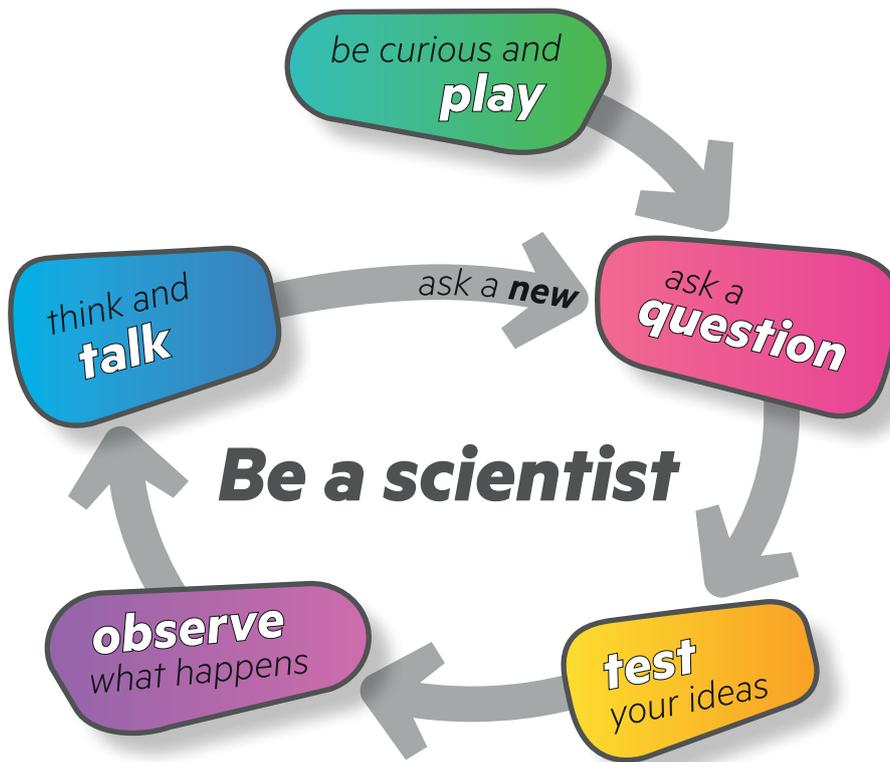


SCIENCECENTRE

Exhibition Guide



Follow your curiosity

Ignite your imagination at the **Cobb+Co Museum 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 over 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 every day.

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: Toowoomba Gallery
	CONTENT: Forces Energy Design Electricity Gears Circuits Technology	

Sciencentre highlights

Our world and how it works.

Wonder at the changing world around us and investigate how matter moves, behaves and changes.

See how far the electricity can jump between the two rods in **Electric sparks**.

Watch what the streams of coloured light inside the Mesmer tubes do when you **Touch the lightning**.

Investigate how a whirlpool forms in **Whirling around** and see if you can make the **Slow bubbles** catch each other.



How can we change our world?

What does this change do?

Explore forces, energy and structures, and use your imagination to design and build to find solutions to challenges. Make a change and see the impact.

See and feel the effect of forces as you keep the ball in the stream of air in **Floating ball**. Explore how energy can be changed from one form into another in **Newton's cradle** or when you try **Making waves**.

See how **Spinning gears** help make work easier and explore which lightbulb requires the most energy to **Light it up**.



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

Design and build your own flying machine for **Flight test**. Observe how it moves through the air and test out your design changes. Share your thinking with others and collaborate on new ideas.

Transform energy as you work with your friends to build a **Gravity run** with lots of moving parts.

Pedal a bicycle or turn a crank handle to generate electricity with **People power**. Investigate how much energy it takes to boil the electric kettle. If you need more energy, ask other people to help!



Make the most of your visit

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

Things to do:

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

Things to think or talk about :

- What can you observe, change 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. Explore Cobb+Co Museum and find historical clues of both constant and changing technologies.

Journey back in time in the **National Carriage Gallery** as you discover the technology of horse-drawn transport, bicycles and early motor vehicles. Compare to the transport of today.



In **Binangar**, discover the science and technology used by Aboriginal people over thousands of years in the development of their tools and weapons, and how through traditional living they use the resources of the natural environment.

Recognise the skills, tools, methods and materials used in heritage trades and compare them with those used today in the **Cobb+Co Factory**. Look at how simple machines – pedals, crank handles, levers, wedges, wheels and axels, screws and inclined planes make work easier. How do people use the power from their own bodies to make machines work?

Explore more and test new methods and ideas with the Queensland Museum Network's online learning resources, at learning.qm.qld.gov.au