


SparkLab

SCIENCENTRE

Exhibition Guide

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|  Information | TARGET AGE: 6–13 years | LOCATION: Level 1, Queensland Museum |
| | CONTENT: Earth & Space Matter Light Sound Perception Forces Energy Structures Maths Design | |

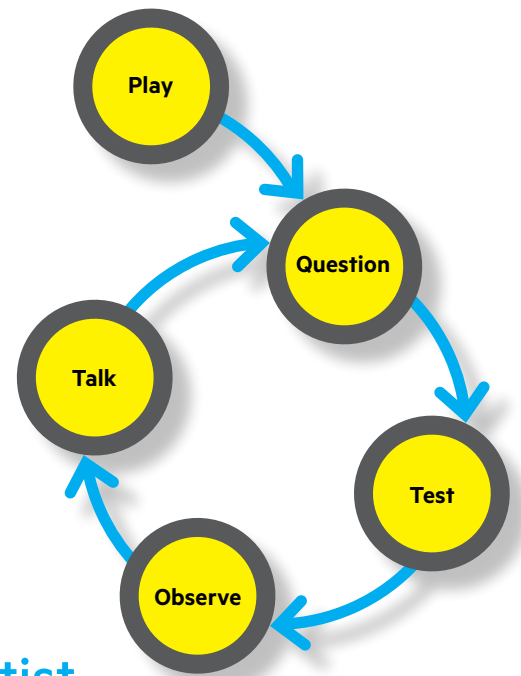


Follow your curiosity

Ignite your imagination in *SparkLab*, our new Sciencecentre experience. Follow your curiosity and bring out your inner scientist as you question, investigate and wonder about the world around you.

Explore 40 interactive exhibits across three zones and discover how science, technology, engineering and maths (STEM) affect your everyday world.

Think creatively as you design in the Maker Space, get up close to experiments in the Science Bar and experience the wonder of our changing world with Science on a Sphere.



Be a scientist

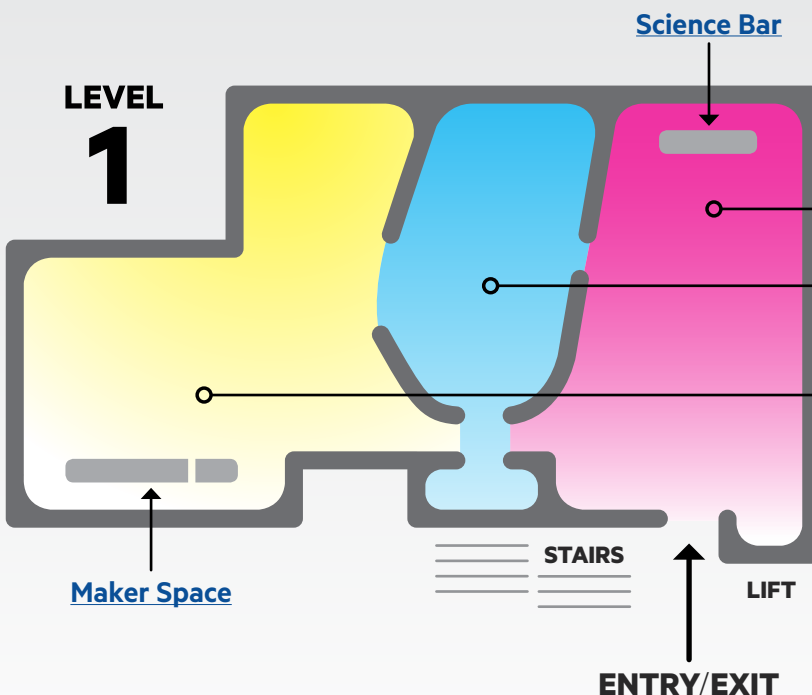
As you play and investigate in *SparkLab*, you are using lots of the same skills that scientists, engineers and mathematicians use in their everyday.

Explore your **curiosity** as you **play** with the exhibits.

Ask **questions**, **test** out your ideas and make **observations** of what is happening.

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

Share your thinking with others and build on each other's ideas and new questions.



Zones:

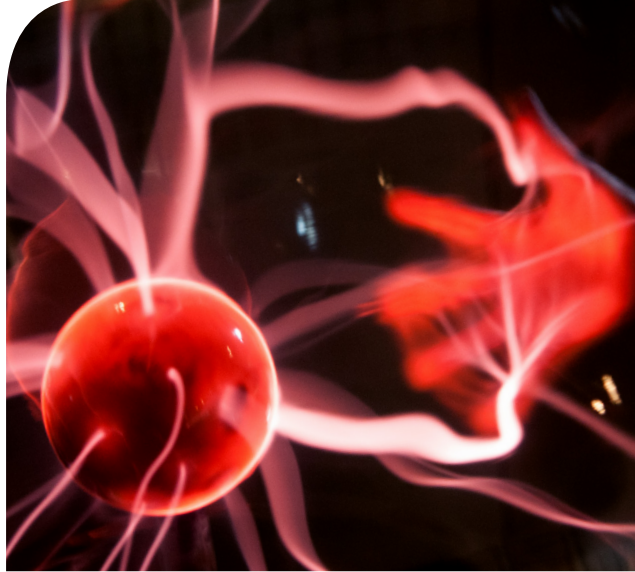
- Our world and how it works.
- How do we perceive our world?
Do we all perceive it the same way?
- How can we change our world?
What does this change do?

SparkLab zones and highlights

● Our world and how it works.

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

Explore Earth's place in space and how being part of a larger universe can impact our world and daily lives.



See giant sparks of electricity with our **Tesla Coil** and **Touch the Lightning** as you get hands on with the plasma ball.

Grow colourful ice crystals as you heat up ice and then **Watch Water Freeze** again.

● How do we perceive our world? Do we all perceive it the same way?

Explore the science of light and sound as you question, challenge and test how you perceive your world through your eyes and ears. Compare your perception in relation to other people and animals.



How can you make multiple **Coloured Shadows** or leave your shadow behind with **Frozen Shadows**? Collaborate with friends to create and change your shadow story.

Discover how to see and feel sound. Listen closely as you create **Visible Vibrations** while choosing different frequencies and wave patterns.

● How can we change our world? What does this change do?

Imagine, design and build to find solutions to challenges and for creative expression. Make a change and see the impact. Explore and use forces, transform and transfer energy and test out structures as you imagine the possibilities.



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.

Lift a Fridge by yourself or pull yourself up high in **Pulley Up**. Experience how we can cleverly use forces to give us an advantage.

Do, Think, Talk

SparkLab is an active, social and hands-on space.
Start in any zone and choose where you want to explore.

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?

Make the most of your visit

SparkLab staff will encourage exploration and investigation, and answer questions about the daily program.

- Imagine and design solutions to challenging questions in the **Maker Space**. Make your creation from a range of materials. Share your thinking with others and build on each other's ideas.
- Get up close with live science experiments and demonstrations at the **Science Bar**. Colour, chemistry, unexpected science, predictions and questions will be part of the experience. See the daily program for details.
- Experience the wonder of our changing world with Science on a Sphere.

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. You can also use the keywords in 'explore more' 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 how things work, imagine changes to design and the impacts these changes have on our natural and cultural world, and share your thinking and questions with others.

Visit **Wild State** (Level 4) and explore animal adaptations for movement and survival, energy flow through ecosystems, and the impact of water on habitats and animal survival. View up close skeletal structures of dinosaurs in **Lost Creatures** (Level 2), how these structures support their body and help them move, and how matter changes during fossilisation.

Explore more by visiting *SparkLab* online for learning resources.