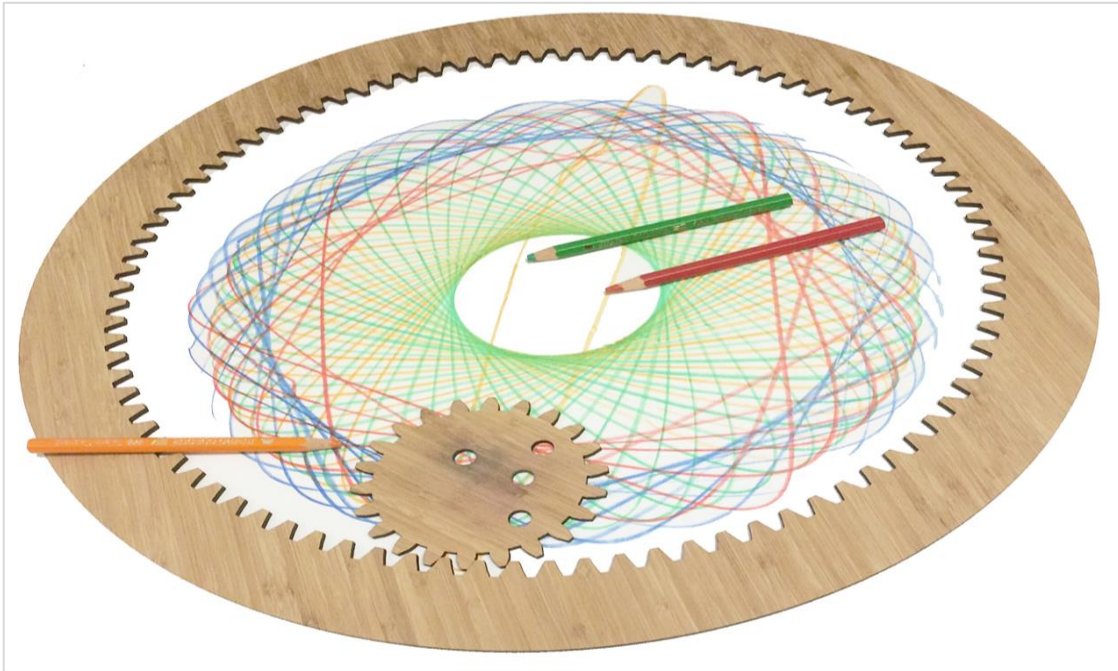


Drawing Machines

School Program
16 April – 10 July 2016



Swinging pendulums, turning cogs and spinning discs... come and play with the drawing machines!

Make a frenzy of marks with a multitude of wind-up mice and chickens. Swing the pendulum table and magic spirals will appear. Experiment with a giant Spirograph to create large geometric designs. Be mesmerised by the mysterious harmonograph — every drawing it makes is one of a kind. Take your drawings home or hang them in the exhibition.

Recommended for children 4 years and over. Toddlers space for children 3 years and under.

Drawing Machines offers cross curriculum learning experiences, in 45minute to one hour facilitated sessions.

School visits are recommended for Prep to Year 6.

Tailored Programs are available for Years 7, 8 & 9. Please contact us to discuss tailoring an educational program to suit your current learning focus.

All school groups are required to book.

School Visits

School groups can be facilitated for 45 minute to 1 hour sessions with a Children's Program Officer. Groups are welcome to stay on and play in the space once the program is completed.

A drawing machine is a tool that can create images. Many artists have created and used drawing machines.



By participating in a school program children will have a more engaged experience. They will be encouraged to explore experimentation that combines mechanical movement with mark making.

The Drawing Machine exhibition is designed for children with interactive exhibits that demonstrate different forms of mechanical movement and energy. Children can create with a number of images produced using a variety of mechanical processes.

Facilitators will introduce each of the activities and how the machines work, students will experiment and then be brought together to share their discoveries.

During school programs, students will discuss concepts associated with drawing and basic mechanical movement. This will include vocabulary and concepts such as:

| | | | |
|------------------|------------------|----------------|------------------|
| Motion | Rotation | Energy | Pattern |
| Pendulums | Momentum | Spirals | Chance |
| Line | Direction | Mark | Intention |

Together or individually students can create and observe diverse drawing techniques made with different toys, machines and drawing materials. They will be encouraged to consider how they can use the materials and tools provided to create their own unique art works.

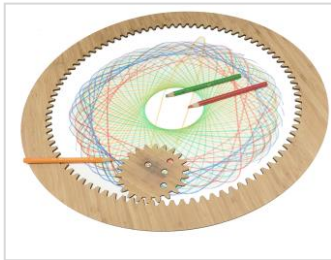
This exhibition offers a fun and creative way to engage with experimentation and making. Children will be encouraged to observe, repeat and refine their processes and evaluate their outcomes. The aesthetic outcomes of this playful experimentation encourage students to consider and extend their understanding of artistic and creative practice. This exhibition does not require previous artistic experience or drawing skills.

Exhibition content



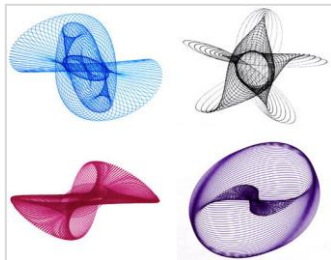
Wind up toys

Wind up chickens, mice and other animal toys become a fun way to experiment with mark making and expression. Children can attach drawing media and manipulate the mechanical function to compose an image with lines, dashes and dots.



Giant Spirographs

Based on the classic toy, the giant Spirograph uses different scaled wheels and rings to produce mathematical and spiral-based patterns. Children can work together to move the cogs to create large designs in bright colours.



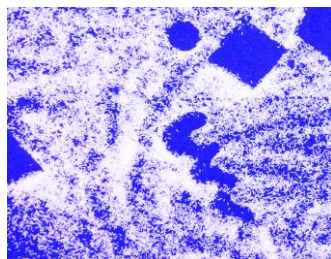
Harmonographs

Invented in the 19th century, the harmonograph machine demonstrates the energy and movement of pendulums on opposing x and y axis. With a simple movement of the stylus children can start the pendulums and produce infinitely unique designs. Known as a lissajous curve, these patterns record the machine's motion.



Pendulums

Our hanging pendulum table can be swung to produce a geometric design, in this instance the stylus is a fixed point and the table and paper is the area of motion. See how the drawing changes with different movements and as the energy of the pendulum decreases.



Giant rice drawing

Based on the idea of sand drawings, this space invites children to enter and use a number of tools to create large temporary designs. Children can experiment with a pendulum, rollers, rakes, scoops and stencils, in this collaborative and constantly changing interactive space.



Spinning disks

Spinning turn-tables have been converted into a drawing machine, as your paper spins place and move your textas to create bold concentric patters. Play with the speed of each machine, to produce line, colour and pattern.

Curriculum Links – Primary School

| Year | Maths | Science | Visual Art |
|-------------------|---|--|--|
| Prep | <p>Location and transformation Describe position and movement</p> <p>Copy, continue and create patterns with drawings and objects</p> | <p>Physical science The way objects move depends on a variety of factors including their size and shape</p> <p>Planning and conducting Participate in guided investigations and make observations using the senses</p> <p>Communicating Share observations and ideas</p> | <p>Visual Art Explore ideas, experiences, observations and imagination to create visual artworks and design</p> <p>Developing understanding of practice Use and experiment with different materials, techniques, technologies and processes to make artworks</p> <p>Sharing artworks, presentation or display Create and display artworks to communicate ideas to an audience</p> |
| Year One | <p>Chance Identify outcomes of familiar events involving chance and describe them using everyday language such as ‘will happen’, ‘won’t happen’ and ‘might happen’</p> | <p>Communicating Represent and communicate observations and ideas in a variety of ways</p> <p>Nature and development of science Science involves observing, asking questions about, and describing changes in, objects and events</p> <p>Planning and conducting Participate in guided investigations to explore and answer questions</p> | |
| Year Two | <p>Chance Identify practical activities and everyday events that involve chance. Describe outcomes as ‘likely’ or ‘unlikely’ and ‘identify’ some events as ‘certain’ or ‘impossible’</p> | <p>Communicating Represent and communicate observations and ideas in a variety of ways</p> <p>Nature and development of science Science involves observing, asking questions about, and describing changes in, objects and events</p> <p>Physical Sciences A push or a pull affects how an object moves or changes shape</p> | |
| Year Three | <p>Chance Conduct chance experiments identify and describe possible outcomes and recognised variations in results.</p> | <p>Nature and development of science Science involves making predictions and describing patterns and relationships</p> | <p>Developing understanding of practice Use materials, techniques and processes to explore visual conventions when making artwork</p> <p>Sharing artworks, presentation or display: Present artworks and describe how they have used visual conventions to represent their ideas</p> |
| Year Four | <p>Location and direction Create symmetrical patterns and pictures and shapes, with and without digital technologies</p> | <p>Nature and development of science Science involves making predictions and describing patterns and relationships</p> <p>Physical Sciences Forces can be exerted by one object on another through direct contact or from a distance</p> | |
| Year Five | <p>Location and Direction Describe translation, reflection and rotations of two dimensional shapes. Identify lines and rational symmetries</p> | <p>Questioning and predicting With guidance, pose clarifying questions and make predictions about scientific investigations</p> | <p>Visual Art Explore ideas and practices used by artists</p> <p>Developing and understanding practice Develop and apply techniques and processes when making their artworks</p> |
| Year Six | | | |

