# Grade P/1/2   Full STEAM Ahead

1. Mechanical Toys (1hr)

When children understand how things work they can apply that knowledge to become interested to work as young scientist and engineers. In this workshop students are engaged in building and designing toys with gears, pulleys, wheels and axles, while deepening their understanding of push and pulls, forces and motion to discover how the real world works.
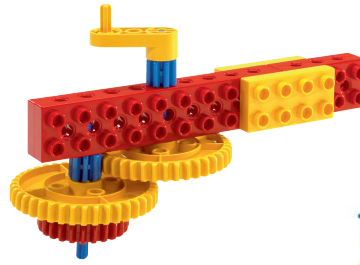
Visualise, generate,develop and communicate design ideas through describing, drawing and modeling. (ACTDEP006)
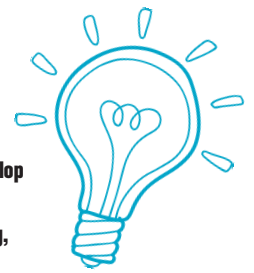
2. Building Strong Structures (1hr)

It is crucial for children's success in life that they develop the ability to collaborate and problem solve. In this class children explore the basic principles of structures while collaborating to build a solution to a problem related to a well known fairytale.

**Explore how technologies use forces to create movement. (ACTDEK002)**

Grade 3/4   Building STEM & Coding Skills

3. Great Gears Go-Round (1hr)

Get your students into gear with STEM and discover how forces and motion apply in the real world. In this workshop students investigate gears while building and redesigning a merry go-round to operate at different speeds using different gear ratios.

Investigate how forces and the properties of materials effect the behavior of a system. (ACTDEK011)
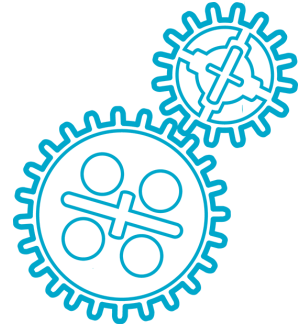
4. Build Code Learn (1hr)

Students will build a fun Robot Rover and modify the motor and sensor to drive it around and detect obstacles along its way. Students curiosity in STEM will be ignited while building, coding, and problem solving using LEGO Education WeDo 2.0.

Define simple problems and follow a sequence of steps and algorithims needed to solve them. (ACTDIP010)
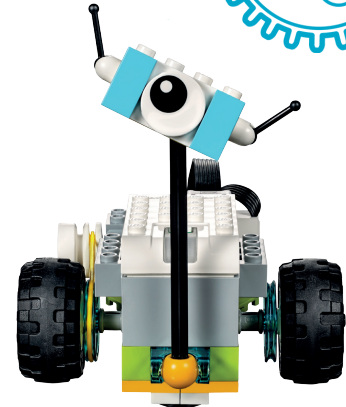
Grade 5/6   Build Code Learn

5. Powerful Pulleys (1hr)

Build STEM learning and engage students in how real world machines work. This workshop will inspire students curiosity and develop confidence in science and engineering while deepening their understanding of pulley and gearing systems in simple machines.

Critique needs or opportunities for designing, and investigating materials, components, tools, equipment & process to achieve designed solutions. (ACTDEP024)

6. Create Code Innovate (1hr)

Students will build a robot arm that can sense the colour of an object to be moved. Using the SPIKE Prime App they will program the motor and sensor to control the model. Students will collaborate to design a solutions and evaluate the results. This workshop will ignite students interest in STEM and strengthen the skills needed for a digital future.

Implement digital solutions as visual programs involving branching, iteration and user input. (ACTDIP020)
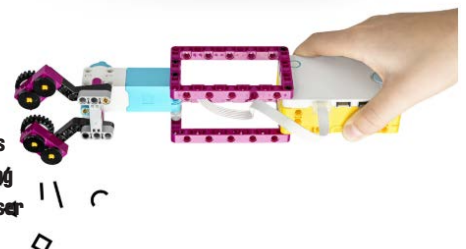
STEM LEARNING LAB BOOKING FORM

Moore Educational
- supplier of serious fun -

STEM Learning Centre   Shop 5/439 Docklands Drv (Glenti Place) DOCKLANDS

Name:		Grade level	
School:			
Address:			
Phone:		Mobile:	
Email:			

Day and Date Required

Number of students per class: .

Select option

Option 1	Option 2	Option 3	Option 4
2X 1hr labs per day Cost $600 ex gst	3X 1hr labs per day Cost $800 ex gst	4 X 1hr labs per day Cost $1000 ex gst	6 X 1hr labs per day Cost $1200 ex gst
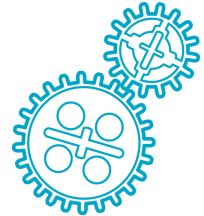
Select STEM Learning Lab

Grade P /1/2	Grade 3/4	Grade 5/6
1. Mechanical Toys 2. Building Strong Structures	3. Great Gears 4. Build Code Learn	5. Powerful Pulleys 6. Create Code Innovate

Suggested timetable

1. 10am-11am
2. 11.15 - 12.15
3. 12.45- 1.45pm

For more information

Ph: 1800 684068
E: sales@mooreed.com.au

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