LEARNING THROUGH ROBOTICS LLC

Creative Computing & **Robotics**

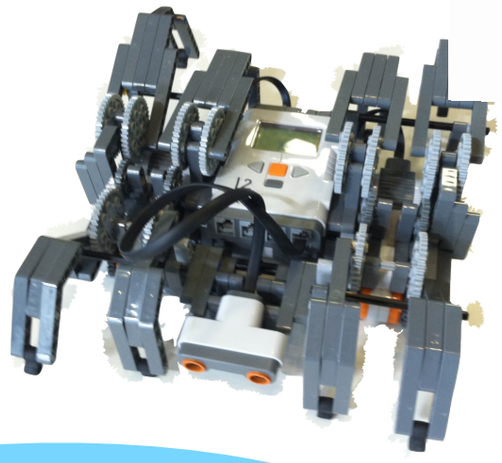
Spring STEM Program

Learn to build, design and code!

- **Starting: Jan 23rd** (9 Week Program)
- Grades **4 - 6**
- Days and Times: **Thursdays** 2:45pm - 3:45pm
- Creative programming & robotics
- **Registration:** http://www.roboticstem.com/sign-up/

Math-Science-Technology Focused

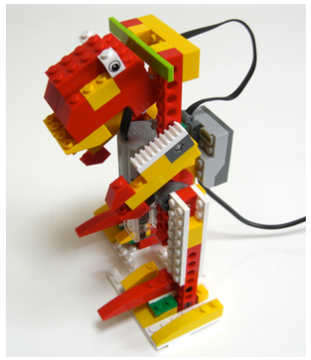
- Parents invited to SHOWCASE on last day
- **Advanced lessons** for continuing students
- Robotics Competitions coming up
- STEM based curriculum

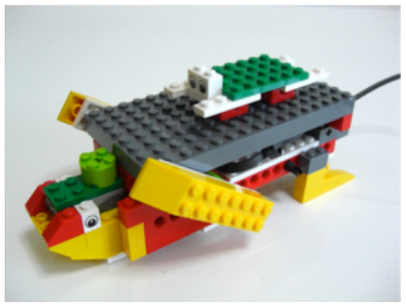


$69 FOR THE ENTIRE PROGRAM

www.roboticstem.com

STEM Pathway





Age 6-7

Introductory

Introduction to STEM. Building models, Introduction to construction, colors, shapes, Wheels & motors. Environment, animals, technology and transport

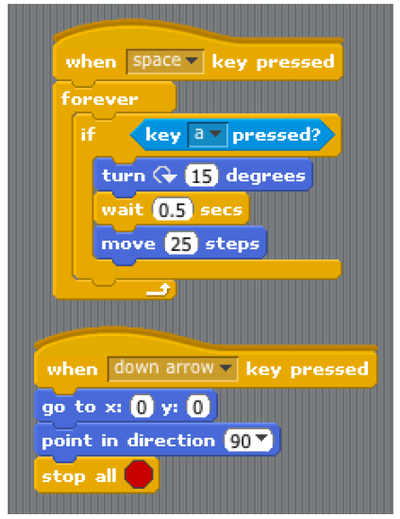
Advanced

Exposure to programming and engineering. Design and build. Distance and tilt sensors. Lessons include motion, gear, belts, spin and balance, beats and rhythm

Age 8-9

Introductory

Designs, Observations, and interpretations. Introduction to coding and programming. Design your own programs and configure its behavior using motors, sensors and other electronics

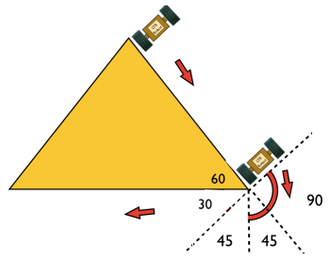


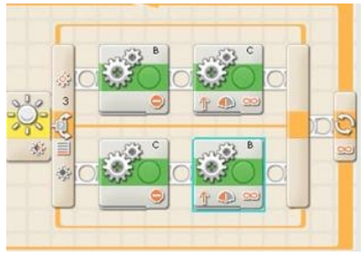
Age 8-9

Advanced

Engineering & technology. Building simple machines. Coding lessons include: direction, negatives, rotation, coordinates, shapes, animation costumes, switches, “logic” & sequences

STEM Pathway



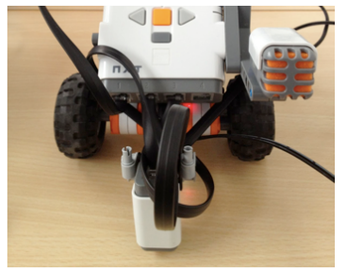
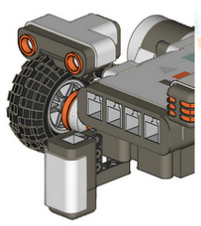


Age 10-12

Age 10-11

Introductory

Introduction to Mindstorm robots and micro-controllers. Problem solving and “hands on” application. Product design, Observations, interpretations, ratios & proportions. Programming, random number concepts and variables, servo motors, multiple sensors and electronics.

Advanced

Navigating autonomous robots with sensors (ultrasonic, sound, touch and light). Concepts include: making music with codes, light intensity, line counter and tracer, switches & loops, geometric shapes and programming on degrees, synchronizing multiple motors and fun obstacle courses