

YOUR GUIDE TO ROBOTHINK

PROGRAMS



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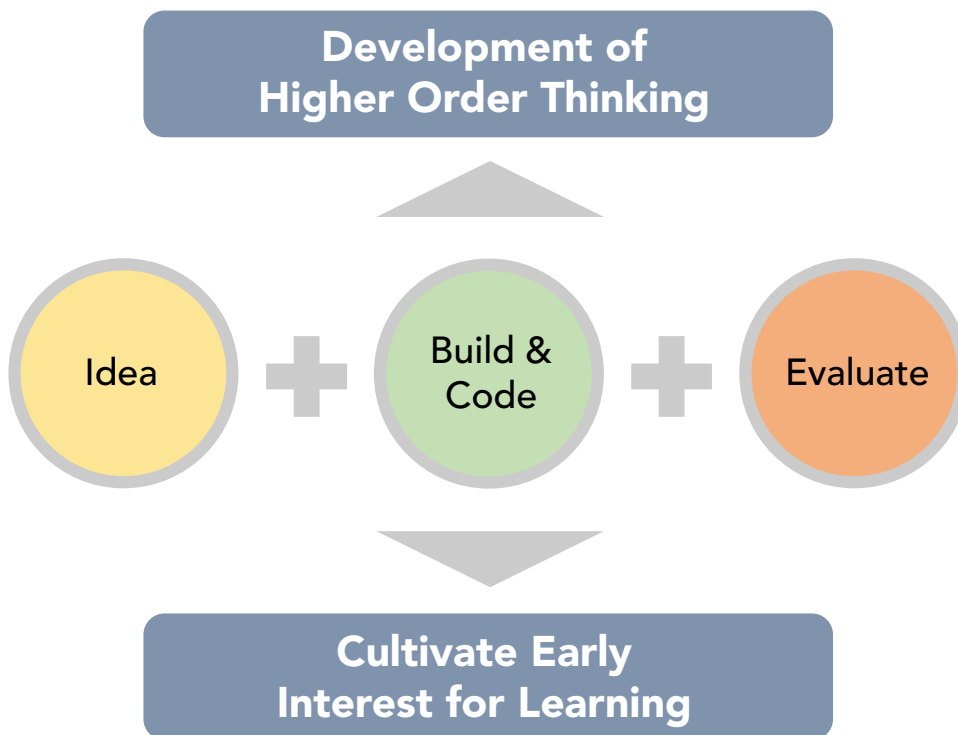
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RoboThink Philosophy

Intro

RoboThink Programs cultivate creativity, problem-solving capabilities and an interest for learning through project based robotics, coding and engineering activities.



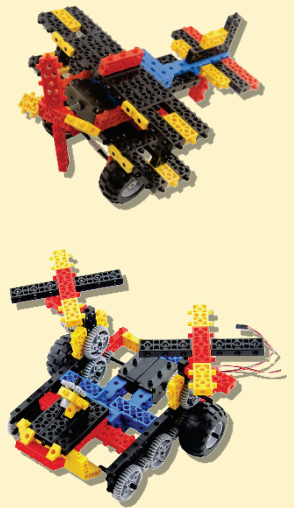
Concept

Critical thinking, problem-solving, engineering and programming will be essential skills for the 21st century world. Prepare your child for a 21st century world with RoboThink!

RoboThink Robotics

What is RoboThink Robotics?

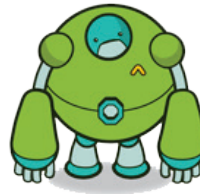
❖ Introduction



RoboThink's Robotics Programs is a structured and curriculum based engineering program where K-8 students build dynamic robotics models based on the innovative RoboThink Robotics Kit.

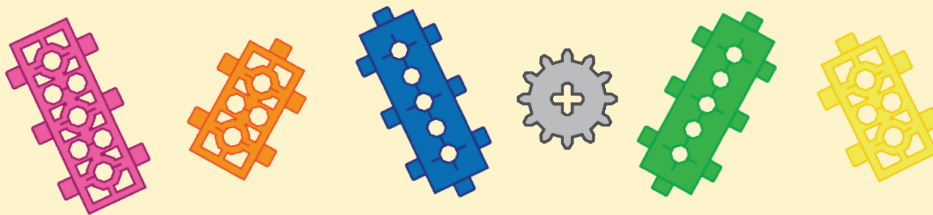
❖ Academic Benefits

- Engages visual, auditory and kinesthetic learning
- Organizational, Teamwork, Communication Skills
- Fine motor skills development
- Nurtures process oriented thinking



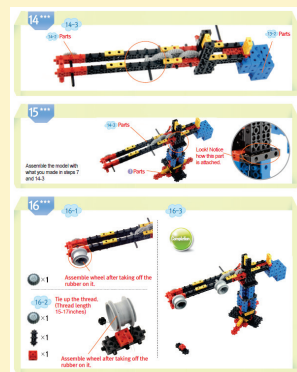
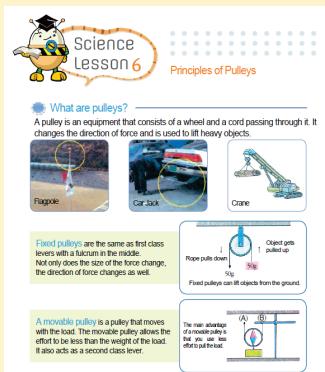
Hardware

RoboThink uses a proprietary RoboThink Robotics Kit developed with ease-of-use and flexibility in mind. With no messy connectors and screws, students spend less time building, and more time thinking!



Instruction

RoboThink Robotics lesson plans make it easy for students to learn how to build robotics models of all shapes, sizes and functions! With fun science lessons and stories, robotics has never been so fun!



RoboThink Robotics

Curriculum & Programs

Curriculum

The RoboThink Robotics Curriculum is divided into 5 levels.

1

Cells

Introduction to RoboThink cells and building basic block based models.

2

Gears & DC Motor

Introduction to various gears, axles as well as the DC Motor. Study of transforming and transferring motion.

3

Mainboard & Wired Remote

Introduction to intermediate level electronics. Study of robots that move and are controllable.

4

Sensors

Introduction to various types of sensors. Study of autonomous robots and understanding sensor electronics.

5

Wireless Remote & Servo Motor

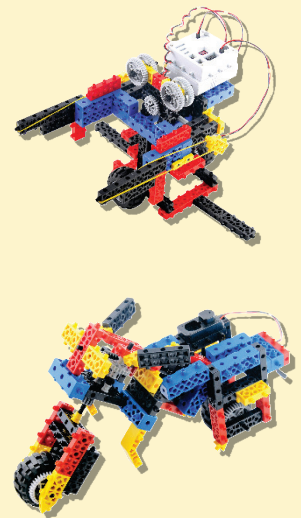
Introduction to advanced electronics. Study of using high precision parts and application of all parts to build advanced designs.

RoboThink Programming

What is RoboThink Programming?

❖ Introduction

RoboThink Programming teaches students K-8 how to program with the RoboThink Robotics Kit, Rocomi or Rocode and our workbooks.



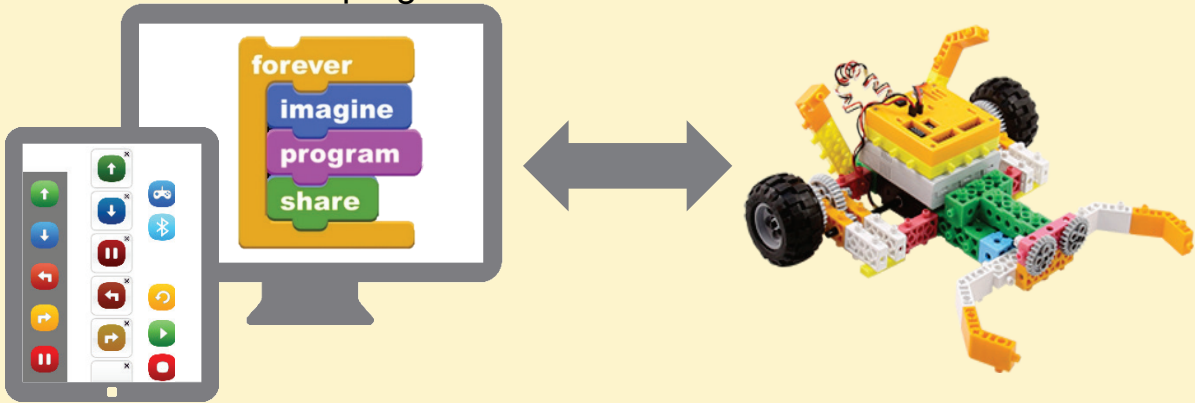
❖ Academic Benefits

- Study of real programming concepts
- Application of hardware and software solutions to problems
- Encourages self-motivated and exploratory learning
- Early exposure to technology and understanding how computers work



Hardware

The RoboThink Programming Curriculum utilizes the power of the RoboThink Robotics Kit and Rocomi or Rocode, coding platform for students developed specifically to work with Robotics Kits. Students are able to build and code robots that runs programs students write!



Instruction

Unlike other programs, RoboThink Programming offers a step by step lesson plans and accompanying workbooks for the entirety of the program!

RoboThink Programming

Curriculum & Programs

Curriculum

The RoboThink Coding Program is divided into 6 levels.

1 **Movement**

Introduction to coding software. Study of basics sequencing and moving robots using sequencing.

2 **Sensory**

Use of IR and LED sensors in a variety of robotics projects. If & Else concepts explored in depth.

3 **Analogue**

Study of analog values from sensors and applying values in meaningful solutions to challenges.

4 **Variables**

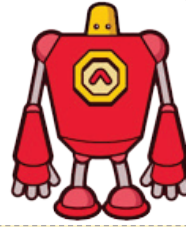
Study of variables and application of variables in advanced code and robotics.

5 **Functions**

Study and practical utilization of functions as a way of optimization of robotics coding.

6 **Lists**

Study of lists, databases and application of lists in advanced code and robotics



Class

RoboThink STEM Class covers robotics, coding and engineering concepts comprehensively. Every week, students build models, study coding concepts and complete fun engineering projects.

Weekly Class

Camp

RoboThink Robotics Camps are offered in 3 different levels: Beginner, Intermediate and Advanced. Students are taken through an accelerated program where robotics and/or coding concepts are covered and explored through project based lessons.

Offered as one week camp



