



# DISCOVERY KIT

HANDS-ON KNOWLEDGE AT YOUR FINGER TIPS

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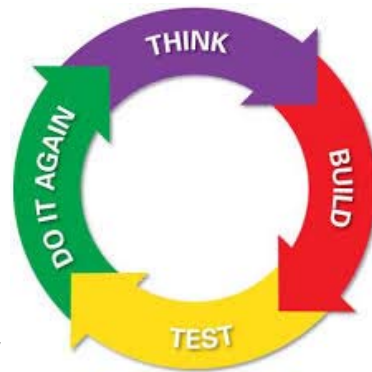
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## Engineering Design Process

### Think, Build, Test, Do It Again

That's the process Engineers use when they tackle a problem. Engineers don't have official rules telling them to follow this set of steps. But, over time they have learned that **they get the best results this way.**

They **think** and brainstorm about a problem and factors they have to consider to solve it. They come up with an idea and **build** a prototype. They **test** the prototype. Then they **repeat** the process to improve their results.



### It Takes a Lot of Back and Forth

Engineers often move back and forth within the loop, repeating two steps over and over again before moving forward. It's a key to engineering success. Sometimes engineers will focus on one specific step, and when complete, pass the project off to another team with a different skill set.

### Engineers are creative problem solvers!

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## Coding 1: Robot Mouse

**Scientific Concept:** Computer Coding

**Recommended Ages:** 4 to 8

**Scientific Practice:** Computational Thinking

### ABOUT THIS KIT

Coding can be as simple as programming a microwave to heat food or putting instructions in the proper order. An Early introduction to the basic programming concepts can help children build problem solving and critical thinking skills. Here they can use logic to design a code, test it out, tweak their code, and try again—all without ever touching a computer!

**Please note:** this kit must be returned to a staff member at the Kenai Community Library Location.



# Kit Contents & Replacement Costs

Item Type	Description	Cost
Object	Learning Resources Code & Go Robot Mouse (83 piece set)	\$60
Leaflet	Code & Go Robot Mouse Activity Guide	n/a
Book	The Story of Coding	\$15
Book	How to Code a Sandcastle	\$35
<b>Packaging &amp; Processing Fee:</b>		\$25
<b>Total Kit Replacement Cost:</b>		\$135



Please verify all parts are present before returning.

