Did you enjoy this kit? We'd love to see how you used it! Tag us on social media and let us know! #APLstem

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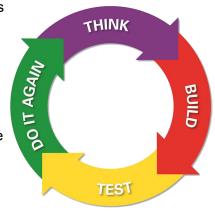
Engineering Design Process

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've 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. And, 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!

This kit generously sponsored by:



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J-KIT STEM

Gecko Robot

Scientific Concept: Physics, force

Recommended Ages: 8 to 12

Scientific Practice: Engineering

What to know about this kit:

Build a wall-climbing robot and other projects with a battery motor and air suction system. You will learn physics and engineering and conduct experiments and practice model building.

The robot walks up perfectly smooth surfaces like glass.

<u>Please note</u>: This kit must be returned to a **staff member** at an **Anchorage**<u>**Public Library** location.</u>



Kit Contents & Replacement Costs		
Item Type	Description	Cost
Object	Thames & Kosmos Geckobot kit (176 pieces)	\$50
Leaflet	Thames & Kosmos instruction booklet	n/a
Book	Robot by DK	\$20
Book	Make: Making Simple Robots	\$25
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$120

