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J-KIT STEM

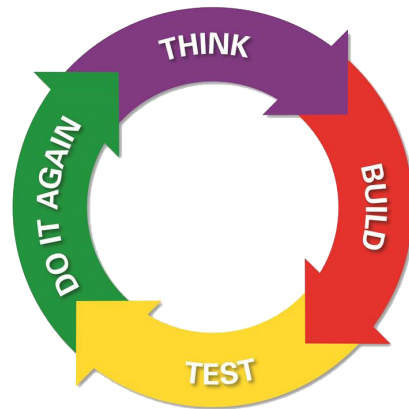
Playground Engineering & Design

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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Scientific Concept: Spatial relations, structures

Recommended Ages: 4 to 8

Scientific Practice: Engineering

What to know about this kit:

Design and then build your own playground with this engineering kit. First think about what things you want to include, and then draw a sketch of how you want your playground to look. Then get to work building it! Use the included challenge cards if you wish, or build things all on your own.

Please note: This kit must be returned to a staff member at an Anchorage Public Library location.



Kit Contents & Replacement Costs		
Item Type	Description	Cost
Object	Learning Resources Playground Engineering & Design Set (104 pieces)	\$28
Book	<i>Rosie Revere's Big Project Book for Bold Engineers</i>	\$12
Book	<i>Building Structures and Towers</i>	\$5
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$70



Please verify all parts are present before returning.