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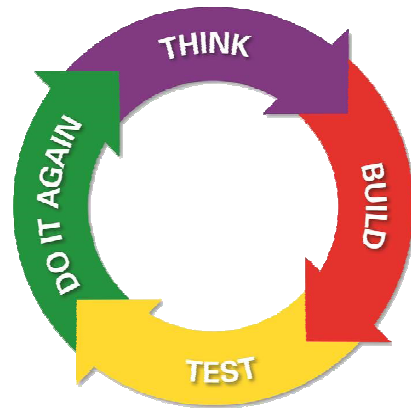


## Engineering Design Process

### 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.

### This kit generously sponsored by:



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## J-KIT STEM

# Simple Machines for Early Elementary

Scientific Concept: Physics, simple machines

Recommended Ages: 5 to 8

Scientific Practice: Engineering

### What to know about this kit:

Learn how simple machines can be used to solve real-world problems through the use of lever boards, wedges, pulleys, and more. Use the included challenge cards to conduct experiments.

*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 Simple Machines Kit (19 pieces)	\$30
Book	<i>Simple Machines</i>	\$18
Book	<i>Pull, Lift, and Lower: A Book About Pulleys</i>	\$8
Packaging & Processing Fee:		\$25
<b>Total Kit Replacement Cost:</b>		<b>\$81</b>



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