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

Twitter: @anchlibrary

Facebook & Instagram: @anchoragelibrary



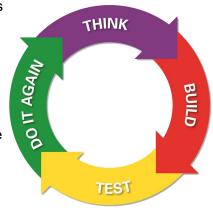
Engineering Design Process

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:



This material is based upon work supported by the National Science Foundation under Grant Number DRL-1657593. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.

J-KIT STEM

Math Manipulatives

Place value, counting, **Scientific Concept:**

operations

6 to 10 **Recommended Ages:**

Scientific Practice: **Mathematics**

What to know about this kit:

This kit provides hands-on materials to help kids learn about place value, counting, operations, and arithmetic equations.

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	Hand2mind Number & Operations Manipulative Kit	\$100
Booklet	Versa Tiles for Number & Operations	\$5
Book	A Place for Zero	\$8
Book	Place Value	\$8
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$141

