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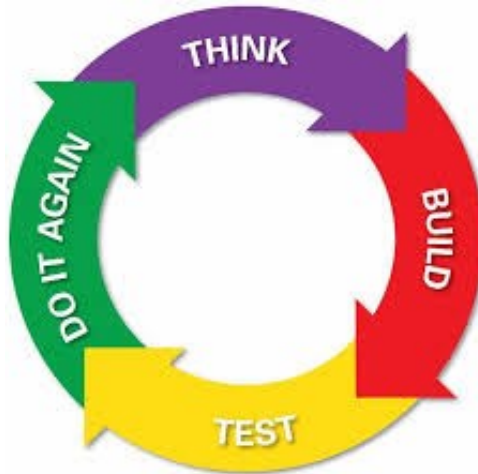
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Engineering Design Process

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'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 was made possible by the
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STEM Kit 14

Catapult

Scientific Concept: Physics/Simple Machines

Recommended Ages: 5 to 13

Scientific Practice: Engineering

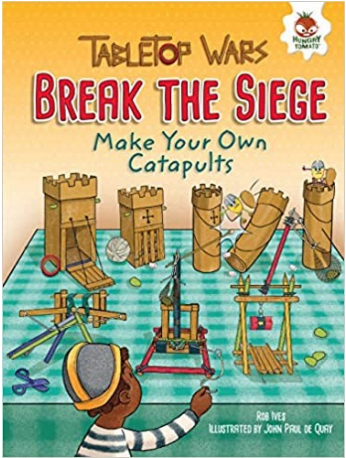
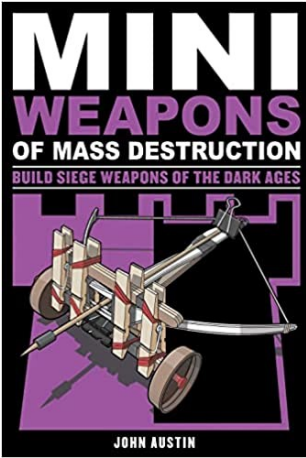
What to know about this kit:

Set the catapult on a table, desk, or the floor, then place one end of the rubber band over the launching arm and secure the other end on the cross bar. To launch a beanbag, place it on the launching pad, pull back, and let go. Measure the distance and accuracy of each launch. Try adding more rubber bands to experiment with force or try launching more than one bean bag at a time. What other things could you launch?

Please note: This kit must be returned to a staff member at the
Irene Ingle Public Library.

907-874-3535 / wrangell.com/library

Kit Contents & Replacement Costs		
Item Type	Description	Cost
Object	LearnLauncher Mini Catapult Set	\$100
Object	6 Rainbow colored bean bags	\$10
Object	4 jumbo rubber bands	\$5
Leaflet	Lesson Directions (2 pages)	n/a
Book	<i>Mini Weapons</i>	\$14
Book	<i>Break the Siege</i>	\$10
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$139



Please verify all parts are present before returning.