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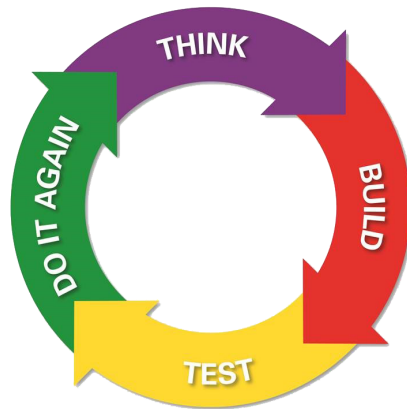
Catapults

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: Physics, simple machines

Recommended Ages: 8 to 12

Scientific Practice: Engineering

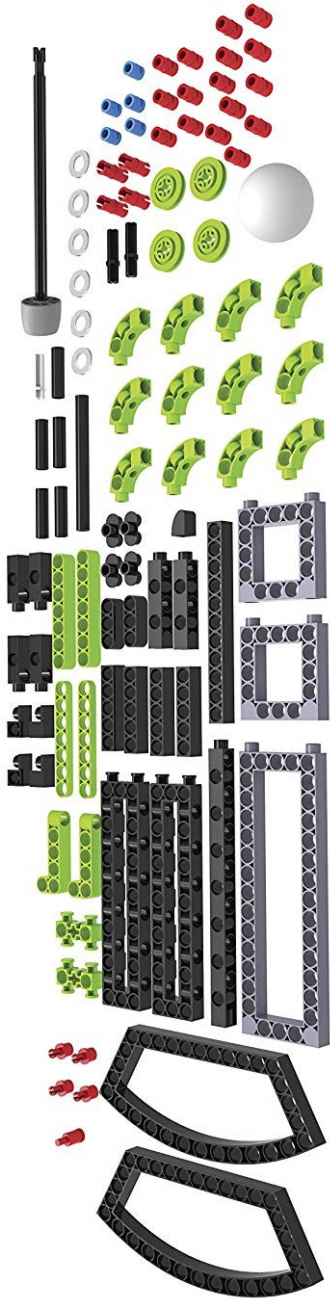
What to know about this kit:

Learn some Medieval engineering and build catapults and crossbows. With this kit you can build ten models of catapults, crossbows, and trebuchets. Plus there are instructions on how to build even more medieval siege warfare instruments with things around your house. Have fun with physics and engineering!

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	Thames & Kosmos Catapults & Crossbows kit	\$25
Leaflet	Thames & Kosmos Catapults & Crossbows Experiment Manual	n/a
Book	<i>Mini Weapons of Mass Destruction 3: Build Siege Weapons of the Dark Ages</i>	\$17
Book	<i>Tabletop Wars Break the Siege: Make Your Own Catapults</i>	\$8
Packaging & Processing Fee:		\$25
Total Kit Replacement Cost:		\$75



Please verify all parts are present before returning.