



DISCOVERY KIT

HANDS-ON KNOWLEDGE AT YOUR FINGER TIPS

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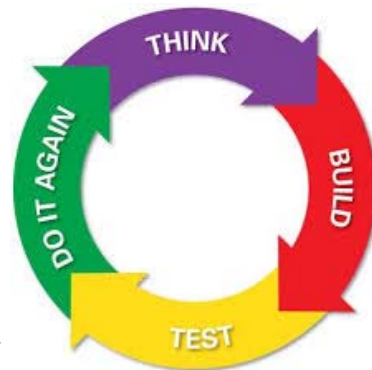
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Engineering Design Process

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 have 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. 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!

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Circuits

Scientific Concept: Energy, circuits

Recommended Ages: 8 to 12

Scientific Practice: Engineering design

ABOUT THIS KIT

Snap Circuits use interchangeable parts connected with snaps to build working circuits. The included project books will guide you through the basics of circuit design as you build projects without any additional tools. Can you finish an experiment? Build a buzzer or a fan? Or design your own circuits?

Please note: this kit must be returned to a staff member at the Kenai Community Library Location.



Kit Contents & Replacement Costs

| Item Type | Description | Cost |
|--|--|-------|
| Object | Snap Circuits SC-300 | \$95 |
| Leaflet | Teacher Guide for Electronic Snap Circuits | n/a |
| Leaflet | Student Guide for Electronic Snap Circuits | \$10 |
| Leaflet | Experiments 1-101 | \$10 |
| Leaflet | Projects 102-305 | \$10 |
| Book | Electronics for Kids | \$25 |
| Book | You Wouldn't Want To Live Without Electricity! | \$10 |
| Packaging & Processing Fee: | | \$25 |
| Total Kit Replacement Cost: | | \$185 |



Please verify all parts are present before returning.

