What is a STEM kit?

Our kits are designed to provide hands-on interaction and creative learning with STEM concepts while complementing Anchorage School District's science curriculum standards.

One kit per family please.

Kits circulate for **three weeks** and are eligible for renewals, as item demand allows. Items can be picked up from the Youth Services desk at Loussac Library or placed on hold for pick-up at any APL location. Please keep in mind, **kits must be returned to a desk inside an APL location.**

The initial kits were made possible by a grant from the Space Science Institute. If you would like to sponsor a future kit topic, please contact Elizabeth Nicolai at (907)343-2840 or Elizabeth.Nicolai@anchorageak.gov.

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

Ready Set Create! Design Challenges for Kids

ANCHORAGE PUBLIC LIBRARY

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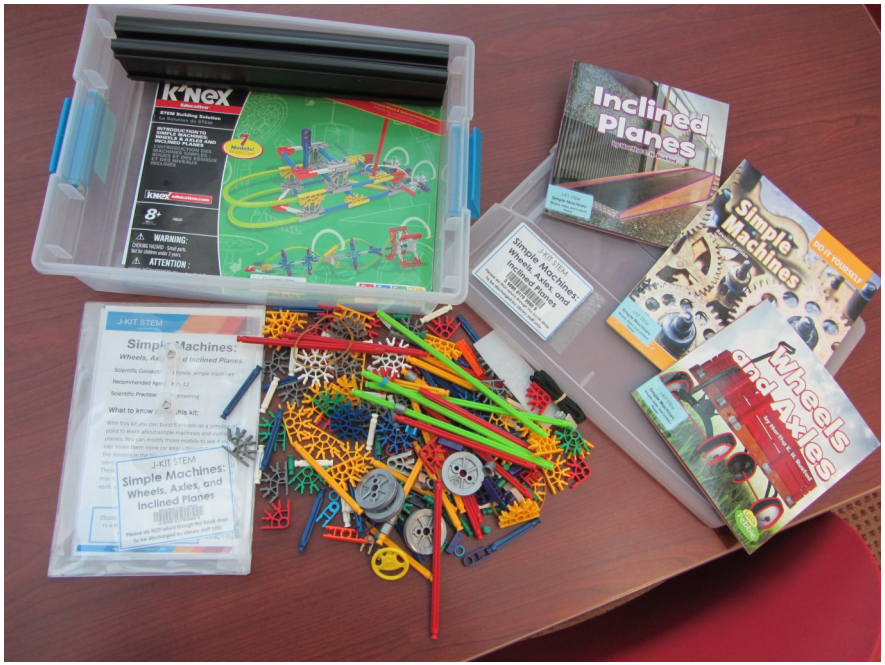
NSF

09/15/2019

Juvenile STEM Kits

Each kit focuses on a theme and contains:

- **explorative item(s)**
- **discovery sheets**, and
- **non-fiction books**



Help cultivate a love for science, technology, engineering, and mathematics at home—check out one of our STEM kits today!

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Theme	Recommended Age
Alaska Birds & Animals	5 to 12
Binoculars, field guides to birds and animals, observation journal	
Alaska Plants and Bugs	5 to 12
Magnifying glass, pocket microscope, field guides to insects and plants	
Anatomy	6 to 12
A human body model for you to "dissect", a stethoscope, books on anatomy	
Astronomy Binoculars	6 to 12
Binoculars especially for night sky viewing, a star finder, and astronomy books	
Astronomy Telescope	6 to 12
Portable telescope, star finder, astronomy books, all in backpack ready to go	
Bridges	8 to 12
K'nex bridge building kit and books on bridges	
Catapults	8-12
Learn some Medieval engineering and build catapults and crossbows.	
Circuits 1	8 to 12
Snap circuits set and instructions to build several projects; electricity books	
Circuits 2	8 to 12
Squishy circuits set (clay instead of wires), hand generator, and electricity books	
Coding 1	4 to 7
Robot mouse you program to solve a maze with card prompts	
Coding 2	5 to 10
Botley robot you program with cards and a remote	
Coding 3	8 to 12
Ozobot robots you code by drawing on paper; coding books	
Dino Robot	8 to 12
Build seven different dinosaur model robots that can walk and move!	
Electricity & Magnetism	8 to 12
Using snap together parts, conduct experiments with electricity and magnets.	
Gears	4 to 9
Create, arrange and explore the motion of gears with these builders	

Theme	Recommended Age
Gecko Robot	8 to 12
Build a wall-climbing robot and other projects with a battery motor and air suction system to learn physics and engineering concepts.	
GPS & Maps	8 to 12
GPS unit and books on maps and geocaching	
Light Waves	6 to 9
Prisms and a light source; books on how light works	
Math Games	8 to 12
Prime Climb game that uses math to advance pieces	
Measurement	4 to 10
Scales, beakers, measuring tape, and more to learn about different systems of measurements with books and challenges on measurem	
Probability	6 to 12
Dice, spinners, cards, and challenges to learn about probability; math books	
Robotic Arms	8 to 12
Build 6 different robotic arms using pneumatic air pressure to power them.	
Simple Machines: Gears	8 to 12
K'nex building kit on gears and books on simple machines.	
Simple Machines: Levers & Pulleys	8 to 12
K'nex building kit on levers and pulleys	
Simple Machines: Wheels, Axles, and Inclined Planes	8 to 12
K'nex building kit & books on wheels, axles, and inclined planes	
Snow Science	5 to 12
Experiments to learn about the states of matter & snow crystals. (Need a freezer at home, snow on the ground recommended but not required.)	
Solar Energy	8 to 12
K'nex building kit & solar panel to create solar powered machines.	
Straw Building	4 to 12
Straws and connectors allow you to build structures, models and more.	
Structures	5 to 12
Engineer a variety of structures with KEVA planks and cardboard pieces.	
Wind & Water Energy	8 to 12
K'nex building kit to create wind and water powered machines.	