

Educational Hands-On Kits: available for check out through Benton County Extension and Outreach. Research shows that hands-on learning is one of the best ways for youth to retain Knowledge. Youth that participate in the use of our educational hands-on kits are given an introduction to science concepts through hands-on learning and are able to practice work skill areas like team building, problem-solving, and communication skills.

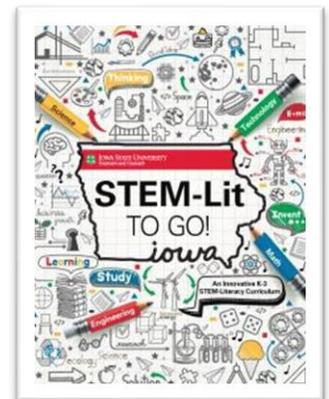
Kits can be used by: teachers, afterschool providers, summer day camp personnel, homeschool families, and 4-H clubs among others.

To RESERVE an Educational Kit: Submit the Benton County Hands-On Educational Kit **CHECK OUT REQUEST FORM** available at: <https://go.iastate.edu/G8PYJL> or scan the QR Code.



For more Information: Contact Benton County Extension's 4-H County Youth Coordinator at 319.472.4739

STEM-Lit to Go! Iowa	
<ul style="list-style-type: none"> • Each lesson is in a separate small kit 	<ul style="list-style-type: none"> • Best for: K – 3rd Grade
<p>BRIEF DESCRIPTION: STEM-Lit to Go! Iowa is an innovative program that supports the development of STEM and literacy skills for K-3 youth. This program utilizes a unique instructional framework that integrates inquiry-based STEM activities and carefully selected children's literature. Through a variety of engaging topics including space, inventions and popcorn, children explore key STEM concepts such as the engineering design process and conducting investigations. Each lesson provides youth with a hands-on STEM experience and multiple opportunities to read, write, speak and listen about that experience. This exciting research-based program is designed to support the Next Generation Science Standards and the Common Core English Language Arts Standards.</p>	
<p>#1 A CHAIR FOR BEAR: Work with the engineering design process to build a chair for Goldilocks. Introduce the fairytale genre & explore text-based drama.</p> <p>#2 BLAST OFF: Learn about being an astronaut & participate in space-themed learning activities.</p> <p>#3 CODE ACROSS IOWA: Practice coding and problem-solving skills while learning about Iowa.</p> <p>#4 HOUR AT THE FAIR: Participate in a variety of STEM-literacy activities while learning more about the Iowa State Fair.</p> <p>#5 MARVELOUS MARSHMALLOWS: Learn about an Iowa connection to a famous marshmallow treat, conduct marshmallow investigations, and launch them at a target while learning STEM process skills.</p> <p>#6 MUNCHING MYSTERIES: Learn about the mystery and biography genres, how to solve mysteries, and use the Engineering Design Process.</p> <p>#7 SCREAM FOR ICE CREAM: Explore chemistry and the states of matter through investigations that end in a delicious, sweet treat – ice cream!</p> <p>#8 SOUND ALL AROUND: Learn about the elements of music such as rhythm and pitch, how sound is produced, & designing instruments.</p> <p>#9 SUPER SHAPES: Learn about shapes and explore shapes in our world.</p> <p>#10 TAKE A CHANCE: Participate in various games of chance to learn more about math concepts.</p> <p>#11 TRICKY TOWERS: Participate in the engineering design process to learn about structures and STEM professions.</p> <p>#12 WONDERS OF NATURE: Learn about natural resources and the importance of environmental conservation.</p>	



STEAM'n Through the Seasons

- Each lesson is in a separate small kit
- Best for: K – 3rd Grade

BRIEF DESCRIPTION: STEAM'n Through the Seasons is an innovative Iowa 4-H program that supports the development of STEAM and literacy skills for K-3 children. This informal education program is designed to teach children fundamental STEM and art concepts through integrated STEAM-literacy activities that focus on a seasonal topic.

- Children will use STEM thinking skills by pursuing questions, investigating ideas, and forming and testing theories about the world around them.
- Children will explore a variety of tools, media, and art techniques.
- Children will practice reading, writing, speaking, and listening skills

#1 APPLE'LICIOUS: Children learn about the life cycle of the apple tree and the many uses of apples

#2 PUMPKIN EXPLORATION: Children will learn about the life cycle of a pumpkin

#3 SCURRYING SQUIRRELS: Children learn how squirrels prepare for winter and use the engineering design process to design and build a contraption to move acorns

#4 GINGERBREAD TIME: Children will use the engineering design process to build a gingerbread house

#5 SNOW SPECTACULAR: Children learn about blizzards and explore how meteorologists use tools to forecast weather and help people prepare for severe weather

#6 GIFTS FROM THE HEART: Children learn the importance of giving to others by measuring and creating a delicious gift in a jar

#7 TRAPTASTIC: Children learn about the engineering design process and dimension creation in art

#8 BITTY BUNNIES: Children learn about rabbits and explore how animals help their babies survive

#9 SENSATIONAL SEEDS: Children learn the parts of a seed and what they need to grow

#10 DIRT-N-WORMS: Children will learn about worms and their four main parts

#11 SUMMER CELEBRATIONS: Children explore educational while learning about fun things that happen during summer celebrations

#12 MAKE A SPLASH: Children will learn how to test and improve their designs for a water transportation device

