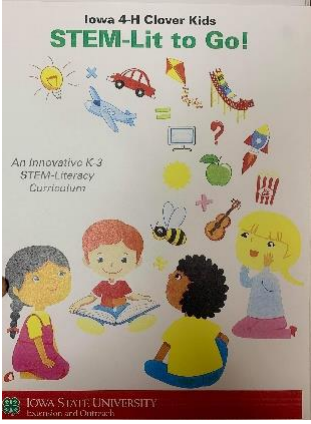
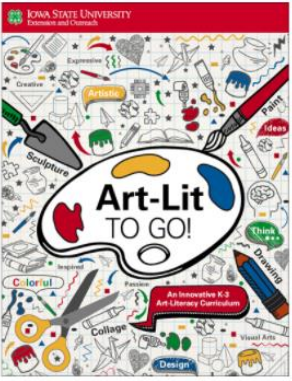
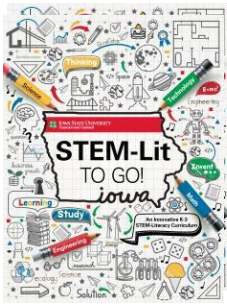


Kit Topic	Brief Description
<p>STEM-Lit to Go! (each lesson is in a separate small kit)</p>  <p>Best for: K-3rd grade</p>	<p>These hands-on lessons combine science, technology, engineering and math concepts with literature. The curriculum includes 12 lessons designed for students in kindergarten through third grade and incorporates Next Generation Science Standards and Common Core literacy standards. An important feature of the program is STEM-based activities that encourage learning through play. Science concepts are first introduced to students by reading a fiction book. Students then experiment with the concept through a hands-on activity or play.</p> <ul style="list-style-type: none"> • STEM-Lit to Go! #1 - Bubbles: Investigate bubbles, their shape, and the inquiry process. • STEM-Lit to Go! #2 - Curious Candy: Investigate the engineering process by designing a candy machine to deliver chocolate. • STEM-Lit to Go! #3 - Healthy Hearts: Investigate how the heart works and ways to keep it healthy. • STEM-Lit to Go! #4 - Inventor's Hat: Investigate the invention process; design & create a new or improved invention. • STEM-Lit to Go! #5 - Jumping Beans: Investigate Mexican Jumping Beans and what causes them to jump. • STEM-Lit to Go! #6 - Lots of Light: Investigate the properties of light and the role of cause and effect. • STEM-Lit to Go! #7 - Popping Popcorn: Investigate popcorn; plan and conduct popcorn investigations. • STEM-Lit to Go! #8 - Roller Coasters: Investigate force and motion using model roller coasters; plan & conduct force and motion investigations. • STEM-Lit to Go! #9 - Sunny Sunshine: Investigate UV rays and ways to be safe in the sun. • STEM-Lit to Go! #10- Super Sled: Investigate friction & design a super sled. • STEM-Lit to Go! #11 - Terrific Trees: Investigate trees and discuss their importance in our lives. • STEM-Lit to Go! #12 - Wonderful Wind: Investigate the power of wind; plan and conduct wind experiments.
<p>Art-Lit TO GO! (each lesson is in a separate small kit)</p>  <p>Best for: K-3rd grade</p>	<p>Art-Lit to Go! is an innovative Iowa 4-H program that supports the development of art and literacy skills for K-3 children. This informal education program is designed to teach children a basic understanding of the foundational art elements of line, shape, color, form, and texture through integrated art-literacy activities</p> <ul style="list-style-type: none"> • Art-Lit TO GO! #1: Mistake to Masterpiece: Children learn that mistakes are a part of the creative process and that they can grow and learn from mistakes • Art-Lit TO GO! #2: Lines on Signs: Children learn about lines as they work together to plan, design, and create a road mural • Art-Lit TO GO! #3: Shape-O-Saurus: Children learn about shapes and use shapes to create artwork on stones • Art-Lit TO GO! #4: Color Creation: Children learn about color theory by identifying primary and secondary colors through color mixing activities • Art-Lit TO GO! #5: Stunning Sculptures: Children learn about sculpture and create 3-D works of art by shaping and combining materials • Art-Lit TO GO! #6: Touch- and- Feel Texture: Children learn about texture through exploring textures and creating a touch and feel book • Art-Lit TO GO! #7: Lots of Layers: Children learn Collages by creating a paper pizza



STEM-Lit to Go! Iowa (each lesson is in a separate small kit)

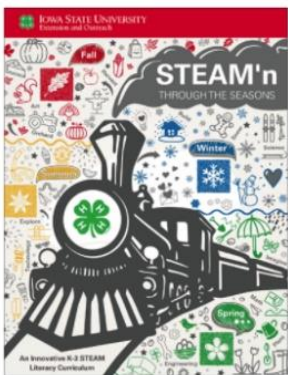


Best for: K-3rd grade

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.

- **STEM-Lit to Go! Iowa #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.
- **STEM-Lit to Go! Iowa #2: Blast Off-** Learn about being an astronaut & participate in space-themed learning activities.
- **STEM-Lit to Go! Iowa #3: Code Across Iowa** – Practice coding and problem-solving skills while learning about Iowa.
- **STEM-Lit to Go! Iowa #4: Hour at the Fair** – Participate in a variety of STEM-literacy activities while learning more about the Iowa State Fair.
- **STEM-Lit to Go! Iowa #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.
- **STEM-Lit to Go! Iowa #6: Munching Mysteries** – Learn about the mystery and biography genres, how to solve mysteries, and use the Engineering Design Process.
- **STEM-Lit to Go! Iowa #7: Scream for Ice Cream** – Explore chemistry and the states of matter through investigations that end in a delicious, sweet treat – ice cream!
- **STEM-Lit to Go! Iowa #8: Sound All Around** – Learn about the elements of music such as rhythm and pitch, how sound is produced, & designing instruments.
- **STEM-Lit to Go! Iowa #9: Super Shapes** – Learn about shapes and explore shapes in our world.
- **STEM-Lit to Go! Iowa #10: Take a Chance** – Participate in various games of chance to learn more about math concepts.
- **STEM-Lit to Go! Iowa #11: Tricky Towers** – Participate in the engineering design process to learn about structures and STEM professions.
- **STEM-Lit to Go! Iowa #12: Wonders of Nature** – Learn about natural resources and the importance of environmental conservation.

STEAM'n Through the Seasons (each lesson is in a separate small kit)

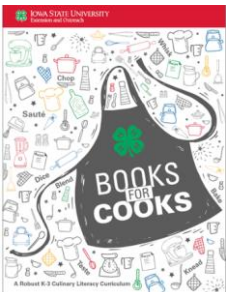
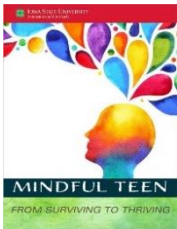



Best for: K-3rd grade






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
- **STEAM'n Through the Seasons # 1: Apple'licious-** Children learn about the life cycle of the apple tree and the many uses of apples
- **STEAM'n Through the Seasons # 2: Pumpkin Exploration-** Children will learn about the life cycle of a pumpkin
- **STEAM'n Through the Seasons # 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
- **STEAM'n Through the Seasons # 4: Gingerbread Time-** Children will use the engineering design process to build a gingerbread house
- **STEAM'n Through the Seasons # 5: Snow Spectacular-** Children learn about blizzards and explore how meteorologists use tools to forecast weather and help people prepare for severe weather

Educational Kits available for check out from the Cass County Extension Office

<p>STEAM'n Through the Seasons Continued</p>	<ul style="list-style-type: none"> • STEAM'n Through the Seasons # 6: Gifts from The Heart- Children learn the importance of giving to others by measuring and creating a delicious gift in a jar • STEAM'n Through the Seasons # 7: Traptastic- Children learn about the engineering design process and dimension creation in art • STEAM'n Through the Seasons # 8: Bitty Bunnies- Children learn about rabbits and explore how animals help their babies survive • STEAM'n Through the Seasons # 9: Sensational Seeds- Children learn the parts of a seed and what they need to grow • STEAM'n Through the Seasons # 10: Dirt-N-Worms: Children will learn about worms and their four main parts • STEAM'n Through the Seasons # 11: Summer Celebrations- Children explore educational while learning about fun things that happen during summer celebrations • STEAM'n Through the Seasons # 12: Make a Splash- Children will learn how to test and improve their designs for a water transportation device
<p>Books for Cooks (each lesson is in a separate small kit)</p>  <p>Best for: K-3rd grade</p>	<p>This informal education program is designed to teach children fundamental culinary concepts through integrated literacy activities that focus on kitchen skills. In addition, this exciting research-based program is designed to support Common Core English Language Arts Standards.</p> <ul style="list-style-type: none"> • Books for Cooks #1: A Dairy Yummy Treat- Children learn to cream dairy foods to the desired consistency • Books for Cooks #2: Breakfast Basics- Children learn to beat a mixture using a whisk • Books for Cooks #3: Eye Grow Potatoes- Children learn how to chop, peel and dice foods • Books for Cooks #4: Fabulous Friends & Foodies- Children learn knife safety and proper techniques for chopping and dicing fresh produce • Books for Cooks #5: Farm Frenzy- Children learn how to cut fruit and squeeze fruit to make juice • Books for Cooks #6: Fast Flipping- Children learn how to flip pancakes with a spatula • Books for Cooks #7: Let's Taco Bout Spices- Children learn how spices and seasonings enhance flavor • Books for Cooks #8: Nothing is Im-PATSA-ble- Children learn the proper technique for boiling pasta • Books for Cooks #9: PB&J Yay!- Children learn to mash and blend foods to change the consistency • Books for Cooks #10: Secret Ingredient- Children learn the importance of following directions when baking • Books for Cooks #11: Silly Sandwich- Children learn about yeast and why it is needed when baking bread • Books for Cooks #12: What's Your Beef- Children learn where beef comes from and important practices for safely preparing and cooking beef
<p>Mindful Teen Series (Must be led in a group by Extension Staff)</p>  <p>Best for: 7-12th grade</p>	<p>The program can be implemented over multiple sessions. Mindful Teens focuses on empowering youth and equipping them with practical strategies and mindful practices to manage stress, difficult emotions, and improve and support their overall well-being, relationships, and performance in school, sports, the arts, and other daily activities. An interactive journal also accompanies</p> <ul style="list-style-type: none"> • Lesson 1: Introduction to Mindfulness and Stress • Lesson 2: Breathing – The Heart of Mindfulness and Loving-Kindness • Lesson 3: Embracing the Now and Gratitude as Mindful Practice • Lesson 4: Everyday Mindfulness –Freedom Wherever You Are and Mindful Movement • Lesson 5: Building Mindful Relationships and The Power of Mindfulness in Sports & Arts • Lesson 6: Caring for Your Body, Self-Care, and Creating Our Mindfulness and Resilience Action Plan
<p>Hex Bugs</p>  <p>Best for: Any Age</p>	<p>Hex bugs are activity that allows youth to build courses and challenges to get their bug from one side of the course to the other. This kit allows for youth to explore their own creativity while working independently or within a team atmosphere. The works will with youth of all ages and is a great opportunity for older youth to be a leader of a team to assist younger youth.</p>

Educational Kits available for check out from the Cass County Extension Office

Dash Robot  Best for: 3-8th grade	Dash is a Robot that is programmed by youth on a tablet and allows them to learn how to code in different positions to complete challenges. It allows for youth to learn the basics of coding. It comes with Applications on the tablet to allow them to explore different forms of coding. (6 Dash Bots)
Dot Robot  Best for: K-3rd grade	Dot is a Robot that is programmed by youth on a tablet. It introduces basic coding and comes with Applications on the tablet for youth to explore coding in different forms. (6 Dot Robots)
BeeBots Best for: K-3rd grade	BeeBot Robots come with charging hive, directional cards, and floor matt. Youth use right, left, forward backward to navigate through floor matt maze. (6 BeeBots in Cass County, can acquire more in regional kit if needed.)
Makey Makey  Best for: 3-12th grade	Turn anything into a fun controller with Makey Makey sets! These are fun and experiential with lots of ideas for projects that help teach concepts like conductivity and circuitry. Kit includes 6 Makey Makey sets (3-4 youth per Makey Makey recommended). A Computer is also needed –not included.
Kids In the Kitchen  Best for: K-3rd grade	Youth will learn the importance of healthy eating and physical activity while making and eating healthy, child-friendly recipes. Lesson topics include food safety, basic kitchen safety, the five food groups, and the importance of physical activity. Along with the curriculum, this kit includes a “portable kitchen” with all the supplies needed for making the nutritious and delicious recipes in the lessons.
Building Blocks of Leadership (Must be led in a group by Extension Staff)  Best for: 6-8 Grade	Building Blocks of Leadership is a series of mini-lessons geared towards developing leadership skills in youth. These lessons are 20-30 minutes in length and can be incorporated into existing programs such as day camps, 4-H meetings, program area workshops, and afterschool programming. Designed for grades 6-8, Building Blocks of Leadership can be adapted to meet the needs of a variety of youth audiences, settings, and experience levels of youth.
Noodle Activities & Games Best for: K-12th grade	Did you know there are tons of fun games and activities using pool noodles that don't involve water? This kit includes pool noodles, activity ideas, and the book <i>50 More Ways to Use Your Noodle</i> .
To check out any of these FREE kits or request an Extension Staff present a lesson, contact Katie Bateman at kbateman@iastate.edu or call the office at 712-243-1132.	

Questions? *Contact us!*



Katie Bateman

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Other Ways to Contact Us:

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Instagram: @CassCountyIowa4h

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