EDUCATIONAL RESOURCES

Story County Extension and Outreach
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Phone 515-337-1601 or email xstory@iastate.edu
www.extension.iastate.edu/story

Curricula, kits, and online resources can be used to create lessons to support learning goals. A check-out option of resources may be available. A list of Story County Extension programs for youth and adults is also provided at the end of this packet.

CURRICULUM — Lessons are ready to implement, however supplies are not provided. Request for a staff-led lesson with supplies is an option. A check-out form will be used for any reservation to collect contact information and participant data information.

Acres of Adventures Curriculum – fun lessons to learn about science in agriculture. Grades 3-5

A Crime, A Clue, and Biotechnology – curriculum lessons exploring DNA. Grades 7-12

Brick Lab Core Set – Lessons around STEM with the opportunity to incorporate Legos! Grades 1-6
https://edventures.com/collections/bricklab

Build It! – mathematic activities. Grades K-6

Cycling Back to Nature – environmental lessons. Grades 4-6

Engineering is Elementary Curriculum (design, engineer, improve) - lessons may build on each other for a longer program. https://www.eie.org/ Grades 1-5
  o Lighting Systems - Curriculum
  o Model Membrane - Curriculum
  o Earthquake Buildings - Curriculum
  o Recycled Racers - Curriculum

Energizing your future with energy, economics, and the environment. Grades K-12

Food, Culture & Reading – National 4-H Curriculum Guide. Grades 4-6

Food, Land, People Curriculum – food, community, etc. Has individual lessons plans that connect youth to people, the land, and people. Grades K-12

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Funtivities 1 & 2 – Hand-On Science and Math activity lessons. Grades 4-8

Health Rocks – Staying healthy with choices and develop skills to reduce tobacco, alcohol, and drug use. Grades 4-6

Growing in the Garden Curriculum – horticulture based. Has individual lessons plans for indoor. Also has outdoor garden option. Grades K-3

Junior Master Gardener Curriculum – garden related lessons. Grades K-8


More Picture-Perfect Science – science lessons. Grades K-4

Mud, Muck, & Other Wonderful Things – Environmental Curriculum. Grades K-3

Mystery Festival – practice skills to solve a mystery or two. Grades 2-8

Ohio Cloverbud Book of Activities Curriculum. Lessons in the following topic areas. Grades K-3.

- Science & technology
- Community & Expressive Arts
- Healthy Lifestyles
- Environmental and Earth Science
- Personal Development
- Citizenship
- Consumerism and Family Science
- Plants and Animals

Palette of Fun Curriculum - Arts & craft lessons. Painting, printing, etc. Grades K-6

Project Butterfly Wings – Explore life cycle and types of butterflies. Grades K-6

Project Guides – 4-H Project guides with activity ideas. Grades 4-12

- Beef
- Bicycle
- Cat
- Child Development
- Clothing
- Communication
- Computer
- Consumer Education
- Crops
- Dog
- Electricity
- Entomology
- Environment
- Finance
- Fishing
- Food
- Forestry
- Gardening
- Dairy Goat
- Health
- Horse
- Leadership
- Meat Goat
- Outdoor Adventures
- Photography
- Poultry
- Power of Wind
- Rabbit
- Sewing
- Sheep
- Small Engine
- Small Pet
- Swine
- Theater Arts
- Veterinary Science
- Visual art
- Welding
- Woodworking

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Where We Live Curriculum – learn about land, natural resources, food, and more through individual lessons plans. Grades 4-8

Wild Over Work (WOW) Curriculum – Career exploration activities through self-reflection, teamwork, community, and future planning. Grades K-6

**KITS** – Each kit offers one or more pre-planned lessons and materials for groups of youth to participate in the activity. A check-out form will be used for any reservation to collect contact information and participant data. These kits may be used at home, with Clover Kids groups, in classrooms or another youth group setting. If you are not comfortable leading these activities it is sometimes possible for these activities to be lead by an extension staff member.

Antarctica’s Climate Secrets Kit – past and present; includes mapping, wildlife, geology. Grades K-8

Bee Bots Kit – introduction to programming with Bee Bot Robots. Program buttons located directly on bee bots. Grades K-3

Bridge Kit – learn to build a bridge with K’Nex and a larger scale bridge to crawl through. Learn the engineering process, careers, etc. Grade 3-5

Dash & Dot Robots – program Dash Robot with a tablet and a blockly program. Grades 3-8.

Engineering is Elementary Kits (design, engineer, improve) - lessons may build on each other for a longer program. [https://www.eie.org/](https://www.eie.org/) Grades 1-5
  - Alarm Circuits - Kit
  - Hand Pollinators - Kit

Fish Iowa Kit – Everything fishing! Supplies and related activity/lesson resources. Grades K-12

Food & Fitness Craze Kits with Lessons Grades K-6
  - Vegetable & Fruit Jeopardy
  - Super Size
  - How much sugar
  - Highest, Lowest
  - Serving Sizes

GPS kit – 8 hand held devices available along with related activity information. Grades 4-12

Hand Washing Kit – stay healthy by washing hands lesson, black light, lotion). Grades K-12

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Money Craze Kit – Binder has lessons and most supplies. Grades 4-12

- Blind Taste Test
- It All Adds Up
- Making Change
- Menu Math
- Money Match
- Pet Pals
- Shoplifting Costs
- Sticky Situations
- Visit a Vault
- Want or Need Collage
- What’s in an Ad?

Monarchs on the Move Kit – Explore the life cycle and migration movement of the Monarch butterfly. Further explore Monarch habitat in our environment with a model milkweed plant and maps. Grades K-12 [https://www.extension.iastate.edu/4h/monarchs-move](https://www.extension.iastate.edu/4h/monarchs-move)

Pint Size Science Kits – Each kit provides background information and up to four lessons with many supplies provided. Granted through the Iowa STEM Council and the Science Center of Iowa. Grades K-2. Topics include:

- Mini Meteorologist - inspires students to understand the weather..
- Tiny Tinkerers - introduces lights and sounds.
- Bits and Bots - will provide a beginning step in learning programming and coding.
- Colorful Chemistry - introduces the three phases of matter found on earth.
- Classifying Creatures – classify and compare features of various animals and insects.
- Homes and Habitats - explores were animals live based on their environments.
- Exploring Engineering - continues children’s natural curiosity in how things work.
- Push and Pull - investigates the forces that cause motion.
- Fascinating Farmers - brings the world of agriculture to young children.

STEM Backpack Kits - contains lesson and activity supplies including story book(s). Pre-School. Each bag ideal for 2-4 youth. There are 10 bags available per topic. [https://www.extension.iastate.edu/humansciences/checkoutstem](https://www.extension.iastate.edu/humansciences/checkoutstem)

- Bee and Me – use a Bee Bot to navigate to a flower.
- Building Bridges – complete bridge design challenges.
- Curious Coding – set up a maze for Colby, the mouse.
- Fabulous Five Senses – explore senses through activities.
- Humpty Dumpty – explore wall designs.
- Magic Eye – learn and explore all about our eyes.
- Super Slinky – explore gravity with a slinky.

STEM Skillastics – an interactive floor game to explore STEM with physical activities. Grade 3-6

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STEM Lit Go Kits – contains lesson, story book(s), and most supplies. Grades K-3
  o Bubbles – investigate bubbles and their shape using the inquiry process.
  o Curious Candy – investigate the engineering process with Curious George as they design a candy machine to deliver chocolate
  o Heart – investigate how the heart works and ways to keep it healthy.
  o Inventor’s Hat – investigate the invention process by designing or creating a new or improved invention.
  o Jumping Beans – investigate Mexican Jumping Beans and what causes them to jump.
  o Lots of Light – investigate the properties of light and the role of cause and effect.
  o Popping popcorn – plan and conduct popcorn investigations.
  o Roller Coaster – investigate force and motion using model roller coasters.
  o Snow – investigate friction and design a super sled.
  o Sunny Sunshine – investigate UV rays and ways to be safe in the sun.
  o Terrific Tress – investigate trees and discuss their importance in our lives.
  o Wonderful Wind – investigate the power of the wind.

STEM Lit to Go IOWA Kits – contains lesson, Story book(s), and most supplies. Grades K-3
  o A Chair for Bear – Work with the engineering design process to build a chair for Goldilocks.
  o Blast Off – Learn about being an astronaut and participate in space themed learning.
  o Code Across Iowa – Practice coding and problem solving.
  o Hour at the Fair – Conduct STEM activities to learn about the fair.
  o Marvelous Marshmallows – Conduct a marshmallow investigations and launch marshmallows at a target.
  o Munching Mysteries - Learn about mystery and biography genres, and how to solve mysteries.
  o Scream for Ice Cream – Explore chemistry and the state of matter.
  o Sound All Around – Learn about the elements of music such as rhythm and pitch.
  o Super Shapes – Learn about and explore our world’s shapes.
  o Take a Chance – Participate in various games of chance to learn more about math concepts.
  o Tricky Towers – Participate in the engineering design process to learn more about structures.
  o Wonders of Nature – Learn about natural resources and the importance of environmental conservation.
https://www.hand2mind.com/brands/stem-in-action

- Grade PreK
  - Ron’s Habitat Adventure
  - Pam & Ava’s Mapping Adventure
  - Pam’s Camping Adventure

- Grades K-2
  - Wild Feet Exploration
  - Project Park Design
  - Sound Bite Exploration

- Grades 3-5
  - Food Deserts Challenge
  - Farmer Grady’s Challenge
  - Helicopter Hang Time
  - Solar House Design Challenge.

Toys in Space Kit – lessons of science, aerospace, and physics using toys tested in space. Grades 2-12


Wind Curriculums/Kits Grades 4-12
  - Kid Wind Kit – 1 larger turbine and 15 smaller turbines https://www.kidwind.org/about
  - Power of Wind – National 4-H Curriculum Guide

Wonderwise Kits – Women, Science & Technology Grades 4-6 http://wonderwise.unl.edu/index.htm
  - African Plant Explorer
  - Genetics Counselor
  - Parasite Sleuth
  - Pollen Detective
  - Rainforest Ecologist

  - Sea Otter Biologist
  - Space Geologist
  - Urban Ecologist
  - Vet Detective

Thank you for making Story County Extension

#partofyourStory

Sign up for the bi-monthly newsletter or view additional Extension resources and opportunities at www.extension.iastate.edu/story or visit us at https://www.facebook.com/ISUExtStory/

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Online Resources — Research based resources are identified with some lessons available for download along with a list of program opportunities available through the Iowa 4-H Youth Development Program. Lessons may be planned by youth program facilitators, teachers, volunteers, etc. Local staff may also be available to lead a lesson or program.

Financial Literacy – Grades K-5

High School Financial Planning Program – Financial planning lessons. Grades 9-12
https://www.extension.iastate.edu/humansciences/high-school-financial-planning

Curricula Resources – Curricula reviewed and vetted by Iowa 4-H indicating it is research based, supportive of the Iowa 4-H mission, and aligns with Iowa Core. Curricula created by Extension units around the county and organizations like the Science Center of Iowa.
https://www.extension.iastate.edu/4h/product

Iowa 4-H Programs – An introduction to available youth program experiences that support learning in STEM and Animal Science, Healthy Living, Leadership and Civic Engagement, and Communication and the Arts. https://www.extension.iastate.edu/4h/program-list

Pick a Better Snack – Food based lessons. Grades K-3
http://idph.iowa.gov/inn/pick-a-better-snack

4-H Project Topics https://www.extension.iastate.edu/4h/projects-list Related 4-H project guides with lessons available from the Extension office for purchase and/or check-out.

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**Extension Programs for Youth and Adults** – These programs are available for implementation by county Extension staff. Program topics relate to Extension program areas including Agriculture and Natural Resources, Human Sciences, and 4-H Youth Development. Call 515-382-6551 or email xstory@iastate.edu for questions or to schedule a program.

**4-H and Clover Kids** - A membership program for youth to participate in monthly club activities in addition to opportunities available at the county, state, and national levels. The 4-H and Clover Kid program provides opportunities for youth to develop skills that they can use now and throughout their lives. The Mission of the Iowa 4-H program is to "empower youth to reach their full potential through youth-adult partnerships and research-based experiences". This is accomplished through STEM, Healthy Living, Leadership, Civic Engagement, and Communications and the Arts activities [https://www.extension.iastate.edu/story/page/join-4-h](https://www.extension.iastate.edu/story/page/join-4-h)

**Babysitting Basics** – A program teaching safe babysitting practices to students in grades 5-12. Online version available at [https://www.extension.iastate.edu/4h/program-list](https://www.extension.iastate.edu/4h/program-list)

**Beef Quality Assurance Certification Course** - Beef Quality Assurance (BQA) works to protect consumer confidence in our beef supply and to return more profits to producers. All individuals who have the opportunity to influence the quality and handling of cattle are encouraged to become certified.

**Better Choices, Better Health** - An evidence-based program proven to help participants with health conditions feel empowered and in control of their lives. These 6-week workshops meet once a week and learn from trained leaders while setting goals to plan improvement in your health.

**Boots in the Barn** - Boots in the Barn is a three-part series for women involved in their cattle operation. Participants will learn about herd health and participate in hands-on activities about calving practices.

**Buy. Eat. Live Healthy** – This program provides FREE nutrition education to low resource families in Story County! This program is 8 weeks long, meeting once a week for about an hour to an hour and a half. During the program we focus on nutrition, being active, and cooking a healthy recipe. You will get fun take home items such as measuring cups, measuring spoons, cookbook. Income guidelines apply.

**Childcare Courses** - Workshops for child-care teachers and providers on a wide variety of topics designed to improve the quality of childcare.
Commercial Pesticide Applicator Training – Offered in the spring and fall, this program serves as the yearly recertification for commercial pesticide applicators. For more information: https://www.extension.iastate.edu/psep/commercial-pesticide-applicator-information

Finances of Caregiving - When you understand possible financial solutions for care of a loved one, you and your family can make the best decision for their care. As your family plans together, be sure to look at financial solutions that protect the financial future of the caregiver. For guidance, contact Barb Wollan at bwollan@iastate.edu

FLEX (Forward Learning Experience) Program – For grades 4-12. Explore circuit bending with littleBits, view 3D printing, and tour ISU through virtual reality roller coaster. https://www.extension.iastate.edu/4h/flex-forward-learning-experience

Manure Applicator Certification Training – This program serves as training for recertification or for initial certification for commercial or confinement manure applicators. For more information: https://www.extension.iastate.edu/immag/

Master Conservationists – Planting the “seeds of conservation” in Iowa through an intensive educational curriculum that blends online lessons with in-person field experiences with local conservation leaders and passionate citizens.

Master Gardeners –Join a group who are passionate about serving their communities and sharing gardening best practices. Master Gardener volunteers are individuals who have completed the Master Gardener training and share their time and expertise as volunteers in community gardens, city beautification projects, and farmers markets. Master Gardener training is an intensive blend of online lessons and in-person tours taught by local experts and ISU Extension and Outreach educators in topics such as vegetables, houseplants, compost, flowers, fruits, turf grass, landscape design, native plants, plant propagation, soils, wildlife, integrated pest management, plant diseases, and insects.

My Plate -A program used to help find your healthy eating style and build it through your daily meals. It focuses on showing students how colorful their plates should be when eating meals at school and at home focusing on the 5 main portions of a plate (fruits, vegetables, grains, protein and dairy) while doing fun activities with the students so they get the opportunity to work hands on with building their own My Plate Meal with their guardians.

On Their Own & Okay Program – This program supports conversation with students in grades 4-6 about being home safely for a short time. Topics include nutrition, safety, emergencies, and additional activities.

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**Pasture Walk** – This program is an in person program at a local pasture with Beef Specialist, Chris Clark, to learn more about rotational grazing, weed control, water sources, and other production practices.

**Plan, Shop, Save & Cook** – This program provides FREE nutrition education to low resource individuals in Story County. This program is 4 weeks long and meets once a week for an hour. During the program we focus on planning for meals and snacks, how to budget for meals and snacks, how to read labels, and a food tasting at each lesson. You will get fun take home items such as measuring spoons, reusable grocery bag, and cookbook. Income guidelines apply.

**Private Pesticide Applicator Training** – Offered December 1 – April 15, this program serves as the yearly recertification for private pesticide applicators. For more information: [https://www.extension.iastate.edu/psep/private-pesticide-applicator-information](https://www.extension.iastate.edu/psep/private-pesticide-applicator-information)

**Powerful Tools for Caregiving** - For caregivers of adults or children with chronic conditions. In this 6-week program, you will learn skills for self-care as well as ways to reduce stress, establish balance in your life, and communication skills through tough decisions.

**Raising Backyard Chickens** - Offered in-person or virtually, learn about choosing the best chickens for you, preparing and caring for baby chicks, housing options, and handling the challenges of raising chickens in your backyard.

**Raising School Ready Readers** – A program for parents of preschoolers to recognize ways to help their children develop literacy skills through everyday activities. Five session series with 1.5 hours each time that includes research information and stations of interactive parent and child activities.

**Ricochet: A Leadership Adventure Program** – Students in grades 5-8 learn five dimensions of leadership through activities. Leadership information and attitudes, decision making, communication, and stress management. Extend the program opportunity by identifying a need to support while planning and implementing a service-learning experience.

**Spend Smart Eat Smart** – This program helps shoppers stick to a budget with a little planning, savvy shopping and tasty recipes to cook at home.

**Stay Independent** - It’s never too early — or too late — to set realistic goals for eating well and moving more. Learn the health benefits of eating well and how to strengthen your muscles to stay independent for life. Sample healthy, tasty, and low-cost food and trade tips with peers.
SWITCH – This is an evidence-based obesity prevention program designed to help students adopt healthy lifestyles – both in school and at home. Through SWITCH, students learn to ‘switch what they Do, View, and Chew’. [https://www.extension.iastate.edu/switch/](https://www.extension.iastate.edu/switch/)

The Mindful Teen: From Surviving to Thriving in a Busy World: The workshop series is based on the book, “The Mindful Teen: Powerful Skills to Help You Handle Stress One Moment at a Time,” by Dr. Dzung Vo, an adolescent medicine specialist and clinical associate professor at the University of British Columbia. 4-H staff developed the program as part of the Iowa 4-H Healthy Living Program Priority Area and Mental Health Champions Group, seeking new and innovative ways to meet the needs and interests of adolescents and our communities. Workshops will be offered statewide through the fall and winter.

Themed Camp Boxes – Themed camp boxes are offered throughout the year with topics such as STEM, gardening, nature, art, etc. For more information contact Mary Wilkins, mwilkins@iastate.edu.

Women Managing Horses – The women-centered course is designed for women of all ages and experience levels. As horse owners and business managers, women make important decisions about the equine in their care. Horses, ponies, mules, and donkeys are an important part of Iowa’s agricultural economy and landscape. Sessions cover financial documentation and breakeven analysis, equine insurance, annual horse health care plans, evaluation of feed rations, marketing your equine business, environmental management, and land use decisions.

Women Planning Ag Businesses - Women Planning Ag Businesses is a multi-session course for women interested in exploring, starting, or expanding a farm or rural business. Business planning can also be helpful for those considering generational transitions. The course, offered in conjunction with the Women In Ag program, can be virtual, in-person, or a hybrid model.

Youth For the Quality Care of Animals (YQCA): Youth For the Quality Care of Animals (YQCA) is a national multi-species quality assurance program for youth ages 8 to 21 with a focus on the three core pillars: food safety, animal well-being, and character development. Youth that reside in Story County and plan to exhibit livestock through 4-H or the FFA program are required to be YQCA certified to exhibit at the Story County Fair. Several District, State-level, and Association shows hold the same requirement.