Resources available at ISU Extension & Outreach – Story County, 220 H Avenue, Nevada, IA 50201

Request a program with listed resources or check-out a curriculum or kit to implement with your group. For questions, please contact Youth Outreach Coordinator Mary Wilkins at 515-382-6551 or mwilkins@iastate.edu

**Curriculum**

**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

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

**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

**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

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

**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 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  • Photography  • Swine
• Dairy Goat  • Poultry  • Theater Arts
• Health  • Power of Wind  • Veterinary Science
• Horse  • Rabbit  • Visual art
• Leadership  • Sewing  • Welding
• Meat Goat  • Sheep  • Woodworking
• Outdoor Adventures  • Small Engine  •
• Adventures  • Small Pet  •

Science Fun with Kitchen Chemistry - 4-H Guide of activities. Grades K-6

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

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

Camp in a Can: Winging It Kit – Lessons & supplies to learn about birds. Lessons can build on each other. Grades 1-3

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

Edventures – Learn with Legos! Brick Lab Core Set. Grades 1-6 https://edventures.com/collections/bricklab

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

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

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

Funtivities 1 & 2 Kit – Interactive STEM lessons with supplies. Grades 4-8
GPS kit – 8 hand held devices available along with related activity information. Grades 4-12

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

Making STEM Connections Kit. Grades K-8. Granted through the Iowa STEM Council and program partner The Science Center of Iowa. Topics include Safety in Making, What is Making, Document Making, Old Things/New Ways, Embrace Constraints, Fashion Upcycle, ARTech, Levels include novice, practitioner, apprentice, and expert. Examples of kit supplies – tools, safety glasses, needle felting, strawbees, DC motors, etc. 

Money Craze Kit – Binder has lessons and most supplies. Grades 4-12
  o Blind Taste Test
  o It All Adds Up
  o Making Change
  o Menu Math
  o Money Match
  o Pet Pals
  o Shoplifting Costs
  o Sticky Situations
  o Visit a Vault
  o Want or Need Collage
  o What’s in an Ad?

Monarchs on the Move Kit – Grades K-12 Explore the life cycle and migration movement of the Monarch butterfly. Further explore Monarch habitat in our environment. 
https://www.extension.iastate.edu/4h/monarchs-move

Robot Kits – 2 NXT’s available and 1 EV3 available with guides. Grades 4-12
Rockets Away Kit – 4-H curriculum of activities (rocket launch supplies included) Grades 4-12

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

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


Kits available will include Helicopter Hang Time in addition to the following:

• PreK - Ron’s Habitat Adventure, Pam & Ava’s Mapping Adventure, Pam’s Camping Adventure
• K-2 - Wild Feet Exploration, Project Park Design, Sound Bite Exploration,
• 3-5 - Food Deserts Challenge, Farmer Grady’s Challenge, and Solar House Design Challenge.

https://www.hand2mind.com/brands/stem-in-action

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

Grades 2-12


Wind Curriculums/Kits Grades 4-12

o Kid Wind Kit – 3 larger turbines and 15 smaller turbines https://www.kidwind.org/about
o Power of Wind – National 4-H Curriculum Guide
o Wired for Wind – 2011 National 4-H Science Experiment
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

Programs:

Babysitting Basics – a six hour program teaching safe babysitting practices. Grades 5-6

FLEX (Forward Learning Experience) Program – 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

On Their Own & Okay Program – Grades 4-6. A day program supporting conversation of being home safely for a short time. Topics include nutrition, safety, emergencies, and additional activities.

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

Ricochet – A Leadership Adventure Program – Learn five dimensions of leadership through activities. Leadership information and attitudes, decision making, communication, and stress management. Opportunity to identify a need to support while planning and implementing a service learning experience. Grades 5-8

SWITCH - 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/

Online Resources

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

Iowa 4-H Curriculum -Reviewed and vetted to be research based, supportive of the Iowa 4-H mission, aligns with Iowa Core, etc. https://www.extension.iastate.edu/4h/product

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.