



Nebraska Extension Clay/Fillmore Counties - School Enrichment Programs

WHAT IS SCHOOL ENRICHMENT?

The 4-H school enrichment program is a cooperation between schools and Nebraska Extension complimenting the educational goals of both organizations. Lessons taught compliment the state and/or national standards.

PreK - Kindergarten

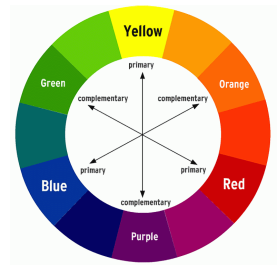
Farm to the Cart:

Description: Where does our food, clothing and shelter come from? Play a game showing where our food comes from while learning shapes on the farm. Play a game showing where our food comes from and learn shapes on the farm.

Nebraska **Science** Standards addressed SC.K.7.2.A, SC.K.12.3.B, SC.K.12.3.C

The Magic of COLOR

Description: Understand primary and secondary colors through a fun hands-on activity.



My Clothing and the Weather

Description: Understand how clothing provides protection from the weather and understand how to dress for the weather they will be in.

Nebraska **Science** Standards addressed SC.K.12.3.A

Beef Cattle from A to Z (Grades K-3)

Description: Identify common beef products, explore breed identify, define agriculture and articulate ways that farmers care for animals through hands-on activities.

CCSS for English Language Arts Informational Text K-5 (1, 2, 4, 7)

CCSS for Mathematics K.CC.4.: & 1.MD.4:

National Social Studies & History Standards NSS-G.K-12.1 The world in spatial terms.

Nebraska **Science** Standards addressed SC.K.12.3.A

Hot House Detective (Grade K-3)

Description: Youth will learn about the process of germination by creating a seed necklace and learning about the parts of the seed.

Nebraska **Science** Standards addressed SC.K.7.2.A, SC.K.12.3.B, SC.K.12.3.C



Fight Bac/Bacteriology (Grade K-3)

Grades Pre-K – 3: Using “Glow Germ” powder, younger students will see how easily germs can spread. We’ll talk about benefits of hand washing. “Bac”, the grumpy bacteria puppet, will also visit the younger classes.

Grades 4 – 6: Upper level students learn about the spread of germs, grow and observe cultures of bacteria common in our lives. This can also tie in safe food handling and personal hygiene.

Pumpkin Life Cycle (Grade K-2)

Description: Students will learn the concept of a life cycle by recreating the various stages of growth and development of a pumpkin through a hands on activity. Learning about life cycles will help in understanding the many elements of agriculture.

Nebraska Science Standards addressed: SC.K.7.2.A, SC.K.12.3.B, SC.K.12.3.C, SC.2.7.2

Positively Popcorn (Grade K-5)

Description: This lesson is a hands on activity on the process of how popcorn pops using gas as a form of matter. Youth will use science to learn the importance of agriculture and how popcorn goes from a seed to a snack.

Nebraska Science Standards addressed: SC.2.3.1, SC5.2.1, SC.5.3

How Did That Get in My Lunchbox? (Grades K-2)

Description: Introduce healthy choices and a balanced meal and understand how their food is produced.

Nebraska Science Standards addressed: SC.K.7.2.A, SC.K.12.3.B, SC.K.12.3.C



How Did That Get in My Lunchbox? (Grades 2-3)

Description: Introduce the concept of sequence or story order to youth by learning how their food is produced.

National Learning Standards:

NL-ENG.K-12.1 -4. Reading for Perspective, Reading for Understanding, Evaluation Strategies, Communication Skills & NS.K-4.1 Science as Inquiry

Nebraska Science Standards addressed: SC.2.7.2

Soil is Not a Dirty Word (Grades 1-3)

Description: Apply knowledge of the seeds, soil and sun to the larger concept of agriculture and determine particles in soil and soil types.

Nebraska Science Standards addressed: SC2.1.1, SC5.1.1, SC.2.7.2, SC 3.7.2



The Plant Parts We Eat (Grades 1-3)

Description: Apply knowledge of seeds, soil and sun to the larger concept of agriculture and understand the process of photosynthesis; identify plant parts humans & animals use for food.
Nebraska Science Standards addressed: SC2.1.1, SC.2.7.2

Spheros (Grades K-12) ***Variety of lessons available and still being developed in conjunction with the classroom teacher.

Description: Draw paths or use blocks that represent code. Then write your own Javascript text programs. Utilizing Sphero educational tools, it weaves hardware, software and community engagement to promote 21st century skills.

Radioactive Golf Balls (Grades 4-6)



Description: Students will learn the basics of engineering science through hands-on activities. Students will work in groups and use their creativity to develop a new device to transport "radioactive" golf balls safely over a distance of 8 feet.

Nebraska Science Standards addressed: SC.4.4.2, SC6.4.

Tec Box (Grades 4-6)

Description: Youth will explore entrepreneurial skills through hands-on activities. This is a two part workshop. You will create a product or service to solve a problem in their community using a maker space. You will then build their product in to a business and present their idea to investors.

Nebraska Science Standards addressed:

Embryology (Grade PreK-12) SPRING ONLY (First-come, first-serve basis)

Description: Students of all ages enjoy taking care of eggs and anticipating arrival of baby chicks. We learn about the similarities and differences between chickens, other animals and humans as well as study the development of life. We will also talk about animal care and the circle of Real eggs, from ostrich to robin will also be available for observation and comparison.

Nebraska Science Standards addressed: 1.1.3, 1.4.1, 1.4.2, 4.4.1, 4.4.2, 8.4.1



the
life.

4.4.3,



GPS & Geocaching (Grade 4-12)

Description: Called treasure hunting for the 21st century, geocaching provides a chance to use global satellite technology to hunt for caches or other items. Students learn to use longitude and latitude to determine where an item is placed by using hand-held GPS units provided by our office. Beyond treasure hunting, this skill can also be used for locating and marking landmarks or other specific locations for use in community planning.

Nebraska **Social Studies** Standards which may be addressed: 4.10, 4.11, 12.4.1, 12.4.2, 12.4.7



College & Career Readiness (5-8th)

Description: As educators, Nebraska Extension's goal is to prepare each student for post-secondary success, regardless of what path each may choose. This curriculum is to help youth develop skills and knowledge in career exploration.

Middle School Leadership Summit (5-8th)

Description: 5th -8th graders will see the world from a new perspective and learn to be more effective leaders, as well as team members, after attending this day-long event. Leadership Discovery and Personality Trait Assessment sessions followed by engaging interactive leadership development activities will build knowledge of interpersonal and teamwork skills.



LEADERSHIP SUMMIT
Hike Your Leadership Trail

Did you know?

4-H'ers are:

- Nearly **4x** more likely to make contributions to their communities.
- About **2x** more likely to be civically active
- Nearly **2x** more likely to participate in science programs during out-of-school time.
- **2x** more likely (Grade 10) and nearly **3x** more likely (Grade 12) to take part in science programs compared to girls in other out-of-school time activities
- Nearly **2x** more likely to make healthier choices.

Source: Tufts University, 2013



To compliment Beef (and Pork) Booster programs, the following programs are available:

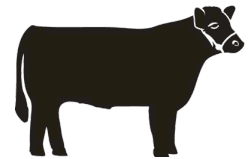
Beef Basics (for Grades 1-5)

Demonstrate an understanding of cattle and basic cattle terminology and identify major beef producing regions in the U.S. and world.

Caring for Cattle (for Grades 1-6)

Explain how people involved in agriculture ensure the wellbeing of animals through routine practices (i.e. providing shelter, access to food & water, illness prevention).

Identify major feed components in cattle rations.



What's for Dinner (for Grades 5-8)

Identify major cuts of beef and plan a meal using lean beef.

***Beef Cattle: The Story of Agriculture (for Grades 4-6)**

Understand the five parts of agriculture: production, processing, distribution, marketing and consumerism.

Taste & Nutrition (for Grades 7-12)

Identify and describe nutrient benefits of the vitamins and minerals provided by consuming beef. Demonstrate cooking practices using lean beef and build a nutritious meal plan incorporating beef products.



Kits Available with a Teacher's Guide

(some lessons have consumable products & may not be provided)

Drone Discovery (Grades 3rd-8th)

Learn about the platform part of a drone system; design a flying device to explore the forces of flight, lift, thrust and gravity. Brainstorm ways drones can help us in everyday life.

Incredible Wearables (Grades 3rd-8th)

Students will learn the engineering design process to build a prototype wearable technology that will gather data to help solve a real world problem.

Rockets to the Rescue (Grade 3rd-8th)

Captures Many of the wonders and issues of modern day engineering. It emphasizes aerospace engineering, as it incorporates lessons related to math, science and physics. While it is a fictional scenario, it has real life parallels.

Eco Bot Challenge (Grade 3rd-8th)

Explore how robots can be used to preserve and protect the environment, while offering a glimpse into the future of science, technology, engineering and math.

Code Your World (Grade 3rd-8th)

Show youth how they can use computer science and code both as a form of personal expression and as a lens to understand the world around them with engaging activities with a computer or unplugged.

Maps & Apps (Grade 3rd-8th)

Explore how geography and geographic information systems (GIS) help people make smart decisions that improve lives, respect our natural resources, and make a positive impact in our world.

Motion Commotion (Grade 3rd-8th)

Explores the science of motion through the relationship of speed and stopping distance. The activity extends to real-world investigation on reaction time and safety, making connections to the dangers of distracted driving.

Wired for Wind (Grade 3rd-8th)

Explore how to engineer renewable energy technologies and the positive impact that they can have in communities across the country and the world.



To register for these local programs...

Online registration for these programs can be found at <https://go.unl.edu/seregistration>



For more information, contact the Clay or Fillmore County Extension Offices.

Clay County Extension Office 111 W Fairfield Clay Center, NE 68933 (402) 762-3644 Website: clay.unl.edu	Fillmore County Extension Office 1340 G Street Geneva, NE 68361 (402) 756-3712 Website: fillmore.unl.edu
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NEBRASKA CLASSROOM CONNECTION OFFERINGS

Whether your classroom is in a school, cafeteria, gym, or living room, learning can happen anywhere. And Nebraska 4-H Youth Development is ready to help.

With a wide variety of program offerings for both in-school or out-of-school delivery, the following experiences are designed for groups of youth in school classrooms, home school co-ops, afterschool programs, and families looking for supplemental learning experiences.

By searching the 4-H Classroom Connection catalog, you will find an experience that is most relevant to the needs of your learners and their environment. All opportunities are supported by a statewide network of Nebraska Extension 4-H Youth Development faculty/staff, bringing the education of the University of Nebraska-Lincoln straight to your classroom.

You will find a variety of programs (some free and some with a cost) that can fit into your curriculum. *This listing includes virtual field trips.*

TO REGISTER FOR THESE, go to: <https://4h.unl.edu/classroom-connection>