



## 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:** 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.

### 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.

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### 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)*

*Reading Standards: Foundational Skills K-5 (1.d), Writing Standards: K-5 (1)*

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

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

### 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.

**Standards:** *Nebraska Science Standards addressed: SC 1, SC 3*

### 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.

**Standards:** *Science Standards: 2.1.1, 2.3.1, 5.1.1, 5.1.2, 5.3.1, 5.3.3 Social Studies: 1.8*





## 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.

**Standards:** Nebraska **Science** Standards addressed: 2.3.1.c, 2.3.2.b, 2.3.4.a

## 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.

**Standards:** Nebraska **Science** Standards addressed: SC5.2.1

Nebraska **Language Arts** Standards addressed: 4.1

## 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.

**National Learning Standards:**

NL-ENG.K-12.1 -2. *Reading for Perspective, Reading for Understanding*  
NA-VA.K-4.1. *Understanding & Applying Media, Techniques, and Processes*  
NPH-H.K-4.1, 4, 5 & 6.



## 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*

## 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.

**Standards:** SC2.1.1, SC5.1.1

## 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.

**Standards:** SC2.1.1 & SC5.1.1



### On Your Own & Okay (Grades 1-3)

**Description:** Increasingly, younger children are at home without adult supervision. Through simple activities and take-home projects highlighting topics such as family rules, safety and first aid, communication, and easy healthy snack, youth learn self-care and skills related to well-being.

**Standards:** NPH-H.K-4.1, 4, 5 & 6.

### It's Made From What? (Grades 3-4)

**Description:** Students will rely on their critical thinking and problem solving skills to gain a better understanding of how agriculture affects their daily life. Youth will explore agriculture and its wide uses in our everyday life with by-products of corn and soybeans.

### Messing with the Message (Grades 3-5)

**Description:** "Messing with the Message" provides a framework for youth to learn more about the effects of drugs on their brain. Youth will more closely examine the effects drugs have on the messages their brain sends and receives every day.

### New Companion Animal (Grades 4-6)

**Description: Companion Animal Anatomy-** Youth will be able to identify the similarities and differences between human body parts and the body parts of companion animals. Youth will also learn about joints and how they are constructed to allow movement through hands-on activities

**Companion Animal Digestion-**Students will learn about the different nutritional needs of companion animals. They will also study the digestive system of their favorite pets.

**Companion Animal Genetics-**Students will learn the basic principles of genetics and will discover what genes their favorite pet inherited from each parent.



### 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.

### 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.



## New Incredible Wearables (Grade 4-8<sup>th</sup>)

Description: Students will learn the engineering design process to build a prototype wearable technology that will gather data to help solve a real world problem. Then youth will use a web based tracking site to test the prototype fitness tracker.

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

Description: Students of all ages enjoy taking care of eggs and anticipating the 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 life. Real eggs, from ostrich to robin will also be available for observation and comparison.

Standards: Nebraska **Science** Standards which may be addressed: 1.1.3, 1.4.1, 1.4.2, 4.4.1, 4.4.2, 4.4.3, 8.4.1



## GPS & Geocaching (Grade 2-12)

Description: Called treasure hunting for the 21<sup>st</sup> 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. **Standards: Nebraska Social Studies Standards** which may be addressed: 4.10, 4.11, 12.4.1, 12.4.2, 12.4.7

## NEW: Career Readiness (5-8<sup>th</sup>)

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.

**Career Clusters**-This activity is used as a warm up to introduce the concept of career clusters. Youth learn about the concept of clustering or categorizing similarities. Youth also understand how careers can be clustered into similar groups.

**College Lingo**-Student will have a better understand of some on the common academic language/vocabulary used in the college environment.

## 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



**Offered in the Spring...**

To complement Beef 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.

**To register...**

Online registration for these programs can be found at [go.unl.edu/seregistration](http://go.unl.edu/seregistration)

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

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