**Chicken Embryology**  
(3) 30-45 minute lessons  
Available in Fall and spring  
**Program includes:** 1 dozen fertilized eggs, incubator, detailed instructions, educational information, Count Down to Hatch eggs, brooder and brooder supplies and chick feed. Extension Staff will provide education on Day 1, detailing what to expect, the basics of chicken embryology, and general expectations of the students for the entire process. Day 9 or 10, Extension Staff will return and help candle eggs to determine with the students which eggs are still viable. Day 20-21 Extension Staff will return to help set up brooder if needed and discuss with students their observations over the entire experience. Students will learn about chicken growth and development, record keeping of daily observations, and responsibility for caring for the chicks.

**Dairy Cow**  
(1) 45 minute lesson  
Available all year  
**Program includes:** Pudding in a cup supplies  
Extension Staff will provide education on dairy, why its nutrients are important to building strong and healthy bones, different ways we get calcium, and how the dairy cow is built for producing milk. The lesson will end with students making pudding in a cup.

**All Programs are subject to availability.**
Pollinators/Garden Protectors
3 options available

Option 1: Painted Lady Butterflies
(2) 30 minute lessons
Available Spring only
Program includes: Butterfly habitat, 5 live caterpillars, daily journal
Extension Staff will provide education on Day 1 about the life cycle of a caterpillar into a butterfly, and the importance butterflies play in pollination. Approximately 3 weeks later, your butterflies will emerge and extension Staff will return to discuss butterfly migration and have a release party for the butterflies.

Option 2: Bees
(1) 45 minute lesson
Available all year
Program includes: Bee waterer supplies, pollination activity supplies
Extension staff will provide education on the importance of bees in relation to the food we grow. Students will also learn about the bee life cycle, bee behaviors and what everyone can do to help save the bees! Students will end the lesson by making a bee waterer to take home.

Option 3: Ladybugs
(2) 30 minute lessons
Available in Spring only
Program includes: Ladybug habitat, ladybug larvae, daily journal
Extension Staff will provide education on Day 1 about the life cycle of a ladybug and why they are important for our gardens. Approximately 3 weeks later, Extension Staff will return to discuss student observations and have a release party for the ladybugs.

Mental Health Awareness
2 options available

Option 1: Mindful Me
Pre-K-2nd grade
(10) 45 minute lessons (Do not have to do all)
Available all year
Program includes: Extension Staff led program. The program promotes mindful practices that lead to improvements in managing one's own goals, developing a sense of self, time management, stress management, emotional regulation, and mindful eating practices. Specific outcomes from youth participation in the curriculum include short-term (skill development and knowledge gain), mid-term (increased stress management, mindful eating, etc.), and long-term (improved physical, emotional, and social health) benefits.

Option 2: GEM-Get Experience in Mindfulness
3rd-8th grade
(5) 45 minute lessons (Do not have to do all)
Available all year
Program includes: Extension Staff led program. This program places an emphasis on stress management taught through practical and interactive mindfulness-based activities to facilitate experiential learning. There are five lesson topics: Intentions and Goal Setting, Awareness and Attention, Self-care: Stress Reduction and Relaxation, Communication and Relationships, and Gratitude and Acceptance. Among other things, participants will learn what mindfulness is and how to integrate it into daily life, alignment and form for over 25 strength and flexibility poses adapted from yoga poses, and relaxation techniques.

Popcorn and Portion Sizes
(1) 45 minute lesson
Available all year
Program includes: popcorn, popcorn popper, seasoning mixes
Extension Staff will introduce the idea that the size of our dishes sometimes determines the amount we eat. Students will learn about optical illusions related to this, steps to take to be mindful of the amount they are eating and learn how to make seasoning mixes to put on a healthy popcorn snack.

We Grow Corn!
K-8th grade
(3) 45 minute lessons
Available all year
Program includes: Extension Staff led program. Your scientists will test their ideas about what plants need to grow and live by using corn plants as model organisms. Although many conditions such as amount of water, soil and temperature impact corn growth, this lab will focus on the impact light can have on the growth of a plant. At the end of the lab, the scientists will know how to conduct an investigation and how light impacts plant growth.

The Mystery of Corn
2nd-8th grade
(4) 45-minute sessions
Available all year
Program includes: Extension Staff led program. Students will investigate 4 mysteries related to corn. The mysteries include: Could It Be Corn?, The History of Corn?, The Secret of Soil, and The Miracle of Water. They will learn how corn is used, corn’s origins and the different types of corn, what soil is and the types of soil, and learn about the water cycle, how the Earth’s water is used, and how to conserve water.

**All Programs are subject to availability.**
Little Red Hen
K-2nd grade
(4) 45 minute-1 hour lessons
Available all year
Program includes: Extension Staff led program. Students will use the story *The Little Red Hen* to investigate wheat production and bread making. Students will thresh their own wheat and grind it into flour which can be made into bread or tortillas during an additional session.

Who Grew My Soup?
K-5th Grade
(3) 45 minute-1 hour lessons
Available all year
Program includes: Extension Staff led program. Students identify the source of the food they eat and investigate the processes and people involved in getting food from the farm to their spoon.

How Does Your Garden Grow?
K-5th grade
(3) 45 minute-1 hour lessons
Available Spring only
Program includes: Extension Staff led. Students discover the needs of a seed to germinate and the needs of a plant to grow while exploring the life stages of a flowering plant.

Pumpkins...Not Just for Halloween
K-5th grade
(2-3) 45 minute-1 hour lessons
Available Fall only
Program includes: Extension Staff led program. Students estimate the size and weight of pumpkins, sprout pumpkin seeds, and make pumpkin pie in a bag. All supplies needed will be supplied by Extension Staff.

The Great Pumpkin
K-2nd grade
(1) 45 minute-1 hour lesson
Available Fall only
Program includes: Extension Staff led program. In this fun and simple activity, students will make a paper-plate model of the life cycle of a pumpkin. All supplies needed will be supplied by Extension Staff.

Simple & Powered Machines using LEGO kits
2nd-8th grade
((3) 90 minute lessons (each can be broken into (2) 45 minute lessons if needed)
Available all year
Program includes: Extension Staff led program. Students will explore design engineering through 3 stand alone lessons. The lessons are Make a Digital Accessory, Wearables, and Make a Repeated Pattern. You can choose 1, 2 or all 3 lessons to promote your students’ fundamental STEM understanding of simple and powered machines, structures, and mechanisms.

Mars Base Camp: 4-H STEM Challenge
2nd-8th grade
(4) 35 minute-1 hour lessons (can choose to do individual lessons or all of them)
Available all year
Program includes: Extension Staff led program. The race to land humans on Mars is on! This challenge will explore sending a mission to Mars with the activity, Mars Base Camp. Developed by Google and Virginia Cooperative Extension, Mars Base Camp is a collection of activities that teaches kids STEM skills like mechanical engineering, physics, computer science, and agriculture.

**All Programs are subject to availability.**
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