



food+farm
EXPLORATION CENTER

2023-2024

Outreach Guide



INTRODUCTION

WELCOME TO THE FOOD + FARM EXPLORATION CENTER!

Our mission is to educate current and future generations about agricultural innovation and sustainability through experiential learning. We strive to create a community rich in agricultural literacy and innovation through programming that will excite, engage and promote agriculture.

We educate people of all ages about the importance of farming and its connection to the food we eat. We recognize that:

- there is a deep connection between food and farming.
- everyone is connected to agriculture.
- agriculturalists are innovative professionals.
- agriculture is a highly technical industry that requires skilled workers in a variety of areas.
- agriculturalists work together to conserve natural resources through sustainable practices.
- learners can grow and connect with agriculture through immersive educational experiences.



THE OUTREACH PROGRAM

The Education Outreach program at the Food + Farm Exploration Center is designed to bring agricultural literacy into your classroom. We aim to increase students' awareness of and interest in the field of agriculture. As well as to help them understand the importance of agriculture to their everyday lives. We offer a variety of programs that engage students and make it easy for teachers to bring agriculture into the classroom while meeting state standards.

EDUCATION OUTREACH STAFF: KIT PICK UP AND DROP OFF:

Jenn Scott
Education Outreach Manager
jscott@fftf.us
715-496-4014

Heidi Schleicher
Elementary Specialist
hschleicher@fftf.us
715-972-2595

Outreach materials can be picked up and returned at the Food + Farm Exploration Center at 3400 Innovation Drive, Plover, WI. If you are farther away from the center, please call or email for other options.

OUTREACH PROGRAMS:

- School Visits
- STEAM Kits
- Breakout Boxes
- Literacy Kits
- Agricultural Readers
- Lesson Plans



SCHOOL VISITS

Have a member of the Food + Farm Exploration Center staff come to your classroom and teach one of our hands-on lessons. School visits can be done as a stand alone event, but are also a great way to get students excited about an upcoming field trip, or a good review after a field trip.

School visits are:

- Aligned to state standards.
- Free of charge within 60 miles of Plover, WI.
- **30-45** minute in length.
- Conducted by an exploration center education staff member.

SCHOOL VISIT OFFERINGS

- **How Am I Connected to Agriculture?:** Students participate in several activities that engage them in a conversation about what agriculture is, why it's important to their lives, how food gets to their dinner tables, and career opportunities in the industry. This lesson is recommended prior to field trips. (Grades K-12)
- **A Wisconsin Picnic:** Learn about Wisconsin agricultural commodities and the products they are turned into through this engaging presentation. (Grades K-12)
- **Insects are Everywhere:** Students will learn about both the challenges insects present and how they benefit humans as well as learning about insect anatomy. (Grades K-6)
- **Plants We Eat:** Students will learn about the parts of a plant and their functions as they play a game to learn more about the plant parts we eat. (Grades 3-5)



- **Crayon Rock Cycle:** In this hands-on lab, students learn about the three types of rocks and how they are created using crayons to simulate the rock cycle. (Grades 4-8)
- **Colorful Chemistry:** In this laboratory investigation, students will learn about pH using household chemicals to create a pH rainbow. (Grades 8-10)
- **Strawberry DNA Extraction:** In this laboratory investigation, students will learn about DNA and its importance to agriculture as they extract it from strawberries. (Grades 6-12)
- **How Sweet Is It?** In this laboratory investigation students will learn about the science of refractometry as they test the sugar content in different juices. (Grades 8-12)

STEM KITS

STEM kits are a great way to engage your learners with hands-on activities that help reinforce core academic areas through real-world agricultural examples. Kits are free of charge and can be checked out for two weeks at a time.

STEAM Kits:

- Aligned to state standards.
- Free to use.
- Include lesson plans.
- Contain all or most of the equipment and supplies needed to do activities.
- Can be checked out for one-two weeks at a time.



AVAILABLE STEM KITS:

- **Insects!:** This STEM kit introduces students to the wonderful world of insects. Students will learn about helpful and harmful insects, examine insects, build an insect, learn about pollinators and more. (Grades K-2)
- **Cooking With Sunshine:** This STEM kit utilizes the book *Cooking with Sunshine: How Plants Make Food* by Ellen Lawrence to engage students in building a deeper understanding of plants, photosynthesis, and how they affect human and animal life. (Grades 3-5)
- **Cranberries:** Have fun while learning about the exciting world of cranberries. This kit is a collaboration with Cranberry Learning, Inc. and includes activities and labs that encourage students to look at cranberries in a new light. Two kits available: grades K-2 and grades 3-5.

- **Light Waves:** This kit focus on light waves and the application of light waves in agriculture. The book *Light Waves!* is incorporated into the kit as an informational text. This kit is designed to be done in centers or stations. However, the activities can be done individually or used as demonstrations. Several of the activities below do require a darkened room to be successful. (Grades 3-5)
- **Water and Irrigation:** This STEM kit focuses on the concept of water and how it is used in agriculture. Students will engage in activities that evaluate where water is found on Earth, play a creative game to illustrate the water cycle and how it applies to agriculture, build their own irrigation system and investigate center pivot irrigation systems. (Grades 4-6)
- **Colorful Chemistry:** This hands-on lab-based lesson engages students in learning about pH. Students will use household chemicals to create acids and bases that represent the “rainbow” of universal indicator. (Grades 8-12)
- **Strawberry DNA Extraction:** This hands-on lab-based lesson focuses on DNA. Students will use household chemicals to extract DNA from a strawberry while learning about the importance of DNA to agriculture. (Grades 6-12)
- **The Plant Game:** In the game, teams of students grow green pea plants composed of leaves, roots, and flowers. The goal of the game is to produce the maximum number of flowers. In the game the only way for students to produce flowers is if they have a good strategy to keep their roots in water and produce enough leaves to support adequate photosynthesis. (Grades 9-12)



LITERACY KITS

Knowing that teachers need more time to incorporate science and social studies into their curriculum, this program offers teachers the opportunity to use literacy time to do just that.

Literacy Kits:

- Aligned to state standards
- Include multi-disciplinary lessons
- Free to use
- Contains a class set of an agriculturally focused book
- Can be checked out for one week at a time



AVAILABLE LITERACY KITS:

- **Jump Into Science: Dirt!:** What is soil? Who lives in dirt? How does earth help things grow? The answers are within this fun- and fact-filled picture book. Just follow the gardening, star-nosed mole in the colorful outfits . . . and dig in! This book introduces young readers to the basics of soil science with a creative presentation of the subject matter. (Grades 2-4)
- **No Small Potatoes:** This story follows the life of Junius G. Groves on his journey from slavery to becoming the “Potato King” of Kansas. Learn about his challenges and successes along the way in this tale of hard work and perseverance. (Grades 3-5)

AGRICULTURAL READERS

Teach students about the variety of crops grown in Central Wisconsin with these magazine-like readers. Read on-line or request printed versions for your class.

AVAILABLE AG READERS:

- **Primary Readers: (Grades 3-5)**
 - Carrots
 - Corn
 - Cranberries
 - Cucumbers
 - Potatoes
- **Middle-High School Readers and activities:**
 - Corn
 - Cranberries
 - Potatoes



LESSON PLANS

Our lesson library consists of a variety of lesson plans aligned to state standards. These lessons focus on aspects of agriculture taught through the lense of social studies, science, literacy, and math. Lessons may be used as stand-alone additions to your curriculum or may be taught together as a unit. There are over 20 lessons available for grades K-12. Learn more about our lesson library on our website:

explorefoodandfarm.org/lesson-library.

How Am I Connected to Ag?

Lesson Plan



LESSON OVERVIEW

When a child asks where their food comes from, a common response may be the grocery store, a restaurant, their parents, or somewhere else. While they are not wrong, there is more to the process. When you eat and wear clothes, you're touched in agriculture. In this lesson, students will see the food they eat and the products they use to production on a farm.

ESSENTIAL QUESTIONS

- How am I connected to agriculture in my daily life?

LEARNING OBJECTIVES

- Students will be able to:
 - Create a concept map from words that describes how products they eat and use can be traced back to production on a farm.
 - Describe at least one way they are personally connected to agriculture through what they eat or purchase.

STANDARDS

Social Studies: SS.501A.3
 Environmental: EL5.ENG.A.1
 Literacy: CCSS.ELA.LITERACY.W.4.7
 B.4.4
 Nutrition:
 Family and Consumer Science: CCLC.1.A.3.3
 CCLC.4.2.4
 CCLC.4.1.6

DOCUMENTS INCLUDED

- Student Worksheet
- Lesson PowerPoint

MATERIALS REQUIRED:

- Whiteboard and markers
- Internet access for student research

TIME REQUIRED

- Before Class: 10 minutes
- During Class: Two-three 45-minute periods

LESSON ACTIVITIES OUTLINE

- How many items come from a farm?
- Discuss agriculture connections
- Small group research
- Create a class concept map
- Center modeling
- Writing assignment

CONNECTION TO OTHER F+FEC

LESSONS

- Produce from a Farm
- More Than America's Dairyland: Agriculture in Wisconsin



For more information on field trips or education outreach please contact the Food + Farm Exploration Center at 715-303-3276 or education@ffft.us.