

CAREER EXPLORATION GUIDE

Imagine what awaits

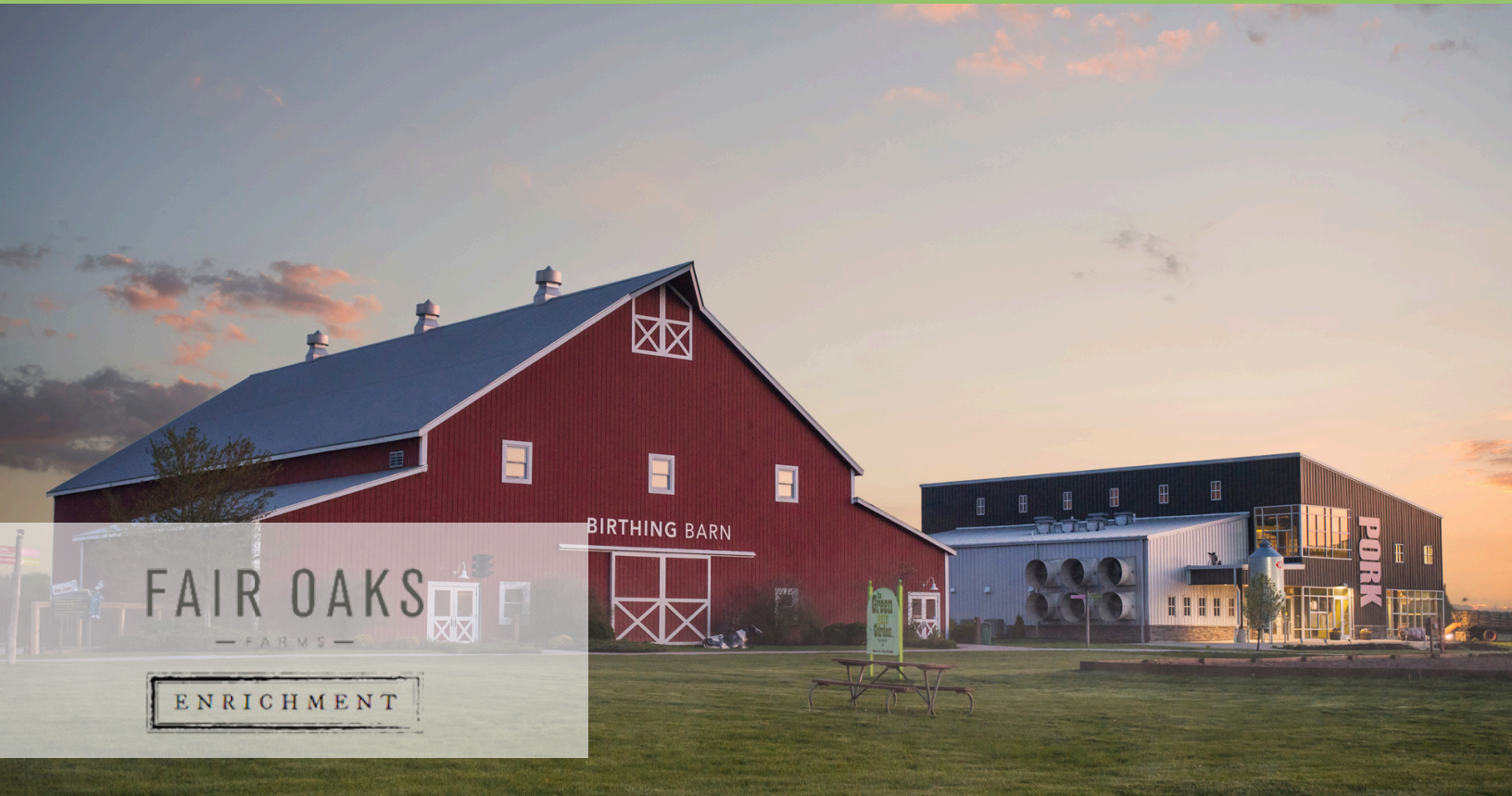


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KWL Chart

6 Pillars of Sustainability

Safety | Animal Care | Environment |
Employees | Community | Nutrition



Standards based lesson plans and resources to utilize as part of the Fair Oaks Farms field trip experience for grades K-8. MS-PSI-3, MS-LS1-4, MS-LS1-5, MS-LS3-1, MS-LS3-2, 8.RN.1, 8.RV.1. Please see the Standard Alignment Document to see the full list of standards that the curriculum meets.

STEM Relation

- **Science** | See how a tractor can tell you how much nitrogen, phosphates and H₂O are in the soil.
- **Technology** | Learn how Satellites, Drones, remote tractors and NASA helps farmers.
- **Engineering** | Explore good bugs & bad bugs and learn about biodiversity on the farm.
- **Math** | Feeding 7 billion people takes a lot of crops! Calculate how many ears of corn are in a bushel, how many bushels of corn are in an acre, how many acres of corn are on a farm... and on and on!

HOW TO BEST USE THIS GUIDE

Here is how we suggest you use the Career Exploration Field Trip Guide.



Our Timeline Suggestions

We are excited that you are planning a visit to Fair Oaks Farms! We have created this guide to help make your experience more engaging when coming to the Farm. In this guide, you will find resources to help prepare you for a fun-filled and educational day. Here is what we suggest:

- Before coming on the field trip:
 - Teach Lesson 1 over the course of two days
 - Teach Lesson 2 over the course of two days
- Make yourself familiar with the "Know Before You Go Guide"
- Print the Field Trip Guide to keep your groups on engaged during the day

Example Passports

The passports below will vary on group size and the amount of time you have on campus. You will receive a more detailed passport a week in advance and a final passport the day of.

Dairy Adventure Only

9:00 AM | Arrival

10:00 AM | Dairy Bus

11:30 AM | Lunch

12:00 PM | Free Time

*** Free time is a great time to explore the other buildings.*

Dairy and Pig Adventure

9:00 AM | Arrival

9:30 AM | Pig Bus

11:00 AM | Lunch

12:20 PM | Dairy Bus

*** During any downtime, it is a great opportunity to explore the crop building.*

Crop Adventure Only

9:00 AM | Arrival

9:30 AM | Crop Adventure

11:00 AM | Hands on Workshop

11:00 AM | Lunch

12:00 PM | Free Time

*** Special pricing. Free time is a great time to explore the other buildings.*

Hands On Field Trip

9:00 AM | Arrival

9:30 AM | Pig Bus

11:00 AM | Lunch

12:20 PM | Dairy Bus

2:00 PM | Hands on Activity

***The activity can 15 minutes to 45 minutes depending on the time you have available and the program you want*

KNOW BEFORE YOU GO

Have a field trip with us? Here are some things that may help engage your students during your visit!



Buildings on Campus

- Get a sneak peek at a working dairy farm on the **Dairy Adventure**.
- Go hog wild at the **Pig Adventure**.
- Learn how we can feed 9 BILLION people at the **Crop Adventure**.
- Take a stroll and look for the newest seasonal blooms on the **Nature Trail**.
- Take your herd over to get a tasty treat or souvenir at the **Cowfé**.
- See a baby cow being born at the **birthing barn**, go when the light is green.

Career Exploration

- **Apples on Aisle Four** | Watch our magnificent twenty-foot curved screen movie created by National Geographic and learn how hard work, weather and determination all go into providing you with apples on aisle four!
- **The Future of Farming** | With limited resources, learn all about how we are contributing to feeding the ever-growing population. Watch our floating globe movie and learn how much farming has changed through the decades and where it's headed next. Students learn that nature and farmers must work together and, without the environment for beneficial insects to thrive, we cannot feed the world. Farmers use many innovative tools to maximize yield on each acre they farm. Wetlands, prairies, and rainforest can remain undisturbed although our population grows.
- **Deep Underground** | Go underground and view life from a bug's perspective, check out the intricate root systems and see how insects affect our crops.
- **Pollinator Garden** | This garden gives our bees and butterflies a place to rest and eat while they work hard helping us grow food. According to the USDA, more than 90 species of US specialty crops require pollination.

Career Search

Use the "career search" page below to help your students identify the following careers in each area of the Winfield Crop Adventure.

For a more advanced option have students pick a career to explore. Have them write or give a report on the career they found. Specifically why they are interested in that career.

CAREER SEARCH

Have a field trip with us? Go through the Winfield Crop Adventure and help students identify the following careers in each area.



The Crop Adventure

- **The Future of Farming**
 - Farmers
 - Plant Science
 - Animal Science
 - Engineering and Technology
 - Food Production
- **Deep Underground**
 - Soil Science
 - Farmer
 - Bio-Engineer
- **Moving Crops**
 - Logistics
 - Farmer
 - Agriculture Equipment Technician
 - Economics
- **Pollinator Garden**
 - Animal Science
 - Animal Care
 - Bee Keeping
 - Plant Science
- **Apples on Aisle Four**
 - Food Production
 - Food Marketing
 - Farmer

CAREERS IN AGRICULTURE

Let's Explore!



SOME BACKGROUND

While the population keeps growing, the amount of land, water, and farmers is decreasing. In 1900, 41% of the United States Workforce was employed in agriculture. That is nearly half of the workforce! In 2000, that number dropped to 2% of the workforce. That means for every 100 people 2 people are employed in agriculture and our population is not shrinking, it is growing.

While farming may not be for everyone, there are many career opportunities through agriculture. Agriculture careers consist of scientists, engineers, marketing, and so much more!



Learning Objectives

Students will be able to:

- Identify careers in agriculture
- Discuss attributes that make them successful at a career
- Describe family farms in Indiana
- Share their interests in agriculture

Vocabulary

- **Career** | A job undertaken for a significant period of a person's life and with opportunities for progress.
- **Farming** | the activity or business of growing crops and raising livestock.
- **4-H** | U.S.-based network of youth organizations whose mission is "engaging youth to reach their fullest potential while advancing the field of youth development".
- **FFA** | A youth organization, specifically a career and technical student organization, based on middle and high school classes that promote and support agricultural education.

Materials & Setup

- KWL Chart - Printed for each student (on the last page of this guide)
- All About Me Worksheet
- Career Worksheet

Recommended Timeline

Estimated Time: 45 to 55 minutes or two days (recommended)

- Engage | 5 minutes | 10 minutes
- Explore | 15 to 20 minutes | 30 minutes
- Explain | 10 to 15 minutes | 10 minutes
- Elaborate | 10 minutes | 25 minutes
 - 2 options with grade appropriate opportunities
- Evaluate | 5 minutes | 5 minutes

Engage

Students will have a quick introduction to Careers in Agriculture. Students will then engage in various activities related to the Agricultural Industry. Provide KWL Chart, this can be done individually (recommended), in groups, or as a class.

Ask students to complete the K section of the KWL Chart, by responding to the question, What do you know about careers in farming and agriculture? Students share information from the K portion of their chart, for lower grade band modify to do chart as a class. Debrief with students, writing careers shared on the board. Consider proposing less commonly known careers, such as arborist, food scientist, soil engineer, soil and plant scientist, landscaper, botanist, cooperative extension agent, agricultural sales representative, etc.).

Give students two to three minutes to brainstorm what they know about crops and farming. Once complete ask a few to share. Give them the same amount of time to complete the W section.

Explore

Once they have finished the "K" section divide students into small groups.

Ask students to complete the **All About Me Sheet** by drawing pictures or using words to describe them. Then facilitate a discussion, students to share their all about me sheets. Relate the items they included to possible careers and or skills needed in a career.

Explain

Show the video about the Hill Family Farm. Then learn about other Indiana Farm Families here. Read the information to the students about Indiana Farm Families on the link above or have students read about them on their own devices.

Thank you all for sharing. Let's learn about some family farms!

Elaborate

Option 1 | After watching the short videos, kids can review the careers in agriculture sheet and play the game. To play the game, cut the cards apart and divide the students into teams. You will need one copy per student. Then one student will pick a card and act or draw the career. The teams guess. This is similar to charades or Pictionary. Students will then complete the W section of the KWL Chart, by responding to the question:

What do you want to know about careers in farming and agriculture?

Option 2 | Let's Go Shopping Grades K-3

Option 2 | Find Your Future Career Grades 4-6

Option 2 | Find Your Future Career Grades 7-8

Evaluate

You can edit, adjust, or add to the the following questions but by the end of the lesson students should be able to answer the following.

- Name two careers that are related to agriculture.
- What is something that make them successful at a career?
- Describe family farms in Indiana.
- Share your interests in agriculture.

Field Trip Suggestions & Links for this Lesson

When you return from your field trip finish the KWL chart.

Have fun!

Hill Family Farm Video | <https://youtu.be/INpZx20VWcw>

Indiana Farm Families | <https://www.glassbarn.org/meet-indiana-farmers/indiana-farm-families/>

Ag in the Classroom Career Activities | [https://agclassroom.org/matrix/search_result/?](https://agclassroom.org/matrix/search_result/?search_term=career&findlesson=on&findresource=on&maxlessons=25&maxresources=25)

[search_term=career&findlesson=on&findresource=on&maxlessons=25&maxresources=25](https://agclassroom.org/matrix/search_result/?search_term=career&findlesson=on&findresource=on&maxlessons=25&maxresources=25)

Discovery Education | <https://www.discoveryeducation.com/>

Glass Barn | <https://glassbarn.org/wegrow/indiana-farm-families/>

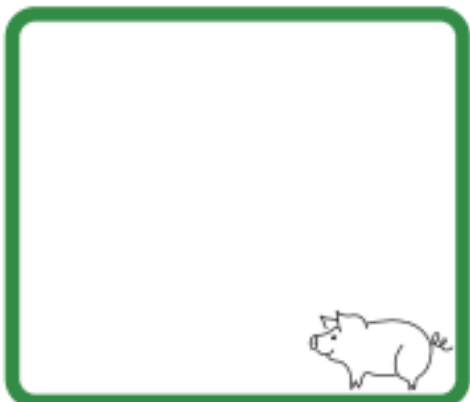
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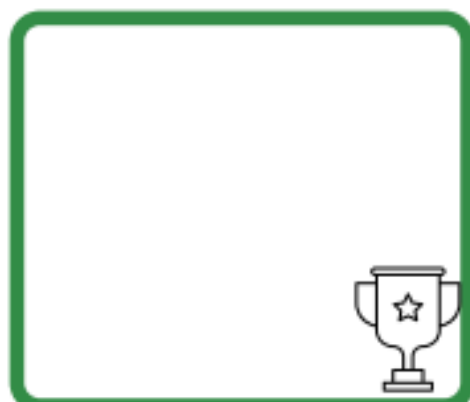
FAVORITE FRUIT OR
VEGETABLE



FAVORITE PLANT OR
FLOWER



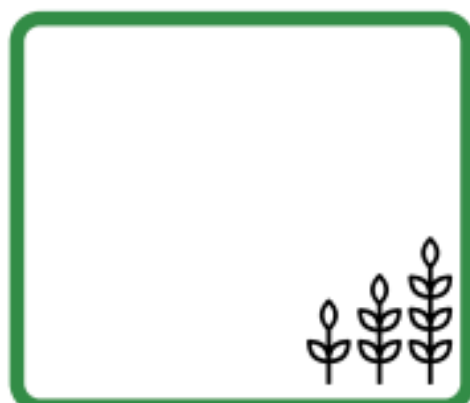
FAVORITE ANIMAL



I AM GREAT AT



FAVORITE OUTSIDE
ACTIVITIES



WHEN I GROW UP, I
WANT TO BE...

CHEF

TEACHER

FARMER

**SEMI TRUCK
DRIVER**

BEE KEEPER

SCIENTIST

ENGINEER

MARKETING

VETERINARIAN

**ENVIROMENTAL
SPECIALIST**

KWL

Know | Want to Know | Learned



K - What I know

W - What I want to know

L - What I learned