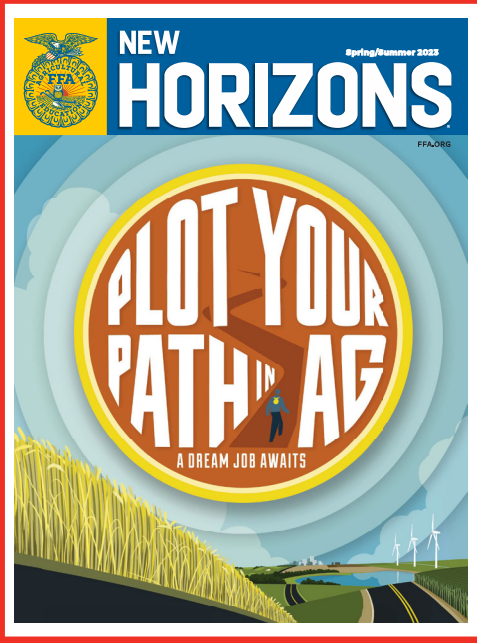




Spring/Summer 2023 Teaching Guide

In this guide, you will find activities for seven articles in the fall 2023 issue of *FFA New Horizons*. Worksheet answer keys can be found at the end of the activity worksheet. The activities are aligned to educational standards. (See each activity for the specific standards.)

VOCABULARY ACTIVITY

Write a story:

Use [Appendix 8](#) and the list of vocabulary words to choose ten words and define each by drawing a picture.



COMMITTED TO CONSTANT IMPROVEMENT

One of Hawaii's first agricultural leaders got his start in the FFA and continued to live his life by the FFA motto to achieve career success.

[Appendix 1: Committed to Constant Improvement](#)



FUNDING THE FUTURE

When Warrenton FFA faced major budget cuts in 2020, its community stepped up in support of agricultural education. Today, the chapter thrives by giving back.

[Appendix 5: Funding the Future](#)



6 UNUSUAL CAREERS IN AG

Wildlife, windmills, sports fields, and more are part of the agriculture industry. Learn how you can land a unique career that might just involve your hobbies.

[Appendix 2: 6 Unusual Careers in Agriculture](#)



MINTED A FARMER

Learn how an American FFA Degree recipient with a limited background in agriculture forged a successful SAE and career in the field.

[Appendix 6: Minted a Farmer](#)



LEADING THE CHANGE

Learn how the first African American female to receive the American FFA Degree used her FFA experiences to pursue an agricultural career that has opened many doors for her.

[Appendix 3: Leading the Change](#)



FROM CDE TO A SUCCESSFUL BUSINESS

This former FFA member creates innovative products to solve unique problems in agriculture.

[Appendix 7: From CDE to a Successful Business](#)



THE VIEW FROM A FIRST-GENERATION FARM

Discover how an Indiana farmer started his own operation — and what he's learned from it.

[Appendix 4: The View From a First-Generation Farm](#)

CLICK HERE TO DOWNLOAD THE GOOGLE WORKSHEETS.





NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

COMMITTED TO CONSTANT IMPROVEMENT

One of Hawaii's first agricultural leaders got his start in the FFA and continued to live his life by the FFA motto to achieve career success.

Bell Ringer

How many islands make up the state of Hawaii?

Discussion Questions

1. What is leadership?
2. Why should we learn from leaders in the past?
3. Why does agriculture look different in Hawaii compared to your home state?

Activity

Part 1: Have students share their answers to the bell ringer. Students will then read the article "Committed to Constant Improvement" in the spring 2023 issue of FFA New Horizons and answer the questions about Mr. Ching.

Part 2: Students will learn more about Hawaiian agriculture through a web quest as well as compare their state's agriculture to that of Hawaii.

Part 3: Students will take what they learned in Parts 1 and 2 and put it into action by developing an infographic to depict Hawaiian agriculture. Their infographic should be an accurate visual representation of Hawaii agriculture, not just pretty beaches for vacation.

FFA Tip

Have students check out the [leadership development events](#) to develop their leadership skills through competitive events such as public speaking, employment skills or agriculture issues.

SAE Tip

What past FFA members or junior/senior FFA members do you have in your community who can be an example to younger FFA members? Set up tours or have these individuals give presentations about how they got started.

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.02, CS.06, FFA PRECEPTS: FFA-PL-E, FFA-CS-M, FFA-CS-N, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA-LITERACY.RI.9-10.1, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING: CCSS.ELA-LITERACY.WHST.9-10.6, COMMON CORE-SCIENCE & TECHNICAL SUBJECTS: CCSS.ELA-LITERACY.RST.9-10.9, COMMON CORE - SPEAKING AND LISTENING: CCSS.ELA-LITERACY.SL.9-10.2, CCSS.ELA-LITERACY.SL.9-10.4, NASDCTEC-STATE DIRECTORS (CAREER CLUSTERS): AGC10.03, P21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, FINANCIAL, ECONOMIC, BUSINESS, AND ENTREPRENEURIAL LITERACY, GLOBAL AWARENESS, INFORMATION, COMMUNICATIONS, AND TECHNOLOGY LITERACY, THINK CREATIVELY

VOCABULARY

Commodity
Egg Grader
Perseverance

EXIT TICKET

Why is it important that we have diverse agriculture across the United States?

CAREER FOCUS AREA

Any

RESOURCE HIGHLIGHT

FFA Member Leadership Series, [FFA.org/participate/conference/ffa-member-leadership-series](https://ffafuture.org/participate/conference/ffa-member-leadership-series)

REFERENCES

USDA National Agricultural Statistics Service, https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=HAWAII

National Agriculture in the Classroom State Agricultural Facts, <https://agclassroom.org/teacher/agfacts>

APPENDIX

Appendix 1: Committed to Constant Improvement

COMMITTED TO CONSTANT IMPROVEMENT

Hawaii native Stevenson Ching made history in FFA. His legacy can inspire FFA members today. – By Jessica Walker Boehm

Born in 1918 on the Hawaiian island of Kauai, the late Stevenson Ching cultivated in FFA a passion for agriculture that flourished throughout his life.

Ching was a member of the Hans P. Faye FFA Chapter that began in 1935, which is when he started his freshman year at Waimea High School. He served as chapter president in 1936, and in 1937, he was elected president of the Hawaii FFA Association.

In 1938, Ching was named his chapter's "outstanding senior farmer" and appointed chapter president for the following year (a repeat), but his most exciting news was yet to come.

At the age of 19, Ching made history when he was elected the 1938-39 national FFA vice president at the 11th National FFA Convention in Kansas City, Mo.

He was the first national officer of color and he remains the only FFA member from Hawaii to serve as a national officer.

That was just the beginning of Ching's impressive career in agriculture. He and his brothers operated a nearly 200-acre ranch on Kauai that included cattle, horses, swine and chickens. In 1946, he became an egg grader and served as an inspector for the Hawaii Board of Agriculture and Forestry.

Ching went on to work for the Hawaii Department of Agriculture (HDOA), initially as chief of the marketing and economics branch, and later as chief of the commodities branch. After retiring from the HDOA, he established a commercial orchid-growing business called S&K Orchids.

"Let us resolve to better our organization, just as the great patriots, pilgrims and pioneers have built America,"

Ching said in his vice president's report at the 12th National FFA Convention in 1939.

An Inspiration

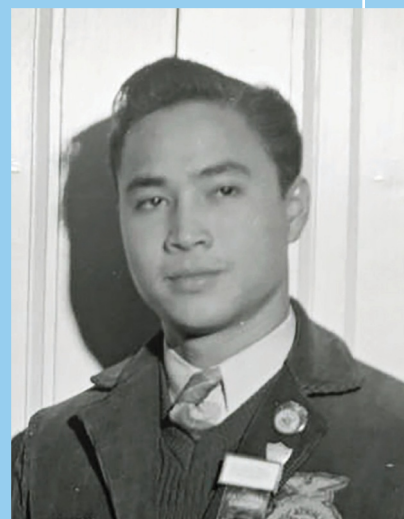
Ching passed away in 2006 at the age of 87. His legacy endures, however, and still inspires FFA members today.

Not only did he embody the hard work, service and dedication that FFA imparts, but he also was a visionary who supported the organization's commitment to constant improvement — as well as the patience and perseverance required to see it through.

"Let us resolve to better our organization, just as the great patriots, pilgrims and pioneers have built America," Ching said in his vice president's report at the 12th National FFA Convention in 1939. Then, reflecting the famous words of American icon Helen Keller, he said, "We have plenty to do, so let us not shirk. It is well to remember the world is moved not only by the shoves of the mighty heroes, but also by the aggregate of the tiny pushes of each little honest worker."

Above right: Stevenson Ching, here in 1939, served as the national FFA vice president.

Right: Ching, front row, far left, poses with the 1938-39 National FFA officers.



Name: _____

Appendix 1: Committed to Constant Improvement

Part 1

Directions:

Read the article “Committed to Constant Improvement” in the spring 2023 issue of *FFA New Horizons* and complete the following questions.

1. What leadership roles did Mr. Ching serve in during his FFA career?
Chapter Level: _____
State Level: _____
National Level: _____

2. How did he make history? _____

3. Which career pathway did Ching start out in with his family’s business? Highlight the pathway below in **BLUE**.

Agribusiness Systems	Animal Systems	Biotechnology Systems
Plant Systems	Power, Structure, and Technical Systems	Sustainability

4. How did/does Ching inspire others? _____

5. Investigate the purpose of the Hawaii Department of Agriculture (HDOA). What are the main roles and responsibilities of this agency?

Roles:

Responsibilities:

6. What surprised you the most while reading this article? _____

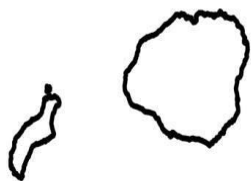
7. What is one question you still have after reading this article? _____

Name: _____

Part 2

Directions:

Learn about Hawaiian agriculture by completing the activities below. Utilize the USDA National Agriculture Statistics survey website (https://www.nass.usda.gov/Quick_Stats/Aq_Overview/stateOverview.php?state=HAWAII) and the National Agriculture in the Classroom website (<https://agclassroom.org/teacher/agfacts/>).



1. Label each of the islands of Hawaii.
2. Draw a * on the two islands that raise cattle and hogs.
3. In blue, shade the two islands that receive snow.
4. Identify the island that receives the greatest impact from pineapple production. Draw a pineapple image next to the island.
5. In green, shade the island that has a substantial number of dairy and egg farms.



Identify the flower in the image. _____

What connection does it have to Hawaii? _____

Name: _____

Hawaii Agriculture	Topic to Compare	Your State: _____
	Population	
	Average size farm	
	Total number of farms	
	Total acres in farm operation	
	State average temperature	
	Average annual precipitation	
	Top commodities	
	Acres of coffee grown	

*Draw and label the state tree for Hawaii and your own state in the box below.

Hawaii	Your State: _____
---------------	--------------------------

*Draw and label the state bird for Hawaii and your own state in the box below.

Hawaii	Your State: _____
---------------	--------------------------

***What is the biggest takeaway for you when comparing Hawaiian agriculture to your own state's agriculture?**

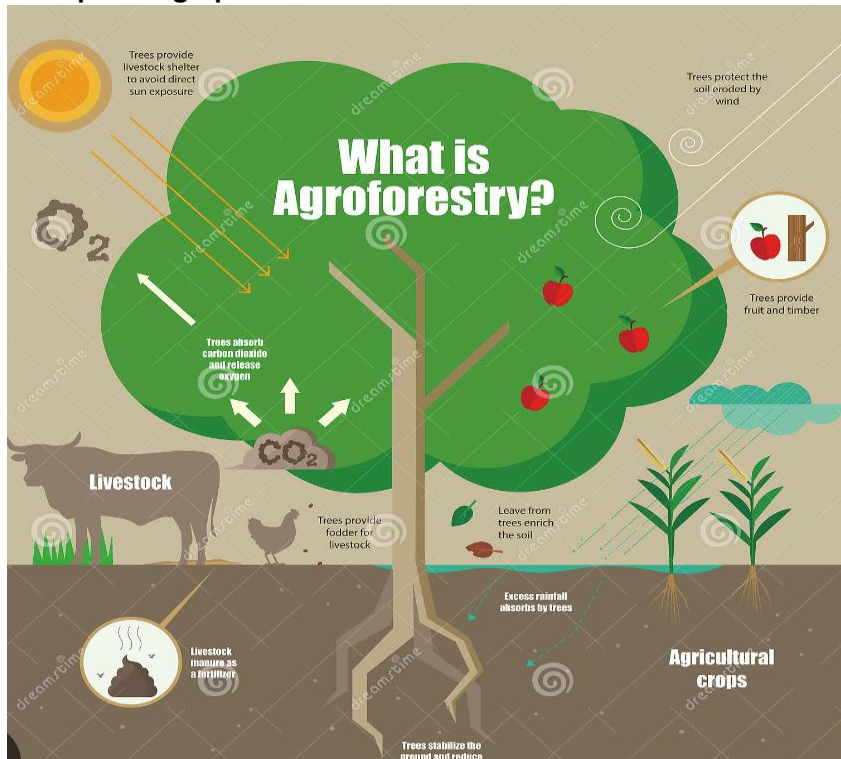
Name: _____

Part 3

Directions:

Now that you have learned a little about Hawaiian agriculture, take your knowledge and put it to use developing a one-page infographic that could be used to enlighten others about agriculture in Hawaii. This infographic should visually represent the agriculture industry of Hawaii and show that there is more to Hawaii than beautiful beaches for vacationing. Use the space below to develop your infographic, and follow your teacher's instructions for the final format to turn in for this project.

Example Infographic:



What to Include:

- Title
- Primarily images and graphics
- Few words — statistics and facts that are short and to the point
- Color — draw attention to the info.
- Organized — easy to view and follow

Brainstorm: Use the box below to help you plan your infographic.

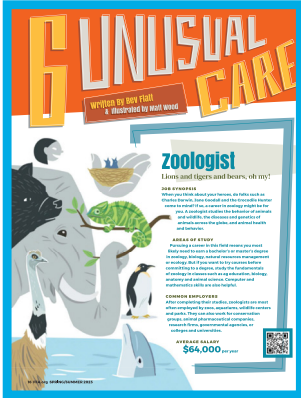
Name: _____

*Use the box below to develop your infographic.



NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

6 UNUSUAL CAREERS IN AG

Wildlife, windmills, sports fields, and more are part of the agriculture industry. Learn how you can land a unique career that might just involve your hobbies.

Bell Ringer

Teacher Note: As a class, compile the lists to see what students come up with and see if any of the careers in the New Horizons article are on their lists.

With a partner, develop a list of careers in agriculture in two minutes or less.

Discussion Questions

1. Why do we need careers in agriculture that are not production oriented?
2. Which agricultural career pathways tie to a majority of the careers discussed in this article?

Activity

Part 1: Have students read the article "6 Unusual Careers in Ag" in the spring 2023 issue of FFA New Horizons and complete the activities. They will identify three key takeaways for each of the careers discussed in the article and complete the follow-up questions.

Part 2: Students will select one of the six unusual careers from the article and explore more about the career by utilizing AgExplorer (AgExplorer.FFA.org) to complete the activity.

Part 3: Using AgExplorer (AgExplorer.FFA.org), students will select a career that they were surprised to find is related to agriculture and complete the activity to learn more about this career.

FFA Tip

Have students check out the employment skills LDE, FFA.org/participate/ides/employment-skills, to learn more about preparing to land their dream job by polishing up their resumes, cover letters and interview skills.

SAE Tip

Remind students there is no need to wait to graduate from high school to experience these and other fulfilling careers. Encourage them to start an SAE in a career they are interested in. They can find a part time job, complete an internship, or start their own business — students can earn while they learn!

VOCABULARY

Restoration
Synopsis
Pharmaceutical

EXIT TICKET

What is a unique career you have an interest in that is not in the agriculture industry?

CAREER FOCUS AREA

Animal Systems

RESOURCE HIGHLIGHTS

AgExplorer, AgExplorer.FFA.org
SAE for All, <https://saeforall.org>

REFERENCES

AgExplorer, AgExplorer.FFA.org

APPENDIX

Appendix 2: 6 Unusual Careers in Agriculture

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.02, CS.05, FFA PRECEPTS: FFA.PL-A, FFA.PL-E, FFA.CS-M, FFA.CS-N, FFA.PL-C, FFA.PL-E, FFA.PL-F, FFA.PL-I, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA-LITERACY.RI.9-10.4, COMMON CORE-LITERACY IN SCIENCE & TECHNICAL SUBJECTS: WRITING: CCSS.ELA-LITERACY.WHST.9-10.6, COMMON CORE – MATH PRACTICES: MP.2, MP.3, COMMON CORE – WRITING: CCSS.ELA-LITERACY.W.9-10.1, CCSS.ELA-LITERACY.W.9-10.2, COMMON CORE – SPEAKING AND LISTENING: CCSS.ELA-LITERACY.SL.9-10.2, CCSS.ELA-LITERACY.SL.9-10.4, COMMON CAREER TECHNICAL CORE: AG.1, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.05, CRP.06, CRP.08, CRP.11, P.21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, ENVIRONMENTAL LITERACY, GLOBAL AWARENESS, INFORMATION, COMMUNICATIONS, AND TECHNOLOGY LITERACY, THINK CREATIVELY

6 UNUSUAL CAREERS

Written By Bev Flatt
& Illustrated by Matt Wood

Zoologist

Lions and tigers and bears, oh my!

JOB SYNOPSIS

When you think about your heroes, do folks such as Charles Darwin, Jane Goodall and the Crocodile Hunter come to mind? If so, a career in zoology might be for you. A zoologist studies the behavior of animals and wildlife, the diseases and genetics of animals across the globe, and animal health and behavior.

AREAS OF STUDY

Pursuing a career in this field means you most likely need to earn a bachelor's or master's degree in zoology, biology, natural resources management or ecology. But if you want to try courses before committing to a degree, study the fundamentals of zoology in classes such as ag education, biology, anatomy and animal science. Computer and mathematics skills are also helpful.

COMMON EMPLOYERS

After completing their studies, zoologists are most often employed by zoos, aquariums, wildlife centers and parks. They can also work for conservation groups, animal pharmaceutical companies, research firms, governmental agencies, or colleges and universities.

AVERAGE SALARY

\$64,000 per year



CAREERS IN AG

There is a job in agriculture to meet virtually every interest. We have proof!

AG
careers

Just think: One day, you could be one of those people who truly loves their job. Instead of a sitcom stereotype of employees who clock in each day, sit in their cubicles and drink stale coffee, you could earn your paycheck by working at something you deeply enjoy. Agriculture has no shortage of career options. Whether you are looking for a job where you can help other people, find your place in the business world, learn a forgotten craft or develop other talents, one of these careers could bring you exactly what you are seeking.



Restoration Specialist

There's more to fix than antiques.

JOB SYNOPSIS

Restoration is more than just a category on Pinterest. It can also be considered a career in agriculture. A restoration specialist investigates the connections between organisms and the environment. They make recommendations for improvements with the goal of reestablishing natural ecosystems.

AREAS OF STUDY

Students interested in careers like this are recommended to take high school courses in ag education, earth science, biology, plant science, chemistry, biology and mathematics. After high school, pursuing an advanced degree in biology, plant science, environmental science or natural resource management can set you up for success.

COMMON EMPLOYERS

Much of this work will include implementing your recommendations for seed companies, crop protection companies, universities, government agencies, consulting firms, research laboratories, museums, field stations, and parks and recreation areas.

AVERAGE SALARY

\$43,000 per year



Flavor Technologist

It's a delicious career!



JOB SYNOPSIS

If your Starbucks order is a complex combination of milks, syrups and espresso, you might have what it takes for one of the most unusual careers in agriculture. Coffee is considered one of the most complex flavors to exist. Flavor technologists use these complexities to develop the tastes used in food and drinks. In a fusion of chemistry and kitchen know-how, they develop new formulas, run samples and manage experiments in a laboratory.

AREAS OF STUDY

High school students can get a head start in this field by taking classes in ag education, family and consumer science, mathematics, biology, chemistry and computer skills. From there, advanced degrees in food science, nutrition or chemistry further develop skills. Passing an examination with the Society of Flavor Chemists and undergoing a seven-year apprenticeship under a senior flavorist is the cherry on top.

COMMON EMPLOYERS

Professionals in these careers typically work for food companies or flavor houses that focus on producing and selling flavors to be used by the food and beverage industries.

AVERAGE SALARY

\$60,000 per year



Game Warden

Are you game?

JOB SYNOPSIS

Jurassic Park is more than an award-winning, multibillion-dollar franchise. It's a story about the immense responsibility and value of game wardens. Game wardens are focused on ensuring the protection and safety of wild animals. While they often work to enforce laws related to hunting and fishing, they also create wildlife conservation programs and educate the public.

AREAS OF STUDY

Courses in ag education, natural resources, biology, earth science and mathematics lay a foundation for pursuing a career as a game warden. Earning a bachelor's degree in relevant areas such as environmental science, natural resources or wildlife management is also a great addition to an education plan.

COMMON EMPLOYERS

Game wardens are almost always employed at a state or national park, preserve and range, which gives them some of the best views in the world.

AVERAGE SALARY

\$58,000 per year





Athletic Turf Manager



The grass is always greener in turf management.

JOB SYNOPSIS

Are you looking at a career that is even rarer than becoming a professional football player or golfer? It involves managing these sporting grounds. Athletic turf managers ensure the turf and surrounding areas of sporting grounds are pristine, healthy and ready for game time. They plan, oversee and manage major athletics grounds and field renovation projects, while also being responsible for tasks such as project management and budgeting.

AREAS OF STUDY

These professionals typically need a high school diploma or college degree in turf grass management, horticulture or crop science, in addition to studying courses such as ag education, mathematics, biology, chemistry and environmental science.

COMMON EMPLOYERS

They are usually employed by universities, golf courses, municipal stadiums or even professional sporting teams.

AVERAGE SALARY

\$50,000 per year

MORE COOL AG CAREERS

Want to learn more about these careers or research even more ag jobs? Visit AgExplorer.FFA.org.

Wind Turbine Technician

A 'wind-wind' career path.

JOB SYNOPSIS

According to the U.S. Wind Turbine Database, there are more than 70,800 turbines across 44 states, Puerto Rico and Guam. Not only is that number impressive due to the massive size of these turbines, but it also means good career prospects for wind turbine technicians. Wind techs are responsible for installing new turbines as well as maintaining and repairing existing structures.

AREAS OF STUDY

An associate degree in applied sciences such as wind energy technology may meet many job requirements. However, in some cases, only a high school diploma is required if you take courses such as ag education, agricultural mechanics, environmental science, physics and computer skills. If you are in an area with a large wind turbine presence, you may be able to receive training specifically as a wind turbine technician.

COMMON EMPLOYERS

Electrical companies and cooperatives often hire wind techs. Also private energy firms focus on wind energy-producing areas. Illinois, Iowa, Kansas, Oklahoma and Texas have a high demand for these jobs, and the industry continues to grow.

AVERAGE SALARY

\$42,000 per year



Name: _____

Appendix 2: 6 Unusual Careers in Agriculture

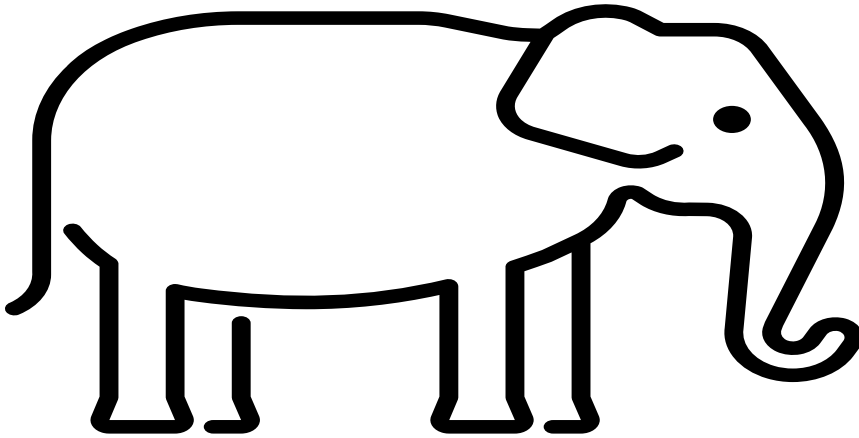
Part 1

Directions:

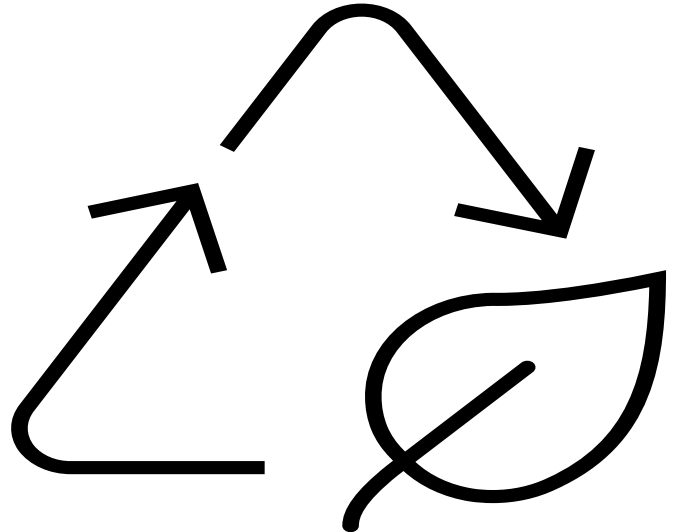
Read the article "6 Unusual Careers in Ag" in the spring 2023 issue of *FFA New Horizons* and complete the following activities.

*Identify three key takeaways for each of the careers discussed in the article, and record that information on and/or near each picture that represents the career.

Zoologist

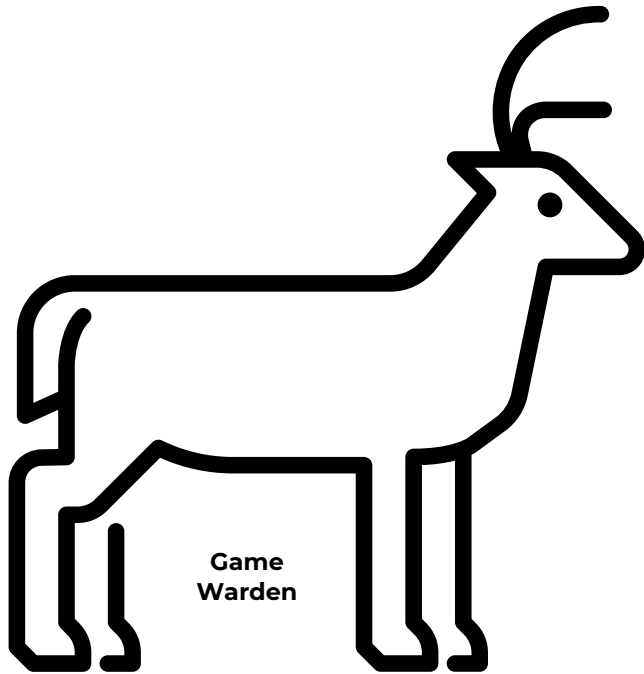


Restoration Specialist



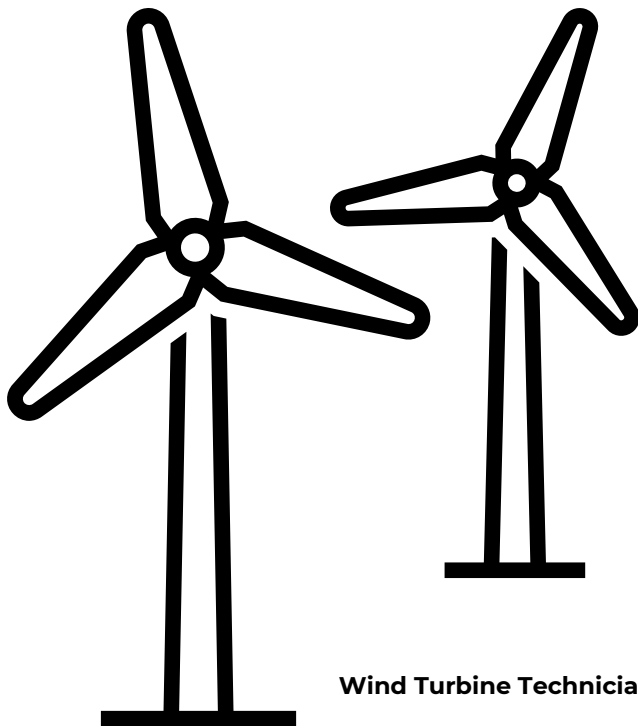
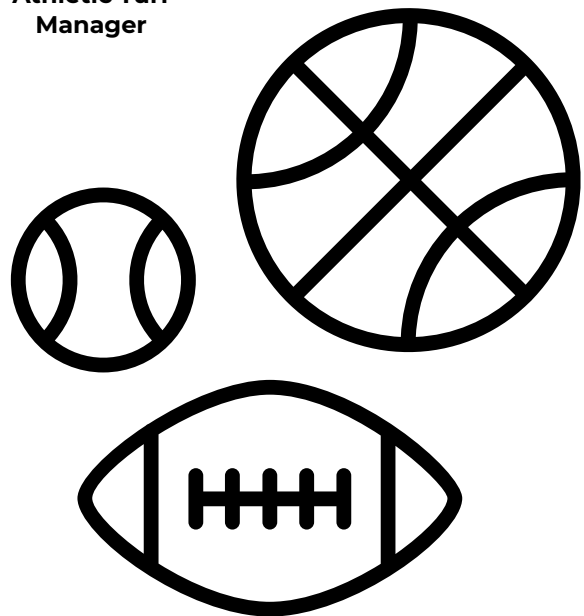
Flavor Technologist

Name: _____



**Game
Warden**

**Athletic Turf
Manager**



Wind Turbine Technician

Name: _____

- Rank the careers in the article based on your interest in them with **1** being the most interesting.

Career	Rank	Importance of the Career to the Industry
Athletic Turf Manager		
Flavor Technologist		
Game Warden		
Restoration Specialist		
Wind Turbine Technician		
Zoologist		

- Pick one of the careers above and describe in detail a scenario that would require a person in this career to take part in and be beneficial to the agriculture industry.

Name: _____

Part 2

Directions:

Select one of the six unusual careers from the article and explore more about the career by utilizing AgExplorer (AgExplorer.FFA.org/) to complete the activity below.

Exploring Unusual Careers

Career:

Career Focus Area: _____

What responsibilities will I have?

What trainings and courses can help you prepare for this job?

Who could you work for with this job?

What is the future job market outlook?

Average Salary: _____

Hours of Work: _____

Name: _____

Part 3

Directions:

Using AgExplorer (AgExplorer.FFA.org/), select a career that you were surprised to find is related to agriculture and then complete the activity below.

Career Exploration

Career: _____

Job Overview

Job Outlook

Responsibilities

Common Employers

High School Courses

Education/ Training Required

Average Salary

Related Careers

Responsibilities

Name: _____

- Review what you recorded about the career you identified in Part 3. Now that you know more about the career, rate the following with an emoji that reflects how you feel about each aspect of the career.

Average Salary	
Responsibilities	
Education/Training Required	
Job Outlook	
Career Overall	



NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

LEADING THE CHANGE

Learn how the first African American female to receive the American FFA Degree used her FFA experiences to pursue an agricultural career that has opened many doors for her.

Bell Ringer

What percent of FFA members earn their American FFA Degree?

Answer: 1%

Discussion Questions

1. Why does such a small percentage of FFA members earn the American degree?
2. Why is the United States Department of Agriculture (USDA) and the National Agriculture Statistics Service (NASS) so crucial to the future of the agriculture industry?

Activity

Part 1: Students are to read the article "Leading the Change" in the spring 2023 FFA New Horizons magazine and then complete the series of questions about the first African American female to earn her American FFA Degree.

Part 2: Using the American FFA Degree handbook, website and other references listed, have students complete the activities to learn more about earning their American FFA degrees. Upon completion of this activity, students should have a better understanding of what it takes to earn the American degree and be able to discuss the bell ringer question and why that percentage is so low.

Part 3: Students will use the tips provided to develop a survey about an agricultural topic that they could administer to their classmates and other peers within their school and community. A brainstorming section is provided to help students create this survey. Provide them with additional directions regarding formatting the survey. Examples include using Google Forms, JotForm or SurveyMonkey.

FFA Tip

Have students check out the agriscience fair, [FFA.org/participate/awards/agriscience-fair](https://ffa.org/participate/awards/agriscience-fair), to learn how they could use their survey results to develop a research project to investigate their agricultural topic.

SAE Tip

Have students research agriculture and natural resource jobs with local, state and national government agencies. Are there part time jobs or internships available with these agencies or government departments in your area?

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS.05, FFA PRECEPTS: FFA.PL-A, FFA.PL-C, FFA.PL-E, FFA.PL-F, FFA.PG-I, FFA.PG-J, FFA.CS-M, FFA.CS-N, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA-LITERACY.RI.9-10.2, CCSS.ELA-LITERACY.RI.9-10.4, COMMON CORE - SPEAKING AND LISTENING: CCSS.ELA-LITERACY.SL.9-10.1, COMMON CAREER TECHNICAL CORE: AG5, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.07, CRP.08, P21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, FLEXIBILITY AND ADAPTABILITY, INITIATIVE AND SELF-DIRECTION, LEADERSHIP AND RESPONSIBILITY

VOCABULARY

USDA
Statistician
GIS Specialist

EXIT TICKET

What surprised you the most about this article?

CAREER FOCUS AREA

Any

RESOURCE HIGHLIGHTS

"How to Become the Gold Standard," [FFA.org/ffa-new-horizons/how-to-become-the-gold-standard](https://ffa-new-horizons/how-to-become-the-gold-standard)

"Go for the FFA Gold," [FFA.org/the-feed/go-for-the-ffa-gold](https://ffa.org/the-feed/go-for-the-ffa-gold)

REFERENCES

[FFA.org/participate/awards/american-ffa-degree](https://ffa.org/participate/awards/american-ffa-degree)

<https://ffa.app.box.com/file/291603672169?s=li1l1sntok48fxy5khgq-ur6t8srd1id6w>

APPENDIX

Appendix 3: Leading the Change

LEADING THE CHANGE

The first female African-American recipient of the American FFA Degree pursues a successful career with USDA. – By Jessica Mozo

College Station, Texas, FFA alumna Benita Hodge clearly remembers walking across the stage at the 2003 National FFA Convention & Expo to receive her American FFA Degree. She didn't know she was making history.

"I had no idea I was the first African-American female to receive the American FFA Degree; it was not even a thought in my mind," Hodge says. "Once I learned I was the first, I was quite shocked. I wondered why no one like me had ever taken this journey."

Then Hodge acknowledged that many had indeed. In 1965, 38 years before Hodge was awarded the highest FFA degree, African

Americans were first allowed to join the National FFA Organization. Women could not be official members until 1969.

"They paved the way and afforded me the opportunity to be the first African-American female in FFA to be awarded the American FFA Degree," Hodge says. "It made a positive impact in my life and made me want to share my experiences and encourage others."

Hodge's involvement with FFA exposed her to many different careers in agriculture. She later earned her bachelor's degree in agriculture science from Prairie View A&M University in Texas. Hodge launched her career as an intern with the U.S. Department of Agriculture's Agricultural Research Service in Lubbock, Texas.

A PUBLIC SERVANT

"My first job was with USDA in 2002, and I am still working with USDA today," she says. "I began my career with the USDA National Agricultural Statistics Service in Des Moines, Iowa, where I served as the national livestock slaughter statistician. After a few years, I relocated to East Lansing, Mich., to gain more experience in other sectors of the agency."

A few years later, Hodge was happy to return home to the Southern Plains Region of Texas, where she worked

as an agricultural survey statistician, GIS specialist and coordinator for the National Association of State Departments of Agriculture. In that position, she worked with about 200 employees across all 254 Texas counties.

Today, Hodge serves as a national survey administrator for the USDA National Agricultural Statistics Service (NASS) in Washington, D.C.

"We are known as the fact finders of U.S. agriculture," she explains. "The purpose of this position is to plan, coordinate and direct the data collection and conduct of large-scale and complex commodity surveys of national scope. The USDA NASS conducts hundreds of surveys annually and prepares reports covering almost every aspect of agriculture."

NASS also conducts the Census of Agriculture every five years, with the most recent census being undertaken for the 2022 production year.

"If I could pick one word to describe my position, it would be impactful," Hodge says. "It's impactful because the importance of obtaining accurate data and information helps in making informed decisions."

Hodge gives back to FFA by participating and speaking at events to encourage students, teachers and stakeholders, especially those under-represented in the organization.

"There is always a higher height to climb," she says. "What I learned in FFA is very applicable to me today, and each experience led me to where I am today. I live by our FFA motto – Learning to Do, Doing to Learn, Earning to Live, Living to Serve. I thank God I am a proud product of FFA, and I am honored to be a public servant in U.S. agriculture."



Benita Hodge poses with her father's ag teacher, CJ Hagler, who was inducted into the Agriculture Teachers Association of Texas Hall of Fame.

Name: _____

Appendix 3: Leading the Change

Part 1

Directions:

Read the article "Leading the Change" in the spring 2023 issue of *FFA New Horizons* and complete the following questions.

1. In which state was Hodge an FFA member? Highlight the correct answer in **YELLOW**.

Iowa	Michigan	Texas	Washington, D.C.
------	----------	-------	------------------

2. What was unique about Hodge's earning the American FFA Degree?

3. What was a potential limitation female FFA members, prior to Hodge, had earning their American degrees?

4. How did Hodge get started with the USDA?

5. What is the purpose of Hodge's role with the USDA and NASS?

6. Hodge states her position is impactful. How do you plan on being impactful in your future career?

7. What does it mean to be a public servant?

8. How could you be a public servant in your community?

Name: _____

Part 2

Directions:

Using the American FFA Degree handbook, website and other references listed below, complete the activities to learn more about earning your American FFA Degree.

The Gold Standard: Earning the American FFA Degree

Resources to Use

American FFA Degree Website: [FFA.org/participate/awards/american-ffa-degree/](https://ffa.org/participate/awards/american-ffa-degree/)

American FFA Degree Handbook: <https://ffa.app.box.com/s/lillstok48fxy5khgqur6t8srd1id6w>

Introduction

*The American degree is the _____ degree an FFA member can achieve. It is the _____ in an FFA degree system that encourages personal growth and achievement. The degree is a high and _____ honor, less than _____ of FFA members earn it.

It requires commitment and hard work to attain, but you don't have to be _____ to reach this goal. The FFA degree system is organized so that all FFA members have _____ at the American FFA Degree, no matter where they come from.

The American FFA Degree requires at least _____ to meet the requirements. Plan and set goals early to earn the degree.

Why Earn the Degree?

*_____: Many members have said that there is no greater satisfaction than walking across the stage at the National FFA Convention to receive their American FFA Degree key and certificate. In addition, recipients' names are listed in the American FFA Degree convention booklet and the official proceedings of the convention.

*_____: An SAE that leads to an American FFA Degree provides training and experience that enables members to enjoy a useful, interesting and challenging career later in life. Listing the receipt of the American FFA Degree on a job resume stands out to employers in agricultural career areas.

*_____: Everyone must compete to secure a job or a position to start a career and make a difference in the world. Meeting the degree requirements teaches members to reach career goals and provides learning experiences that complement classroom education.

Qualifications

Who can earn the American FFA Degree?

When do you earn the American FFA Degree?



Name: _____

What degree must be earned prior to receiving the American degree?

How long must you have been an active member in the FFA to receive the American degree?

Greenhand Degree



Chapter Degree

State Degree



American Degree

What are the educational requirements for earning the American degree?

Hours:

Graduation:

Scholastic record:

Community service:

What are the SAE financial requirements for earning the American FFA Degree?

An SAE that demonstrates _____, managerial and financial expertise.

Option 1: earned _____ and productively invested at least _____, through an eligible SAE

Option 2: earned and productively invested at least _____ and worked _____ in excess of scheduled class time in an eligible SAE

Option 3: Any combination of hours times a factor of _____ plus any dollar amount of student earnings and investments must be equal to or greater than _____.

*Identify two goals that can help you earn the American FFA Degree.

1.

2.

Name: _____

Part 3

Directions:

Think about the work Mrs. Hodge does at the NASS with statistics and surveys. Now, you'll develop your own survey about an agricultural topic using the tips shown below that you could administer to your classmates and other peers within your school and community. Use the brainstorming section to help you create this survey and then follow your teacher's direction for putting the survey into the format they prefer, such as a Google Forms, JotForm or SurveyMonkey.



Survey Brainstorming

Survey Topic:

Why is this topic relevant or important?

What is your end goal with the data you will gather from the survey?

(Examples: Agriscience fair project, SAE, FFA chapter project, community service project, etc.)

Who is your target audience?

Demographic Questions to Include: (Examples: age, gender, ethnicity, rural/urban/suburban)

Questions Specific to Topic:

***Why are surveys important to you and your family? Cite two examples of a survey that could impact you and/or your family.**



NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

THE VIEW FROM A FIRST-GENERATION FARM

Discover how an Indiana famer started his own operation — and what he's learned from it.

Bell Ringer

Is it important to set goals? Why or why not?

Discussion Questions

- What is a goal you have for your time in high school?
 - What are the steps that you will need to take to achieve that goal?
- What is a goal you have for your time after high school?
 - What are the steps that you will need to take to achieve that goal?

Activity

Part 1: Students should read the article "The View From a First-Generation Farm" and answer the questions in the worksheet.

Part 2: Cody developed a plan and set goals to help achieve tasks in the future. Students will utilize this website, <https://www.smartsheet.com/blog/essential-guide-writing-smart-goals>, and the worksheet in Appendix 4 to create their own goals (three to five) for a future task.

FFA Tip

Invite a local farmer/agricultural producer to speak to the agriculture classes and/or FFA chapter and give insights about their daily routine, responsibilities, etc.

SAE Tip

FFA members can obtain funding for all kinds of SAEs from many sources including Farm Service Agency, National FFA Organization SAE Grants and state department of agriculture programs. What funding sources are available in your area?

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS. 02, CS. 05, FFA PRECEPTS: FFA. PL-A, FFA. PL-C, FFA.PL-D, FFA. PL-E, FFA.PL-F, FFA. PG-G, FFA.PG-I, FFA.CS-M, FFA.CS-N, FFA.CS-Q, FFA.CS-P, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA.RI.9-10.2, CCSS.ELA.RI.9-10.4, COMMON CORE – WRITING: CCSS.W.9-10.2, CCSS.W.9-10.4, CCSS.W.9-10.8, COMMON CORE – SPEAKING AND LISTENING: CCSS.SL.9-10.2, CCSS.SL.9-10.4, COMMON CAREER TECHNICAL CORE: AG2, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.08, CRP.09, P21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, INITIATIVE AND SELF-DIRECTION, LEADERSHIP AND RESPONSIBILITY, THINK CREATIVELY

VOCABULARY

Cash Crop Bolster
Financial Institution
Cooperative

EXIT TICKET

- What are three things you learned from this article and lesson?
- How can you apply what you learned in your everyday life?

CAREER FOCUS AREA

Plant Systems

RESOURCE HIGHLIGHT

Next Gen Conference, ffa.org/participate/next-generation-conference

REFERENCES

The Essential Guide to Writing SMART Goals, <https://www.smartsheet.com/blog/essential-guide-writing-smart-goals>

APPENDIX

Appendix 4: The View From a First-Generation Farm

The View From A First-Generation Farm

How an Indiana farmer started his own operation — and what he's learned from it.

— By Lauren Denton

Cody Otten has only one regret about farming full-time: “I wish I’d done this all sooner.”

The 2014 McCutcheon FFA alumnus from Indiana started his own farming operation — soon to be officially named Otten Family Farms — in 2022 after dreaming about it his whole life.

“I always wanted to farm, but I never thought I’d have the opportunity,” Otten says. Growing up, his family owned farmland that was mainly rented out to produce cattle and hay. Otten didn’t have experience with cash crops. “I used to ride across the street and watch the farmer who now helps me out,” he says.

Today, Otten watches over his own 80 acres in Clarks Hill, Ind., and smiles every time he thinks about being a farmer. While the effort has not been easy (or cheap), it has all been worth it, he says. Here are the key lessons he’s learned.

SEEK EXPERTISE AND SUPPORT. Otten first ran his farm idea by his neighbor, a farmer with decades of experience, who affirmed him with a resounding yes. From there, he chose Farm Credit for lending, primarily because of a beginning farmers program through which he’ll receive two years of training alongside other young farmers. Otten says that was a key decision: “The number one

thing I’d tell others is to get involved with a financial institution that will help you get set up,” not simply provide funding.

He also researches continuously and listens to the local farmers who have been harvesting similar land for generations. They’ve formed a cooperative: Otten teaches them new technology, while they share old-school techniques that help bolster his agricultural knowledge.

START SMALL AND MAKE A PLAN TO GROW. For the first year, Otten grew only soybeans on an 80-acre plot he originally rented from his dad, but bought in September 2022. Sticking to one crop and using leased equipment helped minimize inputs and the learning

curve. He plans to master two crops before getting more land. He’s already set his long-term goals: In 10 years, he hopes to farm around 1,000 acres, own his own equipment and possibly be a seed rep. Ultimately, “I would love another generation to take it over,” he says.

KEEP GOOD RECORDS AND WATCH YOUR CASH FLOW.

Otten laughs that he never imagined spending so much time with spreadsheets, but up-to-date, accurate record keeping is critical for maintaining the cash flow that helps maintain a farm.

BELIEVE IN YOURSELF AND GO FOR IT.

“That advice may be a little overshoot, but this is something I thought would be impossible,” he says. “If you have a gut feeling, go after it and stay positive. Life’s too short.”



Cody Otten, pictured here as a member of the McCutcheon FFA in Indiana, dreamed about owning a farm his entire life.

Name: _____

Appendix 4: The View From a First-Generation Farm

Part 1

Directions:

Read the article “The View From a First-Generation Farm” in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. Who is this article about, and what FFA chapter is this person from?	2. What is his only regret?
3. Growing up, his family _____ farmland that was mainly _____ out to produce _____ and _____. Otten didn't have experience with _____ crops. “I used to _____ across the street and watch the farmer who now _____ me out.”	4. How many acres does Otten own today? While the effort has not been easy (or _____), it has all _____ worth it, he says.

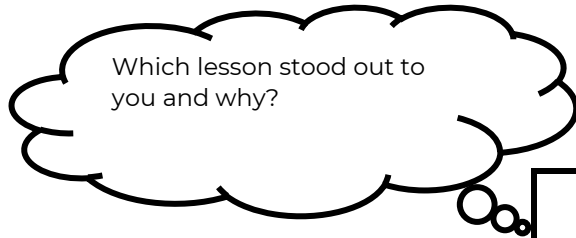
In the boxes below, identify each lesson Cody Otten learned and describe how you can apply it in your life now as a high school student and in the future.

Lesson:	
Lesson:	

Name: _____

Lesson:

Lesson:



Name: _____

Part 2

Directions:

Cody developed a plan and set goals to help achieve tasks in the future. Utilize this website, <https://www.smartsheet.com/blog/essential-guide-writing-smart-goals>, and the space below to create your own goals (three to five) for a future task.

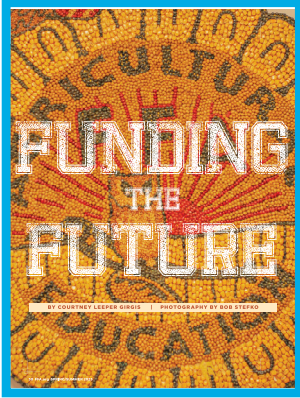


Why is writing down goals important for reaching any goal?



NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

FUNDING THE FUTURE

When Warrenton FFA faced major budget cuts in 2020, its community stepped up in support of agricultural education. Today, the chapter thrives by giving back.

Bell Ringer

What does the word “advocate” mean to you?

Discussion Questions

1. What is a topic that you are passionate about advocating for?
2. What are things that you can do to advocate for that topic?
3. Do you think it is important for people to advocate for what they are passionate about? Explain your answer.

Activity

Part 1: Have students read the article “Funding the Future” in the spring 2023 issue of FFA New Horizons and answer the questions in Appendix 5.

Part 2: Students will complete activities to learn about advocacy. Students will identify the four steps to advocacy and will explain, in their own words, what those steps mean. Next, students will identify and explain some examples of an individual and/or group advocating in their school or community. Lastly, students will think of a topic that they are passionate about advocating for and will plan out a presentation that can be presented to school administration and/or school board.

FFA Tip

If your program has an alumni and supporters chapter, invite a representative to speak to your FFA chapter about their purpose and duties. If you don't have an alumni and supporters group, invite parents, community members, etc. to an informational meeting about potentially starting an alumni and supporters chapter. Check out this website for more information, [FFA.org/alumni-and-supporters/join-alumni](https://www.ffa.org/alumni-and-supporters/join-alumni).

SAE Tip

Tracking and reporting the economic impact of your members' SAEs can provide valuable data to show another way that an agricultural education program provides value to the community. How much do your members spend on feed, seed and other supplies in the community for their SAEs? How many hours/dollars are earned through placement SAEs?

VOCABULARY

Precautionary	Captivated
Campaign	Integrity
Anticipated	Single Axle
Agricultural Fabrication	Advocate

EXIT TICKET

How would you explain advocacy to an elementary student?

CAREER FOCUS AREA

Agricultural Education

RESOURCE HIGHLIGHT

Agriculture Education SAE | Erin Johnson, <https://vimeo.com/236610832>

REFERENCES

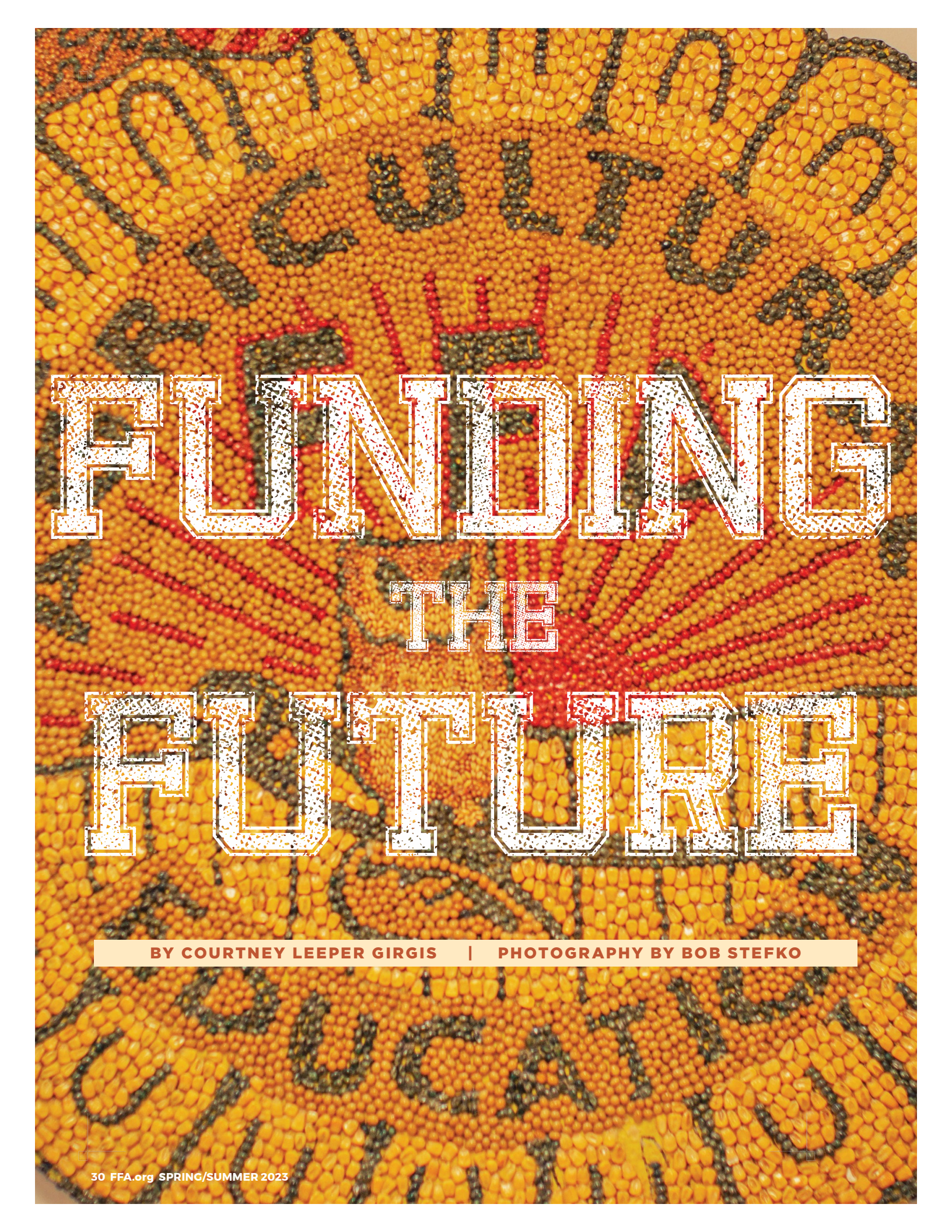
Agricultural Literacy and Advocacy, [FFA.org/ag-literacy-and-advocacy](https://www.ffa.org/ag-literacy-and-advocacy)

APPENDIX

Appendix 5: Funding the Future

STANDARDS ALIGNMENT

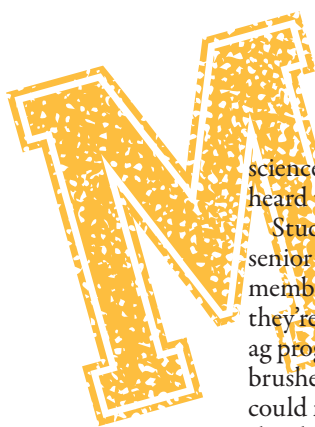
AFNR Performance Element: CS.02, CS.05, FFA Precepts: FFA. PL-A, FFA. PL-C, FFA. PL-D, FFA. PL-E, FFA. PL-F, FFA. PG-G, FFA. PG-I, FFA. CS-M, FFA. CS-N, FFA. CS-O, FFA. CS-P, Common Core – Reading: Informational Text: CCSS.ELA.RI.9-10.2, CCSS.ELA.RI.9-10.4, Common Core – Writing: CCSS.W.9-10.2, CCSS.W.9-10.4, CCSS.W.9-10.8, Common Core – Speaking and Listening: CCSS.SL.9-10.2, CCSS.SL.9-10.4, Common Career Technical Core: AG2, AFNR Career Ready Practices: CRP.02, CRP.04, CRP.08, CRP.09, P21 Skills: Communication, Critical Thinking and Problem Solving, Initiative and Self-direction, Leadership and Responsibility, Think Creatively



FUNDING THE FUTURE

BY COURTNEY LEEPER GIRGIS | PHOTOGRAPHY BY BOB STEFKO

When Warrenton FFA faced major budget cuts in 2020, its community stepped up in support of agricultural education. Today, the chapter thrives by giving back.



Mary Schleuter was in science class when she first heard the rumblings.

Students came to the senior Warrenton FFA member asking, “Is it true they’re shutting down the ag program?” Schleuter just brushed it off. Surely that could not be happening, the chapter parliamentarian thought, but she texted the chapter president, Dawn Sherman, and other officers to see if they had heard the same rumors. They had.

Two days later, Missouri’s Warren County R-III School Board posted its agenda for a special session to be held Nov. 18, 2020. The focus was discussion on \$1 million in budget cuts across the district.

One of the two Warrenton FFA advisors was on the chopping block. In effect, so were the

agricultural construction classes, an agricultural business leadership and communication course and the entire middle school program, which at the time enrolled 92 students.

Growing Support

Sherman, who was serving on the Area V FFA officer team in addition to her role as chapter president, recalls the look of panic in the faces of freshmen and sophomores.

Students were finally back in school after the COVID-19 pandemic shut down activities at the end of spring 2020, and underclassmen, especially, were pumped for all the opportunities older FFA members had told them were coming — even if they had to wear masks and follow precautionary rules.



This photo: Former Warrenton FFA President Dawn Sherman proudly shows her blue-and-gold jacket at Warrenton High School. Below (left to right): A trailer built by Warrenton High School metal fabrication students; Downtown Warrenton, Mo.; Teresa Lee, Warrenton FFA alumni treasurer.

Now they were asking questions such as, “Am I only going to have one year of FFA?”

“We were just trying to make FFA normal again, and then, bam, this happened,” Sherman says. “It was a stressful time. I was trying to find as much information as I could to relay what was happening and give them the facts, which was hard because there were a lot of emotions in it and none of us knew what was happening.”

Warrenton FFA Alumni and Supporters, many of whom are parents of active members, were also hearing the news. Schleuter started a Change.org petition that gained nearly 8,000 signatures in a few days and, with alumni support, the students started a social media campaign using the hashtag #WarrentonAgImpact to raise awareness for the situation in their small (8,388 people in 2020) but expanding community on the outskirts of the St. Louis suburbs.

Alumni and community leaders also wrote emails to board members.

They wanted to help the school board realize “how important agriculture is to our community and to our students, and how important it was to keep the ag program intact,” Warrenton FFA Alumni Treasurer Teresa Lee says.

The Decision

The meeting had to be moved to a different location to accommodate the number of community members





Former Warrenton FFA chapter officer Mary Schleuter advocated to the school board to keep the Warrenton agricultural education program intact.



Warrenton FFA advisor Diane Miederhoff also maintains the school's greenhouse.



Warrenton FFA alumni President Denise Dent takes a break at her hair salon.

anticipated to attend the night the school board was slated to make a final decision. Among them, Schleuter says, was a sea of blue FFA jackets.

Schleuter and Sherman were selected to speak on behalf of the FFA members. They had done their research and brought facts to the conversation: Agriculture represented

about 35% of Warrenton's economy, and agricultural fabrication — supported by the courses specifically being cut — made up 45%.

Their speeches captivated the audience in a way that "grown adults over the age of 40 could not have," says Diane Miederhoff who serves with Dan Burkemper as a Warrenton FFA advisor.

However, the board had

to make cuts. With a 6-to-1 vote, Warrenton FFA lost half its program.

Sherman says the FFA advisors and officers tried to remain positive throughout the process.

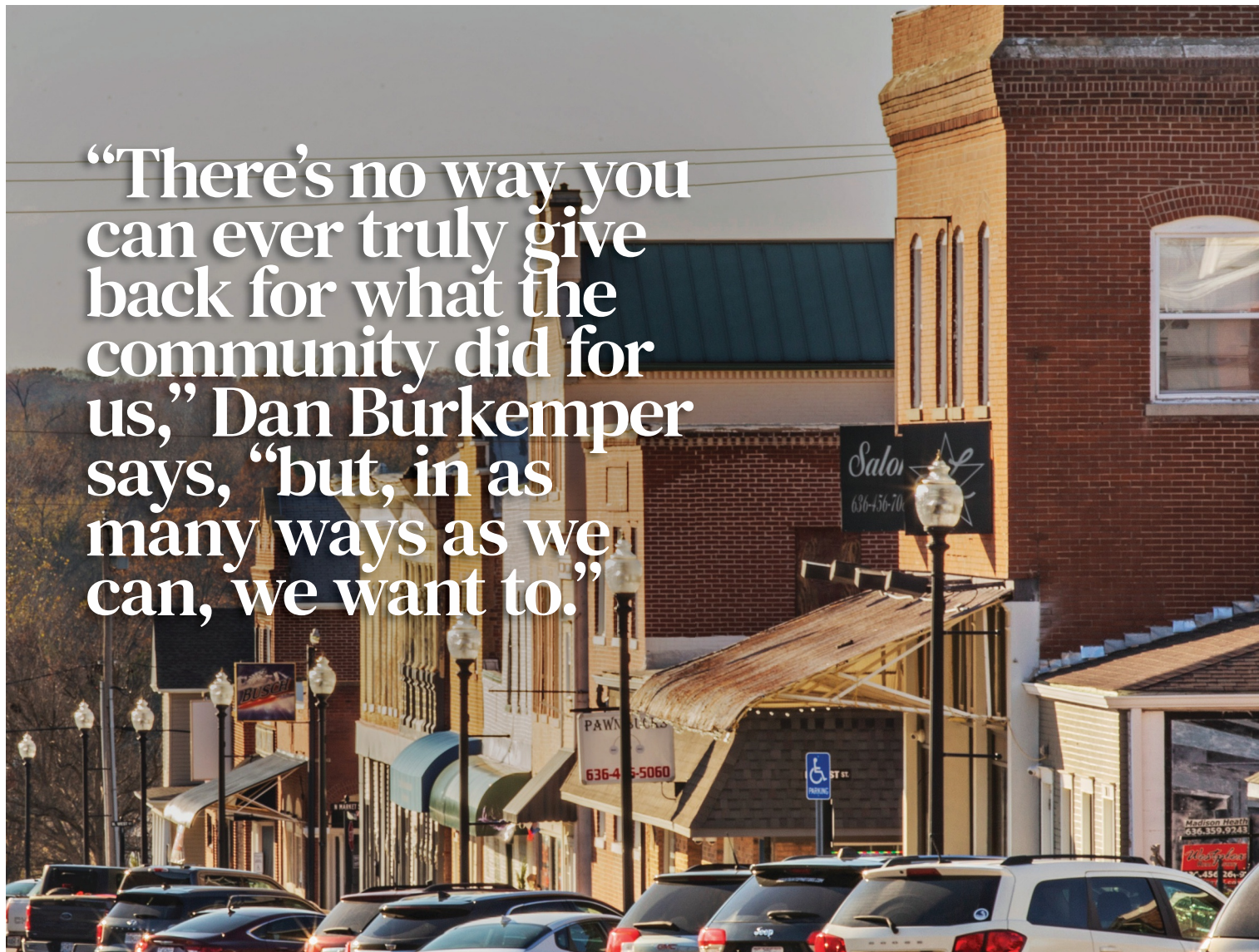
"We told each other, 'We're going to try our best [to keep our full program], but if we can't do it, we're going to make this year the best year possible,'"

Sherman says.

Above all, they would represent themselves with integrity, even in a difficult time.

But alumni members were not satisfied. They could not accept the decision without doing more, so a group got together and proposed that the community fund the second ag teacher. Group members took their proposal

“There’s no way you can ever truly give back for what the community did for us,” Dan Burkemper says, “but, in as many ways as we can, we want to.”



to the superintendent, and at a December 2020 meeting the school board agreed. The community had until April 1, 2021, to raise \$78,000.

A Night to Remember

The Warrenton FFA Alumni and Supporters have been around for decades. The group has not always been very active, Lee says,

but alumni members were always willing to raise funds to help chapter members with trips, FFA Official Dress and college or trade school scholarships.

Now they were fired up. The group, led by Denise Dent, alumni group president, at one point met weekly on Lee’s farm to discuss plans and progress. Their numbers increased over time.

In coordination with the FFA chapter, the alumni tried everything they could think of to raise money, from selling T-shirts to hosting a trapshooting event. In total, the community raised more than \$78,000, which was enough to fully fund the agriculture department.

“There were lots of tears,” Sherman says. “We just realized how much our

community cares for us, how much they see the impact that ag classes had on them, and how much they wanted to continue it for us and future generations.”

Giving Back

Since 2020, the Warrenton agriculture department has seen steady increases in student enrollment. Miederhoff does not anticipate future funding

Advice for FFA Chapters in Jeopardy

After nearly losing an agriculture teacher and programming, Warrenton FFA advisors and alumni recommend building relationships with school administration and the community before issues arise. One way to prevent problems is to advocate now for agricultural education and the value it brings to the community.

If you do encounter a difficult situation with the school board, Warrenton FFA suggests the following tips.

- Understand the board's position. Crack down on rumors and negative talk. Model outstanding citizenship as FFA members, and realize you are responsible for bringing good to your community, not harm.
- Focus on coming together as a community. There is strength in numbers.
- Find the facts, not just the feelings, of the situation. Both are important in the conversation.
- Consider applying for an alumni grant, such as those sponsored by Tractor Supply Co. and Nutrien Ag Solutions, that can help with a variety of financial needs. Visit FFA.org/alumnigrants.
- Stay positive, respectful and flexible.
- Recognize you may not always get the outcome you want, even after doing everything you can. Don't take it personally. Just do your best.

opposite, bottom (left to right): Warrenton FFA advisor Dan Burkemper teaches metal fabrication: Warrenton has a proud FFA history: FFA members aren't afraid of hard work: Members packaged more than 10,000 meals for Meals of Hope. This photo: Metal fabrication students constructed single-axle trailers.



concerns, but the alumni group continues to receive donations from people wanting to support FFA.

Additional donations from community members helped create a metal fabrication class and purchase supplies to build five single-axle trailers, the first of which received grand champion in its division at the Missouri State Fair. The goal is to auction trailers to buy supplies for future projects.

More support helped create a Meals of Hope program, in which students packed more than 10,000 meals for community

members in need. This year, the chapter plans to expand Meals of Hope and continue serving Warrenton and surrounding areas with traditional activities such as food drives and trash pickup days.

"There's no way you can ever truly give back for what the community did for us," Burkemper says, "but, in as many ways as we can, we want to."

Name: _____



Appendix 5: Funding the Future

Part 1

Directions:

Read the article “Funding the Future” in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. What FFA chapter does this article discuss? _____
 - a. In what state is the chapter located? _____
2. What was the rumor students heard? _____

3. What was the focus of the special session of the school board? _____

4. What was potentially on the chopping block? _____

5. Explain how the Warrenton FFA alumni and supporters helped. _____

6. Describe what occurred the night of the special session. _____

7. What activities did the FFA chapter and the alumni and supporters chapter do to help raise funds? _____

Name: _____

Part 2

Directions:

Complete the following activities. Utilize this resource to help answer the questions: FFA.org/ag-literacy-and-advocacy/.



1. Illustrate "advocacy" in the space below and explain, in your own words, what it means.

2. What are the four steps to advocacy?

- a.
- b.
- c.
- d.



3. In your own words, explain each of those steps in detail:

- a.
- b.
- c.
- d.



Think of a topic that you are passionate about advocating for and create a presentation about it to share with your school board, school administration, etc. Example topics could be the FFA chapter, sports team, school club, etc.

Topic: _____

Why did you choose this topic?

Use the next page to map out your presentation.

4. In your school or community, what are some examples of an individual and/or group advocating? Explain in detail.

Name: _____

What resources/equipment do you need to develop and present this presentation?

Why is this topic important to you, your school and your community?

Introduction: How will you introduce the topic to your audience?

Key Points: What facts/supporting information will you share with the audience?



Who is your audience for this presentation?

Key Points: What facts/supporting information will you share with the audience?

Key Points: What facts/supporting information will you share with the audience?

Conclusion: How will you wrap up your presentation? Additionally, write two or three anticipated questions that you might receive after the presentation and write out your answers to them as well.



NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

MINTED A FARMER

Learn how an American FFA Degree recipient with a limited background in agriculture forged a successful SAE and career in the field.

Bell Ringer

What do you think are some of the everyday uses for mint? Try to identify at least three. After you identify at least three, share with your seat neighbor and see if you all have the same answers or different ones.

Discussion Questions

1. What are planting zones?
2. What are the growing requirements for mint?
3. What are the uses of mint?
4. What is the process of harvesting mint?

Activity

Part 1: Have students read the article "Minted a Farmer" in the spring 2023 issue of FFA New Horizons and answer the questions in Appendix 6.

Part 2: Students will complete activities to learn about the production of mint.

FFA Tip

Have older FFA members speak to the chapter about their SAEs — what they are, their duties/responsibilities, how they got started and their future plans for their SAEs.

SAE Tip

Are there farms or employers in the area to whom transportation could be arranged as part of a school program? Can bus routes be used to get students to SAEs?

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS. 02, CS. 05, FFA PRECEPTS: FFA. PL-A, FFA. PL-C, FFA. PL-D, FFA. PL-E, FFA. PL-F, FFA. PG-G, FFA. PG-I, FFA. CS-M, FFA. CS-N, FFA. CS-O, FFA. CS-P, COMMON CORE - READING: INFORMATIONAL TEXT: CCSS.ELA.RI.9-10.2, CCSS.ELA.RI.9-10.4, COMMON CORE - WRITING: CCSS.W.9-10.2, CCSS.W.9-10.4, CCSS.W.9-10.8, COMMON CORE - SPEAKING AND LISTENING: CCSS.SL.9-10.2, CCSS.SL.9-10.4, COMMON CAREER TECHNICAL CORE: AG2, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.08, CRP.09, P21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, INITIATIVE AND SELF-DIRECTION, LEADERSHIP AND RESPONSIBILITY, THINK CREATIVELY

VOCABULARY

Farmhand Program	Extraction
Diversified Crop	Accolades
Niche	Agromony

EXIT TICKET

1. What are three things you learned about mint that you didn't know before?
2. How can you apply what you learned from this activity to your SAE, or how can you apply what you learned in your school career?

CAREER FOCUS AREA

Plant Systems

RESOURCE HIGHLIGHT

SAE Video Library, ffa.org/ffa-video-center

REFERENCES

- Almanac: Mint, <https://www.almanac.com/plant/mint>
- Almanac: What Are Plant Hardiness Zones? <https://www.almanac.com/what-are-plant-hardiness-zones>
- Growing Mint, <https://bonnieplants.com/blogs/how-to-grow/growing-mint>
- USDA Plant Hardiness Zone Map, <https://planthardiness.ars.usda.gov>
- Find Your Zone, <https://southernlivingplants.com/find-your-zone>

APPENDIX

Appendix 6: Minted a Farmer

MINTED A FARMER

HOW AN AMERICAN FFA DEGREE RECIPIENT WITH LITTLE AG BACKGROUND FORGED A SUCCESSFUL SAE AND CAREER IN THE FIELD. - By Lauren Denton



Brock Ashley's mint harvesting and oil extraction SAE won him the 2021 Wisconsin FFA Fiber and Oil Crop Production Proficiency Award.



Ashley's commitment to the task at hand has led the way to more responsibilities and opportunities at Gumz Farms.

Photography: Courtesy of Brock Ashley

Brock Ashley didn't grow up on a farm, but he found his place – or rather, agricultural placement – on one. In 2017, at the end of his freshman year, he joined a morning farmhand program for high school students at Gumz Farms in Endeavor, Wis., and with the exception of a semester at college in fall 2021, he has been there since.

"I knew I wanted to do something in ag, and that was the closest opportunity that worked for me," Ashley says. "My parents just had to drop me off at school, and the bus took us there."

While Gumz is a 6,000-acre diversified-crop farm "with something different to do every day," the former Portage FFA president carved his niche among the specialty crop mint. His harvesting and oil extraction supervised agricultural experience (SAE) won him the 2021 Wisconsin FFA Fiber and Oil Crop Production Proficiency Award and the spot as Wisconsin's finalist for the 2022 American Star in Agricultural Placement.

"I was really shocked [by the accolades]," Ashley says. "A lot of other kids have been working their farm jobs their entire lives, and I thought I was a nobody."

Clearly not. So how did Ashley, who professes he "paved his own way in ag," steer himself to a standout SAE? First, he points to FFA, which he joined in middle

school. "My aunt was an FFA advisor at another high school, so I always joked that I didn't have a choice," he adds. He credits her and his other advisors, which includes his cousin, for pushing him to submit his SAE.

He also acknowledges that FFA "prepared me for what to expect" and introduced him to industry connections, which opened the doors for conversations. "Don't be afraid to talk to people about what you're interested in," he advises. "A lot of farmers want to see young people get involved. My employer was always really interested in my FFA journey and growth."

Ashley also had a willingness to learn. "I couldn't have worked my way up without it," he says. "It may mean picking rocks for about a year or so, but everybody's got to pick rocks."

Ashley's commitment to the task at hand – whether it was clearing fields, harvesting mint, learning to drive tractors or changing tires in the shop during the winter – has led the way to more responsibilities and opportunities at Gumz Farms. The latest, working in the agronomy department and experiencing seed sales, has sparked his interest for the future, where the field remains wide open.

"I don't really plan on finding a different career," he says.

To learn about other SAEs and get inspiration for your own, visit SAEForAll.org.

Name: _____

Appendix 6: Minted a Farmer

Part 1

Directions:

Read the article “Minted a Farmer” in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. In 2017, Brock joined a _____ farmhand _____ for high school students at _____

Farms in _____ Wisconsin.

1a. How long has he been there? _____

2. How big is the farm?

3. Describe the farm.

4. Brock found his niche with what crop?

- a. tomatoes c. watermelon
- b. mint d. peppers

5. What awards did he win because of his SAE?

6. Why was he shocked?

7. How did FFA prepare him?

8. What are some tasks, mentioned in the article, that are associated with growing mint?



8a. What have the tasks led to?



9. What is one fact that stood out to you after reading this article?

10. How can you connect this information to what you are learning in your SAE, agriculture class or other classes?

Name: _____

Part 2

Directions:

Complete the activities below to learn about the production of mint. Utilize these websites to complete the activities: <https://www.almanac.com/plant/mint>, <https://www.almanac.com/what-are-plant-hardiness-zones>, <https://bonnieplants.com/blogs/how-to-grow/growing-mint> and <https://planthardiness.ars.usda.gov/>.

1. What is a plant hardiness zone? _____

2. What zone(s) does mint grow best in? _____

On the map, shade in the zones where mint grows best.



3. In which season is it best to plant mint? Circle the correct answer. Winter Spring Summer Fall

How to Grow and Plant Mint

Spacing Requirements	
Water Requirements	
Fertilize Requirements	
pH Requirement	
When do the flowers on the mint plant typically bloom?	

What insects/pests is mint vulnerable to?

According to your area's USDA planting zone, what crops have similar growth requirements to mint? *Use this site to help with your research:* <https://southernlivingplants.com/find-your-zone/>

Identify various uses for mint. *List at least four.*

1.

2.

3.

4.

How do you harvest mint?

How many harvests per season are typical?

Name: _____

What impact does mint production have on you?

Part 3

Directions:

Create (or modify) a recipe! Use the space below to create a recipe using mint OR take one of your favorite recipes and incorporate mint.

Recipe Name:

Ingredients:

Directions:





NEW HORIZONS

Spring/Summer 2023 TEACHING GUIDE



ARTICLE SUMMARY

FROM CDE TO A SUCCESSFUL BUSINESS

This former FFA member creates innovative products to solve unique problems in agriculture.

Bell Ringer

What are some products/technologies that you think have helped the agriculture industry?

Discussion Questions

1. What are the steps to planning an agriscience fair or research project?
2. What are the different categories of the agriscience fair?
3. How might the agriscience fair or research connect to an SAE?

Activity

Part 1: Have students read the article "From CDE to a Successful Business" in the spring 2023 issue of FFA New Horizons and answer the questions in Appendix 7.

Part 2: Todd used science methods to help create and develop products for his business. Students will utilize the agriscience research information page (following Part 2 of Appendix 7) to complete the activities to learn about agriscience research and plan out an agriscience research project.

FFA Tip

Have agriculture students and FFA members complete an agriscience fair project in their agriculture class. Then host an agriscience fair and invite school administration, community members and science classes to view the projects.

SAE Tip

Have students research and list problems they see in agriculture and natural resources in your area. Have students research or create solutions to these problems as individual or as teams.

VOCABULARY

Concept	Biochemistry	Invaluable
Chlorine	Neutralizes	Introvert
Municipal	Innovative	

EXIT TICKET

Summarize what you learned in two sentences.

CAREER FOCUS AREA

Animals Systems, Agricultural Education

RESOURCE HIGHLIGHTS

Agriscience Fair, [FFA.org/participate/awards/agriscience-fair](https://www.ffa.org/participate/awards/agriscience-fair)

Agricultural Sales Career Development Event, [FFA.org/participate/cdes/agricultural-sales](https://www.ffa.org/participate/cdes/agricultural-sales)

APPENDIX

Appendix 7: From CDE to a Successful Business

STANDARDS ALIGNMENT

AFNR PERFORMANCE ELEMENT: CS. 02, CS. 05, FFA PRECEPTS: FFA. PL-A, FFA. PL-C, FFA.PL-D, FFA. PL-E, FFA.PL-F, FFA. PG-G, FFA.PG-I, FFA.CS-M, FFA.CS-N, FFA.CS-O, FFA.CS-P, COMMON CORE – READING: INFORMATIONAL TEXT: CCSS.ELA.RI.9-10.2, CCSS.ELA.RI.9-10.4, COMMON CORE – WRITING: CCSS.W.9-10.2, CCSS.W.9-10.4, CCSS.W.9-10.8, COMMON CORE – SPEAKING AND LISTENING: CCSS.SL.9-10.2, CCSS.SL.9-10.4, COMMON CAREER TECHNICAL CORE: AG2, AFNR CAREER READY PRACTICES: CRP.02, CRP.04, CRP.08, CRP.09, P21 SKILLS: COMMUNICATION, CRITICAL THINKING AND PROBLEM SOLVING, INITIATIVE AND SELF-DIRECTION, LEADERSHIP AND RESPONSIBILITY, THINK CREATIVELY

From CDE to a Successful Business

This former FFA member creates innovative products to solve unique problems in agriculture.

— By Jessica Mozo

Missouri FFA alumnus Todd Banner was still in high school when he created the concept that would turn into the successful business he runs now. Banner, who lives in Ames, Iowa, used the skills he learned in FFA to launch Swamp Fox Innovations LLC, a technology company that provides solutions to everyday challenges in the equine, livestock and recreational industries.

Banner got the idea for one of his company's products more than 20 years ago when he was an FFA member in Eldon, Mo.

"I grew up on a cattle farm and showed animals at the county and state fairs," Banner says. "I always noticed problems with animals drinking water. None of them drank enough water at shows, and some wouldn't drink any at all. It's a major problem for livestock owners and can be devastating for animals."

Banner thought the problem might be the chlorine in municipal water. Along with his FFA Agricultural Sales Career Development Event (CDE) team, he created the concept of a product that could be added to water to remove chlorine so animals would drink more.

"That was my junior year, around 1996, and it was just a concept at the time," Banner says. "It was a learning experience."

Eventual Expertise

After high school, Banner got his PhD in chemistry and worked for Cargill as a scientist for two decades before starting his business.

"I was always science-centered. In college, I majored in agriculture and biochemistry, and later became a chemist and developed products," Banner says. "I started thinking about that FFA product concept 15 years later, and by then I had the technological expertise to solve the problem."

Banner created a product called Show Fresh_{H₂O} that instantly neutralizes the chlorine and odor in municipal water. His wife, Nicole (pictured below), is an FFA alumna and does marketing for Swamp Fox.

Banner also created a product called Advanced Arena[®] Dust Control Fluid that reduces dust in indoor riding arenas.

"Our business develops innovative products for agriculture. We take everyday problems and develop solutions," Banner says. "Water treatment and dust control are two big ones. I'm working on a new product now that I'm excited about."

The impact FFA had on Banner's career path has proven invaluable.

"I actually manage the business like my old SAE [supervised agricultural experience] projects — I keep track of expenses and sales, create awareness for the product and teach people how to use it," he says. "I was always quiet and introverted, and FFA helped me gain self-confidence. SAE projects helped me learn how to run a small business."

As far as developing a successful new product, Banner says the key is to find unmet needs.

"Be aware of problems that exist," he says. "I had problems with my animals drinking. Is there a product you could develop to create a solution for a problem?"

"our business develops innovative products for agriculture. we take everyday problems and develop solutions." — Todd Banner



Name: _____

Appendix 7: From CDE to a Successful Business

Part 1

Directions:

Read the article "From CDE to a Successful Business" in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. Who is this article about? _____

2. In the box to the right, draw the state where this person was an FFA member.

3. What state does Banner currently live in? _____

4. The name of the company he started is:



5. What is the purpose of the company?



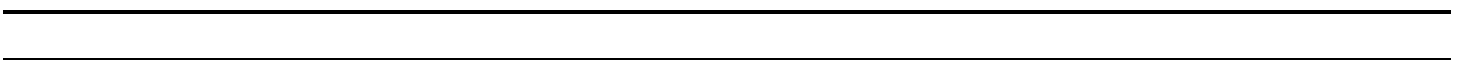
6. He got the idea for one of his company's products more than _____ years ago when he was an FFA member.

- a. 15
- b. 10
- c. 20
- d. 5

7. Describe the idea, referenced in Question 6, that he had for one of his company's products.



8. What did he do after he graduated from high school?



Name: _____

9. What did Banner major in during college?

_____ and _____

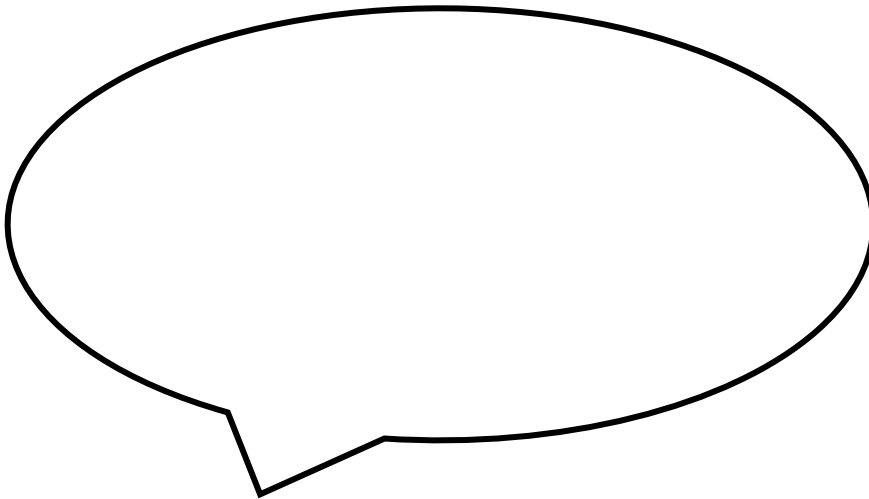
10. What two products did he create, and what is the purpose of those products?

Product and Purpose:

Product and Purpose:

11. Explain how he manages his business, and explain how he credits his SAE:

12. What is his advice for developing successful new products?



13. After reading this article and answering the questions, how can you apply what you learned to your current SAE or to starting an SAE?

Name: _____

Part 2

Directions:

Todd Banner used scientific methods to help create and develop products for his business. Using the agriscience research information page (following this page), complete the following activities to learn about agriscience research.

Draw a line to match the agriscience research category with the correct project opportunity. Hint: There could be more than one match for each category.

- | | |
|--|---|
| 1. Animal Systems | Consumer confidence and understanding of food labels |
| 2. Environmental Service/Natural Resources Systems | Compare plant growth of hydroponics and conventional methods |
| 3. Food Products and Processing Systems | Effect of agricultural chemicals on water quality |
| 4. Plant Systems | Research new disease-control mechanisms |
| 5. Power, Structural and Technical Systems | Control of molds on bakery products |
| 6. Social Science | Create minimum energy use structures |
| | Comparison of profitability of various agricultural/natural resources practices |
| | Effects of lunar climate and soil conditions on plant growth |
| | Resistance of organic fruits to common diseases |
| | Effects of growth hormone on meat/milk production |
| Why is agricultural research important? | Compare water movement through different soil types |

Which research category interests you the most?

Icons can be a great way for people to gain familiarity with something. Create an icon for each of the agriscience research categories. The icon should be strong enough that someone who is unfamiliar with the categories could gain a basic understanding by seeing the icon you create.

Animal Systems

Environmental Service/Natural Resources Systems

Food Products and Processing Systems

Plant Systems

Power, Structural and Technical Systems

Social Science

Name: _____

Agriscience Research

Agriscience research gives students the opportunity to gain real-world, hands-on experiences in agricultural enterprises. Students use scientific principles and emerging technologies to solve complex problems related to agriculture, food and natural resources. Agriscience research can be completed by students of any age.

Skills

- Collaboration
- Communication
- Presentation
- Record keeping
- Research
- Scientific reasoning
- Writing



Parts of your project:

- Written report
- Research notebook
- Research poster
- Research presentation

Category Options

- Animal Systems
 - The study of animal systems, including life processes, health, nutrition, genetics, management and processing, through the study of small animals, aquaculture, livestock, dairy, horses and/or poultry
- Environmental Service/Natural Resources Systems
 - Environmental Service: The study of systems, instruments of technology used to monitor and minimize the impact of human activity on environmental systems
 - Natural Resources: The study of the management, protection, enhancement and improvement of soil, water, wildlife, forests and air as natural resources
- Food Products and Processing Systems
 - The study of product development, quality assurance, food safety, production, regulation and compliance and food service within the food service industry
- Plant Systems
 - The study of plant life cycles, classifications, functions, structures, reproduction, media and nutrients, as well as growth and cultural practices, through the study of crops, turf grass, trees and shrubs and/or ornamental plants
- Power, Structural and Technical Systems
 - The study of agricultural equipment, power systems, alternative fuel sources and precision technology, as well as woodworking, metalworking, welding and project planning for agricultural structures
- Social Science
 - The study of agricultural areas including agricultural education, agribusiness, agricultural communication, agricultural leadership and sales in agriculture, food and natural resources

Agriscience Research

Students can work alone or with a partner based on age:

- 1 – Individual member in grades 7 and 8
- 2 – Team of two members in grades 7 and 8
- 3 – Individual member in grades 9 and 10
- 4 – Team of two members in grades 9 and 10
- 5 – Individual member in grades 11 and 12
- 6 – Team of two members in grades 11 and 12

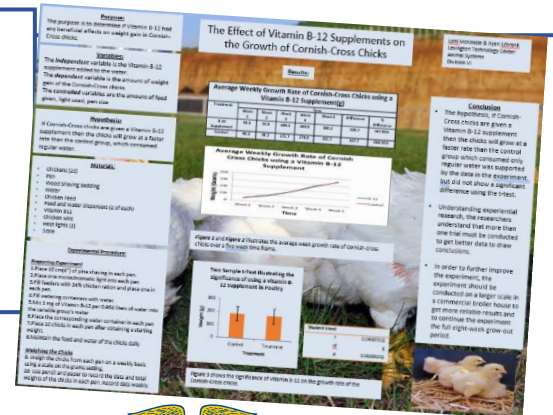
Want to be recognized for your research?



National finalists are selected in each category and division to compete at the National FFA Agriscience Fair.

Award winners will be announced on stage during the National FFA Convention & Expo.

©National FFA Organization 2022



NATIONAL
FFA ORGANIZATION

Name: _____

DIRECTIONS:

For agriscience research to be worthwhile, it is important to carefully plan to ensure an effective study. Follow the outline below to begin planning an agriscience research project of your own!

Step 1: Circle the agriscience research category you would like to research.

- Animal Systems
- Environmental Service/Natural Resources Systems
- Food Products and Processing Systems
- Plant Systems
- Power, Structural and Technical Systems
- Social Science



Step 2: What is your research question? What question will you try to answer?



Step 3: What are three resources that you could use to help you gain some knowledge on your topic? Ex. United States Department of Agriculture, Purdue University, etc.

1. _____
2. _____
3. _____



Step 4: Brainstorm a list of materials you may need to complete your research. Ex. feed, soil, etc.



Why did you select this topic? What about it interests you?

How could this research help with a current problem in the agriculture industry?

What skills could you gain from completing an agriscience research project?

Name: _____

Aligned to the following standards: AG2; AG3 AG5;; CS.03; FFA.PL-A; FFA.PL-C; FFA.PL-D; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.CS-N; FFA.CS-O; FFA.CS-P; CS.02; AG2; CCSS.ELA.RI.9-10.2; CCSS.ELA.RI.9-10.4; CCSS.W.9-10.4; CCSS.ELA.W.9-10.8; CCSS.SL.9-10.2; CCSS.SL.9-10.4; CRP.02; CRP.04; CRP.07; CRP.08

Appendix 8: Vocabulary Activity

Directions:

Choose ten of the vocabulary words from the list below and define each by drawing a picture.

Vocabulary Words: Accolades, Advocate, Agricultural Fabrication, Agronomy, Anticipated, Biochemistry, Bolster, Campaign, Captivated, Cash Crop, Chlorine, Commodity, Concept, Cooperative, Diversified Crop, Egg Grader, Extraction, Farmhand Program, Financial Institution, GIS Specialist, Innovative, Integrity, Introvert, Invaluable, Municipal, Neutralizes, Niche, Perseverance, Pharmaceutical, Precautionary, Restoration, Single Axle, Statistician, Synopsis, USDA

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Name: _____

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

Name: _____

Vocabulary Word:

Picture:

Vocabulary Word:

Picture:

ANSWER KEYS

Name: _____

KEY: Appendix 1: Committed to Constant Improvement

Part 1

Directions:

Read the article "Committed to Constant Improvement" in the spring 2023 issue of *FFA New Horizons* and complete the following questions.

What leadership roles did Mr. Ching serve in during his FFA career?

Chapter Level: **Chapter president**

State Level: **State president**

National Level: **National vice president**

How did he make history? **He was the first national officer of color and remains the only national officer from Hawaii.**

Which career pathway did Ching start out in with his family's business? Highlight the pathway below in **BLUE**.

Agribusiness Systems	Animal Systems	Biotechnology Systems
Plant Systems	Power, Structure, and Technical Systems	Sustainability

How did/does Ching inspire others? **He embodied the hard work, service and dedication that FFA imparts. He was also a visionary who supported the organization's commitment to constant improvement. Lastly, he was patient and persevered.**

Investigate the purpose of the Hawaii Department of Agriculture (HDOA). What are the main roles and responsibilities of this agency?

To support, enhance, promote and protect Hawaii's agriculture and aquaculture industries

To create and maximize opportunities for exporting and facilitate growth of existing and new agricultural commodities and value-added products

To prevent the introduction and establishment of plants, animals and diseases that are detrimental to the state's agriculture industry and the environment

What surprised you the most while reading this article? **Answers will vary.**

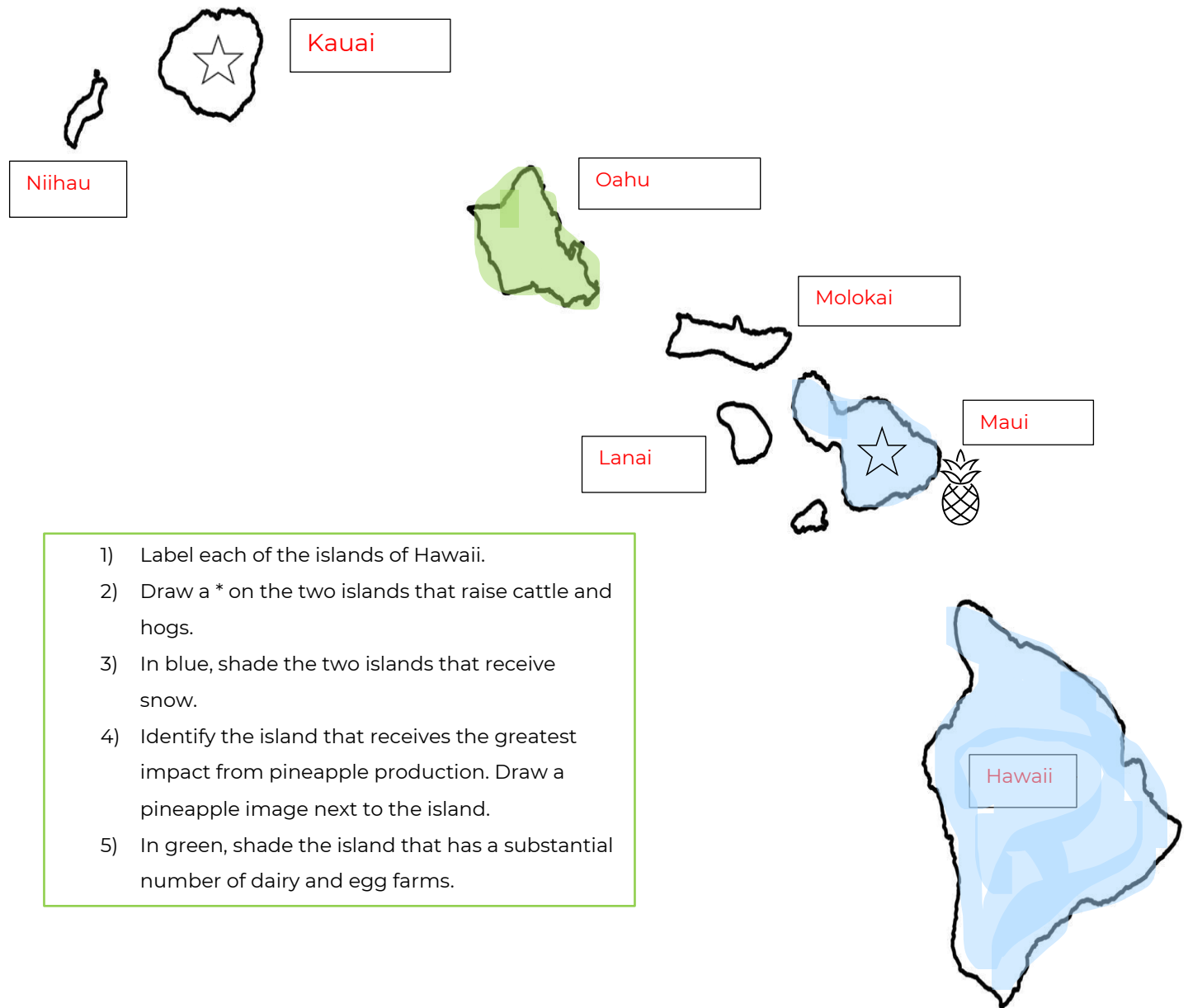
7. What is one question you still have after reading this article? **Answers will vary.**

Name: _____

Part 2

Directions:

Learn about Hawaiian agriculture by completing the activities below. Utilize the USDA National Agriculture Statistics survey website (https://www.nass.usda.gov/Quick_Stats/Aq_Overview/stateOverview.php?state=HAWAII) and the National Agriculture in the Classroom website (<https://agclassroom.org/teacher/agfacts/>).



Identify the flower in the image. Yellow hibiscus

What connection does it have to Hawaii? It is the state flower.

Name: _____

Hawaii Agriculture	Topic to Compare	Your State: _____
1.3 million	Population	Answers will vary.
149-151 acres	Average size farm	Answers will vary.
7,300-7,500 farms	Total number of farms	Answers will vary.
1.1 million acres	Total acres in farm operation	Answers will vary.
July: 77 degrees January: 71 degrees	State average temperature	Answers will vary.
400" in the mountains 10" in the lowlands	Average annual precipitation	Answers will vary.
Greenhouse and nursery products	Top commodities	Answers will vary.
7,200 acres	Acres of coffee grown	Answers will vary.

*Draw and label the state tree for Hawaii and your own state in the box below.

Hawaii 	Answers will vary.
---	---------------------------

*Draw and label the state bird for Hawaii and your own state in the box below.

Hawaii 	Answers will vary.
--	---------------------------

***What is the biggest takeaway for you when comparing Hawaiian agriculture to your own state's agriculture?**

Answers will vary.

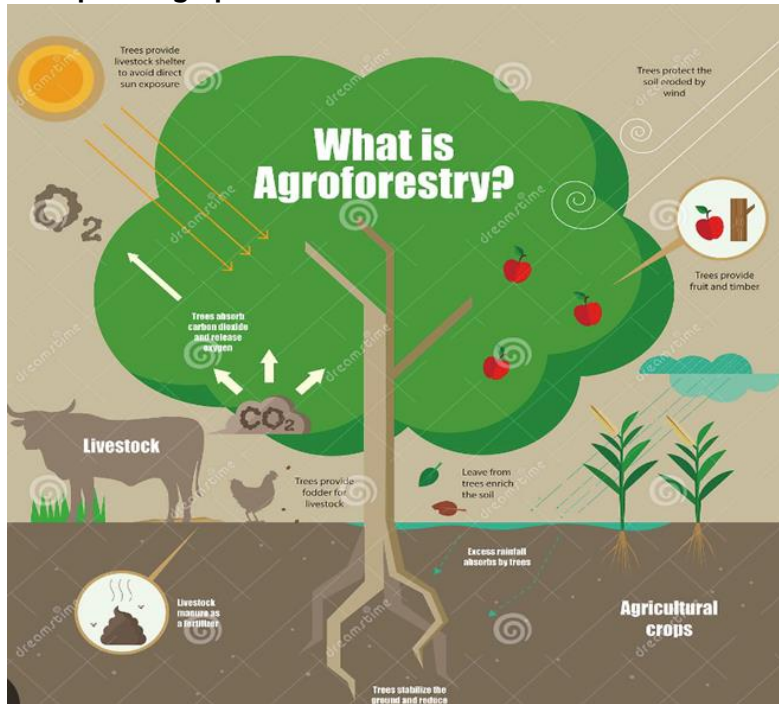
Name: _____

Part 3

Directions:

Now that you have learned a little about Hawaiian agriculture, take your knowledge and put it to use developing a one-page infographic that could be used to enlighten others about agriculture in Hawaii. This infographic should visually represent the agriculture industry of Hawaii and show that there is more to Hawaii than beautiful beaches for vacationing. Use the space below to develop your infographic, and follow your teacher's instructions for the final format to turn in for this project.

Example Infographic:



What to Include:

- Title
- Primarily images and graphics
- Few words — statistics and facts that are short and to the point
- Color — draw attention to the info.
- Organized — easy to view and follow

Brainstorm: Use the box below to help you plan your infographic.

Answers will vary.

Name: _____

*Use the box below to develop your infographic.

Answers will vary.

Name: _____

Infographic Rubric

	Level 1	Level 2	Level 3	Level 4
Knowledge/Understanding Topic (/10)	Provides limited data or data unnecessary to topic	Provides some topic-related information	Provides a considerable amount of information related to the topic	Provides thorough and meaningful information related to the topic
Thinking/Inquiry Organization (/10)	Little organization is evident. Information is confusing and difficult to read.	Some organization is evident. Information is somewhat clear.	Considerable organization is evident. Content is nicely spaced and clear to read.	Thorough organization is evident. There is clear and consistent method to the content.
Communication Form and Audience (/10)	Limited use of infographic features, or features convey information poorly	Some use of infographic features, some features convey information	Considerable use of infographic features that clearly convey information	Thorough use of infographic features, selected features convey information succinctly

Strong parts of your infographic (Gems):

Suggestions (Opportunities for improvement):

One thing I really liked about your infographic was ...

Name: _____

KEY: Appendix 2: 6 Unusual Careers in Agriculture

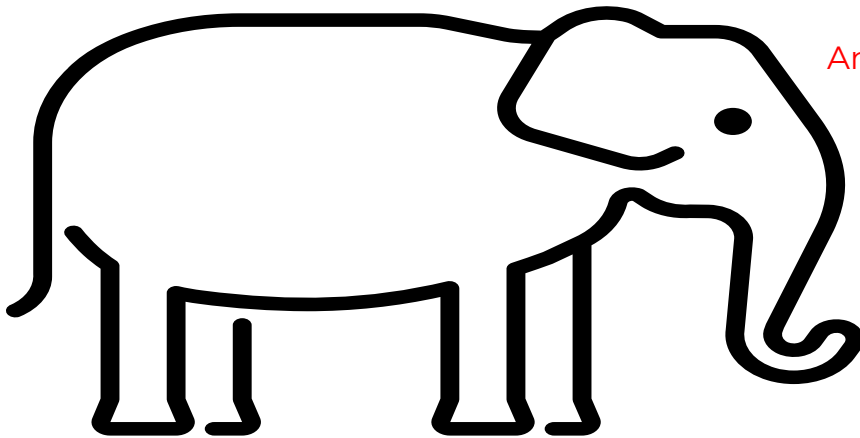
Part 1

Directions:

Read the article "6 Unusual Careers in Ag" in the Spring 2023 issue of *FFA New Horizons* and complete the following activities.

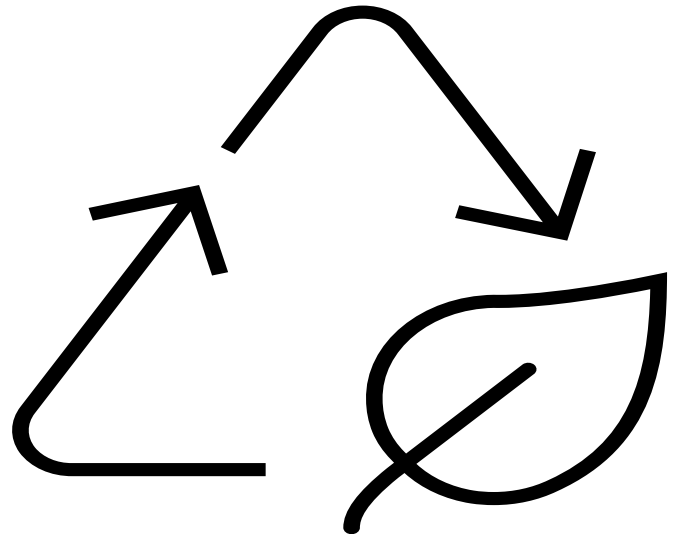
*Identify three key takeaways for each of the careers discussed in the article, and record that information on and/or near each picture that represents the career.

Zoologist



Answers will vary.

Restoration Specialist



Flavor Technologist

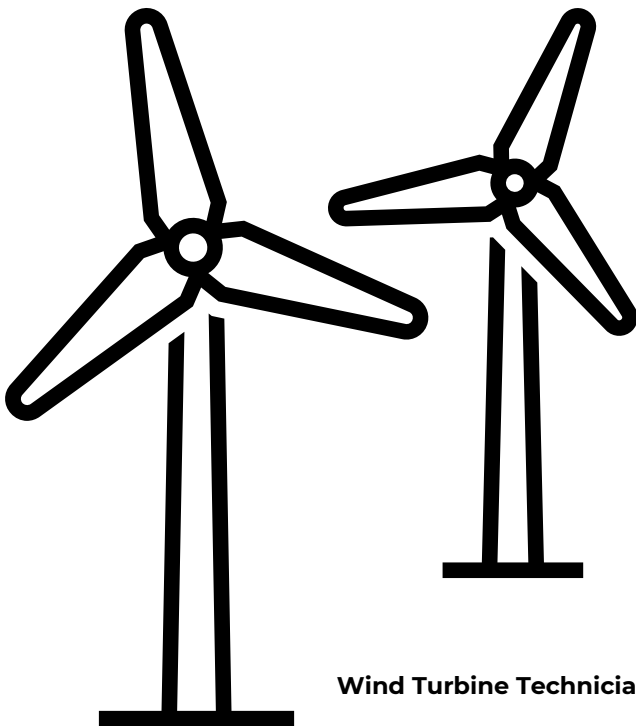
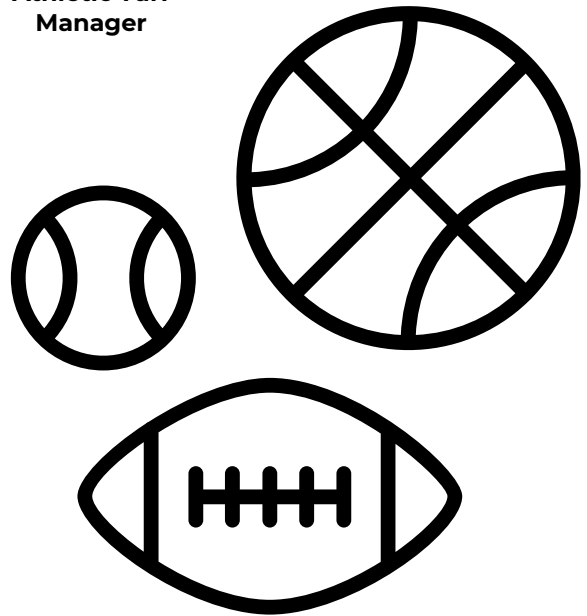
Name: _____

Answers will vary.



Game
Warden

Athletic Turf
Manager



Wind Turbine Technician

Name: _____

- Rank the careers in the article based on your interest in them with **1** being the most interesting.

Career	Rank	Importance of the Career to the Industry
Athletic Turf Manager		Answers will vary.
Flavor Technologist		
Game Warden		
Restoration Specialist		
Wind Turbine Technician		
Zoologist		

- Pick one of the careers above and describe in detail a scenario that would require a person in this career to take part in and be beneficial to the agriculture industry.

Answers will vary.

Name: _____

Part 2

Directions:

Select one of the six unusual careers from the article and explore. Select one of the six unusual careers from the article and explore more about the career by utilizing AgExplorer (AgExplorer.FFA.org/) to complete the activity below.

Exploring Unusual Careers

Career: _____

Answers will vary.

Career Focus Area: _____

What responsibilities will I have?

What trainings and courses can help you prepare for this job?

Who could you work for with this job?

What is the future job market outlook?

Average Salary: _____

Hours of Work: _____

Name: _____

Part 3

Directions:

Using AgExplorer ([AgExplorer: FFA.org/](http://AgExplorer.FFA.org/)), select a career that you were surprised to find is related to agriculture and then complete the activity below.

Career Exploration

Career: _____
Answers will vary

Job Overview

Job Outlook

Responsibilities

Common Employers

High School Courses

Education/ Training Required

Average Salary

Related Careers

Responsibilities

Name: _____

Review what you recorded about the career you identified in Part 3. Now that you know more about the career, rate the following with an emoji that reflects how you feel about each aspect of the career.

Average Salary	Answers will vary
Responsibilities	
Education/Training Required	
Job Outlook	
Career Overall	

Name: _____

KEY: Appendix 3: Leading the Change

Part 1

Directions:

Read the article "Leading the Change" in the winter 2022 issue of *FFA New Horizons* and complete the following activities.

1. In which state was Hodge an FFA member? Highlight the correct answer in **YELLOW**.

Iowa	Michigan	Texas	Washington, D.C.
------	----------	-------	------------------

2. What was unique about Hodge's earning the American FFA Degree?

She was the first African American female to earn the American FFA Degree.

3. What was a potential limitation female FFA members, prior to Hodge, had earning their American degrees?

Females were not allowed in the FFA until 1969. It took time for them to find success in the organization.

4. How did Hodge get started with the USDA?

Internship during college

5. What is the purpose of Hodge's role with the USDA and NASS?

The purpose of this position is to plan, coordinate and direct data collection and conduct of large-scale and complex commodity surveys of national scope.

6. Hodge states her position is impactful. How do you plan on being impactful in your future career?

Answers will vary.

7. What does it mean to be a public servant?

Public servants work for the government and for citizens.

8. How could you be a public servant in your community?

Answers will vary.

Name: _____

Part 2

Directions:

Using the American FFA Degree handbook, website and other references listed below, complete the activities to learn more about earning your American FFA Degree.

The Gold Standard: Earning the American FFA Degree

Resources to Use

American FFA Degree Website: [FFA.org/participate/awards/american-ffa-degree/](https://ffa.org/participate/awards/american-ffa-degree/)

American FFA Degree Handbook: <https://ffa.app.box.com/file/291603672169?s=lillstok48fxy5khgqur6t8srdlid6w>

Introduction

*The American degree is the highest degree an FFA member can achieve. It is the final step in an FFA degree system that encourages personal growth and achievement. The degree is a high and rare honor, less than one percent of FFA members earn it.

It requires commitment and hard work to attain, but you don't have to be a gifted student or live on a farm to reach this goal. The FFA degree system is organized so that all FFA members have equal chance at the American FFA Degree, no matter where they come from.

The American FFA Degree requires at least three years to meet the requirements. Plan and set goals early to earn the degree.

Why Earn the Degree?

***Recognition:** Many members have said that there is no greater satisfaction than walking across the stage at the National FFA Convention to receive their American FFA Degree key and certificate. In addition, recipients' names are listed in the American FFA Degree convention booklet and the official proceedings of the convention.

***Career preparation:** An SAE that leads to an American FFA Degree provides training and experience that enables members to enjoy a useful, interesting and challenging career later in life. Listing the receipt of the American FFA Degree on a job resume stands out to employers in agricultural career areas.

***Perseverance and preparation:** Everyone must compete to secure a job or a position to start a career and make a difference in the world. Meeting the degree requirements teaches members to reach career goals and provides learning experiences that complement classroom education.

Qualifications

Who can earn the American FFA Degree?

Active FFA members with at least three years of membership

When do you earn the American FFA Degree?

After high school



Name: _____

What degree must be earned prior to receiving the American degree?

State degree

How long must you have been an active member in the FFA to receive the American degree?

At least three years

Greenhand Degree



Chapter Degree

State Degree



American Degree

What are the educational requirements for earning the American degree?

Hours: 540 hours of educational class time

Graduation: must have graduated from high school at least 12 months prior to the National FFA Convention at which the degree is to be granted

Scholastic record: grade point average of "C" or better

Community service: at least three different activities and 50 or more hours

What are the SAE financial requirements for earning the American degree?

An SAE that demonstrates comprehensive planning, managerial and financial expertise.

Option 1: earned \$10,000 and productively invested at least \$7,500 through an eligible SAE

Option 2: earned and productively invested at least \$2,000 and worked 2,250 hours in excess of scheduled class time in an eligible SAE

Option 3: Any combination of hours times a factor of 3.56 plus any dollar amount of student earnings and investments must be equal to or greater than \$10,000.

*Identify two goals that can help you earn the American FFA Degree.

1. *Answers will vary.*

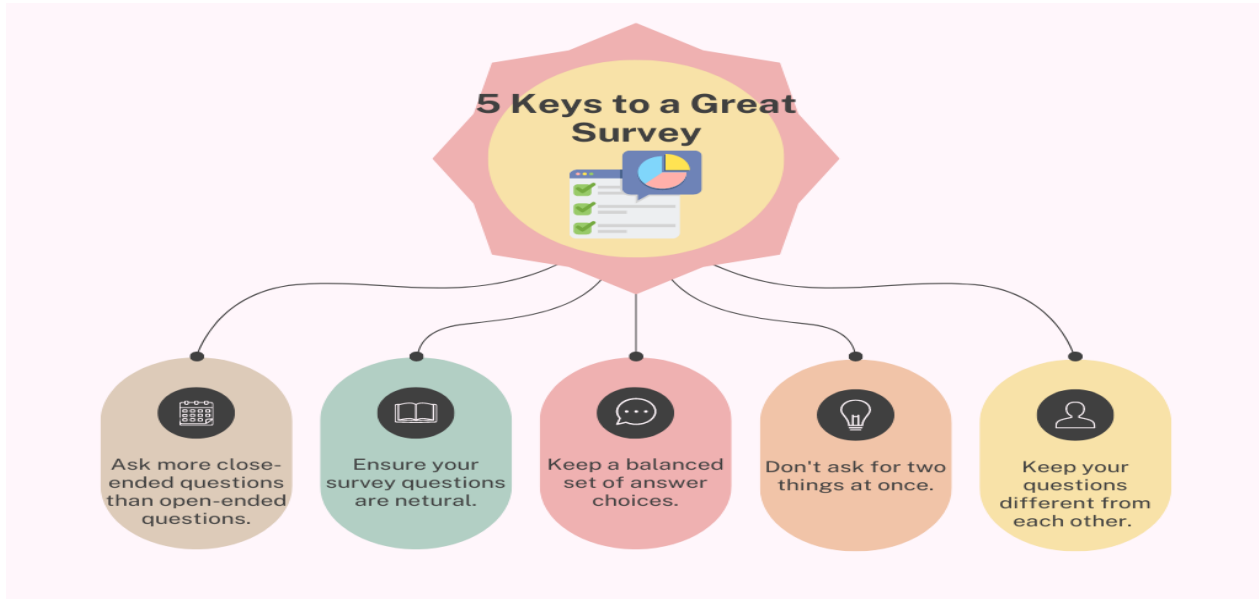
2. *Answers will vary.*

Name: _____

Part 3

Directions:

Think about the work Mrs. Hodge does at the NASS with statistics and surveys. Now, you'll develop your own survey about an agricultural topic using the tips shown below that you could administer to your classmates and other peers within your school and community. Use the brainstorming section to help you create this survey and then follow your teacher's direction for putting the survey into the format they prefer, such as a Google Forms, JotForm or SurveyMonkey.



Survey Brainstorming

Survey Topic: Answers will vary.

Why is this topic relevant or important? Answers will vary.

What is your end goal with the data you will gather from the survey?

(Examples: Agriscience fair project, SAE, FFA chapter project, community service project, etc.)

Answers will vary.

Who is your target audience?

Example answers: classmates, school board, community, local elected officials, school admin

Demographic Questions to Include: (Examples: age, gender, ethnicity, rural/urban/suburban)

Answers will vary.

Questions Specific to Topic:

Answers will vary.

***Why are surveys important to you and your family? Cite two examples of a survey that could impact you and/or your family.**

Answers will vary.

Name: _____

KEY: Appendix 4: The View From a First-Generation Farm

Part 1

Directions:

Read the article “The View From a First-Generation Farm” in the winter 2023 issue of *FFA New Horizons* and answer the questions below.

1. Who is this article about, and what FFA chapter is this person from? Cody Otten, McCutcheon FFA	2. What is his only regret? He wished he had done it sooner.
3. Growing up, his family <u>owned</u> farmland that was mainly <u>rented</u> out to produce <u>cattle</u> and <u>hay</u> . Otten didn't have experience with <u>cash</u> crops. “I used to <u>ride</u> across the street and watch the farmer who now <u>helps</u> me out.”	4.How many acres does Otten own today? 80 While the effort has not been easy (or <u>cheap</u>), it has all <u>been</u> worth it, he says.

In the boxes below, identify each lesson Cody Otten learned and describe how you can apply it in your life now as a high school student and in the future.

Lesson:

Seek expertise and support.

Answers will vary.

Lesson:

Start small and make a plan to grow.

Answers will vary.

Name: _____

Lesson:

Keep good records and watch your cash flow.

Answers will vary.

Lesson:

Believe in yourself and go for it.

Answers will vary.

Which lesson stood out to you and why?

Answers will vary.



Name: _____



KEY: Appendix 5: Funding the Future

Part 1

Directions:

Read the article "Funding the Future" in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. What FFA chapter does this article discuss? Warrenton FFA
 - a. In what state is the chapter located? Missouri
2. What was the rumor that students heard? The agriculture program was being shut down.
3. What was the focus of the special session of the school board? The focus was discussion of \$1 million in budget cuts across the district.
4. What was potentially on the chopping block? One of the two Warrenton FFA advisors was on the chopping block. That would mean the agricultural construction classes, an agricultural business leadership and communication course and the entire middle school program would be cut.
5. Explain how the Warrenton FFA alumni and supporters helped. They started a Change.org petition that gained nearly 8,000 signatures in a few days, and within a few days, the students started a social media campaign. They also wrote emails to board members.
6. Describe what occurred the night of the special session. The board had to make cuts despite the turnout of community members present at the special called session. With a 6-to-1 vote, Warrenton FFA lost half its program.
7. What activities did the FFA chapter and the alumni and supporters chapter do to help raise funds? They sent letters to businesses and community members; sold T-shirts; raffled off hogs, lambs, guns and a quilt donated by various community members; hosted a trapshooting event; added a silent auction and advertising opportunities to an established Warrenton FFA fundraising event in which students raise money by completing service projects.

Name: _____

Part 2

Directions:

Complete the following activities. Utilize this resource to help answer the questions: FFA.org/ag-literacy-and-advocacy/.



1. Illustrate "advocacy" and explain, in your own words, what it means.

Answers will vary.

4. What are the four steps to advocacy?

- a. Plan
- b. Develop
- c. Do
- d. Reflect



5. In your own words, explain each of those steps in detail: Answers will vary.

- a.
- b.
- c.
- d.



Think of a topic that you are passionate about advocating for and create a presentation about it to share with your school board, school administration, etc. Example topics could be the FFA chapter, sports team, school club, etc.

Topic: Answers will vary.

Why did you choose this topic?

Use the next page to map out your presentation.

4. In your school or community, what are some examples of an individual and/or group advocating? Explain in detail below. Answers will vary.

Name: _____

KEY: Appendix 6: Minted a Farmer

Part 1

Directions:

Read the article “Minted a Farmer” in the spring 2023 issue of *FFA New Horizons* and answer the questions below.

1. In 2017, Brock joined a morning farmhand program for high school students at Gumz Farms in Endeavor, Wisconsin.

1a. How long has he been there? With the exception of a semester at college in fall 2021, he has been there since he started in 2017.

2. How big is the farm?

6,000 acres

3. Describe the farm.

Diversified-crop farm “with something different to do every day”

4. Brock found his niche with what crop?

- a. tomatoes c. watermelon
b. mint d. peppers

5. What awards did he win because of his SAE? He won the 2021 Wisconsin FFA Fiber and Oil Crop Production Proficiency Award and the spot as Wisconsin’s finalist for the 2022 American Star in Agricultural Placement.

6. Why was he shocked?

Because a lot of other kids have been working their farm jobs their entire lives and he thought he was a nobody.

7. How did FFA prepare him? FFA introduced him to industry connections, which opened the doors for conversations.

8. What are some tasks, mentioned in the article, that are associated with growing mint? Clearing fields, harvesting mint, learning to drive tractors, changing tires in the shop during the winter

8a. What have the tasks led to? These tasks led the way to more responsibilities and opportunities at Gumz Farms. Currently, he is working in the agronomy department and experiencing seed sales.

9. What is one fact that stood out to you after reading this article?

Answers will vary.

10. How can you connect this information to what you are learning in your SAE, agriculture class or other classes?

Answers will vary.



Name: _____

Part 2

Directions:

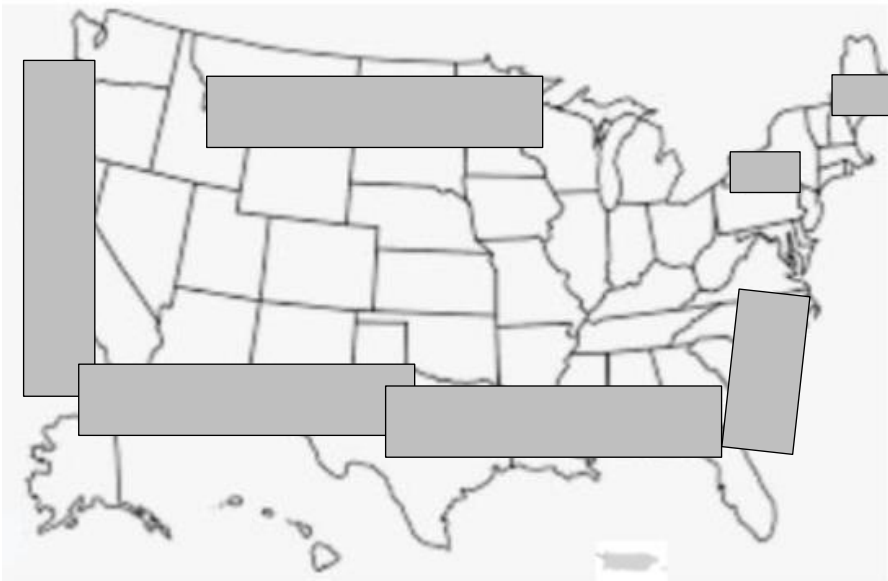
Complete the activities below to learn about the production of mint. Utilize these websites to complete the activities:

<https://www.almanac.com/plant/mint>, <https://www.almanac.com/what-are-plant-hardiness-zones>, <https://bonnieplants.com/blogs/how-to-grow/growing-mint> and <https://planthardiness.ars.usda.gov/>.

1. What is a plant hardiness zone? A planting zone indicates the usual climate of an area, which impacts what plants can grow there. It is important to select varieties of plants that can survive and thrive year-round in your area, especially in regions where extreme winter temperatures are normal. The plant must tolerate year-round conditions, such as the lowest and highest temperatures and the amount of rainfall.

2. What zone(s) does mint grow best in? The top of mint will eventually die back in winter except in zones 8 and south but the roots are quite hardy, surviving into zone 5 (some varieties even into zone 3).

Shade on the map where the zones are that mint grows best.



3. In which season is it best to plant mint? Circle the correct answer. Winter **Spring** Summer Fall

How to Grow and Plant Mint

Spacing Requirements	18 to 24 inches apart — It is best to grow them in pots to keep them from over taking your garden.
Water Requirements	Keep soil consistently moist and water when the top inch becomes dry.
Fertilize Requirements	Regular feed with a water-soluble plant food
pH Requirement	6.0 to 7.0
When do the flowers on the mint plant typically bloom?	They bloom from June to September.

What insects/pests is mint vulnerable to?

Whiteflies, blackflies, spider mites, snails and slugs

How do you harvest mint? You can harvest mint at any size by pinching off stems. For a large harvest, wait until just before the plant blooms, when the flavor is most intense, then cut the whole plant to just above the first or second set of leaves. During this process, you will remove the yellowing lower leaves and promote bushier growth.

How many harvests per season are typical? Three harvests are typical for mint.

Name: _____

Identify various uses for mint. *List at least four.*

1. Nice complement to lamb, fish, poultry and vegetables
2. Mint blends well with green or fruit salads and beverages such as punch, lemonade and tea.
3. You can freeze mint in cubes for iced tea.
4. You can preserve it in vinegar or dry it for potpourri or sachets.

What impact does mint production have on you?

Answers will vary.

Part 3

Directions:

Create (or modify) a recipe! Use the space below to create a recipe using mint OR take one of your favorite recipes and incorporate mint. *Answers will vary.*

Recipe Name:

Ingredients:

Directions:



Name: _____

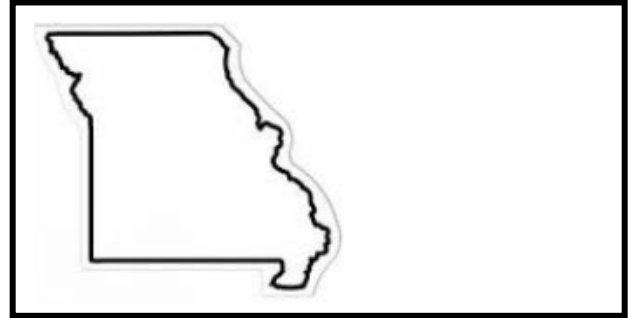
KEY: Appendix 7: From CDE to a Successful Business

Part 1

Directions:

Read the article "From CDE to a Successful Business" in the winter 2023 issue of *FFA New Horizons* and answer the questions below.

1. Who is this article about? Todd Banner
2. In the box to the right, draw the state where this person was an FFA member.
3. What state does Banner currently live in? Iowa
4. The name of the company he started is:
Swamp Fox Innovations LLC



5. What is the purpose of the company?

A technology company that provides solutions to everyday challenges in the equine, livestock and recreational industries

6. He got the idea for one of his company's products more than _____ years ago when he was an FFA member.

- a. 15
- b. 10
- c. 20
- d. 5

7. Describe the idea, referenced in Question 6, that he had for one of his company's products.

He grew up on a cattle farm and showed animals at county and state fairs. He noticed problems with animals drinking water. The animals weren't drinking enough water at shows, and some were not drinking at all. He thought the problem could be the chlorine in municipal water. Along with his agricultural sales career development event team, he created the concept of a product that could be added to water to remove chlorine so animals would drink more.

8. What did he do after he graduated from high school?

He got his Ph.D. in chemistry and worked for Cargill as a scientist for two decades before starting his business.

Name: _____

9. What did Banner major in during college?

Agriculture and Biochemistry

10. What two products did he create, and what is the purpose of those products?

Product and Purpose:

Show Fresh H2O®: It instantly neutralizes the chlorine and odor in municipal water.

Product and Purpose:

Advanced Arena® Dust Control Fluid: It reduces dust in indoor riding arenas.

11. Explain how he manages his business, and explain how he credits his SAE.

He manages the business like his old SAE projects-he keeps track of expenses and sales, create awareness for the product and teach people how to use it. He was always quiet and introverted and FFA helped him gain self-confidence. His SAE projects helped him learn how to run a small business.

12. What is his advice for developing successful new products?

The key is to find unmet needs in the marketplace. Be aware of problems that exist.



13. After reading this article and answering the questions, how can you apply what you learned to your current SAE or to starting an SAE?

Answers will vary.

Name: _____

Part 2

Directions:

Todd Banner used scientific methods to help create and develop products for his business. Using the agriscience research information page (following this page), complete the following activities to learn about agriscience research.

Draw a line to match the agriscience research category with the correct project opportunity. Hint: There could be more than one match for each category.

- | | |
|--|---|
| 1. Animal Systems | Consumer confidence and understanding of food labels |
| 2. Environmental Service/Natural Resources Systems | Compare plant growth of hydroponics and conventional methods |
| 3. Food Products and Processing Systems | Effect of agricultural chemicals on water quality |
| 4. Plant Systems | Research new disease-control mechanisms |
| 5. Power, Structural and Technical Systems | Control of molds on bakery products |
| 6. Social Science | Create minimum energy use structures |
| | Comparison of profitability of various agricultural/natural resources practices |
| | Effects of lunar climate and soil conditions on plant growth |
| | Resistance of organic fruits to common diseases |
| | Effects of growth hormone on meat/milk production |
| | Compare water movement through different soil types |
| | Compare properties of various alternative insulation products |

Why is agricultural research important?

Agricultural research is important for finding solutions to problems that exist in the industry.

Which research category interests you the most?

Answers will vary.

Icons can be a great way for people to gain familiarity with something. Create an icon for each of the agriscience research categories. The icon should be strong enough that someone who is unfamiliar with the categories could gain a basic understanding by seeing the icon you create. Answers will vary.

Animal Systems

Environmental Service/Natural Resources Systems

Food Products and Processing Systems

Plant Systems

Power, Structural and Technical Systems

Social Science