



NATIONAL
FFA ORGANIZATION

CDE, LDE and Agriscience Research Choice Board

Created: 05/2020 by the National FFA Organization

Description: Career and leadership development events (CDEs/LDEs) and agriscience research help develop college and career readiness skills. Through this resource, students will be challenged to learn about and explore different events offered by National FFA.

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THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

AFNR Performance Element

- CS.05. Describe career opportunities and means to achieve those opportunities in each of the Agriculture, Food & Natural Resources career pathways.

FFA Precept

- FFA.PL-A.Action: Assume responsibility and take the necessary steps to achieve the desired results, no matter what the goal or task at hand.
- FFA.PL-C.Vision: Visualize the future and how to get there.
- FFA.PL-E.Awareness: Understand personal vision, mission and goals.
- FFA.PL-F.Continuous Improvement: Accept responsibility for learning and personal growth.
- FFA.PG-I.Professional Growth: Assume responsibility for attaining and improving upon the skills needed for career success.
- FFA.PG-J.Mental Growth: Embrace cognitive and intellectual development relative to reasoning, thinking and coping.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

Common Core – Reading: Informational Text

- CCSS.ELA-Literacy.RI.9-10.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).

Common Core – Writing

- CCSS.ELA-Literacy.W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

Common Core – Speaking and Listening

- CCSS.ELA-Literacy.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

Common Core – Literacy in Science & Technical Subjects: Writing

- CCSS.ELA-Literacy.WHST.9.10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

AFNR Career Ready Practices

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.07. Employ valid and reliable research strategies. Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies.
- CRP.08. Utilize critical thinking to make sense of problems and persevere in solving them. Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem.
- CRP.10. Plan education and career path aligned to personal goals. Career-ready individuals take personal ownership of their own educational and career goals, and they regularly act on a plan to attain these goals.
- CRP.11. Use technology to enhance productivity. Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems.

Partnership for 21st Century Skills

- Communication
- Critical Thinking and Problem Solving
- Flexibility and Adaptability
- Information Literacy
- Initiative and Self-Direction
- Leadership and Responsibility

Name: _____

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CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

CDE, LDE and Agriscience Research Choice Board

DIRECTIONS:

You will explore different events offered by National FFA to complete the tasks listed below. Some tasks will take longer than others, but you can complete them in *any order you choose*. Your due date for completion of this board is _____. Shade or color in each block below as you complete it. The board is worth a total of 100 points. The maximum point value for each activity is at the bottom of each block.

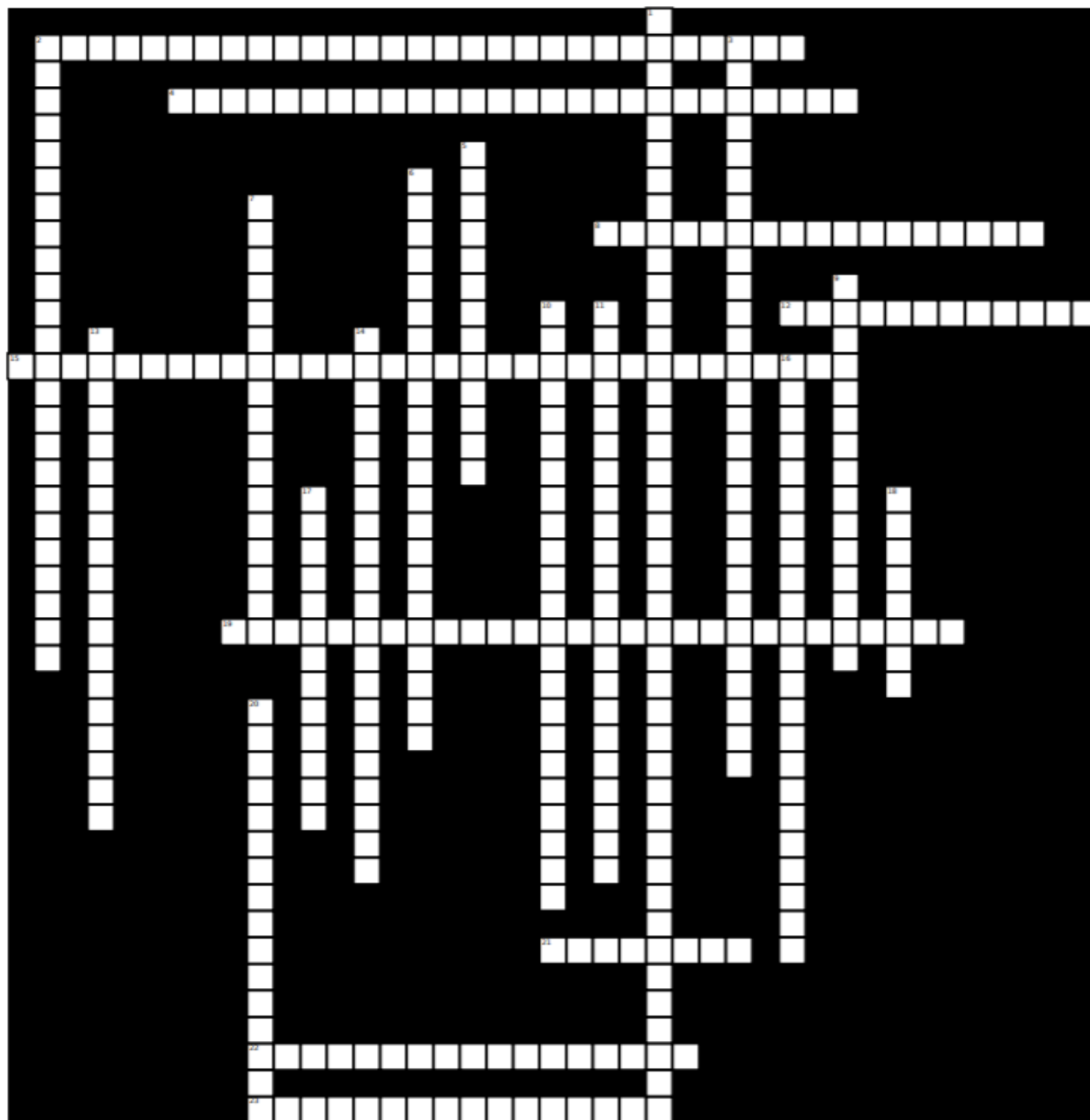
Remember/ Understand	Complete the Competitive Events crossword found in Appendix 1. 5 points	Select three competitive events that you have the most interest in learning about. Use Appendix 3 and the event posters to help guide your thoughts. 5 points	Identify three benefits to competing in an event through National FFA. 1. _____ _____ _____ 2. _____ _____ _____ 3. _____ _____ _____ 5 points	Explore terminology related to National FFA events. Use Appendix 6. 5 points
Apply/Analyze/ Evaluate	In agricultural education there are 8 different career pathways to consider for your future career. Use Appendix 10 to identify which career pathway each event will fit into. 5 points	Research is an important part of any industry. Learn about the agriscience research process using Appendix 8. 10 points	Select one competitive event and use the Agriculture, Food and Natural Resources Value Chain diagram to describe how the skills in that event apply to each step. Use Appendix 5. 5 points	Read the article from the 2017 winter issue of <i>FFA New Horizons</i>. Use Appendix 7. 10 points
Create	Design a bulletin board or sign that could be displayed in your school lunchroom for all students to see and learn about the different competitive events offered by National FFA. 10 points	Write a two-paragraph news release and three social media posts about a competitive event that you have participated in recently. This can be through any club, sport, a video game contest, etc. Use Appendix 2. 10 points	Create the beginning of an agriscience research project by using Appendix 9. 10 points	Select the competitive event you have the greatest interest in learning more about. Design a mini version of the event that you could host at your school. Use Appendix 4 to guide your planning. 20 points

Name: _____

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Appendix 1: Work It Out!



- Across
- 2 In which competitive event do participants learn and apply skills that can be applied to personal financial management?
 - 4 In which competitive event do participants work collaboratively to effectively communicate and advocate for agriculture?
 - 8 In which competitive event do participants evaluate poultry and poultry products within the industry?
 - 12 In which competitive event do participants identify plant materials, disorders, and equipment?
 - 15 In which competitive event do participants work to respond to a scenario involving soils, water, ecosystems, and waste management?
 - 19 In which competitive event do participants identify various cuts of meat?
 - 21 In which competitive event do participants identify trees and disorders?
 - 22 In which competitive event do participants create sales strategies?
 - 23 In which competitive event do participants work to develop, practice, and demonstrate skills needed for seeking employment in the agriculture industry?

- Down
- 1 In which competitive event do participants demonstrate skills based on environmental and natural resources systems, technology, and agricultural machinery equipment?
 - 2 In which competitive event do participants identify food products based on aroma?
 - 3 In which competitive event do participants develop the ability to express themselves on a given subject without having prepared or rehearsed the content in advance?
 - 5 This competitive event is only open to seventh, eighth, and ninth grade FFA members.
 - 6 In which competitive event do participants present a prepared manuscript in a six-to eight-minute presentation?
 - 7 In which competitive event do participants identify parasites in animals?
 - 9 In which competitive event do participants identify equine equipment?
 - 10 In which competitive event do participants research the pros and cons of an agricultural issue and present to a panel of judges?
 - 11 In which competitive event do participants identify different types of cheese?
 - 13 In which competitive event do participants learn about production priorities through the evaluation and selection of beef cattle, swine, sheep, and meat goats?
 - 14 In which competitive event do participants demonstrate the ability to evaluate, select, and manage a modern herd of dairy cattle?
 - 16 In which competitive event do participants learn to participate effectively in a business meeting?
 - 17 In which competitive event do participants develop practical skills in marketing?
 - 18 In which competitive event do participants identify weeds, seeds, and crops?
 - 20 In which competitive event do participants pot or propagate nursery stock?

Name: _____

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CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

Appendix 2: Extra! Extra! Read All About It!

DIRECTIONS:

Write a two-paragraph news release about a competitive event that you have participated in recently. This can be through any club, sport, video game contest, etc. Be sure to outline the following:

1. A description of the event.
2. The skills you have learned by preparing for the event as well as participating in the event.
3. How will those skills you learned help you in the future?
4. If someone were trying to cancel this event, what would you say to advocate for this event? What makes it special?

Handwriting practice area with 20 horizontal lines for writing a two-paragraph news release.



Area for drawing a picture related to the news release.

Picture



TIPS for a successful article:

1. Address the who, what, when, where and why.
2. Start off with a catchy first sentence.
3. Quote important information.
4. Be straightforward.
5. Use appropriate/correct vocabulary.

Name: _____

DIRECTIONS:

Create a Snapchat filter, Facebook post and Instagram announcement to spotlight and advocate for your event.

Snapchat



Facebook

Picture



Instagram



Name: _____

Appendix 3: What's the Difference?

DIRECTIONS:

Using the modified Venn diagram below, compare and contrast three competitive events that you have the most interest in exploring further. Use the competitive events posters to help guide your thoughts.



Event 1:	Similarities	Event 2:
_____ _____ - Purpose: - Tasks accomplished: - Skills learned: - Career pathway (Hint: Use the pathway names below.):		_____ _____ - Purpose: - Tasks accomplished: - Skills learned: - Career pathway (Hint: Use the pathway names below.):
Event 3: _____ _____ - Purpose: - Tasks accomplished:		- Skills learned: - Career pathway (Hint: Use the pathway names below.):

What do you find most exciting about participating in a National FFA competitive event?

HINT: Career Pathway Options: Agribusiness Systems, Animal Systems, Biotechnology Systems, Environmental Service Systems, Food Products and Processing Systems, Natural Resources Systems, Plant Systems, Power, Structural and Technical Systems

Name: _____

Appendix 4: Planning for Learning!

DIRECTIONS:

Select the competitive event you have the greatest interest in learning more about. Design a mini version of the event that you could host at your school. Use the guidelines below to plan your experience.

Which competitive event have you selected?



Why did you select this competitive event?

What is the goal you hope participants will have achieved by the end of this mini competitive event?



Step 1: Identify two different practicums you want to include (what does each student have to do during the event? Ex. Identify cuts of meat).

Step 2: Create a numbered task list that will need to be completed to make the event possible. (Ex. purchase meat cuts)

Step 3: Identify people that can help you put on your mini competitive event. HINT: Think about teachers, janitors, parents and alumni and supporters.

Name: _____

Step 4: Draw a picture of how you are going to set up your mini competitive event. Be sure to consider all the event components.

What are your biggest challenges with planning a mini event?



What skills can you learn from planning and putting on a mini event?



Name: _____

Appendix 5: How Does This Apply?

DIRECTIONS:

Select one competitive event and use the Agriculture, Food and Natural Resources Value Chain diagram to describe how the skills in that competitive event apply to each step. Follow the steps below to make your analysis.

1. Select a National FFA competitive event **from the attached options:** _____
2. Identify 5 skills you can learn from preparing for and participating in a competitive event:

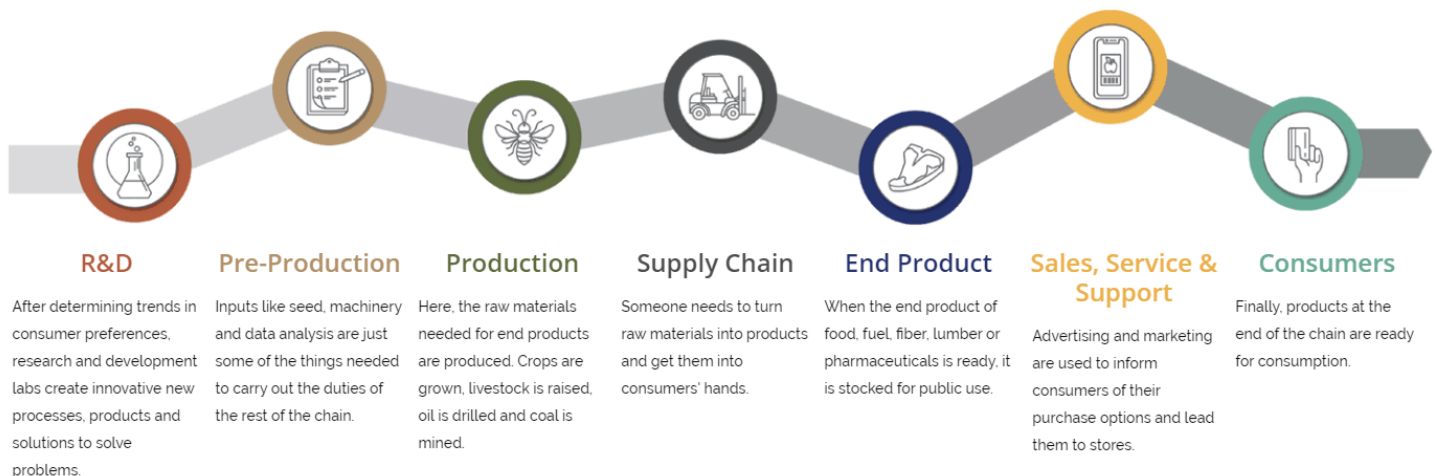
(1)

(2)

(3)

(4)

(5)
3. Place each skill you identified in Question 2 next to the icon(s) of the step in the value chain for which that skill would best prepare you. Explain why you placed each skill where you did.



Name: _____

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Appendix 6: CDE or LDE?

DIRECTIONS:

Explore terminology related to National FFA CDEs and LDEs by completing the following activities. Use the attached posters to help you.

- What does the acronym CDE stand for? C _____ D _____ E _____
- Identify two CDEs. (1) _____ (2) _____
- Draw a picture that depicts what a CDE is and what it provides to participants.

- What does the acronym LDE stand for? L _____ D _____ E _____
- Identify two LDEs. (1) _____ (2) _____
- Draw a picture that depicts what a LDE is and what it provides to participants.

What is the difference between a CDE and LDE?



Why do we call some events CDEs while others are LDEs?



What advice would you give to someone considering participating in a National FFA CDE or LDE?

Name: _____

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Appendix 7: Where Does It All Lead?

DIRECTIONS:

Read the article, "One Thing Leads to Another," from the 2017 winter issue of *FFA New Horizons*. Complete the following activities.

Why did Terren sign up for agriculture classes?

What agriculturally related competitive event did Terren's advisor first sign him up for?

This participation led Terren to compete in three more events through FFA. What were they?

- 1.
- 2.
- 3.

What CDEs and LDEs could Terren have competed in at the national level that would have prepared him for his end career goals? Identify three.

- 1.
- 2.
- 3.

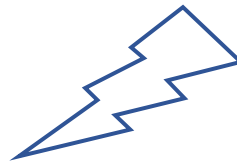
Why do FFA members participate in CDEs and LDEs?

How did participation in CDEs and LDEs help Terran prepare for his future career?

What supervised agricultural experience (SAE) did Terran have in high school?

What CDEs and LDEs could Terren have competed in at the national level that would have helped him with his supervised agricultural experience (SAE)? Identify three.

- 1.
- 2.
- 3.



Name: _____

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Appendix 8: What Is Agriscience Research?

DIRECTIONS:

Agriscience research is critically important to the agriculture industry. Developing your own agricultural research project gives you the opportunity to formulate your own scientific question that you can then test and report on through a presentation and poster. Using the attached [agriscience research information page](#), complete the following activities.

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 Services/Natural Resource 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 |
| Why is agricultural research important? | Compare properties of various alternative insulation products |

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 Systems	Food Products and Processing Systems
Plant Systems	Power, Structural and Technical Systems	Social Science Systems

Name: _____

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Appendix 9: Parts of Agriscience Research

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?

If you love this type of work, check out the National FFA Agriscience Fair!

Name: _____

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Appendix 10: How Does It Fit?

DIRECTIONS:

There are eight identified career pathways in agricultural education to guide you to your future career, even if it is not in the agriculture industry. All the events that National FFA offers align with one or more of those identified career pathways. Follow the numbered steps to complete this activity:

1. Read about each pathway.
2. Highlight 5 key words in each career pathway that help to distinguish that career pathway from the others.
3. List each competitive event that aligns with the career pathway. Use the attached posters and the [Competitive Event Skills](#) to help you. Note: Some events may be used in multiple pathways.

Agribusiness Systems The agribusiness field encompasses activities that contribute to successful agriculture production. This can include crop production, farm equipment, seed supply, marketing, natural resources and animal services. 	Animal Systems Scientists and technicians of this pathway treat diseased or injured livestock, companion and exotic animals and work to keep them healthy. They also study and research genetics, nutrition and the development of animals they work with. 	Biotechnology Systems The use of biotechnology in agriculture enhances plants, animals and microorganisms. Careers in this pathway help make plants more nutritious to eat, enable fish to grow twice as fast, help solve global issues and work to increase the world's access to safe and affordable food and clean water. 	Environmental Service Systems Scientists, technicians and engineers in this pathway are focused on preventing the harmful effects of human activities. People in this pathway may be involved in recycling, water and air pollution control, waste disposal and public health issues. 
Food Products and Processing Systems Careers in this pathway study the physical, biological and chemical makeup of foods to improve safety, create better processes, enhance the nutritional value and shelf-life of foods and even develop new flavors. 	Natural Resources Systems Minerals, forests, water and land are all provided by Earth. Humans use these natural resources in many ways. Careers in this pathway work to develop, maintain and manage these natural resources. 	Plant Systems Careers in this pathway study plants and how they impact our world. These professionals help feed our growing population by monitoring the quality and safety of our food and helping consumers make sensible nutritional decisions. 	Power, Structural and Technical Systems Professionals in these fields apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures and controls to the field of agriculture. They also tackle challenges such as how to conserve soil and water, how to create efficient production and how to conserve natural resources. 

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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.



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Competitive Event Skills

DIRECTIONS:

Use the following information to help you with the activities in the choice board. The skills and practicums completed in each event are not limited to those found here and on each poster.

Agricultural Communications

- Skills:
 - Communication
 - Collaboration
 - Creativity
 - Presentation Skills
 - Journalistic and opinion writing
 - Website design
 - Video production
 - Social media

Agricultural Issues Forum

- Skills:
 - Communication
 - Collaboration
 - Creativity
 - Presentation skills
 - Fact-based writing

Agricultural Sales

- Skills:
 - Active listening skills
 - Building rapport
 - Communication
 - Collaboration
 - Creativity
 - Questioning
 - Presentation skills
 - Product knowledge

Agricultural Technology and Mechanical Systems

- Skills:
 - Communication
 - Collaboration
 - Presentation skills
 - Creativity
 - Problem solving
 - Understanding modern technology

Agronomy

- Skills:
 - Agronomic equipment, plant, seed, weed and pest identification
 - Communication
 - Collaboration
 - Problem solving
 - Presentation Skills

Conduct of Chapter Meetings/Parliamentary Procedure

- Skills:
 - Communication
 - Collaboration
 - Decision making
 - Understanding business meeting proceedings

Creed Speaking

- Skills:
 - Communication
 - Memorization
 - Presentation
 - Self-confidence
 - Speaking skills

Dairy Cattle Evaluation and Management

- Skills:
 - Communication
 - Dairy cattle selection/analysis
 - Herd management
 - Observation

Employment Skills

- Skills:
 - Active listening
 - Communication
 - Decision making
 - Leadership
 - Problem-solving

Environmental and Natural Resources

- Skills:
 - Collaboration
 - Communication
 - Critical thinking
 - Identification
 - Presentation skills
 - Writing

Extemporaneous Public Speaking

- Skills:
 - Communication
 - Critical thinking
 - Quick thinking
 - Presentation skills

Farm and Agribusiness Management

- Skills:
 - Communication
 - Critical thinking
 - Decision making
 - Problem analysis
 - Presentation skills
 - Writing

Name: _____

Floriculture

- Skills:
 - Communication
 - Critical thinking
 - Decision making
 - Floral design
 - Problem analysis
 - Presentation skills
 - Plant and disease identification

Food Science and Technology

- Skills:
 - Communication
 - Critical thinking
 - Decision making
 - Problem analysis
 - Presentation skills

Forestry

- Skills:
 - Communication
 - Equipment identification
 - Problem solving
 - Tree identification
 - Tree measuring

Horse Evaluation

- Skills:
 - Communication
 - Horse selection and management
 - Observation

Livestock Evaluation

- Skills:
 - Communication
 - Cattle, swine, meat goat and lamb selection and management
 - Observation

Marketing Plan

- Skills:
 - Communication
 - Collaboration
 - Presentation
 - Research
 - Teamwork
 - Technical writing

Meats Evaluation and Technology

- Skills:
 - Analytical skills
 - Carcass evaluation
 - Communication
 - Critical thinking
 - Observation

Nursery/Landscape

- Skills:
 - Communication
 - Identification
 - Problem-solving
 - Teamwork

Poultry Evaluation

- Skills:
 - Communication
 - Collaboration
 - Evaluation of live poultry
 - Evaluation of poultry products
 - Presentation

Prepared Public Speaking

- Skills:
 - Communication
 - Critical thinking
 - Memorization
 - Presentation skills

Veterinary Science

- Skills:
 - Animal care and handling
 - Clinical procedures
 - Communication
 - Critical thinking
 - Identification
 - Presentation skills
 - Teamwork

Agriscience Research

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

Name: _____

Rubric: CDE, LDE and Agriscience Research Choice Board

5 POINT TASKS		
Criteria	Points Available	Points Received
Work shows understanding and knowledge of the topic.	2	
Work shows good effort and is of high quality.	1	
Student followed all instructions for the task.	1	
Work was turned in on time.	1	
Total		

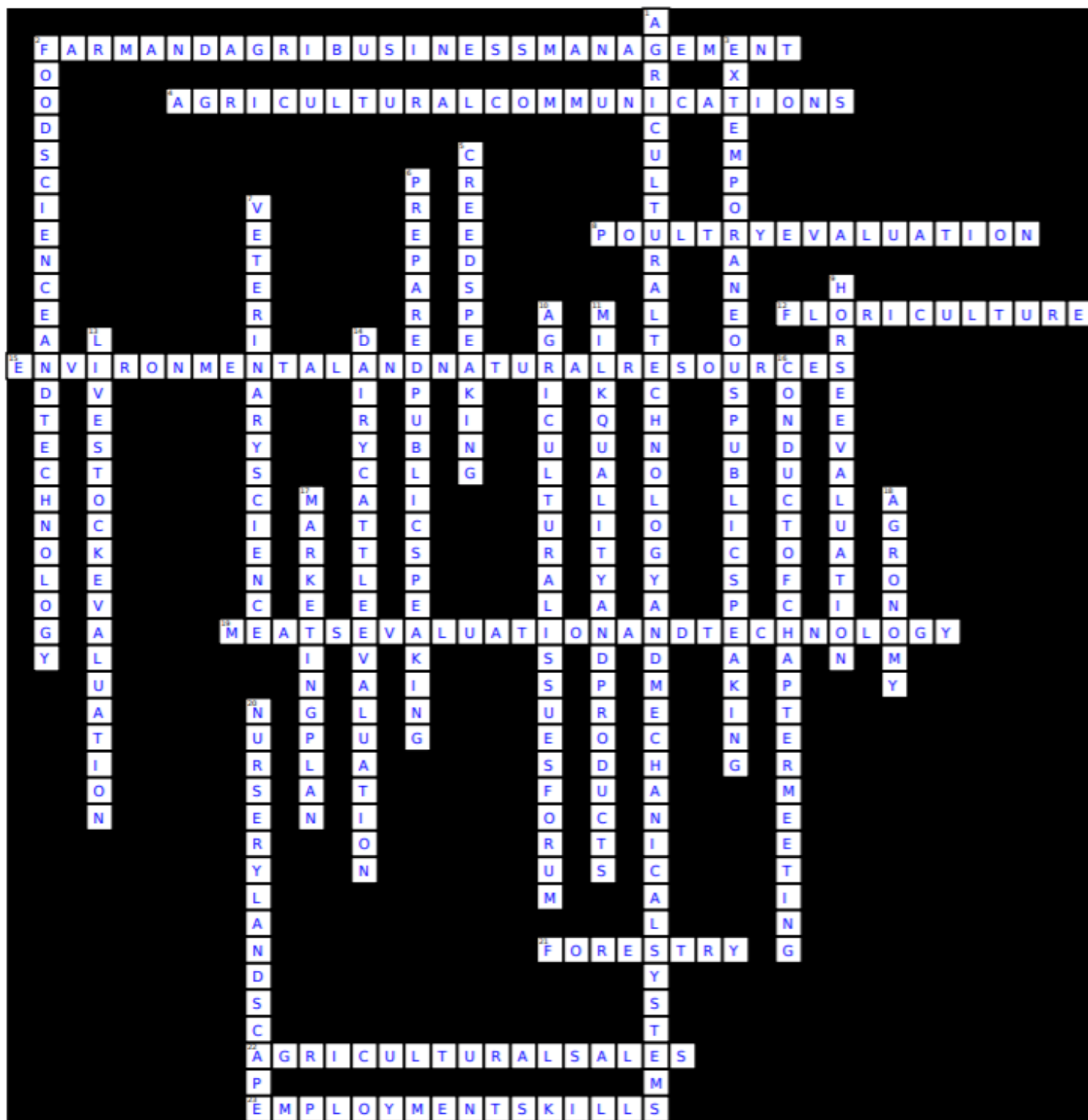
10 POINT TASKS		
Criteria	Points Available	Points Received
Work shows understanding and knowledge of the topic.	4	
Work shows good effort and is of high quality.	2	
Student followed all instructions for the task.	2	
Work was turned in on time.	2	
Total		

20 POINT TASKS			
Criteria	Below Average (0–1 points)	Average (2–3 points)	Above Average (4–5 points)
Knowledge	Work shows little to no understanding of the topic.	Work shows some understanding of the topic.	Work shows excellent understanding of the topic.
Quality	Work is very low quality with little evidence of effort.	Work shows some effort and is mostly neat.	Work shows excellent effort and is of high quality.
Instructions	Student did not follow instructions for the task.	Student followed some of the instructions.	Student followed all instructions for the task.
Timeliness	Work was submitted more than one day late.	Work was one day late.	Work was submitted on time.
Total			

Name: _____

Aligned to the following standards:
 CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N;
 CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1;
 CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

KEY — Appendix 1: Work It Out!



Name: _____

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

KEY — Appendix 6: CDE or LDE?

DIRECTIONS:

Explore terminology related to National FFA CDEs and LDEs by completing the following activities. Use the attached posters to help you.

- What does the acronym CDE stand for? **Career Development Event**
- Identify two CDEs. **Answers will vary.** (1) (2)
- Draw a picture that depicts what a CDE is and what it provides to participants.
Answers will vary.

- What does the acronym LDE stand for? **Leadership Development Event**
- Identify two LDEs. **Answers will vary.** (1) (2)
- Draw a picture that depicts what a CDE is and what it provides to participants.
Answers will vary.

What is the difference between a CDE and LDE?
CDEs have a specific career tie whereas LDEs focus on leadership development. The skills learned in both CDEs and LDEs are applicable to future career preparation.



Why do we call some events CDEs while others are LDEs?
CDEs work to develop skills specific to careers whereas LDEs help to develop leadership skills applicable to all careers.



What advice would you give to someone considering participating in a National FFA CDE or LDE?
Answers will vary.



Name: _____

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

KEY — Appendix 7: Where Does It All Lead?

DIRECTIONS:

Read the article, "One Thing Leads to Another," from the 2017 Winter issue of *FFA New Horizons*. Complete the following activities.

Why did Terren sign up for agriculture classes? **To fulfill his high school elective requirement**

What agriculturally related competitive event did Terren's advisor first sign him up for? **Farm Skills Demonstration**

What CDEs and LDEs could Terren have competed in at the national level that would have prepared him for his end career goals? Identify three.

Answers will vary.

- 1.
- 2.
- 3.



What supervised agricultural experience (SAE) did Terren have in high school? **Growing peas in a small garden**

How did participation in CDEs and LDEs help Terren prepare for his future career? **Participation helped give Terren skills and experiences that prepared and sparked his interest for his future career.**

This participation led Terren to compete in three more events through FFA. What were they?

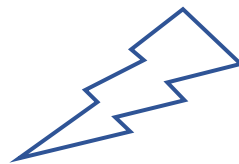
1. **Livestock judging**
2. **Agricultural mechanics**
3. **Radio broadcasting CDE**

Why do FFA members participate in CDEs and LDEs? **To gain skills that will prepare them for their future, regardless of the industry**

What CDEs and LDEs could Terren have competed in at the national level that would have helped him with his supervised agricultural experience (SAE)? Identify three.

Answers will vary.

- 1.
- 2.
- 3.



Name: _____

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

KEY — Appendix 8: What Is Agriscience Research?

DIRECTIONS:

Agriscience research is critically important to the agriculture industry. Developing your own agricultural research project gives you the opportunity to formulate your own scientific question that you can then test and report on through a presentation and poster. Using the attached [agriscience research information page](#), complete the following activities.

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 Services/Natural Resource Systems | Compare plant growth of hydroponics and conventional methods |
| 3. Systems | Effect of agricultural chemicals on water quality |
| 4. Food Products and Processing Systems | Research new disease control mechanisms |
| 5. Plant Systems | Control of molds on bakery products |
| 6. Power, Structural and Technical Systems | Create minimum energy use structures |
| 7. Social Science | 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 Systems	Food Products and Processing Systems
Plant Systems	Power, Structural and Technical Systems	Social Science Systems

Name: _____

Aligned to the following standards:
CS.05; FFA.PL-A; FFA.PL-C; FFA.PL-E; FFA.PL-F; FFA.PG-I; FFA.PG-J; FFA.CS-M; FFA.CS-N; CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2; CCSS.ELA.SL.9-10.1; CCSS.ELA.WHST.9.10.4; CRP.02; CRP.04; CRP.07; CRP.08; CRP.10; CRP.11

KEY — Appendix 10: How Does It Fit?

DIRECTIONS: There are eight identified career pathways in agricultural education to guide you to your future career, even if it is not in the agriculture industry. All the events that National FFA offers align with one or more of those identified career pathways. Follow the numbered steps to complete this activity:

1. Read about each pathway.
2. Highlight 5 key words in each career pathway that help to distinguish that career pathway from the others.
3. List each competitive event that aligns with the career pathway. Use the attached posters and the [Competitive Event Skills](#) to help you. Note: Some events may be used in multiple pathways.

Agribusiness Systems The agribusiness field encompasses activities that contribute to successful agriculture production. This can include crop production, farm equipment, seed supply, marketing, natural resources and animal services. Agriscience research Agricultural communications Agricultural issues forum Agricultural sales Conduct of chapter meetings Creed speaking Employment skills Extemporaneous public speaking Farm and agribusiness management Marketing plan Parliamentary procedure Prepared public speaking 	Animal Systems Scientists and technicians of this pathway treat diseased or injured livestock, companion and exotic animals and work to keep them healthy. They also study and research genetics, nutrition and the development of animals they work with. Agriscience research Conduct of chapter meetings Creed speaking Dairy cattle evaluation and management Dairy cattle handlers activity Employment skills Extemporaneous public speaking Horse evaluation Livestock evaluation Parliamentary procedure Poultry evaluation Prepared public speaking Veterinary science 	Biotechnology Systems The use of biotechnology in agriculture enhances plants, animals and microorganisms. Careers in this pathway help make plants more nutritious to eat, enable fish to grow twice as fast, help solve global issues, and work to increase the world's access to safe and affordable food and clean water. Agriscience research Conduct of chapter meetings Creed speaking Employment skills Extemporaneous public speaking Parliamentary procedure Prepared public speaking 	Environmental Service Systems Scientists, technicians and engineers in this pathway are focused on preventing the harmful effects of human activities. People in this pathway may be involved in recycling, water and air pollution control, waste disposal and public health issues. Agriscience research Conduct of chapter meetings Creed speaking Employment skills Environmental and natural resources Extemporaneous public speaking Forestry Parliamentary procedure Prepared public speaking 
Food Products and Processing Systems Careers in this pathway study the physical, biological and chemical makeup of foods to improve safety, create better processes, enhance the nutritional value and shelf-life of foods and even develop new flavors. Agriscience research Conduct of chapter meetings Creed speaking Employment skills Extemporaneous public speaking Food science and technology Meat evaluation and technology Milk quality and products Parliamentary procedure Prepared public speaking 	Natural Resources Systems Minerals, forests, water and land are all provided by Earth. Humans use these natural resources in many ways. Careers in this pathway work to develop, maintain and manage these natural resources. Agriscience research Conduct of chapter meetings Creed speaking Employment skills Environmental and natural resources Extemporaneous public speaking Forestry Parliamentary procedure Prepared public speaking 	Plant Systems Careers in this pathway study plants and how they impact our world. These professionals help feed our growing population by monitoring the quality and safety of our food and helping consumers make sensible nutritional decisions. Agriscience research Agronomy Conduct of chapter meetings Creed speaking Employment skills Extemporaneous public speaking Floriculture Forestry Nursery/landscape Parliamentary procedure Prepared public speaking 	Power, Structural and Technical Systems Professionals in these fields apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures and controls to the field of agriculture. They also tackle challenges such as how to conserve soil and water, how to create efficient production and how to conserve natural resources. Agriscience research Agricultural technology and mechanical systems Conduct of chapter meetings Creed speaking Employment skills Extemporaneous public speaking Parliamentary procedure Prepared public speaking 