

# Growing Our Future Podcast – Episode 5 Lesson Plan

Lesson Title: "Getting a Job Keeping a Job Getting Promoted"		
TEKs: (c) Knowledge and skills.		
(1) The student demonstrates professional standards/employability skills as required by business and		
industry. The student is expected to:		
(A) identify career and entrepreneurship opportunities related to agribusiness;		
(B) apply competencies related to resources, information, interpersonal skills, and systems of		
operation in agriculture, food, and natural resources industries;		
(C) identify employers' expectations, including appropriate work habits, ethical conduct, and legal		
responsibilities;		
(D) demonstrate employers' expectations and	appropriate work habits;	
(E) demonstrate characteristics of good citize	nship such as stewardship, advocacy, and community	
leadership; and		
(F) research career topics using technology su	ich as the Internet.	
(2) The student demonstrates professional standard	s/employability skills as required by business and	
industry. The student is expected to:		
(A) identify career and entrepreneurship opp	ortunities related to agribusiness;	
(B) apply competencies related to resources,	information, interpersonal skills, and systems of	
operation in agriculture, food, and natural resources industries;		
(E) demonstrate characteristics of good citizenship such as stewardship, advocacy, and community		
leadership; and		
(5) The student communicates effectively with groups and individuals. The student is expected to:		
(A) understand elements of communication such as accuracy, relevance, rhetoric, and organization		
in informal, group discussions; formal presentations; and business-related, technical communication;		
(E) demonstrate effective listening in a variety of settings;		
(F) demonstrate nonverbal communication skills and effective listening strategies; and		
(G) discuss the importance of relationships and group organization.		
(7) The student demonstrates the factors of group and individual efficiency. The student is expected to:		
(A) define the significance of personal and group goals;		
(B) demonstrate leadership traits when solving a problem such as risk-taking, focusing on results,		
decision making, and empowering and investing in individuals when leading a group;		
(C) discuss the importance of time management and teamwork;		
(D) list the steps in the decision-making and problem-solving processes;		
Terminal Performance Objective:	Enabling Objectives:	
At the conclusion of the lesson, students utilize the	1. Research particular career fields related to	
skills they learned in the podcast episode to	agriculture industry topics discussed in class.	
schedule an interview with a career professional in	2. Define the difference between a job and a	
a field of their choice.	career.	

		<ol> <li>Identify key characteristics needed to obtain a ich and/or career</li> </ol>
		JOD and/or career.
		4. Create a visual representation of your findings
		to connect round ideas, concepts, and terms
		choice.
		5. Engage in conversations with professionals in
		fields of interest to gain greater insight into career possibilities
		6 Demonstrate professional communication skills
		by arranging a meeting, conversing with
		employers, and writing appropriate follow-up
		correspondence.
Vo	cabulary:	Bell Work:
•	Achievable Goals - Goals should be designed	Have students complete the following steps for their
	like a good workout. They should stretch you	bell work assignment. The information/content
	slightly so you feel challenged but not cause	gained in this task will be utilized later in the lesson.
	stress or injury.	<b>0</b>
•	<b>Career</b> - an occupation undertaken for a	<b>Step 1:</b> Explore the https://agexplorer.ffa.org/
	significant period of a person's life and with	website.
	opportunities for progress: generally, a	
	profession requiring special training	Step 2: Explore all nine of the different agricultural
•	<b>Competitive Edge</b> - it is that special	career-focused pathway areas. There is 30+ careers
	"something" the "it" that gives an	located within each area.
	advantage to a person or business over their	
	peers. Many times we don't know what "it" is,	Step 3: Select 3 careers from the agricultural career-
	but we know they have it. Students involved in	focused pathway area(s) that interest you. They can be
	the agricultural education and FFA generally	all from the same pathway or from multiple pathways.
	have a competitive edge over their peers who	
	do not participate in the program. Their edge is	Step 4: On piece of paper or Google Doc, answer the
	evident in soft skills, work ethic, teamwork,	following questions about EACH of the three careers
	problem solving, and communication.	you chose. Please remember to use proper grammar,
•	Concept map or conceptual diagram - is a	Sentence structure, and spenning. Please use the Ag
	diagram that depicts suggested relationships	explorer career website to answer the following
	between concepts. A concept map typically	questions.
	represents ideas and information as boxes or	-Position Title:
	often in a downward branching biorarchical	rosition nuc.
		-Annual Salary:
	Experiences - Time spent in hands-on career-	
•	related activities: internshins, apprenticeshins	-Daily Responsibilities:
	networking job shadowing volunteer	, ,
	opportunities industry expert interviews and	-Knowledge/Training Needed:
	more.	
•	Job - A job is work you perform to earn money	• Describe the type of lifestyle you could afford if
	to support your basic needs. It can be a full-	you chose this career as a profession. Use your
	time or part-time job and may be short-term.	imagination to picture what life experiences
	You might earn an hourly wage or a set	you could have with this career. For example:

	paycheck rather than a salary with benefits.	1.	What would your work schedule look
	You might need to learn certain skills		like? Would it be flexible? Could you set
	connected with that role, but not all jobs		your own hours?
	require a specialized degree or advanced	2.	Could you work your way up and
	training.		advance vour career?
	K-W-I Chart - (know want to know and	2	Would you be able to purchase your
•	learned) chart is an approach to bridge the	5.	own home? Preperty? Or would you
	learned) chart is an approach to bridge the		beve to loose or rent2
	theory-practice gap and to encourage students	-	
	to take ownership of their knowledge and	4.	what type of vacation would you be
	become engaged, self-directed learners.		able to afford?
•	Leadership – A process where leaders and their	5.	Would you be able to support family
	followers influence one another to higher		solely on your income? What size of
	levels of performance and motivation to		family?
	achieve results.	6.	What type of entertainment could vou
	Measurable Goals - means that you identify		afford? Concerts. operas. movies.
	exactly what it is you will see hear and feel		hunting trips, etc.?
	when you reach your goal. It means breaking	7	Would you be able to afford the latest
	when you reach your goal. It means bleaking	/.	tech gadgets?
	your goal down into measurable elements. This		
	can be as simple as setting a specific date for		
	your achievement.		
•	Passion - Strong desire and commitment to		
	achieve goals: resilience, perseverance,		
	planning skills, motivation, resolve, energy,		
	courage, grit, and more.		
•	Professional Skills - Personal attributes to		
	succeed in the workplace: work ethic.		
	communication, ability to accept feedback		
	confidence leadership flevibility integrity		
	work-life balance punctuality, stross		
	work-me balance, punctuality, stress		
	management, and more.		
•	workforce – when people engaged in or		
	available for work, either in a country or area		
	or in a particular company or industry.		
	Prep	aration	
Ins	tructor Notes	Activity Note	S
Те	Ithe class, "Science and technology are	Give each stu	dent the "Career Matching Activity"
ins	trumental in the production and processing of	handout.	
for	d, fiber, and renewable natural resources. and		
are	the basis for many careers in aariculture		
		Give the stud	ent 5 to 10 minutes to complete the
Studving agricultural science careers may belo you		activity They	cannot use their cell phones nor any
determine that an agrissionse career is right for		other technol	logical device to look up answers
verennine that an agriscience career is right jor			iogical device to look up answers.
you und guide you to get the appropriate training			
an	u experience necessary for a successful and		
rev	varaing career.		
Let	's take a pop quiz to see how much you know		
ab	out agricultural science careers."		

<b>Once students complete the activity, tell the</b> <b>class,</b> "The students who have the most correct answers to the activity will receive a prize."	Read the answers to the activity aloud to the class.
Pass out candy, stickers, or whatever small prizes the school will allow you to distribute to students.	
<b>Ask the class, "</b> <i>Which careers from this activity</i> sounded the most interesting to you? Why?	Pass out the "Career Scenario Activity" handout. Give student 5 to 10 minutes to complete the activity.
Discuss as a class.	
Which careers sounded the least interesting? Why?"	
Discuss as a class.	
<b>Tell the class, "</b> Now that we understand more about the various agricultural science careers available to us. Let's see if you know which career professional to reach out to in specific situations.	
Again, the student who gets the most correct will get a prize."	Read the answers to the activity aloud to the class.
Prese	entation
Instructor Notes	Activity Notes
<b>Tell the class,</b> <i>"An estimated 300 different careers await you if you decide to stay in the field of agriculture.</i>	
There are roughly 22 million people who work in agriculture related fields. There is a need for approximately 400,000 people to fill positions in agriscience careers each year. Of those positions, there are typically only 100,000 filled by people who are educated and trained in agriscience. The remaining openings go to people who are trained in fields outside of agriculture.	
<i>Openings in agriscience include areas such as mechanics, sales, genetic engineering, nutrition, and extension."</i>	
<b>Ask the class,</b> <i>"What is the difference between a job and a career?"</i>	

#### Allow time for class discussion.

**Explain to the class,** "The main difference between a career and a job is that a job is just something you do short term for immediate for money, whereas a career is a long-term endeavor, something you build towards and work upon every day."

**Tell the class,** *"Today, we are going to hear from an expert in the employment industry. Someone who can help us understand the characteristics necessary to obtain a job or a career. Renae Yanez served as the Human Resource Director at Priefert.* 

Yanez's experience in talent acquisition and retention, employee engagement, employee benefits administration, and worker compensation make her an excellent resource for young people hoping to join the workforce."

**Explain to the class,** *"While you are listening to the podcast episode, you will need to complete the K-W-L handout.* 

Who has used a K-W-L before?"

#### Wait for responses.

**Explain to the class,** *"A K-W-L is an acronym that stands for 'Know,' 'Want to Know,' and 'Learned.' The K-W-L chart is divided into three columns—one for each letter—under which you will record the following:* 

- *K* What you already know about obtaining a job or career.
- *W What you want to know (or questions they have) about obtaining a job or career.*
- L What you learned (after the lesson or assignment) about obtaining a job or career.

*After watching the podcast episode, ask the class,* "What are some things you knew prior to watching the podcast?

Allow time for class discussion.

Show the following image to the class:		
JOB VERSUS CAREER		
Job refers to a paid position of regular employment	Career refers to an occupation that needs a special training or education and is followed as one's lifework	
A short-term pursuit	A long-term pursuit	
Often do not require special training or experience	Often requires formal education, training or experience	
Earning money is the main goal	Earning money is not the main goal	
Gas station attendant, dog walker, babysitter, etc.	Teacher, doctor, architect, writer, musician, etc. ₽ediaa.com	
Pass out the "K-W-L Hando	ut".	
Give student 5 to 10 minutes to complete columns "K" and "W" prior to starting the podcast episode.		
Play Episode 5 - Growing Our Future Podcast Link: o <u>https://youtu.be/y9mUzTnFxCA</u>		

What are some things you wanted to learn?	
Allow time for class discussion.	
What are some things you learned?"	
Allow time for class discussion.	
Арр	lication
Instructor Notes	Activity Notes
<b>Tell the class,</b> <i>"Now that we understand more about obtaining a job or career, we will pick an agricultural career to research further in depth.</i>	
Farmers and ranchers account for less than one percent of the US workforce, but the professionals supporting this industry increase that number to about nine percent, and if you count transportation and distribution, the number employed because of agriculture is about 20 percent.	
Opportunities in jobs related to food, agriculture, renewable natural resources, and the environment are expected to grow 2.6% between 2020 and 2025 for college graduates. These occupations include agricultural inspector, food scientist and technologist, soil and plant scientist, and irrigation engineer.	
Using the three careers you research for your bell work; select one career you would like to learn more about."	
<b>Explain to the class,</b> "In today's assignment, you are going to create a concept map by answering the following questions found on the assignment handout."	Pass out the "Career Concept Map" Assignment.
<b>Ask the class,</b> <i>"How many of you have created a concept map before?"</i>	
Wait for responses.	
<b>Explain to the class,</b> <i>"</i> A concept map is a diagram that depicts suggested relationships between concepts. A concept map typically represents ideas and information as boxes or circles, which it	

connects with labeled arrows, often in a downward-branching hierarchical structure.	
Read the instruction of the assignment aloud to the class.	
<b>Explain to the class,</b> "In order to completely understand and relate to the career field you have selected to research, it is important for you to realize the correlation between wages, income, poverty level, and the percentages of careers available.	Pass out the "Agriculture Career Connections" Handout.
While you are researching your career, I want you to review the statistics listed on the 'Agriculture Career Connections Handout'. Ask yourself,	
<ul> <li>Would a person within this career have a high or low wage?</li> <li>Would they have a livable income or be living in poverty?</li> <li>Does this career fall within the and of the following industries?</li> <li>Management and business</li> </ul>	
<ul> <li>Science and engineering.</li> <li>Food and biomaterials</li> <li>production</li> </ul>	Once students have completed their concept maps,
<ul> <li>Education, communication, and governmental services."</li> </ul>	post them around to classroom and/or hallway for others to see and read.
Evaluatio	n / Summary
Instructor Notes	Activity Notes
<b>Tell the class,</b> "Now that we have research some agriculture careers on our own. It is time to consult an expert about our career of interest.	Pass out the "Career Interview Assignment" and the "Information Interview Questions" handout.
Using the skills and characteristics you learned from the podcast episode, conduct a interview with an agriculture industry professional to ask them about their career field." Read the assignment instructions aloud to class. Answer any questions the students may have.	<ul> <li>Grading for this assignment will be based on three items:</li> <li>1. Did the student follow through with the assignment and conduct the interview?</li> <li>2. Did the student complete the "Information Interview Questions" handout?</li> <li>3. Did the student complete the follow-up and reflection steps of the Career Interview Assignment?</li> </ul>



## Growing Our Future Podcast – Episode 5 Career Matching Activity

**Instructions:** Match the agricultural or natural resource career with the correct description. Write the number of the career description in the blank next to its matching career.

- \_\_\_\_\_ Agronomist
- Animal Nutritionist
- \_\_\_\_\_ Biotechnologist
- \_\_\_\_\_ Conservation Biologist
- Entomologist
- Environmental Scientist
- Fisheries Scientist
- Florist
- \_\_\_\_\_ Food Process Engineer
- Food Safety Specialist
- Food Scientist
- \_\_\_\_\_ Forest Engineer
- \_\_\_\_ Forester
- \_\_\_\_\_ Horticulturist
- \_\_\_\_\_ Hydrologist
- 1. Works to develop new products and processes based on specialized understanding of biological processes.
- 2. Uses specialized knowledge to develop and promote new ways to meet the world's energy needs.
- 3. Researches ways to produce crops and manage soils in a productive and environmentally friendly way.
- 4. Designs floral arrangements, works with customers, and delivers flowers.
- 5. Protects our food supply by working with food services, restaurants, and federal agencies to ensure that foods being sold are wholesome and safe.
- Raises a diverse array of aquatic plants and animals in controlled or semi-controlled settings for food or the stocking of public bodies of water.
- 7. Studies the effects of potentially harmful chemicals on people, animals, and the environment.
- 8. Studies viruses, how they interact with cells, and how they infect living things.
- 9. Works in food, chemical, biochemical, and pharmaceutical industries to engineer new processes and products and ensure quality and safety.
- 10. Helps farmers and ranchers produce crops and livestock more efficiently by using sound pest management strategies.
- 11. Maps and classifies soils and provides interpretations for land planners and managers.
- 12. Dedicated to effective management, use, and conservation of aquatic plants and animals.
- Creates diets that must be nutritionally sound, good tasting, and economical for the ages and types of animals that will use them.
- 14. Assesses and protects our water supplies and quality.

- \_\_\_\_ Nematologist
- \_\_\_\_\_ Nutritionist/ Dietitian
- \_\_\_\_\_ Plant Pathologist
- \_\_\_\_\_ Plant Geneticist
- \_\_\_\_\_ Plant Physiologist
- \_\_\_\_\_ Range Manager
- \_\_\_\_\_ Renewable Energy Specialist
- \_\_\_\_\_ Remote Sensing Specialist
- \_\_\_\_\_ Soil Scientist
- \_\_\_\_\_ Toxicologist
- \_\_\_\_\_ Turf Scientist
- \_\_\_\_\_ Veterinarian
- \_\_\_\_\_ Virologist
- \_\_\_\_\_ Weed Scientist
- Wildlife Biologist
- \_\_\_\_\_ Wood Scientist
- 15. Ensures the flavor, color, texture, and quality of our food supply and develops new food products.
- 16. Studies roundworms, which play important roles in soil ecology and plant and animal agriculture.
- 17. Works primarily with nursery and greenhouse crops.
- 18. Spends time managing timberland.
- 19. Protects threatened and endangered species and habitats.
- 20. Works with plants at a genetic level.
- 21. Helps people look and feel well by making the connection between food, nutrition, and health.
- 22. Interprets and analyzes many types of aerial photographs and satellite images.
- 23. Studies the physical, chemical, and biological functions of living plants.
- 24. Researches animals in their natural environments.
- 25. Works to improve golf greens, park lawns, athletic fields, or other public or private grounds.
- 26. Specializes in converting wood to wood products.
- 27. Protects the environment by working with hazardous waste management, land use, and air or water quality.
- 28. Deals with the symptoms, causes, damage, spread, and control of plant diseases.
- 29. Diagnoses, treats, and helps prevent diseases and disabilities in animals.
- 30. Researches ways to improve weed control and helps develop regulations for weed control agents.
- 31. Cares for our country's vast rangelands.
- 32. Designs timber transportation and harvesting systems.



## Growing Our Future Podcast – Episode 5 **Career Matching Activity Key**

Instructions: Match the agricultural or natural resource career with the correct description. Write the number of the career description in the blank next to its matching career.

- 3\_\_\_ Agronomist
- 13 Animal Nutritionist
- 6 Aquaculturist
- \_1\_\_ Biotechnologist
- \_19\_\_ Conservation Biologist
- 10\_\_\_ Entomologist
- 27 Environmental Scientist 12 Fisheries Scientist
- 4 Florist
- \_\_9\_\_ Food Process Engineer
- \_5\_\_ Food Safety Specialist
- \_15\_\_ Food Scientist
- \_32\_\_ Forest Engineer
- \_18\_\_ Forester
- \_17\_\_ Horticulturist
- \_14\_\_ Hydrologist
- 1. Works to develop new products and processes based on specialized understanding of biological processes.
- 2. Uses specialized knowledge to develop and promote new ways to meet the world's energy needs.
- 3. Researches ways to produce crops and manage soils in a productive and environmentally friendly way.
- 4. Designs floral arrangements, works with customers, and delivers flowers.
- 5. Protects our food supply by working with food services, restaurants, and federal agencies to ensure that foods being sold are wholesome and safe.
- 6. Raises a diverse array of aquatic plants and animals in controlled or semi-controlled settings for food or the stocking of public bodies of water.
- 7. Studies the effects of potentially harmful chemicals on people, animals, and the environment.
- 8. Studies viruses, how they interact with cells, and how they infect living things.
- 9. Works in food, chemical, biochemical, and pharmaceutical industries to engineer new processes and products and ensure quality and safety.
- 10. Helps farmers and ranchers produce crops and livestock more efficiently by using sound pest management strategies.
- 11. Maps and classifies soils and provides interpretations for land planners and managers.
- 12. Dedicated to effective management, use, and conservation of aquatic plants and animals.
- 13. Creates diets that must be nutritionally sound, good tasting, and economical for the ages and types of animals that will use them.
- 14. Assesses and protects our water supplies and quality.

- \_16\_\_ Nematologist
- 21\_\_\_ Nutritionist/ Dietitian
- 28 Plant Pathologist
- \_20\_\_ Plant Geneticist
- 23\_\_\_ Plant Physiologist
- \_31\_\_ Range Manager
- 2 Renewable Energy Specialist
- 22 Remote Sensing Specialist
- \_11\_\_ Soil Scientist
- \_7\_\_ Toxicologist
- 25 Turf Scientist
- 29 Veterinarian
- \_8\_\_ Virologist
- \_30\_\_ Weed Scientist
- \_24\_\_ Wildlife Biologist
- 26 Wood Scientist
- 15. Ensures the flavor, color, texture, and quality of our food supply and develops new food products.
- 16. Studies roundworms, which play important roles in soil ecology and plant and animal agriculture.
- 17. Works primarily with nursery and greenhouse crops.
- 18. Spends time managing timberland.
- 19. Protects threatened and endangered species and habitats.
- 20. Works with plants at a genetic level.
- 21. Helps people look and feel well by making the connection between food, nutrition, and health.
- 22. Interprets and analyzes many types of aerial photographs and satellite images.
- 23. Studies the physical, chemical, and biological functions of living plants.
- 24. Researches animals in their natural environments.
- 25. Works to improve golf greens, park lawns, athletic fields, or other public or private grounds.
- 26. Specializes in converting wood to wood products.
- 27. Protects the environment by working with hazardous waste management, land use, and air or water quality.
- 28. Deals with the symptoms, causes, damage, spread, and control of plant diseases.
- 29. Diagnoses, treats, and helps prevent diseases and disabilities in animals.
- 30. Researches ways to improve weed control and helps develop regulations for weed control agents.
- 31. Cares for our country's vast rangelands.
- 32. Designs timber transportation and harvesting systems.



### Growing Our Future Podcast – Episode 5 Career Scenario Activity

**Instructions:** Using the careers listed on the Career Matching Activity, fill in the blank with the agricultural science career that best fits the scenario listed below.

1. A family goes to the grocery store to pick up some groceries. The food exists because of farmers and ranchers who manage natural resources like soil and water carefully in order to grow the raw ingredients to fill the grocery stores. At the beginning of the season, a farmer (also known as a grower or producer) needs to test the soil to check for nutrients and to determine which fertilizers are necessary. The farmer needs the services of a \_\_\_\_\_\_.

2. The fertilizer plant that produces the fertilizer to sell to the farmer wants to reduce its environmental impact. Who could the plant hire to help monitor waste discharge and assess environmental quality of the surroundings? \_\_\_\_\_\_

3. The farmer is concerned that when it rains fertilizer from the fields may be getting washed into a nearby river. The farmer goes to the Natural Resources Conservation Service to enlist the help of a \_\_\_\_\_\_.

4. The	e farmer notices that the sheep are skinny despite havin	g healthy appetites,	and the alfalfa in th	he hay field is stunted
and h	as swollen stems. The farmer suspects different kinds c	f worms have infect	ed the sheep and the	he alfalfa. Who can
help i	dentify and treat these worms?			

5. A new seed hybrid that is better suited for the farmer's climate or soil has been developed. Who developed that seed?

6. A couple of months after planting, the plants are growing, but the farmer notices holes in the leaves. They may be the result of an insect. Who can help identify the problem? \_\_\_\_\_

7. The insects have been identified and sprayed, but now there are weeds threatening to take over the field. If the weeds are not controlled soon, they will begin to outcompete the crop plants for sunlight, water, and soil nutrients. Who can help the farmer control this problem?

8. The weeds are gone, but the plants aren't growing well. The farmer calls the University Extension office in the county. The Extension Educator referred the farmer to a \_\_\_\_\_\_.

9. The Plant Physiologist says that the plants are stressed by either too little water or high soil salinity. Who can help the producer determine where irrigation is not reaching the plants across the hundreds of acres of fields?

10. The crop is ready to harvest, and the farmer delivers it to the processing plant. The processor will turn the wheat, corn, cherries, etc. into bread, cookies, chips, pies, and so many other products. Who develops these food products?

11. Who works with the food processor to ensure that the food produced is wholesome, safe, and sound? \_\_\_\_\_\_

12. Who determines the nutritional values of the food products?

13. What if the corn is bound for animal consumption rather than human consumption? Who helps determine feed rations? \_\_\_\_\_\_

14. If an animal gets sick from eating too much corn, who will a rancher call? \_\_\_\_\_



### Growing Our Future Podcast – Episode 5 Career Scenario Activity Key

**Instructions:** Using the careers listed on the Career Matching Activity, fill in the blank with the agricultural science career that best fits the scenario listed below.

1. A family goes to the grocery store to pick up some groceries. The food exists because of farmers and ranchers who manage natural resources like soil and water carefully in order to grow the raw ingredients to fill the grocery stores. At the beginning of the season, a farmer (also known as a grower or producer) needs to test the soil to check for nutrients and to determine which fertilizers are necessary. The farmer needs the services of a (Soil Scientist).

2. The fertilizer plant that produces the fertilizer to sell to the farmer wants to reduce its environmental impact. Who could the plant hire to help monitor waste discharge and assess environmental quality of the surroundings? (Environmental Scientist)

3. The farmer is concerned that when it rains fertilizer from the fields may be getting washed into a nearby river. The farmer goes to the Natural Resources Conservation Service to enlist the help of a (Hydrologist).

4. The farmer notices that the sheep are skinny despite having healthy appetites, and the alfalfa in the hay field is stunted and has swollen stems. The farmer suspects different kinds of worms have infected the sheep and the alfalfa. Who can help identify and treat these worms? (Nematologist)

5. A new seed hybrid that is better suited for the farmer's climate or soil has been developed. Who developed that seed? (Plant Geneticist)

6. A couple of months after planting, the plants are growing, but the farmer notices holes in the leaves. They may be the result of an insect. Who can help identify the problem? (Entomologist)

7. The insects have been identified and sprayed, but now there are weeds threatening to take over the field. If the weeds are not controlled soon, they will begin to outcompete the crop plants for sunlight, water, and soil nutrients. Who can help the farmer control this problem? (Weed Scientist)

8. The weeds are gone, but the plants aren't growing well. The farmer calls the University Extension office in the county. The Extension Educator referred the farmer to a (**Plant Physiologist**).

9. The Plant Physiologist says that the plants are stressed by either too little water or high soil salinity. Who can help the producer determine where irrigation is not reaching the plants across the hundreds of acres of fields? (Remote Sensing Specialist)

10. The crop is ready to harvest, and the farmer delivers it to the processing plant. The processor will turn the wheat, corn, cherries, etc. into bread, cookies, chips, pies, and so many other products. Who develops these food products? (Food Scientist)

11. Who works with the food processor to ensure that the food produced is wholesome, safe, and sound? (Food Safety Specialist)

12. Who determines the nutritional values of the food products? (Nutritionist/Dietitian)

13. What if the corn is bound for animal consumption rather than human consumption? Who helps determine feed rations? (Animal Nutritionist)

14. If an animal gets sick from eating too much corn, who will a rancher call? (Veterinarian)



## Growing Our Future Podcast – Episode 5 K-W-L Handout

Instructions: In the chart below, record the following information:

- *K* What you already know about obtaining a job or career.
- *W* What you want to know (or questions do you have) about obtaining a job or career.
- L What you learned (after the podcast episode) about obtaining a job or career.

Know	Want To Know	Learned
K	W	L



### **Growing Our Future Podcast – Episode 5 Career Concept Map Assignment**

#### Instructions:

- 1. Select one career from the three Agriculture Science careers you outlined in your bell work.
- 2. Using the following web resources, research the questions below pertaining to the career you selected.
  - a. Web Resources:
    - Digital e-book version #1 Careers in Agriculture E-Book contains 38 pages with i. articles describing the need and expanse of agricultural careers.
    - ii. Digital e-book version #2 - Careers in Agriculture E-Book with Career Profiles, contains over 80 career profiles (starts on page 31).
    - Ag Career Explorer https://agexplorer.ffa.org/ iii.
- 3. Find answers to the following questions concerning your selected career:
  - What is the career?
  - How much does a person make?
  - What does this career specifically do?
  - Find two careers others have chosen in class that relates to the career you selected. What are those careers:

1.

- 2
- How are these careers connected?
  - 1.
  - - 2.
- What prerequisites and interests would you need for the career you selected?
- Does this career require special training? Explain.
- How long is the training for this career?
- Where was this training offered? College, military academy, etc.
- What skills are needed for this career?
- Where (location) can this career be found?

- What professional organizations are connected to this career?
- 4. After you have finished answering these questions, go to the following website, <u>https://app.creately.com/diagram/</u> to create a Career Concept Map that shows how all these questions build off one another. Or you can create a concept map using paper, markers, and colored pencils. See example attached.





#### Growing Our Future Podcast – Episode 5 Agriculture Career Connections Handout

#### Entry-level wages vs. Higher paying wages:

- \$7/hour \$14,560 per year
- \$10/hour \$20,800
- \$12/hour \$24,960
- \$22.50/hour \$45,000
- \$23,624 current poverty level in America (family of 4 with two children, 2013)
- \$53,046 median US household income (could be two wage earners, 2009–2013)

### Income & Poverty Rate in Texas

- Median household income from 2016-2020 was \$63,826
- Per capita income in past 12 months was \$32,177
- Persons in poverty = 14.2%

Source: https://www.census.gov/quickfacts/fact/table/TX/BZA210220

### Did You Know?

- Between 2020 and 2025, there are expected to be 59,400 average annual openings for graduates with bachelor's or higher degrees in the areas of food, agriculture, renewable natural resources, and the environment.
- 42% of the opportunities will be in management and business.
- Another 31% will be in science and engineering.
- Jobs in food and biomaterials production will make up 13%, while 14% of the openings will be in education, communication, and governmental services.



#### Growing Our Future Podcast – Episode 5 Career Interview Assignment

#### Informational Interview:

- 1. Identify a professional in a career field(s) of interest.
  - How?
    - Speak with instructors, family, friends, and administrators for in-network connections.
    - Search members of professional associations working in relevant area.
- 2. Reach out to arrange a meeting.
  - How?

#### Sample:

Dear\_\_\_\_,

My name is \_\_\_\_\_\_. I am a student at \_\_\_\_\_\_ ISD, and I am currently enrolled in the Agriculture Science Program at \_\_\_\_\_\_ High School. I am currently exploring areas of interest, to guide me in determining my future career path. I was referred to you by\_\_\_\_\_\_(or) I found your information through\_\_\_\_\_\_. I am hoping you might be available for a short 20-30 minute informational interview, either in person or by phone, sometime in the next few weeks. Please let me know and thank you for considering my request. You may reach me at...(phone and email.)

Sincerely,

Your Name

- 3. **Prepare Your Questions** (Use attached document to record): Think about what you want to know about the job, the company, the path to this career, and how the position aligns to your personal skills and values. Then create your questions accordingly.
  - a. Sample Questions:
    - What is a typical day like?
    - What has your career path looked like?
    - What jobs and experiences prepared you for your current position?
    - Is there anything you would have done differently in pursuing your current field?
    - What skills are most desirable and important in this field?
    - What is the most rewarding part of your job?
    - What is the most challenging?
    - Can you recommend other individuals in this field that I should speak with?

- 4. **Follow-up:** Send a thank you note within 24 hours of your meeting. You may send a written note or via email; both are acceptable.
- 5. **Informational Interview Reflection:** Write a reflection on your informational interview experience which addresses the following questions. Remember all outcomes of your informational interview can be viewed as useful even if you discover a dislike for the occupation. This experience can be a valuable learning opportunity to explore multiple career areas, and reassess your plans as needed.
  - After speaking with a professional in this field, how has your understanding of a career in this industry developed (*Example.* what have you learned?)
  - What was the most useful piece of information you took away from your conversation?
  - Is this a career path you will consider pursuing? Why or why not?
  - What steps will you take next to either pursue this career path or explore other career areas?

#### 6. Success Tips:

- Dress professionally in a manner that is appropriate for the field.
- Introduce yourself, shake hands, and make eye contact.
- Come prepared with your questions.
- Be conscious of the time. This means to arrive on time and plan to work within the agreed upon meeting time (20-30 minutes). Remember the interviewee is taking time out of his/her day to meet with you.
- Show your gratitude and thank the interviewee for meeting with you.



#### Growing Our Future Podcast – Episode 5 Informational Interview Questions

Date: \_\_\_\_\_ Name of Contact: \_\_\_\_\_ Company: \_\_\_\_\_

Create open-ended and thoughtful questions that will help you gain a greater understanding of:

- The interviewee's job and responsibilities.
- The preparation needed to pursue this career (academic requirements, skills, experiences, certifications).
- The interviewee's unique career path.
- What it is like working at the interviewee's specific company (company culture, opportunities for advancement, plans for growth, company needs).

Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
Question 6	
Question 7	
Question 8	
Question 9	
Question 10	

Notes: