

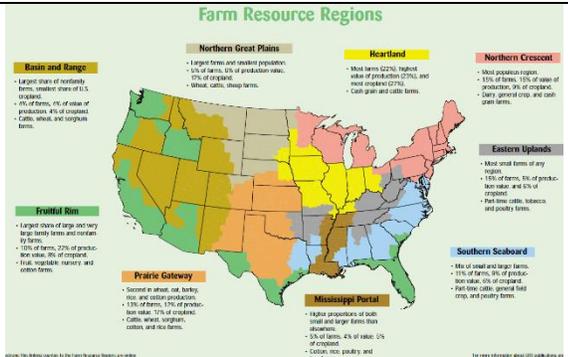
SUSTAINABLE AGRICULTURE SYSTEMS & CAREER FOCUS AREA

ON A SINGLE SHEET OF PAPER WRITE DOWN:

1. THE DAY
2. TODAY'S DATE
3. THE QUESTION
4. THE ANSWER

	Question	Answer
1	Go to AgExplorer.com and complete the Career Finder.	
2	Video journaling – Watch a short video clip, reflect in writing and share out. (https://www.youtube.com/watch?v=sc4HxPxNrZ0)	
3	Video journaling – Watch a short video clip, reflect in writing and share out. (https://www.youtube.com/watch?v=2pXuAw1bSQo)	
4	Video journaling – Watch a short video clip, reflect in writing and share out. (https://www.youtube.com/watch?v=6xINyWpB8)	
5	How many people does one U.S. farm feed? a. 56 people b. 165 people c. 202 people d. 233 people	
6	Which state has the most farms? a. Missouri b. Iowa c. Oklahoma d. Texas	
7	True or False — The majority of farms in the U.S. are owned by corporations. Explain your answer in one to two sentences.	
8	What state has the largest number of aquaculture farms? a. California b. North Carolina c. Louisiana d. Florida e. Mississippi	
9	Approximately how much of the U.S. is covered in trees? a. 1/8 b. 1/4 c. 1/3 d. 2/3	
10	Which of the following is a term used in the forestry industry to describe the segment that works with maintenance and cultivation of trees? a. Vermiculture b. Silviculture c. Parasitology d. Viticulture	
11	Develop a list of everyday items that are produced from animal and plant byproducts. You have two minutes.	
12	Biodiesel is a fuel source created from which common agricultural commodity? a. Corn b. Soybeans c. Wheat d. Sorghum	
13	In what year did John Deere begin manufacturing the steel plow? a. 1791	

	<ul style="list-style-type: none"> b. 1802 c. 1837 d. 1868 	
14	Identify five careers you could have in the Biotechnology Systems Career Focus Area.	
15	Identify five careers you could have in the Environmental Services Systems Career Focus Area.	
16	Identify five careers you could have in the Natural Resource Systems Career Focus Area.	
17	<p>Which U.S. President (pictured here) was known as a conservationist for his work with the National Parks system?</p> <ul style="list-style-type: none"> a. George Washington b. Abraham Lincoln c. John F. Kennedy d. Teddy Roosevelt 	
18	<p>Which U.S. President (pictured here) is known for proposing and beginning the Environmental Protection Agency (EPA)?</p> <ul style="list-style-type: none"> a. George Washington b. Abraham Lincoln c. John F. Kennedy d. Richard Nixon 	
19	<p>What career area is the largest employer in the world?</p> <ul style="list-style-type: none"> a. Medicine b. Manufacturing c. Education d. Agriculture 	
20	What type of tree can you carry in your hand	
21	You throw away the outside and cook the inside, then eat the outside and throw away the inside. What is it?	
22	Draw a picture of what the word <i>agriculture</i> means to you. You have five minutes to complete the drawing.	
23	 <p>Write down five words that come to mind when you look at this picture.</p>	
24	<p>One acre contains how many square feet?</p> <ul style="list-style-type: none"> a. 34,650 b. 43,560 	

	<p>c. 43,600 d. 36,350</p>	
25	<p>The study of insects and their relationship with the forest is called _____.</p> <p>a. Dendrology b. Forest pathology c. Forest hydrology d. Forest entomology</p>	
26	<p>Which of the following is the MOST significant reason species have become threatened or endangered?</p> <p>a. Controlled as pests b. Pesticides c. Illegal killing d. Landscape alteration</p>	
27	 <p>Farm Resource Regions</p> <ul style="list-style-type: none"> Rain and Range: <ul style="list-style-type: none"> Largest share of nonfamily farms, smaller share of U.S. cropland. 6% of farms, 6% of value of production, 4% of cropland. Cattle, wheat, and sorghum farms. Northern Great Plains: <ul style="list-style-type: none"> Largest farms and smallest population. 1% of farms, 1% of production value, 1% of cropland. Wheat, cattle, sheep farms. Heartland: <ul style="list-style-type: none"> Most farms (52%), highest value of production (27%), and most cropland (21%). Cash grain and cattle farms. Northern Crescent: <ul style="list-style-type: none"> Most populous region. 10% of farms, 10% of value of production, 9% of cropland. Dairy, general crop, and cash grain farms. Fruitful Rim: <ul style="list-style-type: none"> Largest share of large dairy and very large family farms and median by farms. 10% of farms, 27% of production value, 6% of cropland. Fruit, vegetable, nursery and other farms. Prairie Gateway: <ul style="list-style-type: none"> Second in wheat, oat, barley, rice, and cotton production. 13% of farms, 13% of production value, 17% of cropland. Cattle, wheat, sorghum, cotton, and rice farms. Mississippi Portal: <ul style="list-style-type: none"> Higher proportions of both small and large farms than elsewhere. 5% of farms, 4% of value, 0% of cropland. Cotton, rice, poultry and hog farms. Eastern Uplands: <ul style="list-style-type: none"> Most small farms of any region. 15% of farms, 6% of production value, and 6% of cropland. Pasture, cotton, tobacco and poultry farms. Southern Seaboard: <ul style="list-style-type: none"> Mix of small and large farms. 12% of farms, 6% of production value, 0% of cropland. Pasture, cattle, general field crop, and poultry farms. <p>(Image can be found at https://www.ers.usda.gov/webdocs/publications/42298/32489_aib-760_002.pdf?v=42487).</p> <p>What region do we live in, and what are some of our greatest commodities according to the map from the USDA?</p>	
28	<p>Utilizing the State Agricultural Facts map (https://www.agclassroom.org/teacher/ag_facts.cfm), identify and write down five interesting facts that you did not know about your state.</p>	
29	<p>Write a Tweet about how agriculture impacted you this weekend.</p>	
30	<p>Find a natural resources resource/publication (https://www.fs.usda.gov/naspf/resources-and-publications) of interest to you and determine the following: (1) What is the issue? (2) accomplishments/program status and (3) future direction. Be ready to share!</p>	
31	<p>What is the purpose and role of the U.S. Forest Service?</p>	
32	<p>Watch the following video: https://youtu.be/B_WSLbw3ApA.</p> <p>What benefits are there to being employed in agriculture? Identify three.</p>	
33	<p>What relationship exists between science and agriculture? Give two examples to illustrate your response.</p>	
34	<p>What is the purpose of a literature review in agriscience research?</p>	
35	<p>What is the purpose of the materials and methods section in an agriscience report/research study?</p>	
36	<p>What is a hypothesis? Why is a hypothesis created when completing agricultural research?</p>	
37	<p>What is the role/purpose of an abstract when writing an agriscience research study?</p>	
38	<p>Find an impactful member of the agricultural community from history. Create a Tweet about the impact that person has had in the agriculture industry.</p>	

39 Read the article "Climate Change Could Make Food Less Healthy," and write a three to five sentence response.
<https://www.sciencenewsforstudents.org/blog/analyze/analyze-climate-change-could-make-food-less-healthy>

40 Read the article "Fish get pooped living in polluted water,"
<https://www.sciencenewsforstudents.org/article/fish-get-pooped-living-polluted-water>.

1. Create a numbered lab procedure to outline the research study that was performed in this article.
 2. What implications will this research have for the future of our natural resource systems?

41 Write a two-minute elevator speech about what agriculture is/means. This elevator speech should be written for a student at the elementary level that has never taken an agriculture class.

42



(Image can be found at <http://www.fao.org/resources/infographics/infographics-details/en/c/852816/>.)

1. What role do forests play in the need for energy across the world?
 2. Why do we need to maintain and improve our forest lands?

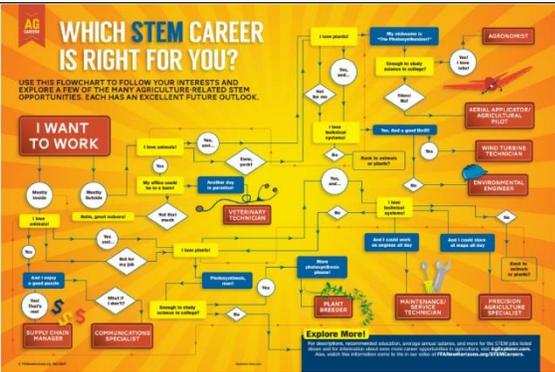
43 The role of this governmental agency is to protect the health of humans and the environment.

- USDA
- EPA
- FSIS
- CDC

44 This scientist not only was awarded the Nobel Peace Prize for his work in addressing hunger globally, but he also developed the World Food Prize to recognize those individuals making an impact in the world of agriculture.



a. George Washington Carver

	<ul style="list-style-type: none"> b. John Deere c. Phillip Nelson d. Dr. Norman Borlaug 	
45	Using the World Food Prize Laureates page, find a laureate of interest to you and write a two to three sentence blog post about their accomplishments and agricultural impact. https://www.worldfoodprize.org/index.cfm?nodeID=90971&audienceID=1	
46	How many U.S. states grow wheat? <ul style="list-style-type: none"> a. 22 d. 32 c. 42 d. 52 	
47	Every state in the U.S. produces honey. Which state leads in honey production? <ul style="list-style-type: none"> a. California b. Florida c. Montana d. North Dakota 	
48	 <p>(Image can be found at https://www.ffanewhorizons.org/2017/08/28/which-stem-career-is-right-for-you/.)</p> <ol style="list-style-type: none"> 1. Use the infographic above to determine what STEM career is right for you. 2. Why do you think you ended up at this career? (Think about your personality and skills as you answer this question.) 	
49	Using this website, https://www.ffanewhorizons.org/category/ag-101/career-pathways/ , select an agricultural career pathway and describe five skills necessary to be successful in that area of agriculture.	
50	Select a career focus area of interest to you (use AgExplorer.com) and create a Tweet about that focus area.	
51	Identify as many agriculture courses that are offered in your school as you can.	
52	How will agriculture look in the year 2050 given the rate at which technology progresses?	
53	Watch the video available at https://youtu.be/MmCCrV1RI9Y and respond to the following questions: <ol style="list-style-type: none"> (1) What is a wildlife biologist? (2) What personality characteristics do you need to have to be successful in an animal biology career? Identify three characteristics. 	
54	What goes around and around the wood but never goes into the wood?	

55	<p>The Farmer's Share Of The Retail Dollar</p> <p>Did you know that farmers and ranchers receive only 15.6 cents of every food dollar that consumers spend on food at home and away from home? According to USDA, off farm costs including marketing, processing, wholesaling, distribution and retailing account for more than 80 cents of every food dollar spent in the United States.</p>  <p>(Image can be found at https://nfu.org/.)</p> <p>Where does the money go when you purchase a food product at the store?</p>	
56	<p>What is the minimum cooking temperature for poultry to ensure safety during consumption?</p> <ol style="list-style-type: none"> 145° 150° 155° 160° 165° 	
57	<p>What country consumes more eggs per capita each year?</p> <ol style="list-style-type: none"> Mexico USA France Portugal India 	
58	<p>How much protein does one eight-ounce glass of milk contain?</p> <ol style="list-style-type: none"> 2 grams 4 grams 6 grams 8 grams 10 grams 	
59	<p>When is National Pizza Day?</p> <ol style="list-style-type: none"> January 10 February 9 April 21 May 6 	
60	<p>What well-known scientist (pictured here) discovered that when you heat liquids to high temperatures you can kill bacteria? HINT: This led to the process of pasteurization.</p> <ol style="list-style-type: none"> Marie Curie Albert Einstein Fanny Farmer Louis Pasteur 	
61	<p>Go to the Smash Your Food game and select two foods. Estimate their sugar, salt and oil composition. Then, "smash" the food to see how well you did. Record your results and be ready to share. (https://fit.webmd.com/teen/food/game/smash-your-food-game)</p>	
62	<p>Play the game Blastoff (https://www.fns.usda.gov/blastoff) and answer the following questions:</p> <ol style="list-style-type: none"> What did you select for breakfast, lunch, snack, dinner and activity? Did you ever change your choices during the game? Why or why not? What did you learn about food choice during this game? 	

63	Complete a MyPlate food group nutrition quiz: https://www.choosemyplate.gov/quiz .	
64	What has to be broken before you can use it?	
65	Draw a picture of what the word <i>agriculture</i> means to you. You have five minutes to complete the drawing.	
66	The percent daily value recommendation on a Nutrition Facts Label is based on a _____ calorie diet. a. 1,000 b. 1,500 c. 2,000 d. 3,000	
67	In food science, labeling is an important component to keep food safe and allow the consumer to know how their food was processed and preserved. What is the name and purpose of the symbol shown here? a. Sunnol, sun drying b. Plantera, plant modification c. Pasteur, pasteurization d. Radura, irradiation	
68	Which of the following are considered "bad fats" in the everyday human diet? a. Monounsaturated b. Saturated c. Polyunsaturated d. Polarized	
69	What does USDA stand for? a. Unified States Department of Agriculture b. United State Department of Aquaculture c. United States Department of Agriculture d. Unknown Status for Domestic Agriculture	
70	Describe, in one to two sentences, the purpose and labeling requirements for this seal.	
71	To make one pound of cheddar cheese, it requires approximately ___ pounds of milk. a. 8 b. 10 c. 22 d. 44	
72	According to the Food and Nutrition Board of the National Academy of Sciences, all people need at least ___ milligrams of calcium per day. a. 10 b. 100 c. 1,000 d. 1,000,000	
73	In 1984, President Ronald Reagan proclaimed a National Ice Cream Month. It has been celebrated annually every _____. a. June b. July c. August d. September	
74	Which of the following flavors of ice cream is the most popular by sales volume? a. Raspberry b. Strawberry c. Vanilla d. Chocolate	

75	Most dairy cows are milked two to three times per day. On average, a cow will produce ___ gallons of milk each day. a. 1 to 2 b. 8 to 9 c. 15 to 16 d. 20 to 21	
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