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Careers from Calf to Cup

USE THIS DOCUMENT TO ACCESS A VIDEO GUIDED WORKSHEET TO TEACH YOUR STUDENTS ONLINE, OR IN THE CLASSROOM.

Grade Level

6th – 8th grade

Estimated Time

60 minutes

Objectives

- Learn about the variety of career opportunities available in the dairy community.
- Describe three different careers including their main responsibilities and education level needed to attain the job.

Materials and Links

- Student led worksheet
 - [Microsoft Word](#) (You must download for the formatting to be correct.)
 - [PDF](#)
- [Online Video Lesson](#)
- Virtual Dairy Farm Tour (Here are links to a couple of options with varying lengths.)
 - Explore a Utah dairy farm [HERE](#) (49:00 min)
 - Discover how farmers care for the cows and community [HERE](#) (24:00 - scroll to the bottom of the page)

How to Use the Online Lesson

1. Make sure to post the student worksheet which includes the link to the video, as well as the questions students will answer while watching the video.
2. Choose a virtual dairy farm tour for your students to view from the options in the *Materials and Links* section and post the link for your students.
3. Students will view the video lesson and take breaks as prompted to answer the questions below.
4. Use the answer key provided to check the student worksheet (answers highlighted in yellow).

Student Worksheet with Answer Key



1. Start by watching a virtual dairy farm field trip (your teacher will provide the link). While watching the video brainstorm careers in each of the categories below. **Note that the examples of careers listed below and what was discussed in the video are not an extensive list of career options. The student could identify other careers that are not listed.**

Steps from Calf to Cup	Careers
Raising a Calf	Calf feeder, herdsman, veterinarian, animal nutritionist
Milking Process	Computer programmer, milker, dairy equipment technician, state milk inspector, milk hauler/trucker
Managing a Farm	Producer/owner, pharmaceutical rep, accountant, breeding specialist/geneticist, agriculture engineer, builder/construction, crop consultant
Processing Dairy Products	Food scientist, sales manager, dairy marketer, plant manager, plant lab technician
Grocery Store to Consumer	Extension educator, agriculture communicator/journalist, dairy case manager, agriculture teacher, registered dietitian

2. Once you have written down some of your ideas above, click the [LINK](#) to watch a video that will introduce you to some career options in the dairy community. While listening to the video add any careers you did not have listed.
3. Now it is time to further explore some careers in the dairy industry. Pick three different careers (from the table in the first question) and use the internet to search for further details on the careers. Fill out the table below with the information regarding the tasks/responsibilities, as well as the education needed. **Note below are just a few options the students could have researched.**



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Career	Responsibility	Education
Feeding	Mixing the feed rations for the animals and then feeding it to them daily	No formal education is required. Individuals do need on-farm training and experience
Herdsman	Manages herd records, reports and oversees animal health	No formal education is required, but a degree in dairy/animal science is preferred. Extensive on-farm experience is also necessary
Veterinarian	Manage herd health through animal exams, treatments, surgical procedures, reproductive checks, and consulting with the farmer on ways to improve herd health	A four-year pre-vet program, followed by a four-year professional degree and a license in states of practice
Animal Nutritionist	Keep up with the latest research and commodity markets to develop a feed ration for the cows	A bachelor's degree in the dairy field
Milker	Facilitates the milking process with the cows	No formal education required, but on the job training and experience
Computer Programmer	Farms have a variety of technical equipment to manage their farm and herd health which requires computers to monitor them	Computer programming, computer science, or electrical engineering



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Field Representative/ State Milk Inspector	Works with the milk industry and producer to offer educational resources and programs to improve practices and ensures producers follow state and federal regulations	A bachelor's degree in dairy related field, and an inspector's and sampler's license
Dairy Equipment Technician	Provides milking equipment service every day of the year when farms experience equipment problems	High school education plus career training in mechanical and refrigeration
Milk Hauler/Trucker	Tests the milk upon arrival at the farm, and then transports the milk to the processing location	Commercial Driver's License
Producer/Owner/Farmer	Manage all relationships involving herd health, farming practices, and industry partners to produce a safe and healthy product	No formal college degree is required, although a degree in dairy science, or another ag major, or business, and dairy experience is essential
Pharmaceutical Rep	Improve the health and wellness of animals by educating vets and producers of programs or products that may help improve herd health	A bachelor's degree
Breeding Specialist/Geneticist	Help producers develop a breeding program to improve the genetics and health of the herd	A bachelor's degree in Animal Science



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Builder/Construction	Provides designs which focus on increased cow comfort, flow, and durable materials	Degree is dependent on specialty, but construction management, engineering, or architecture would be involved
Accountant	Advise on financial matters, as well as provide the owner with needed financial statements	Must be a qualified CPA
Agriculture Engineer	Help develop ways for farmers to decrease the impact of animal agriculture on the environment	Bachelor's degree in engineering and obtain a professional license
Crop Consultant	Provides advice to help producers make the best decision regarding crop production and nutrient management	Bachelor's degree in agronomy, animal/dairy science, or ag mechanization
Food Scientist	Tasks vary a lot but involves development of new and innovative products or improving procedures for current products	Bachelor's degree in Food Science for introductory jobs, and a graduate degree for more roles
Dairy Marketer	Oversee the sales and marketing of raw milk to dairy processors	Bachelor's degree in business, marketing, or management with knowledge of federal and state regulations and the dairy industry



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Sales Managers	Work with the various dairy brands to promote their products and increase consumer demand through marketing, education, and partnerships	Bachelor's degree in a management, or business is preferred
Plant manager	Oversees the food safety, production, and quality of the product as well as the employees	Bachelor's degree in food science or related field. Business and engineering skills are also helpful
Dairy Promoter	Works with a check-off organization to promote the industry and provide accurate information to the public and other industry partners	Depends on specific role, but a degree in communications, public relations, marketing, nutrition, or animal science are common
Extension Educator	Serve as a link between producers and university research to help producers implement new and innovative practices	Master's degree or PhD in extension or related research field, such as dairy science, or crop management
Ag Communicator/Journalist	Can work with various organizations in writing/producing agriculture-based education, stories, videos, or social media	Bachelor's degree in communications and/or a background in agriculture
Dairy Case Manager	Works with food retailers to manage the dairy aisle, purchasing decisions, and promotional programs for the grocery store	Bachelor's degree plus work experience



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Agriculture Teacher

Educates students on agriculture practices and provide experiential experiences for them to learn about the industry

Bachelor's degree in Ag education and licensed teacher in the state

4. You have completed the lesson and are ready to turn the worksheet in to your teacher.

Great job learning about more career opportunities!