

## EXPLORATORY TASKS STUDENT SAMPLES

### CLUSTER: Agriculture, Food and Natural Resources

### PATHWAY: Animal Systems Pathway

People with careers in this pathway work to promote the health of food, service and companion animals.

**EXPLORATORY TASK:** Create an animal care guide for a new caregiver.

- What is a healthy/safe environment?
- What type of food is recommended?
- What are the medical needs?

**OBJECTIVE:** Introduce students to the basic needs of animals.

**TEACHER SUPPORT:**

- Collaborate with a veterinarian, animal care professional, local extension agent, science teacher or a CTE agricultural science teacher.

**STUDENT SUPPORT:**

- Provide links, examples, checklist and/or a template for students to use.

**LEARNING EXTENSIONS:**

- Invite a veterinarian, animal care professional, local extension agent or a CTE agricultural science teacher to discuss the basic needs of animals.
- Lead a discussion connecting school subjects and this pathway.
- Lead a discussion about personal qualities of an animal care professional.
- Identify and research a career within this pathway.

**CONNECTIONS TO KENTUCKY ACADEMIC STANDARDS**

- Career Studies: ES.1.9, CI.2-8
- Reading and Writing: RI.6.4
- Science: LS1.A Structure and function – 6-8 grade band

**NOTE:**

- These samples represent students' first introduction to authentic topics and skills related to a career cluster.
- A range of student performance is included within the complete body of work.



## What do ducks need to survive?

Ducks need an outdoor habitat such as fenced yard or farmland.

- They could also need a pond because they are used to floating around.
- Provide shelter from the weather and safety from predators.
- Clean water and nutritious food need to be provided daily.




## Do's and Don'ts for feeding a duck

### Do's



- Cracked corn
- Oats
- Rice
- Birdseed
- Frozen peas,
- Chopped lettuce,
- Sliced grapes

### Don'ts



- Feed ducks bread or junk food
- Bread
- Pizza
- Cupcakes
- Leave uneaten food lying around.



## MEDICAL NEEDS

- Keeping ducks healthy requires taking the necessary steps to prevent disease.
- Immunize ducks against known infectious diseases.
- Make sure to not feed ducks moldy and outdated food. Toxins in moldy food can cause serious damage in the digestive organs.

## RESOURCES

- <https://www.vet.cornell.edu/animal-health-diagnostic-center/programs/duck-research-lab/health-care> (Slide 4)
- <https://www.caringpets.org/how-to-take-care-of-a-pet-duck/#:~:text=Ducks%20need%20an%20outdoor%20habitat,need%20to%20be%20provided%20daily> (slide 2)
- <https://opensanctuary.org/article/daily-diet-treats-and-supplements-for-ducks/> (Slide 4)
- <https://frisco.library.com/blogs/post/the-dos-and-donts-of-feeding-ducks/> (Slide 3)



# Animal Care Guide For Cows



## Healthy Environments

Cows need plenty of room, many other cows for social needs, and ground plants for plenty of food. A safe environment includes a fenced in area so nothing can get in or out.



## What's good and what's not good for cows to eat?

### \*GOOD:

- \*Hay
- \*Grass
- \*Feed thats was made for cows only
- \* fruits/ vegetables
- \*corn
- \*straw
- Skittles

### \*BAD:

- \*chocolate
- \* blue-green algae
- \*copper
- \*grain poisoning
- \*Molybdenum
- \*Lead Toxicity



## Medicines for cows and how its given

Cows use antibiotics for all kinds of illnesses. Examples include penicillin, florfenicol, tilmicosin, and enrofloxacin. All of these can be used for infections like pink eye or infected wounds. Their medicine can be given by putting their pills in water, mixing in their feed or injecting them.



## Research

Slide 2 -

<https://www.farmhealthonline.com/US/health-welfare/cattle/environment/>

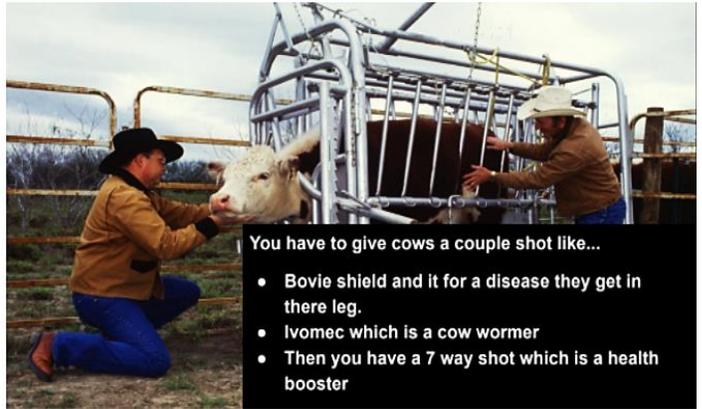
Slide 4:

[Antibiotics in Cattle - Beef2Live | Eat Beef \\* Live Better](#)

<https://www.beef2live.com/story-antibiotics-cattle-88-10...>

<https://opensanctuary.org/article/things-that-are-toxic-to-cows/>





## Snake care guide for the copperhead

What habitat is safe for a copperhead

*Copperhead snakes can be found in most all habitats*



What do copperheads eat?

*Copperheads feed on baby cottontails, rats, mice, birds, snakes, lizards, baby turtles, frogs, toads, and insects.*



Medical needs

*They require low temp areas, No specific humidity, Only need a meal every two weeks.*



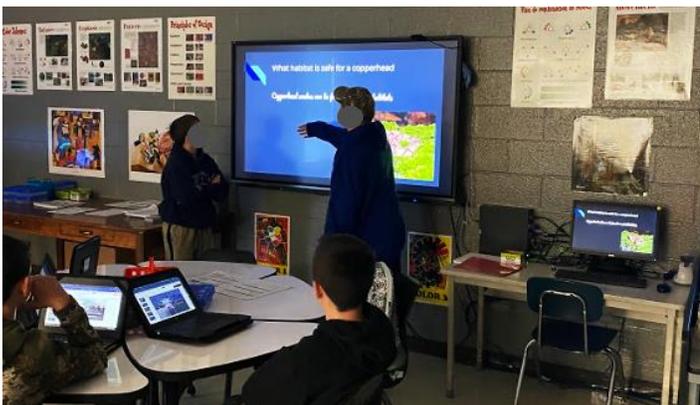
Resources

<https://towd.texas.gov/huntwild/wild/species/southern-copperhead/#:~:text=Copperheads%20feed%20on%20baby%20cottontails,insects%2C%20especially%20grasshoppers%20and%20crickets.>

Northern copperhead | Smithsonian's National Zoo

Copperhead Snake Care Advice, Appearance & Handling

<https://www.everythingreptiles.com/copperheads>



## Animal care guide for cows.



## Food for cows

They need hay, water, feed and grass. Also, cows can eat corn kernels and apples if they are beef cattle.



## What they need for their habitat

They need lots of land to roam free and use the bathroom. They need lots of food because the big animals. They need barns so when there is harsh weather like heavy rain.



## Medical needs.

Cows need a lot of medication like shots to survive diseases and bites.



## Resources

[What Do Cows Eat? - Dairy Management Inc.](https://www.usdairy.com)  
<https://www.usdairy.com> - News & Articles

slide 2

[Beef Cattle Health and Care | Penn State Extension](https://extension.psu.edu)  
<https://extension.psu.edu> - animals and livestock health

slide 4



## Is a Career in Agriculture, Food & Natural Resources for Me?

Would you be interested in a career in Agriculture, Food & Natural Resources? Below are knowledge and skill statements related to the careers in this cluster. Read each statement. Decide if this describes you by checking the Yes, No or Maybe box.

THINGS I LIKE TO DO	YES	NO	MAYBE
Learn how things grow and stay alive		✓	
Make the best use of the earth's natural resources		✓	
Hunt and/or fish	✓		
Protect the environment	✓		
Be outdoors in all kinds of weather	✓		
Plan, budget and keep records	✓		
Learn how machines and/or tools work		✓	
PERSONAL QUALITIES THAT DESCRIBE ME	YES	NO	MAYBE
Self-reliant	✓		
Nature lover	✓		
Physically active	✓		
Planner	✓		
Creative problem solver	✓		
SCHOOL SUBJECTS THAT INTEREST ME	YES	NO	MAYBE
Math	✓		
Life sciences		✓	
Earth sciences		✓	
Chemistry	✓		

**Did you check YES most often?** If so, continue to explore careers and opportunities in this cluster. And don't forget to focus on your math and science classes to build the academic skills you need for these careers.

**Did you check NO most often?** If so, don't worry. There are hundreds of jobs to explore in the other 15 career clusters.

**Did you check MAYBE most often?** If so, continue to explore in this cluster as well as investigating how your skills and interests may be a good match in other clusters.

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Be outdoors in all kinds of weather	✓		
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Learn how machines and/or tools work	✓		
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Physically active	✓		
Planner		X	
Creative problem solver		X	
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Earth sciences		X	
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