**Georgia Science Standards Life Science**

**RESOURCES**

[**Southeast Dairy Association Teacher Resources**](http://southeastdairy.org/teacher-resources/)

[**Georgia Mobile Dairy Classroom**](https://www.milkcow.org/)

[**GAStandards.com**](https://www.georgiastandards.org/Georgia-Standards/Pages/Science.aspx)

[**Dairy Good**](https://dairygood.org/)

[**National Dairy Council**](https://www.nationaldairycouncil.org/)

[**USDA.gov**](https://www.usda.gov/)

[**The Dairy Alliance**](http://thedairyalliance.com/)

[**Fuel to Play 60**](https://www.fueluptoplay60.com/)

[**GENYouth**](https://www.genyouthnow.org/)

[**Great American Milk Drive**](https://milklife.com/give)

[**National Dairy Farm Program**](http://www.nationaldairyfarm.com/)

**SKCS6. Students will understand the important features of the process of scientific inquiry. Students will apply the following to inquiry learning practices:**

c. Much can be learned about plants and animals by observing them closely, but care must be taken to know the needs of living things and how to provide for them (classroom pets).

[**Cow Care and Comfort**](http://southeastdairy.org/animal-care-well-being/)[**Meet Our Dairy Farmers**](http://southeastdairy.org/meet-our-dairy-farmers/)[**Freddie Falcon Visits a Dairy Farm**](http://www.atlantafalcons.com/media-lounge/videos/Freddie-Falcon-Goes-to-the-Farm/f1588d53-437c-444f-bdad-019baa196082)[**Thank Goodness for Cows**](https://sedairy-my.sharepoint.com/personal/mszymanski_sedairy_org/Documents/MOLLYS/GA%20ACCM/03.08.17%20GA%20Science%20Standards.docx)[**Find Out How Farmers Care for their Cows**](https://dairygood.org/content/2017/the-many-ways-farmers-care-for-their-cows)[**Go Behind the Scenes on a Dairy Farm**](https://dairygood.org/content/2017/go-behind-the-scenes-on-a-dairy-farm)

**SKL1. Students will sort living organisms and non-living materials into groups by observable physical attributes.**

 b. Group animals according to their observable features such as appearance, size, motion, where it lives, etc. (Example: A green frog has four legs and hops. A rabbit also hops.)

[**Cow Care and Comfort**](http://southeastdairy.org/animal-care-well-being/)[**Freddie Falcon Visits a Dairy Farm**](http://www.atlantafalcons.com/media-lounge/videos/Freddie-Falcon-Goes-to-the-Farm/f1588d53-437c-444f-bdad-019baa196082)[**Thank Goodness for Cows**](https://sedairy-my.sharepoint.com/personal/mszymanski_sedairy_org/Documents/MOLLYS/GA%20ACCM/03.08.17%20GA%20Science%20Standards.docx)[**Where’s the Dairy**](file:///C%3A%5CUsers%5CFarrah%5CDownloads%5CWhere%E2%80%99s%20the%20Dairy)[**Dairy Worksheets**](https://sedairy-my.sharepoint.com/personal/mszymanski_sedairy_org/Documents/MOLLYS/GA%20ACCM/03.08.17%20GA%20Science%20Standards.docx)[**Dairy Breeds**](http://www.thecattlesite.com/breeds/dairy/)

[**More About Dairy Breeds**](https://docs.wixstatic.com/ugd/03d287_8207ff67157343acb1068a68e7b516c4.pdf)

 **SKL2. Students will compare the similarities and differences in groups of organisms.**

1. Explain the similarities and differences in animals. (color, size, appearance, etc.)

c. Recognize the similarities and differences between a parent and a baby.

d. Match pictures of animal parents and their offspring explaining your reasoning. (Example: dog/puppy; cat/kitten; cow/calf; duck/ducklings, etc.)

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**S1L1. Students will investigate the characteristics and basic needs of plants and animals.**

a. Identify the basic needs of a plant. 1. Air 2. Water 3. Light 4. Nutrients

 b. Identify the basic needs of an animal. 1. Air 2. Water 3. Food 4. Shelter

 d. Compare and describe various animals—appearance, motion, growth, basic needs

[**Cow Care and Comfort**](http://southeastdairy.org/animal-care-well-being/)[**Meet Our Dairy Farmers**](http://southeastdairy.org/meet-our-dairy-farmers/)[**Healthy Farming Healthy You**](http://ymiclassroom.com/lesson-plans/sudia-hf/)[**Milk On The Move**](http://southeastdairy.org/wp-content/uploads/2015/09/04.21.2016_Milk-on-the-Moove-fllier_FINAL_cropped.pdf)[**Freddie Falcon Visits a Dairy Farm**](http://www.atlantafalcons.com/media-lounge/videos/Freddie-Falcon-Goes-to-the-Farm/f1588d53-437c-444f-bdad-019baa196082)

**S2CS7. Students will understand important features of the process of scientific inquiry.**

d. Much can be learned about plants and animals by observing them closely, but care must be taken to know the needs of living things and how to provide for them.

[**Cow Care and Comfort**](http://southeastdairy.org/animal-care-well-being/)[**GA Mobile Dairy Classroom**](https://www.milkcow.org/)[**Milk from Cow to You**](https://docs.wixstatic.com/ugd/03d287_78b6800c6bad4826b354bace2383b181.pdf)

**S2L1. Students will investigate the life cycles of different living organisms**.

a. Determine the sequence of the life cycle of common animals in your area: a mammal such as a cat or dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.

**S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.**

c. Identify features of animals that allow them to live and thrive in different regions of Georgia.

[**Healthy Farming Healthy You**](http://ymiclassroom.com/lesson-plans/sudia-hf/)[**Life on a Dairy Farm**](https://docs.wixstatic.com/ugd/03d287_8207ff67157343acb1068a68e7b516c4.pdf)

 **S3L2. Students will recognize the effects of pollution and humans on the environment.**

a. Explain the effects of pollution (such as littering) to the habitats of plants and animals.

b. Identify ways to protect the environment. • Conservation of resources • Recycling of materials

[**Healthy Farming Healthy You**](http://ymiclassroom.com/lesson-plans/sudia-hf/)

**S4CS8. Students will understand important features of the process of scientific inquiry.**

Students will apply the following to inquiry learning practices:

 a. Scientific investigations may take many different forms, including observing what things are like or what is happening somewhere, collecting specimens for analysis, and doing experiments.

c. Scientists use technology to increase their power to observe things and to measure and compare things accurately.

d. Science involves many different kinds of work and engages men and women of all ages and backgrounds.

[**In the Barn**](https://dairygood.org/content/2016/in-the-barn)[**In The Milking Parlor**](https://dairygood.org/content/2016/in-the-milking-parlor)[**Milk from Cow to You**](https://docs.wixstatic.com/ugd/03d287_78b6800c6bad4826b354bace2383b181.pdf)

**S4L1. Students will describe the roles of organisms and the flow of energy within an ecosystem.**

1. Identify the roles of producers, consumers, and decomposers in a community.

[**How Do You Milk A Cow**](https://dairygood.org/content/2016/how-do-you-milk-a-cow)[**In the Barn**](https://dairygood.org/content/2016/in-the-barn)[**In The Milking Parlor**](https://dairygood.org/content/2016/in-the-milking-parlor)

 b. Demonstrate the flow of energy through a food web/food chain beginning with sunlight and including producers, consumers, and decomposers.

c. Predict how changes in the environment would affect a community (ecosystem) of organisms.

d. Predict effects on a population if some of the plants or animals in the community are scarce or if there are too many.

**S4L2. Students will identify factors that affect the survival of extinction of organisms such as adaptation, variation of behaviors (hibernation) and external factors (camouflage and protection).**

1. Identify external features of organisms that allow them to survive or reproduce better than other organisms that do not have these features. (Changes in an organism’s habitat are sometimes beneficial to it and sometime harmful)

**Animal** [**Adaptations**](https://animalsake.com/farm-animals-list)

**S5L2. Students will recognize that offspring can resemble parents in inherited traits and learned behaviors.**

a. Compare and contrast the characteristics of learned behaviors and of inherited traits.

b. Discuss what a gene is and the role genes play in the transfer of traits.

[**I Look Like my Mom and Dad**](https://www.youtube.com/watch?v=8EQKVHHVR6c)

 **S5L4. Students will relate how microorganisms benefit or harm larger organisms.**

 a. Identify beneficial microorganisms and explain why they are beneficial.

 b. Identify harmful microorganisms and explain why they are harmful.
[**Food Safety**](http://southeastdairy.org/milk-safety/)[**Farm to Fridge**](http://southeastdairy.org/wp-content/uploads/2015/09/Teacher-Resources_31.pdf)[**Farm to Table**](http://ymiclassroom.com/wp-content/uploads/2016/08/sudia_ftt_ga-kit.pdf)