# Mini 4-H Dairy



### Kindergarten, 1st & 2nd Grades

Purdue University is an equal opportunity/equal access/affirmative action institution.

As a Mini 4-H parent, your job will be to guide and encourage your child through this project. We suggest that you do not complete the activities for them. Instead, help them, guide them, work with them, and let them do all that they possibly can. The 4-H motto is "Learn by doing" and is the best educational tool that we can provide for youth.

If you have any questions about this project, please contact Purdue Extension- Hancock County at 317-462-1113 or <u>hancockces@purdue.edu</u>



#### Mini 4-H

Welcome to Mini 4-H! You are now a member of the 4-H family. Mini 4-H'ers have lots of fun. There are many activities for you to explore. You can try new things. You can share it with your friends and family.

An adult can help you with your project, and you can bring your project to the 4-H fair. Many people will be able to see what you have done. You will receive a ribbon made just for Mini 4-H.

The 4-H fair is an exciting time for 4-H members and families. It is a week that allows community youth to show their talents, interests, and enthusiasm for learning!

4-H Symbol: A Four leaf clover with an H in each leaf
4-H Colors: Green and white
4-H Motto: To make the best, better
4-H Pledge: I pledge my Head to clearer thinking
My Heart to greater loyalty
My Hands to larger service and
My Health to better living,
For my club, my community
my country, and my world.

### Mini 4-H Dairy

### Welcome to the Mini 4-H Beef project! You are going to learn a lot of exciting things about dairy animals!

### What will I do?

<u>Kindergarten:</u> you will exhibit a poster with a picture of your favorite dairy cow! You can also show a dairy animal at the fair!

<u>**1**</u><sup>st</sup> **Grade** you will exhibit a poster on three dairy breeds. You can also show a dairy animal at the fair!

**<u>2<sup>nd</sup> Grade</u>**: you will show a calf at the Hancock County 4-H Fair! The calf must belong to a 4-Her that is enrolled in the 4-H Dairy project. If you know a 4-Her that has a calf at the fair, ask them if it is okay for you to show their calf in the Mini 4-H Dairy Show or you can exhibit a poster with the parts of a dairy cow.

Be sure that your posters are 22" by 14", mounted on a firm backing, and covered in clear plastic. Attach a label to your exhibit in the lower right-hand corner indicating your name and grade.

While showing the calf, a parent, legal guardian, or another adult designated in writing by parent or legal guardian will have control of the animal at all times. This includes coming and going to the show ring. A Mini 4-H Animal Liability Release form must be completed and on file with the Extension Office before the Mini Dairy show.

#### **Dairy Cow Breeds**

**Holstein-Friesian:** Holstein cattle are easily recognized by their black and white color. Some animals are nearly white, having only a few black spots. Others are nearly black, but have white under the body, on lower portions of the legs, and a white switch (long hairs at the tip of the tail.) They are the largest of the dairy breeds. Because of their size, they consume large quantities of feed. In milk production they rank first in the amount produced!



**Jersey:** The characteristic color of the Jersey is some shade of fawn such as tan, red, brown, gray, mulberry or black and may have white markings. They have either a black or white switch or a mixture of the two. Jerseys are small cows. They are alert and very obedient if properly handled. The amount of milk produced is the lowest of the dairy breeds.



**Guernsey:** Their color is a shade of reddish or golden fawn with white markings. A majority of the animals are predominately fawn with a small amount of white. The cows are a little larger than the Jersey cows, but not as large as the other breeds. In general, Guernsey's are docile. They produce a slightly greater amount of milk than the Jerseys.



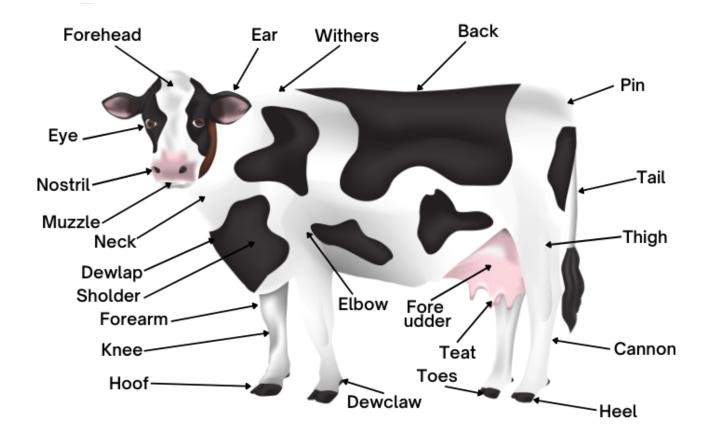
**Ayshire:** The characteristic color is red and white, with the red color varying from a light or brownish shade to a very dark mahogany. This breed is smaller in size than the Holstein and larger than the Guernsey. Ayrshires are alert, with tendency towards nervousness in some strains.



**Brown Swiss:** The Brown Swiss are solid brown varying from very light to dark. It is a very docile breed, sometimes almost sluggish. They produce around the same amount of milk as Ayshire and Guernsey's.

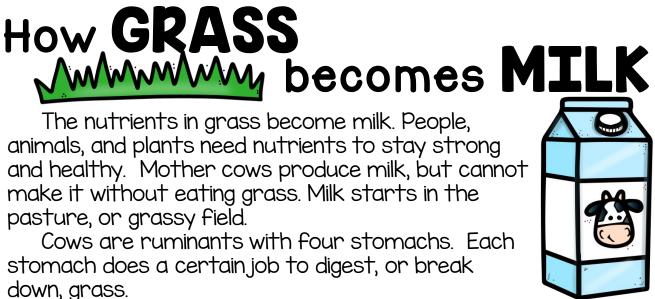


### Parts of a Dairy Cow



The nutrients in grass become milk. People, animals, and plants need nutrients to stay strong and healthy. Mother cows produce milk, but cannot make it without eating grass. Milk starts in the pasture, or grassy field.

Cows are ruminants with four stomachs. Each stomach does a certain job to digest, or break down, grass.





The process begins when cows graze. They swallow grass half chewed. The first two stomachs soften and break down the grass. It turns into cud, or small balls of grass that are not fully digested.

Cows throw up and then chew the cud. They swallow it again. As the cud is digested, nutrients enter the blood.

The nutrients are carried by the blood to the bag-like part of a female cow called an udder. The mammary glands of the udders use the nutrients to make milk. Cows are then ready to be milked.

Dairy farmers milk their cows two times a day. The teats, or nipples of a cow, are hooked up to milk machines. Milk comes out of the teats. The milk is stored and cooled in tanks called vats.

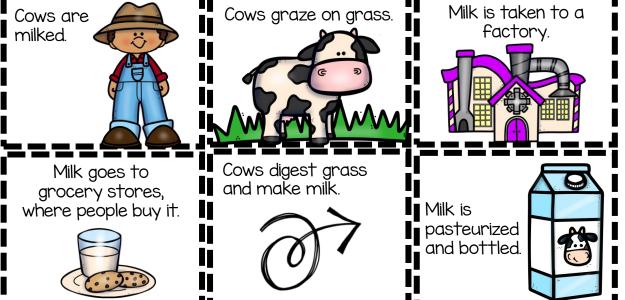
Milk trucks stop at dairy farms every day or two. The milk is taken to a factory. It is pasteurized, or heated and cooled to keep milk fresh longer.

The milk is bottled by machines. A date on the bottle shows how long the milk will stay fresh. The milk is sent to grocery stores, where people buy it.

There are different kinds of milk. Some people enjoy drinking creamy whole milk, while others enjoy low-fat milk.

Milk is used to make many other dairy foods, such as cheese, yogurt, and ice cream.

## Name HOW GRASS BECOMES MILK Cut out each step and place it in the correct order, according to the article. ©Teaching to the Middle Milk is taken to a Cows are Cows graze on grass. factory. milked.

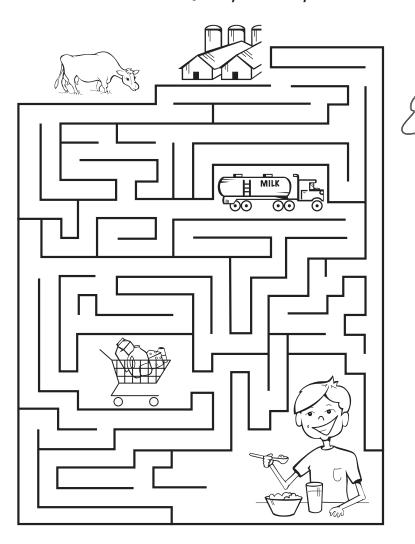








Milk is a-mazing! Navigate the route from the farm to the breakfast table. Without crossing any black lines, draw a line from the milk truck to the grocery store to your cereal bowl.



What's happening at the dairy processing plant? Connect the dots to find out!



Can you help unscramble the letters below to form the dairy words at the left of the page?

cheese yogurt calf milk cow farmer moo calcium dairy

1

eeehsc	
irady _	
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• /	
clcimua	
_	
falc _	
mrfare	

Dairy foods contain nine essential nutrients your body needs, including calcium, potassium and vitamin D! Enjoy three servings of dairy per day to build strong bones and healthy bodies





American Dairy Association Mideast 2018