

Day to Day Dairy

RAISING DAIRY CATTLE LESSON

Learning Target: Describe how producers raise dairy cattle and the day-to-day activities involved on the farm.

Learning Strategy: "Dairy Diary"

Students have learned quite a bit about dairy cattle and their contribution to humans. Now students get to see what goes into the day to day operations of a dairy farm.

Copy, cut out, and fold the student pages so that each student has a "Dairy Diary" mini book.

Show the "A Day on the Dairy Farm" video (25 minutes) and have students fill in the blanks. Pause the video as needed to check for comprehension.

The **answers** to the each section are as follows:

1. Newborn Calf Facility
 - days
 - first
 - ear
2. Baby Grow Out Barn
 - 20
 - herd
 - milk
3. Heifer Freestall Unit
 - 24
 - sand
 - group
4. Milking Herd Freestall Barn
 - walking
 - sick
 - heat
5. Cow Nutrition and Digestion
 - Mixed
 - four
 - chew
6. The Milking Parlor
 - 8
 - order
 - 10
 - gentle
7. Milk Collection
 - 34
 - pounds
 - bulk
8. The Herdsman's Office
 - fed
 - gates
9. The Hospital Group
 - care
 - red
 - never
 - clear
10. Handling the Herd
 - care
 - respect
 - gently
 - happy

Culminating Activity: "Part of the Herd"

Give each student a copy of the handout and access to a **black marker or stamp pad**.

Each student will give their calf a **unique nose print** by pressing their thumb or finger print to the nose. Then have them use crayons or colored pencils to **add markings and/or color in** their calf.

Allow each student to **choose a unique number combination** to write on the ear tag. Suggestions are their date of birth followed by a special number or the year followed by their student number.

Going To Market

MILK COLLECTION

Milk from the cows is collected, filtered, and cooled. The Chiller cools the milk from 101.5 degrees down to _____ degrees very quickly before the milk is pumped into a waiting **tanker** truck.

Each truck is double insulated to keep the milk cold and can hold 50,000 _____ of milk.

Some dairies use a _____ tank to collect the milk each day until a tanker picks it up.

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Cow Comfort

MILKING HERD FREESTALL BARN

Milking cows wear neck monitors which record how much they are _____ and eating. If a cow is not eating or walking as much, she may be getting _____ and the computer sends a report for the producer to check on her.

The beds in the **freestall** barn are filled with a thick layer of sand. The alleys are flushed with water and the sand recycled after being sanitized by a _____ cycle.

4

What's for Dinner?

COW NUTRITION AND DIGESTION

Milk cows are fed a Total _____ Ration

(TMR) which is a combination of grass, alfalfa, and corn. These roughages have been packed into a silo after harvest so they can go through a process a lot like pickling.

When the mixture is taken out and prepared for the cows to eat, it is called **silage**.

Cows have a superpower. They can turn plants into milk. To get the most nutrients out of the plants they eat, cows have _____ compartments in their stomach and will bring their food back up to _____ it again.

Got Milk?

THE MILKING PARLOR

Cows are milked on a schedule. At WDairy, they are milked every _____ hours which is 3 times a day.

They are always milked on the same schedule and in the same _____ each time.

The rotary **parlor** can milk 72 cows at a time in about _____ minutes. Cows walk on to the carousel on their own and are calm and relaxed during the milking process.

The **udder** of the cow is washed and dried before the milking machine is attached. The pulsating vacuum is very _____. It stimulates milk flow and keeps the machine attached until milk flow is reduced. Post dip is applied after milking to prevent infections.

Handled With Care

THE HOSPITAL GROUP

The Hospital Group is a separate pen for cows that need special _____ or extra attention. Cows about to **calve** are kept here to be watched and cared for until the calf is born.

Cows that are sick are treated with medicine then monitored in another pen until they are well. They wear _____ **leg bands** to show that they are milked last and their milk kept separate.

Milk from cows being treated with antibiotics _____ enters the human food supply. A cow must go through a

"Withdrawal Period" after she has been on antibiotics. Only when her milk tests _____ of antibiotics is she allowed to go back into the regular milking herd.

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You Grow Girl

BABY GROW OUT BARN

After 12 to 14 days, the calves are moved from the individual calf hutches to the Grow Out barn and put into groups of _____.

Cattle are _____ animals and like to be in groups. So the calves are socialized early.

Heifers have access to water, feed, and all the _____ they want. An automated machine tracks how much milk each calf has using the RFID button in her ear.

2

Mooving on Up

HEIFER FREESTALL UNIT

At two-and-a-half months heifers are put into groups of _____ and moved to a freestall barn.

A freestall barn has dividers so each animal can lay down in their own bed of _____.

By now, heifers have learned to put their head through a head lock to eat, use an automatic waterer, and how to get along in a _____.

Dairy Data

THE HERDSMAN'S OFFICE

Producers use computer systems to track all the information about a cow throughout her life. This data is used to make sure she is kept healthy and to see how much milk she produces.

The Herdsman can even adjust how much a group of cows is _____ without ever leaving the office.

The computer can even control the _____ when a cow needs to be separated for medical attention.

Oh, Baby!

NEWBORN CALF FACILITY

Calves are raised in individual houses called **hutches**

so they can get special attention for their

first 12 to 14 _____ to make sure they are healthy.

The _____ milk from a cow is called

colostrum. It contains antibodies and is very important for calves to stay healthy.

Each calf gets a **tag** and a RFID button in her

_____ so the producer can keep track of all her information in the computer.

1

Happy Cows

HANDLING THE HERD

Cows will not give much milk if they are mistreated or stressed.

Dairy producers _____ about all the cows in their herd so they treat them with _____ and handle them _____.

Keeping the cows healthy and _____ means more milk for everyone.

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My Dairy Diary

A DAY ON THE DAIRY FARM

Name _____

Part of the Herd

DAIRY CATTLE RECORD KEEPING

Did you know that every cow has a unique identifying feature just like a human fingerprint? For cows, it is her nose print. That's right. The pattern on a cow's nose is individual to every cow.

On the farm, calves are given an ear tag that helps the producer identify her and keep records throughout her life. Every farm has their own numbering system. For the calf below, you get to decide her number, color her coat pattern, and give her a unique nose print.

Directions:

1. First write your cow number on each ear tag. The **same number** goes on both ears to make it easy to identify her no matter which side the handler is standing on.
2. Then use a black marker or stamping pad to color the pad of your thumb (or finger) and press it to her nose.
3. Last color your calf with whatever markings or color pattern you want. Remember, dairy cattle can be black and white, red and white, or tan/gray.

