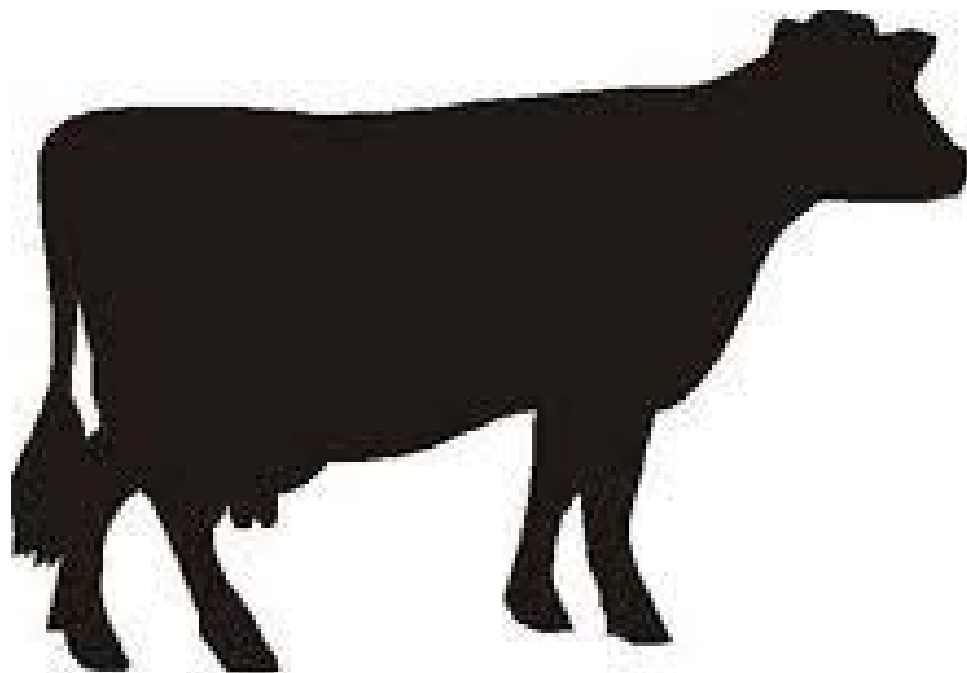


DAIRY



**Livestock Project Information &
Skillathon Study Packet**

2018 Dairy Project Requirement Guide

Project Information

Please note that project information can change. Members are responsible for reading correspondence including newsletters and letters.

❖ **Project Book:**

- Your book will consist of a packet. The book guidelines for completion are reflected by the score sheet in the front cover. A new book must be completed each year. Members can purchase the book for \$2.00 from their club advisor, or download the book and print it for free at <http://vanwert.osu.edu>.
- Resource Guides are a one-time purchase for projects. Members should plan on purchasing this guide for reference and to study for skillathon.

❖ **Quality Assurance:**

- Quality Assurance is a state required training program for any 4-H or FFA member who is exhibiting market livestock at the Jr. Fair.
- **Dates for 2018 Include:** Sunday, March 4 starting at 2:00pm, Thursday, May 31 starting at 7:00pm at the Jr. Fair Building. Rabbit Quality Assurance will be Saturday, April 21 starting at 9:00am in the Jr. Fair Building.
- **Test Out:** Members eligible for test out it will be offered starting at 1 hour prior to the beginning at the Jr. Fair Building. Test out is offered to youth 12-14 or 15-18 as of January 1 of the current year. Youth who need special accommodations for testing should contact the Extension Office for details.
- Quality Assurance Certification **MUST** be completed no later than **June 10, 2018**. Failure to complete will result in disqualification from the Jr. Fair for 2018.

❖ **Possession Deadline:**

- Possession date is June 1 of current year.

❖ **Mandatory Tagging/Weigh-In Date**

- Registration papers, ear tag, tattoo, or other ID will be collected prior to the show. See Jill or Denny McCoy for questions.

❖ **Book & Interview Judging:**

- Judging will be completed on Monday, July 30th, 2018 from 3:00pm-7:00pm at the Jr. Fair Building on the Fairgrounds. Times are scheduled by appointment. Full information on judging and expectations are Included in this packet and titled "Judging Day Information".
- Members who do not complete their judging at this time will need to have their Advisor submit their Project Book Grade and Interview Grade and plan to attend a makeup session for their Skillathon for completion. Make up grades from advisors are due no later than Friday, August 10, 2018.



❖ **Exhibit Limit:**

- Limit of two (2) entries per exhibitor in each class. See fair book for age guidelines and classes.

❖ **Fair Entry Deadline**

- You will be able to enter your projects for exhibition at the Fair. Please note that the entry deadline is August 4, 2018. Entries are made through a website and information will be mailed directly to your home.
- During the summer months, a livestock newsletter will be sent out with tips, suggestions, and information regarding what to expect at the Jr. Fair. This will serve as a guide to Fair preparation and what to expect the week of fair.

❖ **Weight/Age/Breed Requirements:**

- See fair book for age guidelines and classes.

❖ **Health Requirements:**

- Not required unless animal originated from or was shown out-of-state.
- Completed DUNF at the time of weigh in/arrival at the Jr. Fair for Market animals or those animals who are milking.

2018 Livestock Project Judging Day Information

Age divisions for judging are as follows: (Your age as of January 1 of the current year)

- Juniors 8-10
- Intermediate 11-13
- Senior 14-18

Station 1: Project Book 20 points

Present your completed 2018 Livestock Project Book to the judge. The judge will review your records and completed project book. Point values for each section are included in the front of your project book. Judges will award points for degree in which the book is completed. The entire book (with exception of any bonus sections) must be completed. Age/experience will be taken into consideration when giving points.

Station 2: Interview Station 20 points

You will have an interview for the project you are exhibiting. You will be asked questions based on your experience level. You will earn points for each correct question. Sample interview questions are included with this guide. All questions are based from your project books and the Resource Handbook or are general "Tell me about your animal" questions.

Station 3: Quality Assurance 20 points

Information for this station will be based on 2018 Good Production Practices #4 or #5. Youth will be asked to answer questions about a Medication Label or Feed Label. This information will be/was covered in Quality Assurance Sessions and those who have tested out should study accordingly.

Station 4: Skillathon – Year A 20 points

Parts of the Animal: Using your resource book and/or printed packet study the parts of the animal. Note that for full points Juniors will only need to get $\frac{1}{4}$ correct, Intermediate will need to get $\frac{1}{2}$ and Seniors will need to get $\frac{3}{4}$ correct.

Station 5: Skillathon – Year A 20 points

Terminology: Matching worksheet to be provided the day of skillathon to fill out. Please note that the key can be downloaded online and terms can be located in your resource book. Please note that poultry will need to utilize their key as necessary due to lack of resource book at this time.

Total Grade is out of 100 points. Incomplete grades are not eligible for exhibition in the Jr. Fair. Other grades can be salvaged if you take the time to contact the office. It is YOUR responsibility to fix your grades, not the Extension Office's responsibility.

A: 100-80	B: 79-60	C: 59-40	I: 39 and Under
------------------	-----------------	-----------------	------------------------

Please note that accommodations can and will be made for those youth who need and qualify for them. For more information on filling out a "Winning 4-H Plan", please contact Heather at the Extension Office for details!

EVERYONE HAS THE OPPORTUNITY TO SUCCEED WITH PROPER PLANNING!



Breeding Livestock Record Book & Interview Scoring

Name:		As of Jan 1 of Current Year Junior: 8-10 Intermediate 11-13 Senior 14-18
Club:		
Page	Section	Breeding Project Point Value
Cover	Youth Information	1
4	Youth Agreement – must have parent signature for full points	1
5	The Care That You Provide Your Animal	1
6	Goals and Accomplishments	2
7	Miscellaneous Expenses	1
8	Feed Record Summary	2
9	Feed Tag	1
10-11	Project Animal Inventory	3
12	Photo	1
13-14	Treatment Record (write N/A if no treatment given to receive points)	1
15	Pedigree Record	1
16-20	Breeding Records (optional for extra credit 2pts)	
21	Profit or Loss Statement	2
22-23	Assuring Quality Care for Animals	1
24	Project Summary	2
	Station #1: Project Book Score	20
	Station #2: Interview	20
	Station #3: Quality Assurance	20
	Station #4: Skillathon A	20
	Station #5: Skillathon B	20
	Total Points Available	100

Market Livestock Record Book & Interview Scoring

Name:		As of Jan 1 of Current Year Junior: 8-10 Intermediate 11-13 Senior 14-18
Club:		
Page	Section	Market Project Point Value
Cover	Youth Information	1
4	Youth Agreement – must have parent signature for full points	1
5	The Care That You Provide Your Animal	1
6	Goals and Accomplishments	3
7	Project Animal Information	1
8	Misc. Expenses	1
10	Feed Tag	1
11	Feed Record Summary	2
12	Photo	1
13	Treatment Record (write N/A if no treatment given to receive points)	1
14	Rate of Gain	1
15	Closing Animal Roster	1
16	Profit Loss Statement	1
17	<i>Buyer Letter Addresses (optional for extra credit 1pts)</i>	
18	<i>Sample Letter to a buyer or an award donor (optional for extra credit 2pts)</i>	
20	Assuring Quality Care for Animals	1
21	Project Summary	3
	Station #1: Project Book Score	20
	Station #2: Interview	20
	Station #3: Quality Assurance	20
	Station #4: Skillathon A	20
	Station #5: Skillathon B	20
	Total Points Available	100

122 Dairy Heifer Interview Questions

Use two or three of these or similar standard questions as *part* of the interview judging process.

1. Why is milk pasteurized? How is this done?

The milk is heated to kill any disease-causing organisms in it. (page 142)

2. Describe the proper way to house calves.

They need to be housed in a clean, dry place that provides fresh air, but does not allow any direct drafts. Calves should be housed separately to prevent the spread of diseases and it makes it easier to monitor how much each calf is eating. This also prevents calves from suckling on each other which may lead to them getting infections. (page 79)

3. Dairy calves often suffer from coccidiosis, what does this cause?

Coccidia causes diarrhea that is sometimes bloody, anemia, decreased appetite, dehydration, increased susceptibility to other diseases, decreased growth, and possible death. (page 83)

4. What is the difference between active and passive immunity?

Passive immunity is the calf's first protection, antibodies that accumulate in the cow's utter and are passed on to the calf. Active immunity is antibodies created by the calf itself, helped along by vaccinations. (page 55)

5. What are the six essential nutrients needed to survive?

Water, carbohydrates, fat, protein, vitamins, and minerals. (page 43)

6. Name the six breeds of dairy cattle.

The six breeds of dairy cattle are Ayrshire, Holstein, Guernsey, Brown Swiss, Jersey, and Milking Shorthorn. (pages 9-15)

7. What is a pedigree? Why is it important?

A pedigree is a dairy animal's family tree, the record of animal's ancestors showing genetic relationships. It is important because it evaluates genetic relationships, helps in selections, and indicates potential ability. (pages 36-38)

8. What is mastitis?

Mastitis is an inflammation or infection of the mammary gland. This inflammation is the result of infection, injury, or irritation to the udder. (page 98)

9. What are the three types of milking parlors?

Parallel, herringbone, and rotary. (page 112)

10. Why should the machines and the milkers' hands be cleaned and sanitized before milking occurs?

To minimize bacteria. (page 105)



126 Dairy Cow Interview Questions—Beginning

Use two or three of these or similar standard questions as *part* of the interview judging process.

1. What are two nutrients that milk has in large amounts?
Protein, calcium, vitamin D, vitamin B. (page 144)
2. Why is milk pasteurized? How is this done?
The milk is heated to kill any disease-causing organisms in it. (page 142)
3. Should milk be included in a balanced diet for humans?
Yes, because of all the nutrients it provides. (page 144)
4. What are five foods made from milk?
Answers will vary. Examples include ice cream, butter, yogurt, cheese, etc. (page 144)
5. What is mastitis?
Mastitis is an inflammation or infection of the mammary gland. This inflammation is the result of infection, injury, or irritation to the udder. (page 98)
6. What is the rumen?
The rumen is the first and largest compartment of the cow's digestive system. (page 41)
7. What is artificial insemination (AI)?
AI is the practice of introducing sperm into the reproductive tract of the female other than by natural mating. (page 29)
8. What are signs of heat in heifers or cows?
Stands to be mounted by a bull or other cows/heifers; Attempts to mount other cows; excited behavior such as walking fences, bawling, and not eating; clear mucous discharge from the vulva. (page 28)
9. What is colostrum and why is it important?
Colostrum is the first milk produced by the cow. It is important because it contains antibodies important for disease protection of the calf. (page 26)
10. The estrus cycle (# of days from one heat period to another) averages how many days?
21 days. (page 24)
11. What is the main source of energy for your dairy heifer?
Carbohydrates. (page 43)



126 Dairy Cow Interview Questions—Intermediate

Use two or three of these or similar standard questions as *part* of the interview judging process.

1. What is a balanced ration?
A ration that provides all the necessary nutrients the animal needs during one day to stay healthy. (page 72)
2. What is the voluntary waiting period before a cow should be breed again?
45-60 days. (page 28)
3. What are forages? Name two examples.
Forages are any feedstuff that contains the leafy part of the plant such as leaves, stems, flowers, etc. Examples include alfalfa hay, corn silage, etc. (page 50)
4. How much milk (in lbs.) does an average cow hold in its udder?
20-40 lbs. (page 95)
5. What is heritability?
Heritability is the degree to which the genes, not the environment, control a trait. The higher the heritability, the greater the chance of genetic improvement that can be made for that trait. (page 38)
6. When is oxytocin and mammary pressure at the highest?
One to two minutes after being stimulated. (page 97)
7. What percentage of lost milk production is due to mastitis?
50-80 percent. (page 98)
8. Milk is a dairy's primary income source. What are other possible sources of income?
Sale of cull animals, breeding stock, bull calves, excess crops and/or extra heifers. (page 125)
9. Who oversees and regulates the dairy industry to ensure the milk is safe for consumers?
Federal Food and Drug Administration and the Ohio Department of Agriculture. (page 139)
10. What is the gestation period for a cow?
280-285 days. (page 25)



126 Dairy Cow Interview Questions—Advanced

Use two or three of these or similar standard questions as *part* of the interview judging process.

1. What are the four compartments of the stomach called? What does each one do?
Rumen—mixes and stirs up food
Reticulum—bacterial digestion of large feed particles
Omasus—squeezes and absorbs water
Abomasums—produces and secretes digestive enzymes and acids to break down food into nutrients that are used by the body. (page 42)
2. Is there direct exchange of blood and milk between each quarter of the udder?
No, blood is only circulated indirectly when it reenters the central supply. (page 95)
3. Describe the benefits of estrous synchronization to a herd.
It brings all the females into heat at the same time to be bred. Therefore, improving conception rates and reducing labor. (page 29)
4. The *Dairy Herd Improvement Association* (DHIA) was formed to provide production testing and records management services. When they go to a farm each month, what are a few of the things they are testing or evaluating for?
Milk weights, takes milk samples from each lactating cow, collects information on calvings, dry offs, breedings, deaths, and other management events that occurred since the last test date. (page 121)
5. How is the DHIA data vital to the dairy industry?
It identifies superior cows that should be considered as bull mothers for sires used in AI. Provides production data on AI sires' daughters to develop bull proofs. (page 121)
6. How can the DHIA records be used to increase profitability?
It determines the milk weight and milk components of every cow.
It measures milk quality (somatic cell counts)
Feed a cow or a group of cows based on their production needs.
Decides which animals should be culled.
Keeps reproductive performance at an optimal level. (pages 121-122)
7. What is the difference between active and passive immunity?
Passive immunity is the calf's first protection, antibodies that accumulate in the cow's utter and are passed on to the calf. Active immunity is antibodies created by the calf itself, helped along by vaccinations. (page 55)
8. Has taking a dairy cow project helped you to decide what you would like to do in the future for a career? If yes, how?
Answers will vary. (page 173)



Livestock

Dairy: How to Read a Feed Tag

Use the feed tag below to answer the following questions.

Decision-Making

In this activity you will:

- learn how to read a feed tag.

DAIRY CONCENTRATE

CONCENTRATE FOR LACTATING DAIRY CATTLE

GUARANTEED ANALYSIS

CRUDE PROTEIN	MIN 18.00%
CRUDE FAT	MIN 2.50%
CRUDE FIBER	MAX 7.00
ACID DETERGENT FIBER	MAX 9.00%
CALCIUM	MIN 0.50%
CALCIUM	MAX 1.00%
PHOSPHORUS	MIN 0.60%
SELENIUM	MIN 0.70 PPM
VITAMIN A	MIN 7,000.00 IU/LB

INGREDIENT USAGE

PROCESSED GRAIN BY-PRODUCTS, GRAIN PRODUCTS, PLANT PROTEIN PRODUCTS, ROUGHAGE PRODUCTS, GROUND LIMESTONE, SALT, LIGNIN SULFONATE, SODIUM SELENITE, POTASSIUM SULFATE, MAGNESIUM SULFATE, CALCIUM PHOSPHATE, MAGNESIUM OXIDE, VITAMIN A ACETATE, VITAMIN D-3 SUPPLEMENT, VITAMIN E SUPPLEMENT, ZINC SULFATE, ZINC OXIDE, COPPER SULFATE, MANGANOUS OXIDE, CALCIUM IODATE, COBALT CARBONATE, FERROUS SULFATE.

FEEDING DIRECTIONS

FEED DAIRY CONCENTRATE AS THE CONCENTRATE PORTION OF THE DAIRY RATION. THIS CONCENTRATE IS INTENDED FOR USE WHEN THE ROUGHAGE PORTION OF THE DIET CONSISTS OF 60% OR MORE CORN SILAGE (ON A DRY MATTER BASIS). THIS FEED CONTAINS IN ADDITION TO OTHER NUTRIENTS, 0.7 PPM SELENIUM. INTAKE OF SELENIUM SHOULD NOT EXCEED 0.3 PPM ON A COMPLETE FEED BASIS, THEREFORE, THIS CONCENTRATE SHOULD NOT EXCEED 42.8% OF THE TOTAL RATION. PROVIDE CLEAN, FRESH WATER FREE CHOICE AT ALL TIMES. SALT MAY BE FED FOR FREE CHOICE CONSUMPTION.

DAIRY CONCENTRATE FEEDS ARE FORMULATED TO REGULATE THE AMOUNT OF BOTH SOLUBLE AND INSOLUBLE PROTEIN AND TO REGULATE THE AMOUNT OF NON-STRUCTURAL CARBOHYDRATES.

DAIRY CONCENTRATE FEEDS ARE FORMULATED TO REGULATE THE AMOUNT OF RUMINALLY AVAILABLE PROTEIN.

PATENT NO. X,XXX,XXX
PATENT NOS. X,XXX,XXX & X,XXX,XXX

MANUFACTURED BY:
SKILLATHON FEEDS

NET WEIGHT 50 POUNDS (22.7 KILOGRAMS)
OR AS SHOWN ON SHIPPING DOCUMENT

1. What is the main ingredient in this feed?
2. What is the minimum crude protein level?
3. Is this a medicated feed?
4. Is there a withdrawal time for this ration?
5. What is the minimum crude fat level of this diet?
6. Is ground limestone included in the ingredients of this diet?
7. What is the range for calcium content?

Adapted from materials created by Dan Frobose, Agr. & Nat. Res. Agent, Wood County

Prepared By: Jodi Black, State Extension Associate, 4-H/Animal Sciences; Maurice Eastridge, State Extension Specialist, Animal Sciences

Livestock

Dairy: How to Read a Feed Tag

Use the feed tag below to answer the following questions.

Decision-Making—Key

In this activity you will:

- learn how to read a feed tag.

DAIRY CONCENTRATE

CONCENTRATE FOR LACTATING DAIRY CATTLE

GUARANTEED ANALYSIS

CRUDE PROTEIN	MIN 18.00%
CRUDE FAT	MIN 2.50%
CRUDE FIBER	MAX 7.00
ACID DETERGENT FIBER	MAX 9.00%
CALCIUM	MIN 0.50%
CALCIUM	MAX 1.00%
PHOSPHORUS	MIN 0.60%
SELENIUM	MIN 0.70 PPM
VITAMIN A	MIN 7,000.00 IU/LB

INGREDIENT USAGE

PROCESSED GRAIN BY-PRODUCTS, GRAIN PRODUCTS, PLANT PROTEIN PRODUCTS, ROUGHAGE PRODUCTS, GROUND LIMESTONE, SALT, LIGNIN SULFONATE, SODIUM SELENITE, POTASSIUM SULFATE, MAGNESIUM SULFATE, CALCIUM PHOSPHATE, MAGNESIUM OXIDE, VITAMIN A ACETATE, VITAMIN D-3 SUPPLEMENT, VITAMIN E SUPPLEMENT, ZINC SULFATE, ZINC OXIDE, COPPER SULFATE, MANGANOUS OXIDE, CALCIUM IODATE, COBALT CARBONATE, FERROUS SULFATE.

FEEDING DIRECTIONS

FEED DAIRY CONCENTRATE AS THE CONCENTRATE PORTION OF THE DAIRY RATION. THIS CONCENTRATE IS INTENDED FOR USE WHEN THE ROUGHAGE PORTION OF THE DIET CONSISTS OF 60% OR MORE CORN SILAGE (ON A DRY MATTER BASIS). THIS FEED CONTAINS IN ADDITION TO OTHER NUTRIENTS, 0.7 PPM SELENIUM. INTAKE OF SELENIUM SHOULD NOT EXCEED 0.3 PPM ON A COMPLETE FEED BASIS, THEREFORE, THIS CONCENTRATE SHOULD NOT EXCEED 42.8% OF THE TOTAL RATION. PROVIDE CLEAN, FRESH WATER FREE CHOICE AT ALL TIMES. SALT MAY BE FED FOR FREE CHOICE CONSUMPTION.

DAIRY CONCENTRATE FEEDS ARE FORMULATED TO REGULATE THE AMOUNT OF BOTH SOLUBLE AND INSOLUBLE PROTEIN AND TO REGULATE THE AMOUNT OF NON-STRUCTURAL CARBOHYDRATES.

DAIRY CONCENTRATE FEEDS ARE FORMULATED TO REGULATE THE AMOUNT OF RUMINALLY AVAILABLE PROTEIN.

PATENT NO. X,XXX,XXX
PATENT NOS. X,XXX,XXX & X,XXX,XXX

MANUFACTURED BY:
SKILLATHON FEEDS

NET WEIGHT 50 POUNDS (22.7 KILOGRAMS)
OR AS SHOWN ON SHIPPING DOCUMENT

1. What is the main ingredient in this feed?
processed grain by-products
2. What is the minimum crude protein level?
18%
3. Is this a medicated feed?
no
4. Is there a withdrawal time for this ration?
none required or "no"
5. What is the minimum crude fat level of this diet?
25%
6. Is ground limestone included in the ingredients of this diet?
yes
7. What is the range for calcium content?
0.5%–1.0%

Adapted from materials created by Dan Frobose, Agr. & Nat. Res. Agent, Wood County

Prepared By: Jodi Black, State Extension Associate, 4-H/Animal Sciences; Maurice Eastridge, State Extension Specialist, Animal Sciences

Livestock

Dairy Cattle Quality Assurance

Read the situation statement and label of the medication and complete the treatment record.

Situation Statement

Today is February 5. At the afternoon milking today, you notice the right front quarter on cow #28, a 1,200 pound Holstein, has abnormal milk. You saw several flakes and thick milk on the strip plate while preparing the cow for milking. You decide she has mastitis. The udder feels normal as is the cow's temperature and appetite. At the end of the milking, you medicate the right front quarter using an over-the-counter (OTC) intramammary infusion product called SUPER-MAST™. The time of the treatment is 6:00 p.m. The label of the product is seen below. You mark the cow as treated by attaching a red leg band to the rear leg. Fill out the treatment record for today's treatment.

Bottle Label

SUPER-MAST™
Hydrocillin
Lactating Cow Intramammary Infusion

Each 10 ml single dose disposable syringe contains 50 mg hydrocillin in a base suitable for the treatment of bovine mastitis during the lactating period.

Indications: For the intramammary treatment of bovine mastitis caused by susceptible bacteria.

Administration: After milking, clean and disinfect the teat end with an alcohol swab. Remove the protective covering from the tip and insert the tip into the teat orifice. Express the contents of the tube into the quarter with gentle pressure. Withdraw the syringe and massage the medication up into the affected quarter. Milk out the quarter at the next routine milking.

Storage: Store between 45 and 75 degrees F.

WARNING: Milk that has been taken from animal during treatment and for 72 hours (3 days) after the last treatment must be discarded. Treated animal should not be slaughtered for food purposes for 10 days following the last treatment.

Net contents: 10 ml
SKILLATHON ANIMAL HEALTH COMPANY
Veterinary use only—not for human use

Decision-Making

In this activity you will:

- learn about Quality Assurance by practicing how to record animal medication information on the treatment record.

February						
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Treatment Record

Treatment Date	Animal ID • Name • Species • ID Number • Description	Condition Being Treated	Estimated Weight	Treatment Given (Medication dispensed, amount, and route)	Instructed Meat/Milk/Egg Withdrawal	Results	Date Withdrawal Complete	If this is an extra label or Rx drug, list the name, address, and phone number of the licensed veterinarian who prescribed or directed the treatment.

Teaching References: Dairy Learning Laboratory Kit, Curriculum Guide and video. The dairy kit contains a medicine bottle, syringe, and skeletal poster which are helpful but not necessary for this exercise.

Lesson plan by: Dr. Bill Shulaw, OSU Extension Veterinarian

Livestock

Dairy Cattle Quality Assurance

Read the situation statement and label of the medication and complete the treatment record.

Situation Statement

Today is February 5. At the afternoon milking today, you notice the right front quarter on cow #28, a 1,200 pound Holstein, has abnormal milk. You saw several flakes and thick milk on the strip plate while preparing the cow for milking. You decide she has mastitis. The udder feels normal as is the cow's temperature and appetite. At the end of the milking, you medicate the right front quarter using an over-the-counter (OTC) intramammary infusion product called SUPER-MAST™. The time of the treatment is 6:00 p.m. The label of the product is seen below. You mark the cow as treated by attaching a red leg band to the rear leg. Fill out the treatment record for today's treatment.

Bottle Label

SUPER-MAST™ Hydrocillin

Lactating Cow Intramammary Infusion

Each 10 ml single dose disposable syringe contains 50 mg hydrocillin in a base suitable for the treatment of bovine mastitis during the lactating period.

Indications: For the intramammary treatment of bovine mastitis caused by susceptible bacteria.

Administration: After milking, clean and disinfect the teat end with an alcohol swab. Remove the protective covering from the tip and insert the tip into the teat orifice. Express the contents of the tube into the quarter with gentle pressure. Withdraw the syringe and massage the medication up into the affected quarter. Milk out the quarter at the next routine milking.

Storage: Store between 45 and 75 degrees F.

WARNING: Milk that has been taken from animal during treatment and for 72 hours (3 days) after the last treatment must be discarded. Treated animal should not be slaughtered for food purposes for 10 days following the last treatment.

Net contents: 10 ml

SKILLATHON ANIMAL HEALTH COMPANY

Veterinary use only—not for human use

Decision-Making—Key

In this activity you will:

- learn about Quality Assurance by practicing how to record animal medication information on the treatment record.

February						
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

Treatment Record

X = This information was not supplied in the situation, therefore you do not need to complete this box.

Treatment Date	Animal ID • Name • Species • ID Number • Description	Condition Being Treated	Estimated Weight	Treatment Given (Medication dispensed, amount, and route)	Instructed Meat/Milk/Egg Withdrawal	Results	Date Withdrawal Complete	If this is an extra label or Rx drug, list the name, address, and phone number of the licensed veterinarian who prescribed or directed the treatment.
2/5 6 p.m.	#28 Holstein cow	mastitis	1,200 lb	Super-Mast 10 ml intramammary in right front quarter	Milk—3 days Meat—10 days	X	Milk—2/8 6 p.m. Meat—2/15 6 p.m.	X

Teaching References: Dairy Learning Laboratory Kit, Curriculum Guide and video. The dairy kit contains a medicine bottle, syringe, and skeletal poster which are helpful but not necessary for this exercise.

Lesson plan by: Dr. Bill Shulaw, OSU Extension Veterinarian

Livestock

Dairy Cow Parts

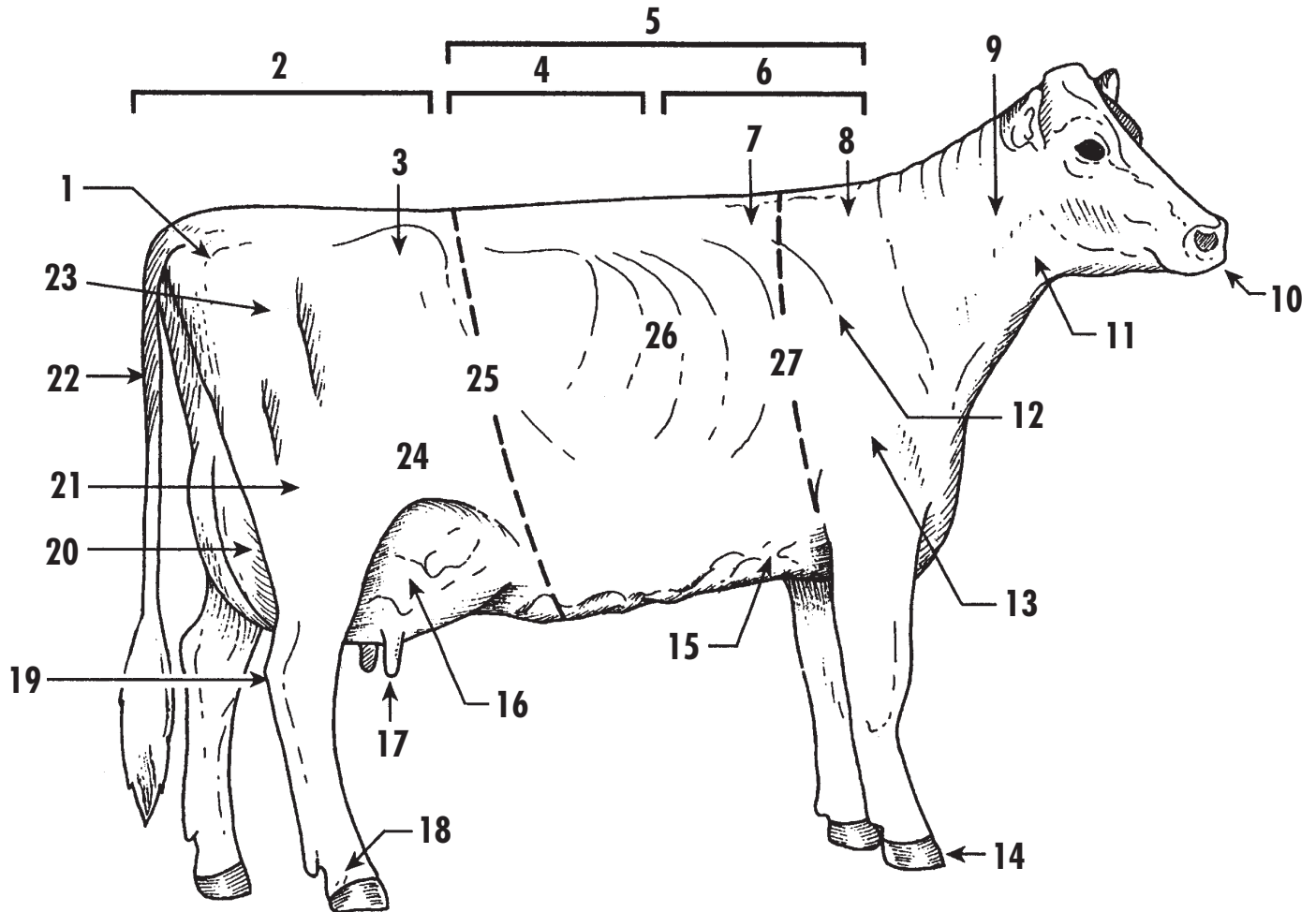
Activity level: Beginners or members ages 9 to 11

Write in the number that corresponds to the correct part of the animal.

Identification

In this activity you will:

- learn the parts of a dairy cow.



- | | | | |
|----------------|-------------------------|-------------------|--------------|
| _____ pin bone | _____ withers | _____ rump | _____ tail |
| _____ pastern | _____ hock | _____ fore udder | _____ hip |
| _____ back | _____ rear udder | _____ crops | _____ stifle |
| _____ loin | _____ heart girth | _____ chest floor | _____ throat |
| _____ chine | _____ shoulder blade | _____ neck | _____ ribs |
| _____ thurl | _____ point of shoulder | _____ muzzle | _____ barrel |
| _____ teat | _____ hoof | _____ thigh | |

Reference: *The Dairy Livestock Learning Laboratory Kit*
Prepared By: *Andrea Auker, Animal Sciences Student*

Livestock

Dairy Cow Parts

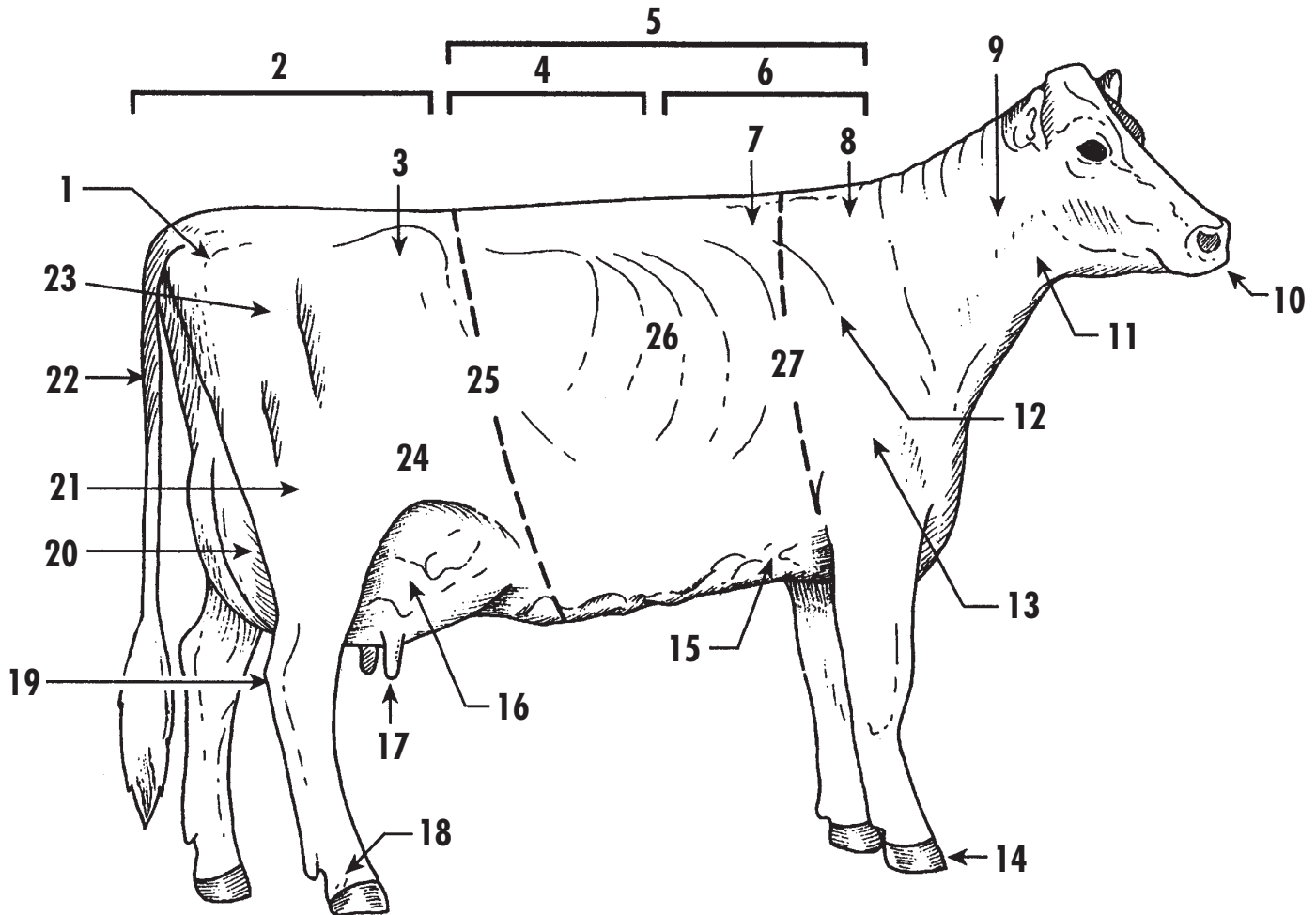
Activity level: Beginners or members ages 9 to 11

Write in the number that corresponds to the correct part of the animal.

Identification—Key

In this activity you will:

- learn the parts of a dairy cow.



<u>1</u> pin bone	<u>8</u> withers	<u>2</u> rump	<u>22</u> tail
<u>18</u> pastern	<u>19</u> hock	<u>16</u> fore udder	<u>3</u> hip
<u>5</u> back	<u>20</u> rear udder	<u>7</u> crops	<u>24</u> stifle
<u>4</u> loin	<u>27</u> heart girth	<u>15</u> chest floor	<u>1</u> throat
<u>6</u> chine	<u>12</u> shoulder blade	<u>9</u> neck	<u>26</u> ribs
<u>23</u> thurl	<u>13</u> point of shoulder	<u>10</u> muzzle	<u>25</u> barrel
<u>7</u> teat	<u>14</u> hoof	<u>21</u> thigh	

Reference: *The Dairy Livestock Learning Laboratory Kit*
Prepared By: Andrea Auker, Animal Sciences Student

Name: _____

Dairy Terms

Beginner Level

Created on TheTeachersCorner.net [Match-up Maker](#)

1.	Antibiotics	a. A young female that has not given birth yet.
	Balanced	b. Usually refers to registered cattle.
2.	Ration	
3.	Bloat	c. A nutritionally balanced mixture of feed ingredients.
		d. The amount of food that is nutritionally balanced for a
4.	Breed	one day period. .
5.	Bull	e. to remove the horns.
6.	Calf	f. A young dairy animal less than six months old.
		g. The muscle, bone, and fat associated with the harvest of
7.	Carbohydrates	an animal; left after removal of the head, hide, and
		internal organs.
		h. Group of cattle with similar traits, such as color, head
8.	Carcass	shape, or body conformation that are passed from
		generation to generation.
9.	Crossbred	i. An intact male of the bovine species.
		j. To start the calf on solid food verse liquid food. Dairy
10.	Dehorn	calves are usually around 4 to 8 weeks of age.
		k. Nutrient group that includes starches, sugars,
11.	Diet	hemicellulose, cellulose, and lignin and is made up of
		carbon, hydrogen, and oxygen.
		l. Feed that provides all the necessary nutrients that the
12.	Forages	animals needs in one day.
		m. Abnormal condition in the ruminants due to the
13.	Heifer	accumulation of gases in the rumen.
	Medicated	n. Feed in which a drug is used.
14.	Feed	

15.	Minerals	o. Plants used as feed for livestock.
16.	Polled	p. Substances made from organisms that kill bacteria. These drugs are used to fight diseases and infections caused by bacteria.
17.	Purebred	q. Nutrients required for strong bones and teeth and also for the chemical reactions needed for many of life's processes.
18.	Ration	r. Cattle with parents and/ or close ancestors of different breeds.
19.	Wean	s. The period of time that must pass before a product can be harvested after treatment with a medication.
20.	Withdrawal Time	t. Cattle that do not grow horns.

Name: _____

Dairy Terms

Beginner Level

Created on TheTeachersCorner.net [Match-up Maker](#)

1.	<u>p</u>	Antibiotics	a. A young female that has not given birth yet.
2.	<u>l</u>	Balanced Ration	b. Usually refers to registered cattle.
3.	<u>m</u>	Bloat	c. A nutritionally balanced mixture of feed ingredients.
4.	<u>h</u>	Breed	d. The amount of food that is nutritionally balanced for a one day period. .
5.	<u>i</u>	Bull	e. to remove the horns.
6.	<u>f</u>	Calf	f. A young dairy animal less than six months old.
7.	<u>k</u>	Carbohydrates	g. The muscle, bone, and fat associated with the harvest of an animal; left after removal of the head, hide, and internal organs.
8.	<u>g</u>	Carcass	h. Group of cattle with similar traits, such as color, head shape, or body conformation that are passed from generation to generation.
9.	<u>r</u>	Crossbred	i. An intact male of the bovine species.
10.	<u>e</u>	Dehorn	j. To start the calf on solid food verse liquid food. Dairy calves are usually around 4 to 8 weeks of age.
11.	<u>c</u>	Diet	k. Nutrient group that includes starches, sugars, hemicellulose, cellulose, and lignin and is made up of carbon, hydrogen, and oxygen.
12.	<u>o</u>	Forages	l. Feed that provides all the necessary nutrients that the animals needs in one day.
13.	<u>a</u>	Heifer	m. Abnormal condition in the ruminants due to the accumulation of gases in the rumen.
14.	<u>n</u>	Medicated Feed	n. Feed in which a drug is used.

15.	q	Minerals	o. Plants used as feed for livestock.
	t		p. Substances made from organisms that kill bacteria. These drugs are used to fight diseases and infections caused by bacteria.
16.		Polled	
	b		q. Nutrients required for strong bones and teeth and also for the chemical reactions needed for many of life's processes.
17.		Purebred	
	d		r. Cattle with parents and/ or close ancestors of different breeds.
18.		Ration	
	j		s. The period of time that must pass before a product can be harvested after treatment with a medication.
19.		Wean	
	s	Withdrawal Time	t. Cattle that do not grow horns.
20.			

Name: _____

Dairy Terms

Advanced Level

Created on TheTeachersCorner.net [Match-up Maker](#)

- | | | |
|-----|--------------------|--|
| 1. | Bulk Tank | a. The general shape and structure of an animal. Animal placing classes are judged on this. |
| 2. | Castrate | b. Administer the medicine through the mouth or in water. |
| 3. | Colostrum | c. The mother of the calf. |
| 4. | Complete Feed | d. A castrated male calf. |
| 5. | Conformation | e. A feed ingredient that provides all of the required nutrients to the ruminant animal except for those from forage; usually in the form of a meal or a pellet. |
| 6. | Cud | f. Having a calf. |
| 7. | Dam | g. Canal through which milk exits the mammary gland. |
| 8. | Feed Additives | h. The mother's first milk that she produces after she gives birth. This is high in antibodies and nutrients for the newborn calf. |
| 9. | Freshening | i. An infection or inflammation of the mammary gland; the most costly dairy disease. |
| 10. | Immunity | j. the bolus ball of feed that is regurgitated from the rumen and chewed to break down particle size of feed for further digestion. |
| 11. | Mastitis | k. To remove the testes from a bull so that it cannot reproduce. |
| 12. | Orally | l. Drugs that can only be used under the direction of a vet. |
| 13. | Prescription Drugs | m. Mammary gland. |
| | | n. A large tank used to refrigerate and store milk on the farm. This keeps the milk cool (less than 40 degrees but above |

14.	Protein	freezing) and prevents bacteria from growing.
15.	Scours	o. The protection or resistance that a body has from disease.
16.	Sire	p. the father or the calf.
17.	Steer	q. A nutrient consisting of amino acids and made up of carbon, hydrogen, oxygen, and nitrogen.
18.	Streak or Teat Canal	r. Substances or products that do not have a nutritional value but may be helpful in growth, digestion, or health of the animal.
19.	Supplements	s. Products added or mixed into feed ingredients and supplying nutrients that may be missing from the base feed.
20.	Udder	t. Diarrhea.

Name: _____

Dairy Terms

Advanced Level

Created on TheTeachersCorner.net [Match-up Maker](#)

1.	n	Bulk Tank	a. The general shape and structure of an animal. Animal placing classes are judged on this.
2.	k	Castrate	b. Administer the medicine through the mouth or in water.
3.	h	Colostrum	c. The mother of the calf.
4.	e	Complete Feed	d. A castrated male calf.
5.	a	Conformation	e. A feed ingredient that provides all of the required nutrients to the ruminant animal except for those from forage; usually in the form of a meal or a pellet.
6.	j	Cud	f. Having a calf.
7.	c	Dam	g. Canal through which milk exits the mammary gland.
8.	r	Feed Additives	h. The mother's first milk that she produces after she gives birth. This is high in antibodies and nutrients for the newborn calf.
9.	f	Freshening	i. An infection or inflammation of the mammary gland; the most costly dairy disease.
10.	o	Immunity	j. the bolus ball of feed that is regurgitated from the rumen and chewed to break down particle size of feed for further digestion.
11.	i	Mastitis	k. To remove the testes from a bull so that it cannot reproduce.
12.	b	Orally	l. Drugs that can only be used under the direction of a vet.
13.	l	Prescription Drugs	m. Mammary gland.
	q		n. A large tank used to refrigerate and store milk on the farm. This keeps the milk cool (less than 40 degrees but above

14.	<u> </u>	Protein	freezing) and prevents bacteria from growing.
15.	<u> t </u>	Scours	o. The protection or resistance that a body has from disease.
16.	<u> p </u>	Sire	p. the father or the calf.
17.	<u> d </u>	Steer	q. A nutrient consisting of amino acids and made up of carbon, hydrogen, oxygen, and nitrogen.
18.	<u> g </u>	Streak or Teat Canal	r. Substances or products that do not have a nutritional value but may be helpful in growth, digestion, or health of the animal.
19.	<u> s </u>	Supplements	s. Products added or mixed into feed ingredients and supplying nutrients that may be missing from the base feed.
20.	<u> m </u>	Udder	t. Diarrhea.