

Dairy Skill-a-thon Study Packet

Senior Division

Key Items to Know:

- Breed Identification
- Parts Identification
- Feed Identification
- Equipment Identification/Slip Knot Knowledge
- Feed Tag
- Medication Labels
- Reproduction Tracks
- Feet & Legs
- Stomachs of a Cow
- Meat Cuts & Wholesale Cuts
- Thank You Card
- General Project Questions
- Record Book

IDENTIFICATION OF DAIRY BREEDS



Ayrshire



Brown Swiss



Guernsey



Holstein



Jersey



Milking Shorthorn

Breed Characteristics

AYRSHIRE

Developed in 1750 the county of Ayr, Scotland, this breed is medium in size with average milk production. They are characterized by strongly attached, well-shaped udders and are known for their extreme hardiness and good foraging ability. These cows may be red or mahogany and white.

BROWN SWISS

This breed originated in Switzerland and is large in size with high milk production. Developed to graze the mountains, these cows were bred to produce high protein milk for cheese. They are known for their strength, ruggedness, and good feet and leg structure. Their color is solid brown with a black nose, switch, and hooves.

GUERNSEY

This breed was developed on an island in the English Channel to produce high fat milk for making butter. This breed is known for its gentle nature, and yellow-tinted milk, Fawn and white markings characterize this breed.

HOLSTEIN

This breed originated in the Netherlands. It is the largest breed in size, and the most popular. They are known for producing the highest volume of milk of all the breeds. They are black and white in color but may be Red and White.

JERSEY

They were developed on an island in the English Channel. They are the smallest cows in size and produce milk that is the highest in fat and protein. A shade of fawn with or without white markings characterizes this breed.

MILKING SHORTHORN

This breed was developed from an English breed of cattle. Their breed association was formed in 1972. Intermediate in size and milk production, this breed is an efficient converter of feed into meat or milk and has a high heat tolerance. These animals can be red, white, or roan in color.

Livestock

Dairy Cow Parts

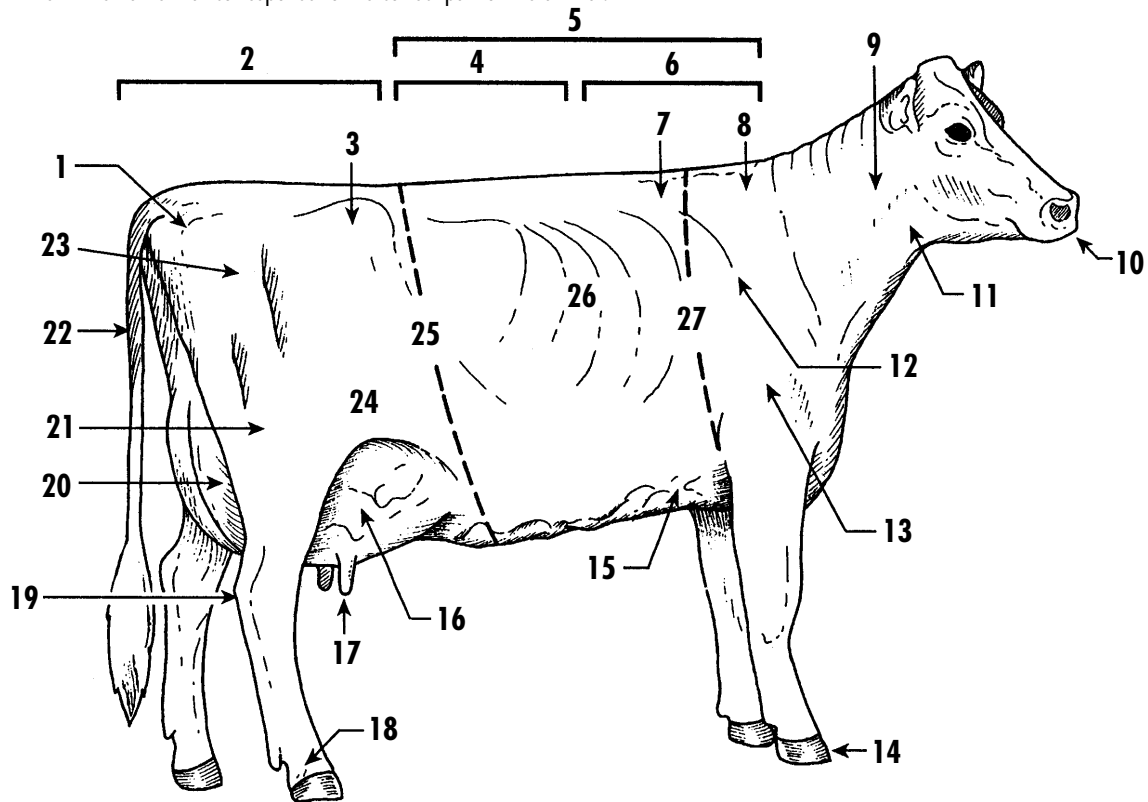
Activity level: Intermediate and advanced members ages 12 to 18

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

Identification—Key

In this activity you will:

- learn the parts of a dairy cow.



- | | | | | | |
|----------------------|-------------|-----------------------|-------------------|-----------------------|-------------|
| 1. <u> </u> | pin bone | 10. <u> </u> | muzzle | 19. <u> </u> | hock |
| 2. <u> </u> | rump | 11. <u> </u> | throat | 20. <u> </u> | rear udder |
| 3. <u> </u> | hip (hooks) | 12. <u> </u> | shoulder blade | 21. <u> </u> | thigh |
| 4. <u> </u> | loin | 13. <u> </u> | point of shoulder | 22. <u> </u> | tail |
| 5. <u> </u> | back | 14. <u> </u> | hoof | 23. <u> </u> | thurl |
| 6. <u> </u> | chine | 15. <u> </u> | chest floor | 24. <u> </u> | stifle |
| 7. <u> </u> | crops | 16. <u> </u> | fore udder | 25. <u> </u> | barrel |
| 8. <u> </u> | withers | 17. <u> </u> | teat | 26. <u> </u> | ribs |
| 9. <u> </u> | neck | 18. <u> </u> | pastern | 27. <u> </u> | heart girth |

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

Livestock

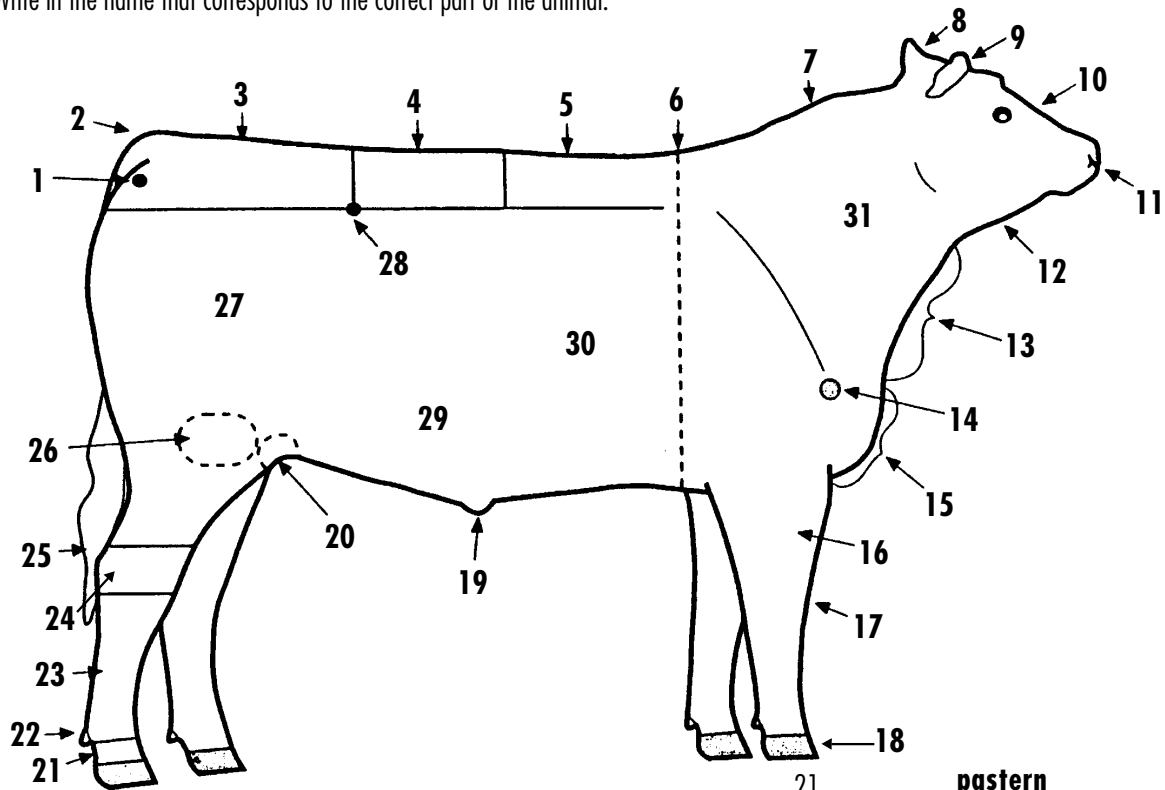
Beef Parts

Activity level: Intermediate and advanced members ages 12 to 18
Write in the name that corresponds to the correct part of the animal.

Identification—Key

In this activity you will:

- learn the parts of a steer.



- | | | | | | |
|-----------|--------------------|-----------|--------------------------|-----------|---------------------|
| 1. _____ | pin | 11. _____ | muzzle | 21. _____ | pastern |
| 2. _____ | tail head | 12. _____ | throat | 22. _____ | dewdaw |
| 3. _____ | rump | 13. _____ | dewlap | 23. _____ | cannon |
| 4. _____ | loin | 14. _____ | point of shoulder | 24. _____ | hock |
| 5. _____ | back | 15. _____ | brisket | 25. _____ | switch |
| 6. _____ | heart girth | 16. _____ | forearm | 26. _____ | stifle joint |
| 7. _____ | crest | 17. _____ | knee | 27. _____ | hindquarter |
| 8. _____ | poll | 18. _____ | hoof | 28. _____ | hook |
| 9. _____ | ear | 19. _____ | sheath/navel | 29. _____ | belly |
| 10. _____ | face | 20. _____ | rear flank | 30. _____ | rib |
| | | | | 31. _____ | neck |

References: Ohio 4-H Beef, Sheep, and Swine Selection and Evaluation Book #103R; Beef Learning Laboratory Kit
Prepared By: Jodi Black, State Extension Associate, 4-H/Animal Sciences; Andrea Auker, Animal Sciences Student

Feed Identification

*This is not a complete list of all the feeds that could be asked at the Skill-a-thon.
Please see Skill-a-thon letter for a more complete listing.



Corn



Ground Corn



Oats



Barley



Wheat



Soybeans



Salt



Trace Minerals



Cotton Seed Hulls



Beet Pulp



Dried Distillers Grain



Urea



Alfalfa Hay



Orchard Grass



Clover Hay

Equipment Identification



Inflation



Teat Dip Cup



A.I. Rod



A.I. Glove



Calf Bottle



Ear Tagger



Dehorner



Elastrator



Syringe



Paint Stick



Ear Tag



Balling Gun



Rumen Magnet

How to Read a Feed Tag

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?

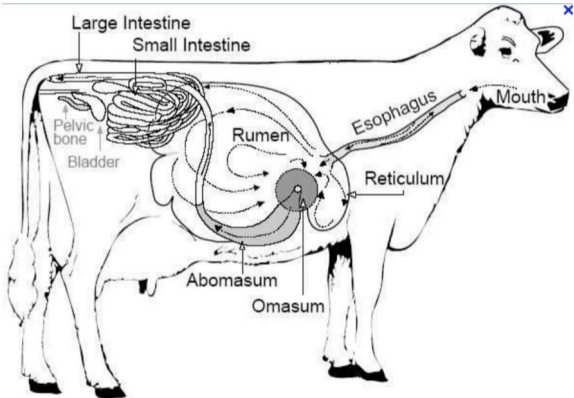
Adapted from materials created by Dan Frobose, Agr. & Nat. Res. Agent, Wood County

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

Medication Insert

<i>Name of Drug</i>	UDDERFUSE (Hydrocillin Sodium)		<i>Active Ingredients</i>
For Intramammary Infusions			
Active Ingredients: Udderfuse is an antibiotic which possesses a wide range of antimicrobial preparation activity against Gram-positive and Gram-negative organisms. It is derived biosynthetically from 6-aminopharmaceutic acid.			
Each 10 ml disposable syringe contains 200 mg of hydrocillin activity in a stable oil gel.			
<i>Approved Uses</i>	Indications: For Use in Lactating Cows Only For the Treatment of Bovine Mastitis		<i>Species and Animal Class</i>
Udderfuse for intramammary infusion should be used at the first sign of inflammation, at the first indication of any alteration in the milk, or following culture of a susceptible pathogen from the milk.			
Udderfuse for intramammary infusion has been shown to be efficacious in the treatment of mastitis in lactating cows caused by susceptible strains of <i>Streptococcus agalactiae</i> and <i>Staphylococcus aureus</i> .			
<i>Dosage</i>	Recommended Dosage: Infuse the entire contents of one 10 ml syringe into each infected quarter after the quarter has been completely milked out. Repeat once only in twelve hours for a maximum of two treatments.		
Directions for Use: Milk out udder completely. Carefully scrub the teat end and orifice with 70% alcohol, using a separate swab for each teat. Allow to dry.			
Insert syringe tip into the teat canal and expel the entire contents of one (1) syringe into each infected quarter. Gently withdraw the syringe and massage the quarter to distribute the suspension into the milk cistern. Do not milk out for twelve hours.			<i>Route of Administration</i>
<i>Cautions and Warnings</i>	Caution: 1. Udderfuse should be administered with caution to subjects which have demonstrated some form of allergy, particularly to penicillin. Such reactions are rare. If they do occur, discontinue treatment and consult your veterinarian. 2. If definite improvement is not noted 48 hours after last treatment, consult your veterinarian because causal organisms should be further investigated. 3. Do not insert contents of syringe if protective cap is broken or damaged. 4. Store at room temperature: 59° to 86° F; avoid excessive heat.		<i>Storage Requirements</i>
<i>Sizes Available</i>	Warning: Milk that has been taken from animals during treatment and for 96 hours (8 milkings) after the last treatment must not be used for food. 2. Treated animals must not be slaughtered for food until 4 days after the last treatment. 3. Administration of more than prescribed dose may lead to residue in milk for more than 96 hours.		<i>Withholding Times</i>
Supply: Udderfuse is available in 10 ml syringes, and cartons containing twelve syringes.			

Stomachs of a Cow



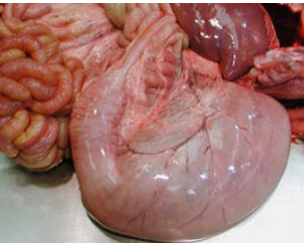
Rumen



Reticulum



Omasum

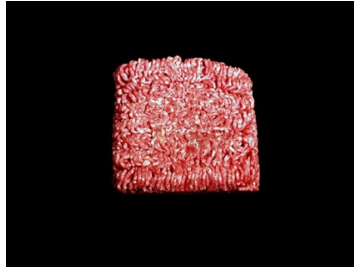


Abomasum

Beef Cuts



Beef Arm Pot Roast



Ground Beef



Flank Steak



Porterhouse Steak



Ribeye Steak



Beef Round Steak



Top Sirloin Steak



7 Bone Pot Roast



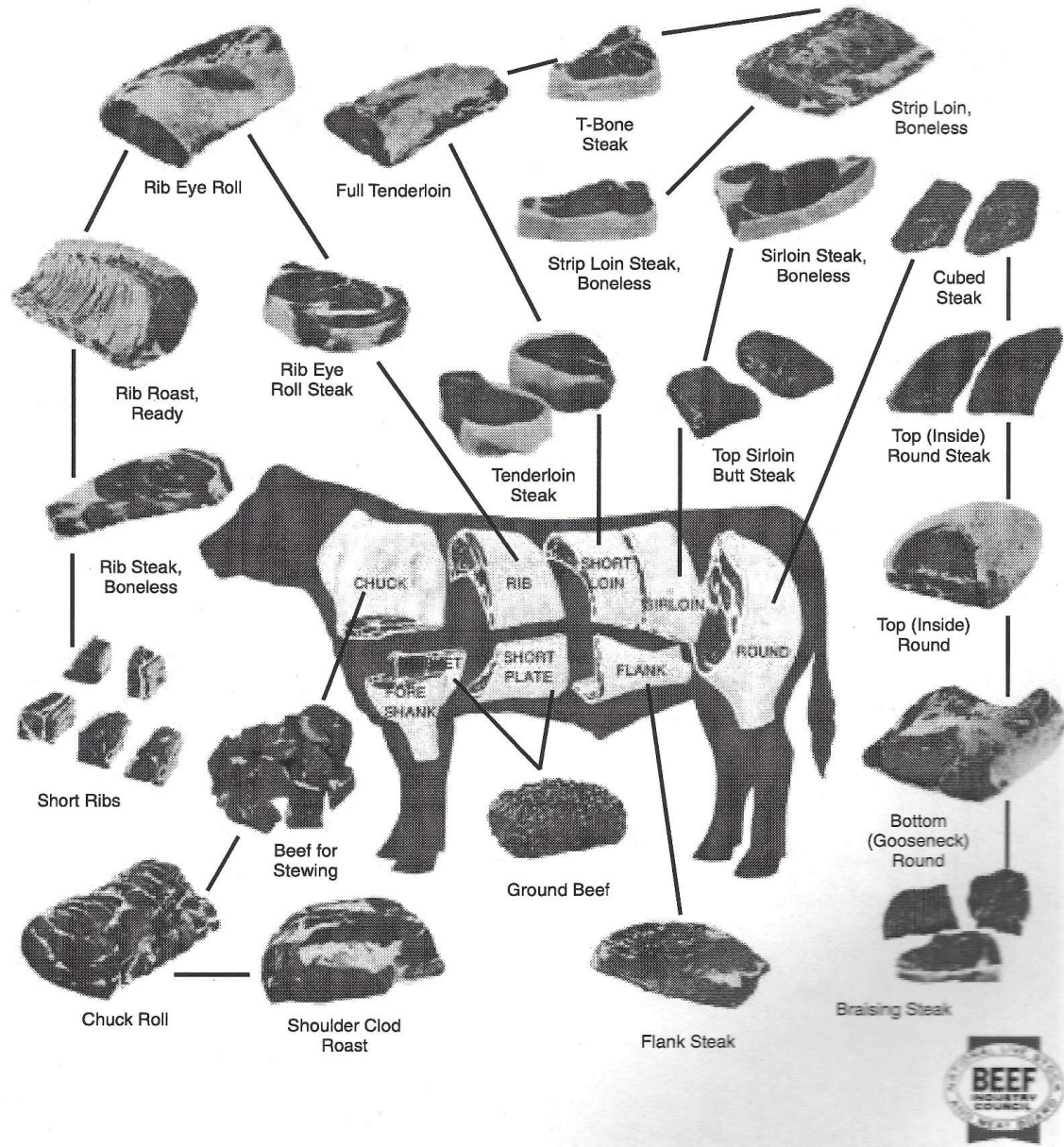
Beef Tenderloin



Short Ribs

Wholesale Cuts of Beef

Wholesale Cuts of Beef

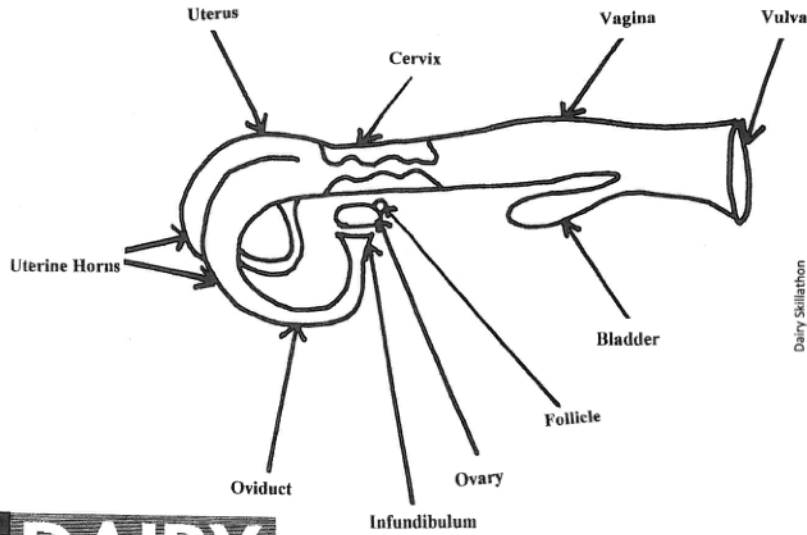


Assuring Animal Product Quality by Youth Producers
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Reproduction

Female Reproductive Tract ID



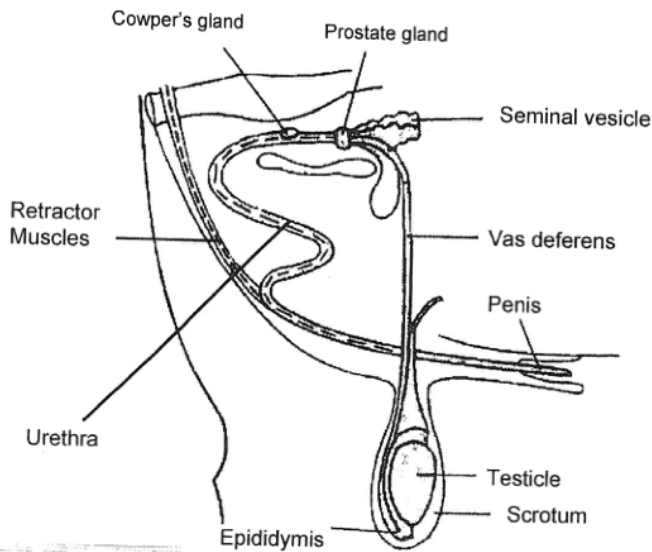
Answers

Dairy Skillathon



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MALE REPRODUCTIVE TRACT ID



Dairy Skillathon




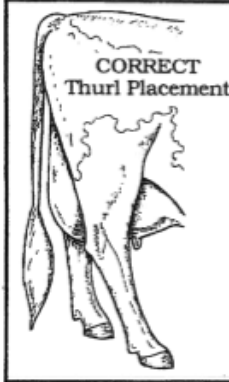
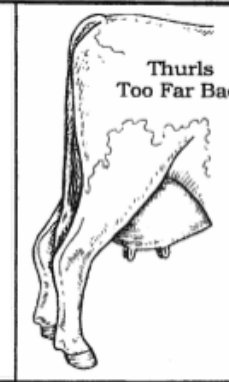




Answers



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Feet & Legs

Dairy Cattle Feet and Leg Structures

Leg Placement			Thurl Placement				
 <p style="text-align: center;">CORRECT Ideal Rear Legs</p>	 <p style="text-align: center;">Post Legged</p>	 <p style="text-align: center;">Sickle-Hocked</p>	 <p style="text-align: center;">CORRECT Thurl Placement</p>	 <p style="text-align: center;">Thurls Too Far Back</p>			
 <p style="text-align: center;">Dairy Cattle Feet</p> <p style="text-align: center;">CORRECT, Ideal Pastern</p>		 <p style="text-align: center;">Weak Pastern, Shallow Heel</p>		 <p style="text-align: center;">Rear View Legs</p> <p style="text-align: center;">CORRECT Set</p>		 <p style="text-align: center;">Cow-Hocked</p>	

Quality Assurance and Animal Care: Youth Education Program
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Answers

Dairy Skillathon