

# STEER

## ACTIVITY BOOK

---

Junior  
Intermediate  
Senior



# Activities

It is recommended that you complete the six activities provided in this skill-a-thon book to help prepare you for the skill-a-thon. **The activities are very similar to what you should expect during the skill-a-thon and can be used for practice.**

**4-H Members Only:** After you have completed an activity you should record it in your record book using the table on the 4-H Project Book/Activities page or you can attach the activity pages you have completed into your record book. Before turning into 4-H in May, have your leader sign the Activity Page showing they have seen your six (6) completed Activities.

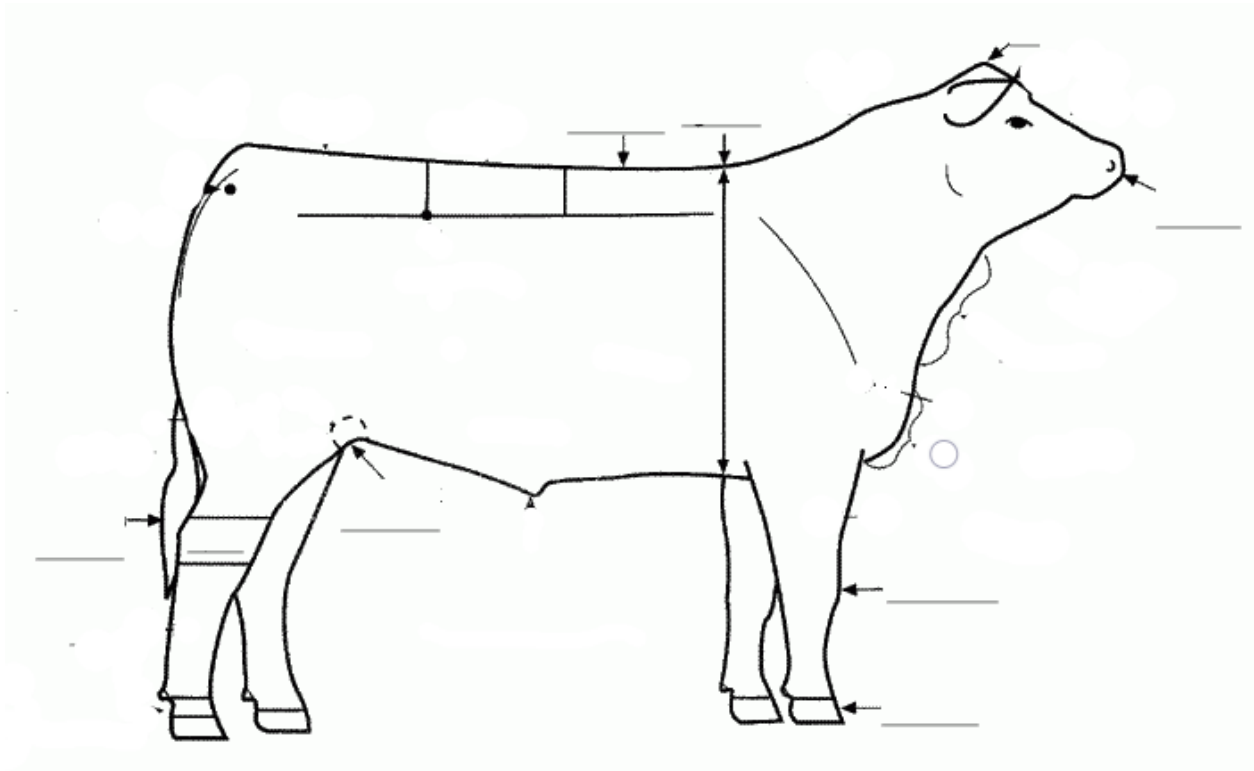
Please find the appropriate activities for your age division, noted on the top of each activity.

# JUNIOR STEER

## PARTS ACTIVITY #1

Write the name of the part on the numbered lines below.

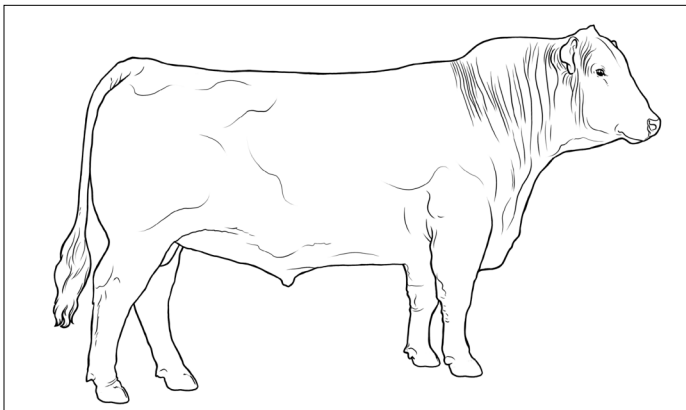
Back	Hock
Poll	Hearth Girth
Knee	Rear Flank
Neck	Switch
Muzzle	Hoof



# JUNIOR STEER BREEDS

## ACTIVITY #2

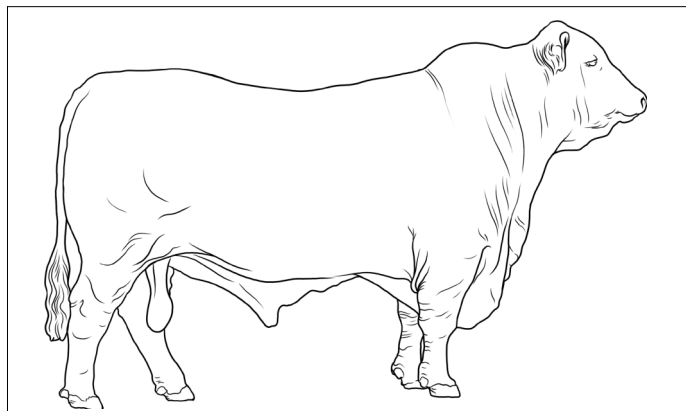
Use the breed pictures in the skill-a-thon book to color in each animal.  
List two interesting facts about each breed.



**Breed: Angus**

\*

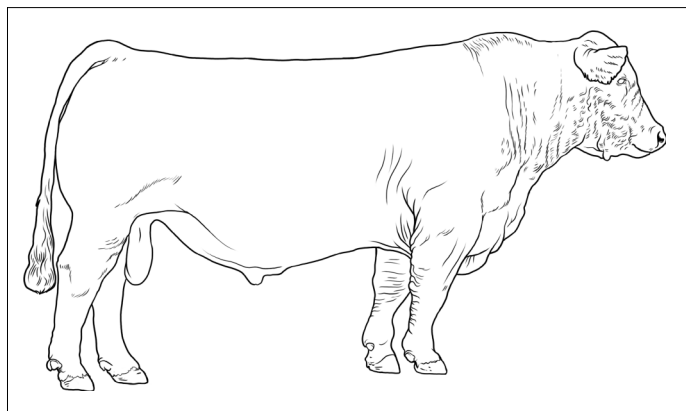
\*



**Breed: Brangus**

\*

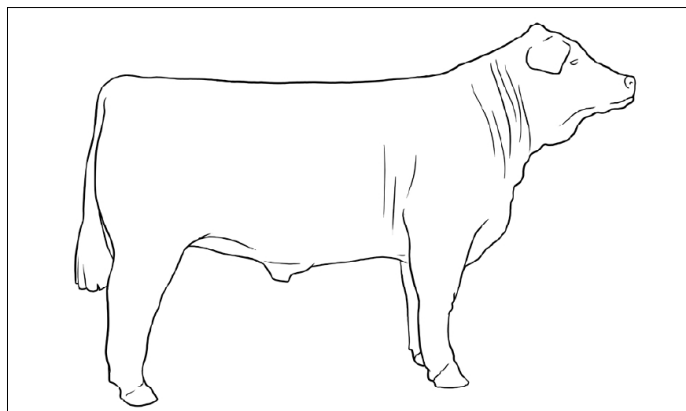
\*



**Breed: Charolais**

\*

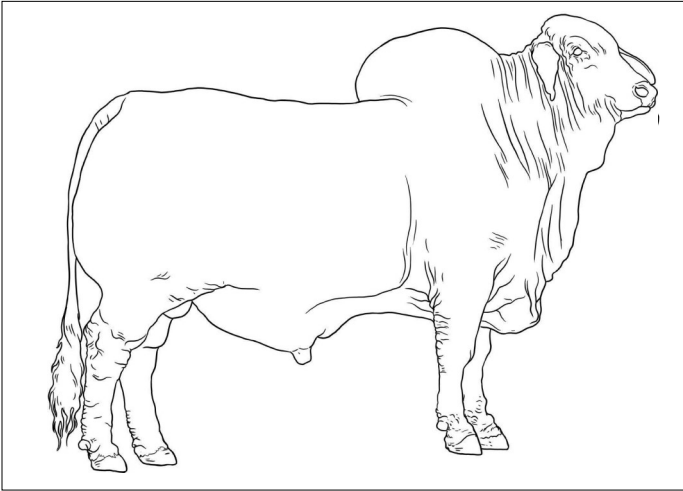
\*



**Breed: Hereford**

\*

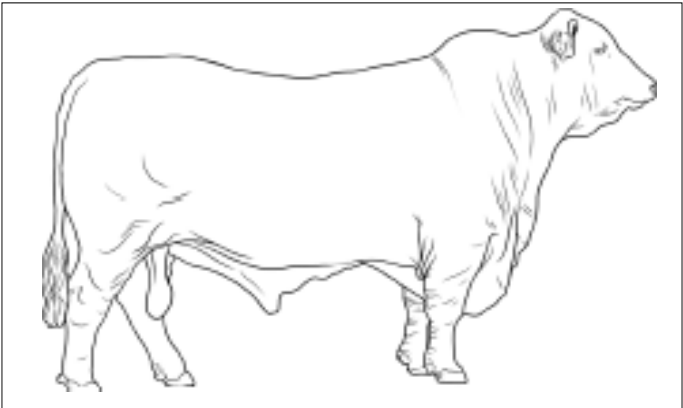
\*



**Breed: Brahman**

\*

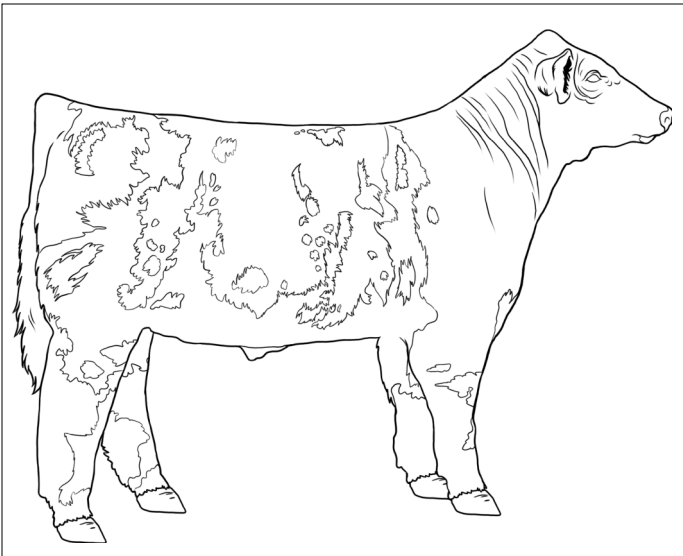
\*



**Breed: Beefmaster**

\*

\*



**Breed: Shorthorn**

\*

\*

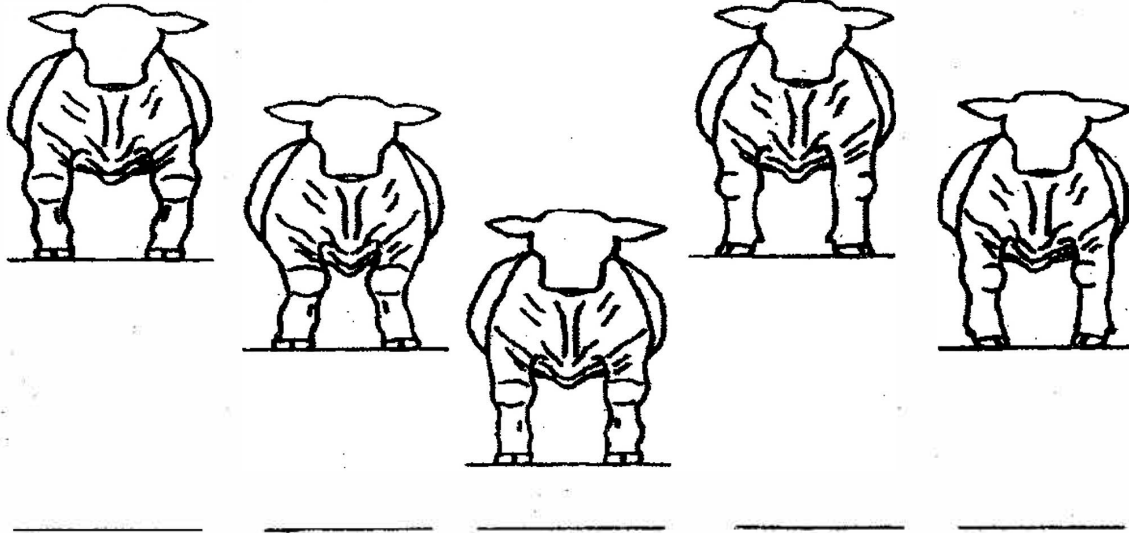
# JUNIOR STEER STRUCTURAL DIFFERENCES FRONT & REAR VIEW

## ACTIVITY #3

Fill in the blank with the correct FRONT LEG Alignment

*CORRECT*      *KNOCK-KNEED*      *BOWLEGGED*      *TOED-IN*      *TOED-OUT*

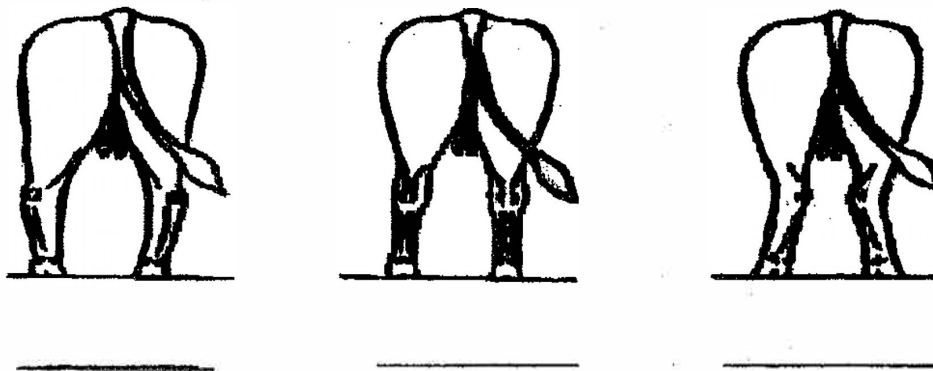
### Front Leg Alignment



Fill in the blank with the correct REAR LEG Alignment

*COW-HOCKED*      *BOWLEGGED*      *CORRECT*

### Rear Leg Alignment



# JUNIOR STEER STRUCTURAL DIFFERENCES SIDE VIEWS

## ACTIVITY #3

Fill in the blank with the correct Front Leg Set

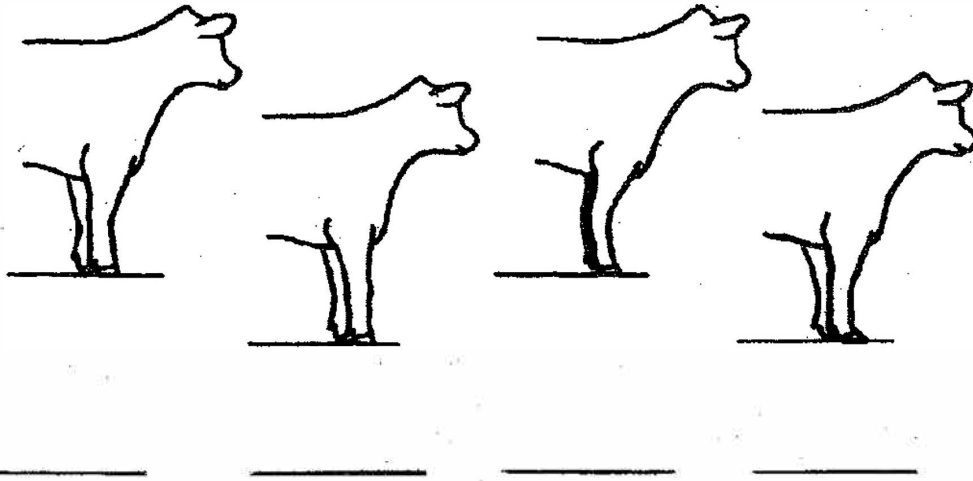
*CALF-KNEED*

*CORRECT*

*WEAK PASTERNS*

*BUCK-KNEED*

Front Leg Set



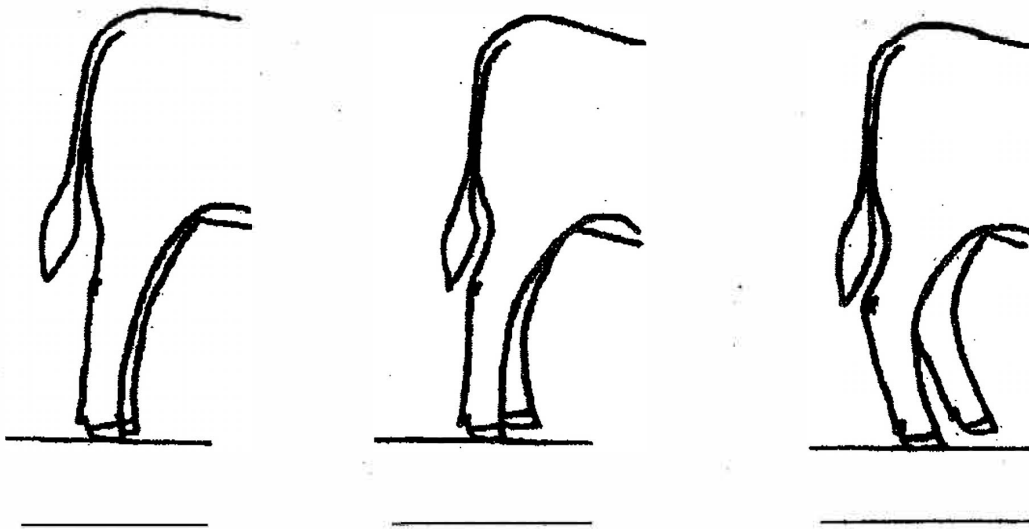
Fill in the blank with the correct Hind Leg Set

*CORRECT*

*SICKLE-HOCKED*

*POST-LEGGED*

Hind Leg Set



# JUNIOR STEER ANIMAL IDENTIFICATION ACTIVITY #4

Please draw a line to match the correct method of animal identification.

A. Hot Branding



B. Tattooing



C. Ear Tagging



D. Freeze Branding



# JUNIOR MARKET STEER ANIMAL HEALTH

## ACTIVITY # 5

Please circle correct answers below and fill in the blank

1. True or False: First you need to recognize normal characteristics of your animal before you can recognize what is abnormal.
2. True or False: Keeping records can help to recognize a health problem in your herd.
3. True or False: It is important to make sure my steer is eating normally.
4. True or False: You should always purchase healthy animals.
5. Please list 6 characteristics of a healthy steer.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

# JUNIOR MARKET STEER RESTRAINTS

## ACTIVITY # 6

Match the word to the definition by drawing a line.

- |            |  |
|------------|--|
| 1. Knots   | a. are used to attach rope to a post or rail   |
| 2. Hitches | b. are used to permanently join ropes to one another                                 |
| 3. Splices | c. join ropes together, attach ropes to a post or rail, or attach ropes to an animal |

# INTERMEDIATE STEER PARTS

## ACTIVITY #1

Write the name of the correct part of the animal on the lines below.

Back

Poll

Knee

Neck

Muzzle

Hock

Heart Girth

Rearflank

Switch

Hoof

Pastern

Brisket

Hook

Rump

Belly

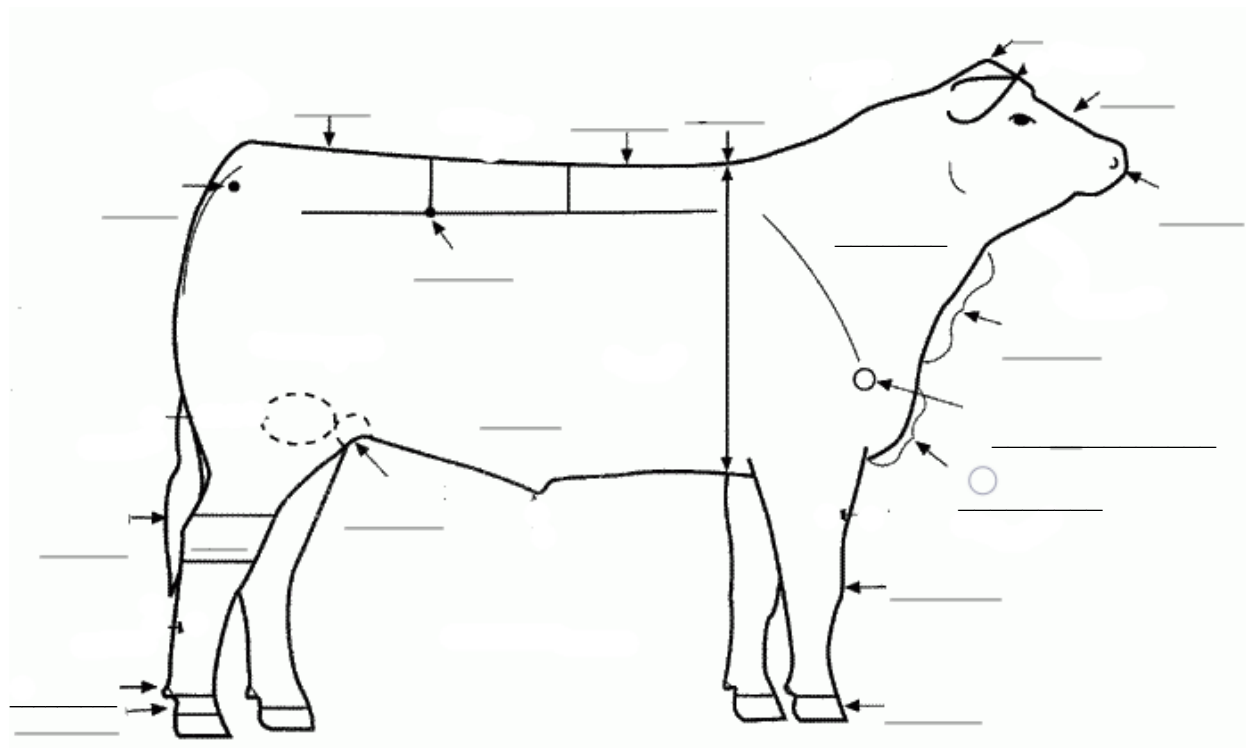
Dewclaw

Pin

Dewlap

Point of Shoulder

Face



# INTERMEDIATE MARKET STEER BREEDS

## ACTIVITY #2

1. This breed originated in the west-central part of France. They are solid to golden-red in color.
2. This breed is big, white and pink-nosed. They were developed in France and imported to the United States from Mexico in 1936.
3. This breed was brought to the United States from England in 1783. They are noted for their good disposition and mothering and milking abilities. Color can be red, white or roan.
4. This breed originated in Scotland. They are known for their carcass quality, milking, mothering, and reproductive abilities. They are always polled with a black coat.
5. This breed was developed in England and brought to the United States in 1817. They are known for their foraging ability, vigor, hardiness, and quiet dispositions. Their bodies are colored red with white faces.
6. The biggest/tallest cow. This breed was developed in Italy. Their color is white with black skin pigmentation. They are noted for their working, mothering, and beef producing abilities.
7. This breed was developed in the United States. They were developed by crossing Brahman and Angus cattle. Foundation stock is 3/8 Brahman and 5/8 Angus. They are solid black in color and polled.
8. This breed was developed in the southwestern part of the United States. Their color ranges from light gray or red to almost black. They have a characteristic hump over the shoulders, loose skin under the throat and large drooping ears. They have a very high heat tolerance.
9. The color of this breed is red and shows a Hereford color pattern. The breed is about 5/8 Hereford and 3/8 Brahman. Calves grow rapidly and attain weaning weights of 500 to 800 pounds. The breed is noted for its superior maternal ability.
10. This breed has a solid cherry red color. The breed was developed on the King Ranch in Texas. These animals are 5/8 Shorthorn and 3/8 Brahman. They are known for their growth rate, long life, and hardiness.

### Match

\_\_\_\_\_ Brangus  
\_\_\_\_\_ Angus  
\_\_\_\_\_ Limousin

\_\_\_\_\_ Brahman  
\_\_\_\_\_ Charolais  
\_\_\_\_\_ Hereford

\_\_\_\_\_ Shorthorn  
\_\_\_\_\_ Chianina  
\_\_\_\_\_ Santa Gertrudis  
\_\_\_\_\_ Braford

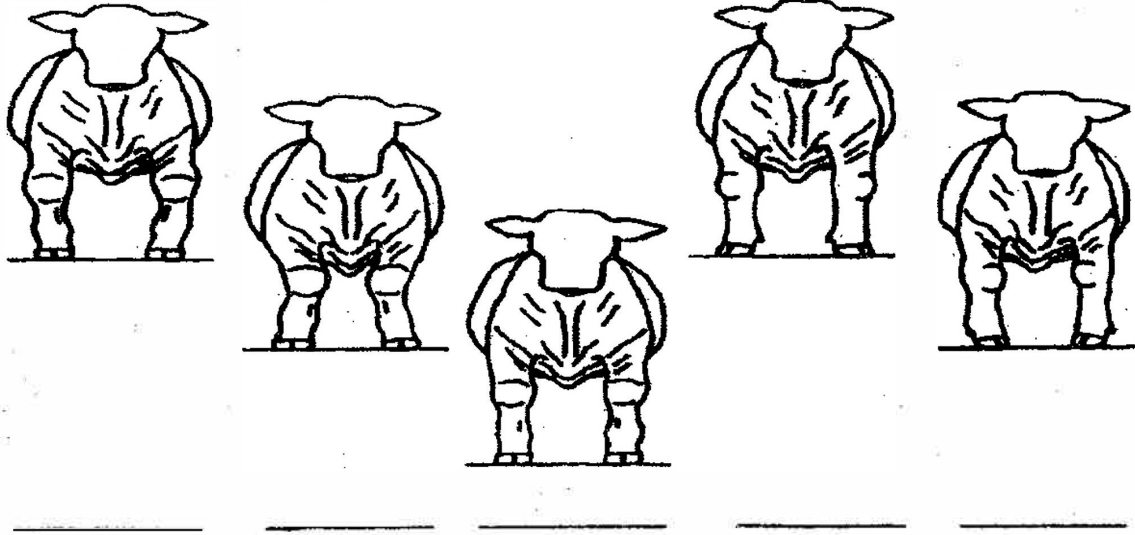
**INTERMEDIATE STEER STRUCTURAL DIFFERENCES FRONT & REAR VIEW**

**ACTIVITY #3**

Fill in the blank with the correct FRONT LEG Alignment

*CORRECT      KNOCK-KNEED      BOWLEGGED      TOED-IN      TOED-OUT*

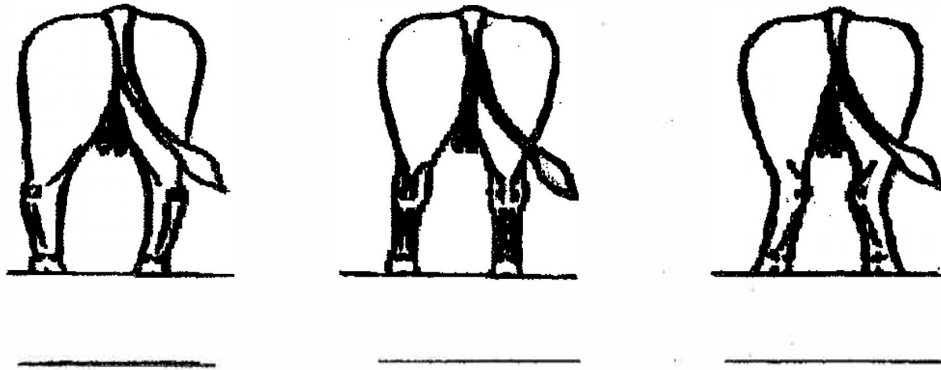
**Front Leg Alignment**



Fill in the blank with the correct REAR LEG Alignment

*COW-HOCKED      BOWLEGGED      CORRECT*

**Rear Leg Alignment**



# INTERMEDIATE STEER STRUCTURAL DIFFERENCES SIDE VIEW

## ACTIVITY #3

Fill in the blank with the correct Front Leg Set

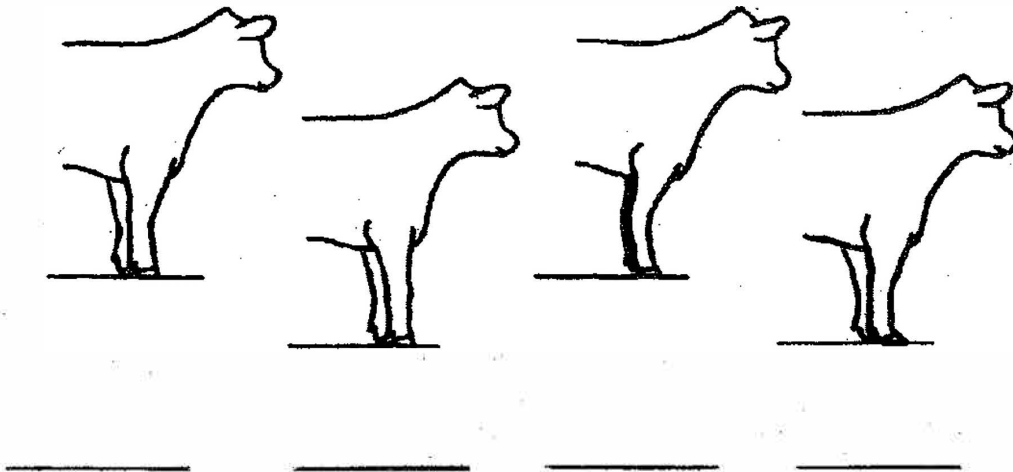
*CALF-KNEED*

*CORRECT*

*WEAK PASTERNS*

*BUCK-KNEED*

Front Leg Set



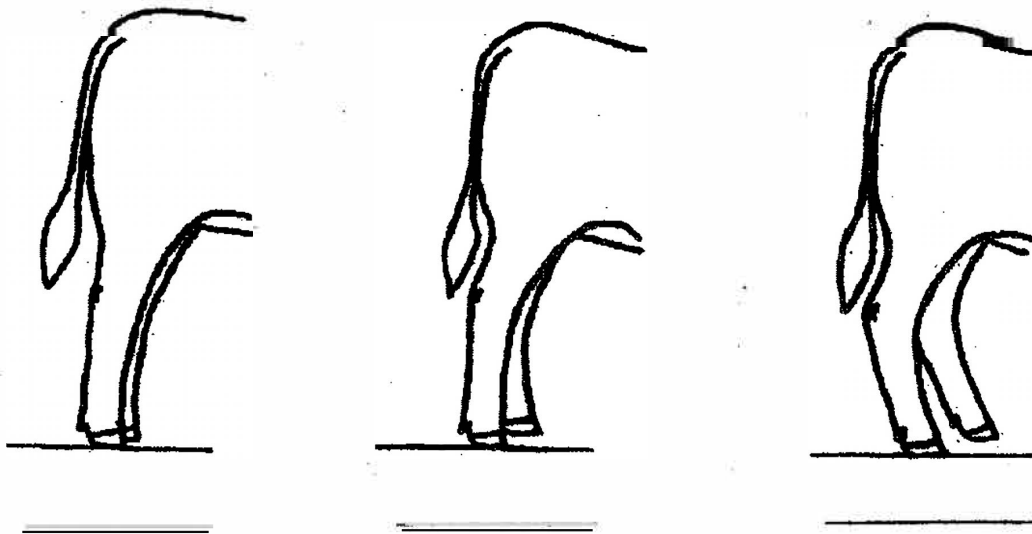
Fill in the blank with the correct Hind Leg Set

*CORRECT*

*SICKLE-HOCKED*

*POST-LEGGED*

Hind Leg Set



## INTERMEDIATE STEER ANIMAL IDENTIFICATION ACTIVITY #4

Please draw a line to match the correct method of animal identification to its advantages and disadvantages.

### A. Hot Branding



1. Advantages-Permanent, Does not disfigure the animal  
Disadvantages- Animal must be confined in order to read. Hard to read on dark-skinned animals.

### B. Tattooing



2. Advantages-Permanent, Limited Hide Damage  
Disadvantages-Takes more time to brand, does not work on white cattle

### C. Ear Tagging



3. Advantages-Easy to read, Unique to producer, Can be used on any color cattle, Permanent  
Disadvantages-Very difficult to read, Stressful for cattle, lowers market value of the hide

### D. Freeze Branding



4. Advantages-Economical, flexible, can be read from a distance  
Disadvantages-Becomes brittle in cold weather, easily lost, difficult to read

# INTERMEDIATE MARKET STEER HEALTH

## ACTIVITY # 5

Answer the questions below by circling the correct answer.

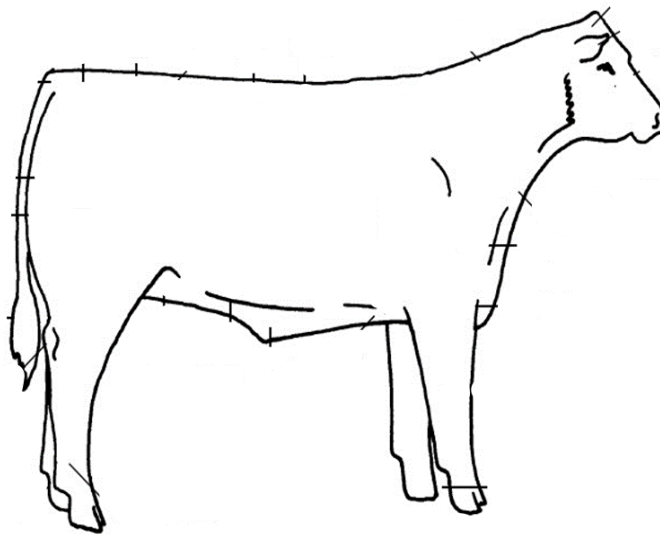
1. What can cause diseases?
  - a. Bacteria
  - b. Viruses
  - c. Fungi
  - d. Prions
  - e. Protozoas
  - f. Parasites
  - g. All of the above
  
2. Transmission occurs through direct or indirect contact. True or False
  
3. This type of contact happens when the diseased animal physically touches or is very close to another animal.
  - a. Indirect contact
  - b. Direct contact
  - c. Airborne contact
  - d. Water contact
  
4. This type of contact occurs when transmission is through a third party or mechanically.
  - a. Indirect contact
  - b. Direct contact
  - c. Vector-borne contact
  
5. Health diseases may also occur from non-infectious causes. Some examples are:
  - a. Malnutrition
  - b. Trauma/Injury
  - c. Cancer
  - d. Genetic defects
  - e. Environmental Toxins
  - f. All of the above

# INTERMEDIATE STEER INJECTION SITE ACTIVITY #6

(Multiple Choice and Fill-in-the-Line)

1. What is meant by the term subcutaneous injection?
  - a. Under the skin
  - b. Deep in the muscle
  - c. In the nasal passages (nose)
2. Where on an animal is the most preferred site to give an injection? \_\_\_\_\_
3. What is the proper spacing when administering multiple vaccines?
  - a. 2 inches
  - b. 4 inches
  - c. 8 inches
4. What is meant by the term intramuscular injection?
  - a. Under the skin
  - b. Deep into the muscle
  - c. In the nasal passages (nose)
5. Intra-nasal vaccines are administered where?
  - a. Under the skin
  - b. Deep in the muscle
  - c. In the nasal passages (nose)

(Draw on the steer to select the appropriate injection site locations for a subcutaneous injection.)



# SENIOR MARKET STEER

## BREEDS ACTIVITY #1

*Use your knowledge of cattle breeds and the characteristics of each to fill in the blank with the correct breed for each animal below.*

1. \_\_\_\_\_: My genetics are 5/8 Angus and 3/8 Brahman.
2. \_\_\_\_\_: My genetics are 3/8 Brahman and 5/8 Shorthorn.
3. \_\_\_\_\_: I have a red body and white face. I am known for my foraging ability, vigor, hardiness and quiet disposition.
5. \_\_\_\_\_: I am a great worker, mother and produce great beef. I am large.
6. \_\_\_\_\_: I was developed in the southwestern United States. I am very heat tolerant.
7. \_\_\_\_\_: I am known for my fast growth and lean meat. I am large and white.
8. \_\_\_\_\_: I am polled with a black coat. I originated in Scotland.
9. \_\_\_\_\_: I may be red and/or white, or roan in color. I am from England.

10. \_\_\_\_\_: This breed is a result of crosses among Herefords, Shorthorns, and Brahmans. The exact percentage of blood from each is not known, the breed has a variety of colors. Reds and duns are more common than other colors. Selection has been mainly for good disposition, fertility, gain, conformation, hardiness, and milk production.

11. \_\_\_\_\_: This breed was imported into the United States from Switzerland, France, and Germany. These animals have red to dark red or black with spotted bodies with white faces. They are noted for their fast growth and milking abilities.

12. \_\_\_\_\_: This breed is solid cream to reddish yellow in color. They originated in Germany. They are known as a general-purpose breed with good milking abilities.

13. \_\_\_\_\_: These cattle are dark red and white in color. Some animals are roan in color. They have lightly pigmented skin. They are a horned breed with medium-size horns that curve forward. They are considered docile and easily handled.

14. \_\_\_\_\_: This breed originated in the west-central part of France. They are solid to golden-red in color with lighter circles around the eyes and muzzle.

## **SENIOR STEER ANIMAL IDENTIFICATION ACTIVITY #2**

Please write in the advantages and disadvantages for each method listed below.

### **A. Hot Branding**

Advantages:

Disadvantages:

### **B. Tattooing**

Advantages:

Disadvantages:

### **C. Ear Tagging**

Advantages:

Disadvantages:

### **D. Freeze Branding**

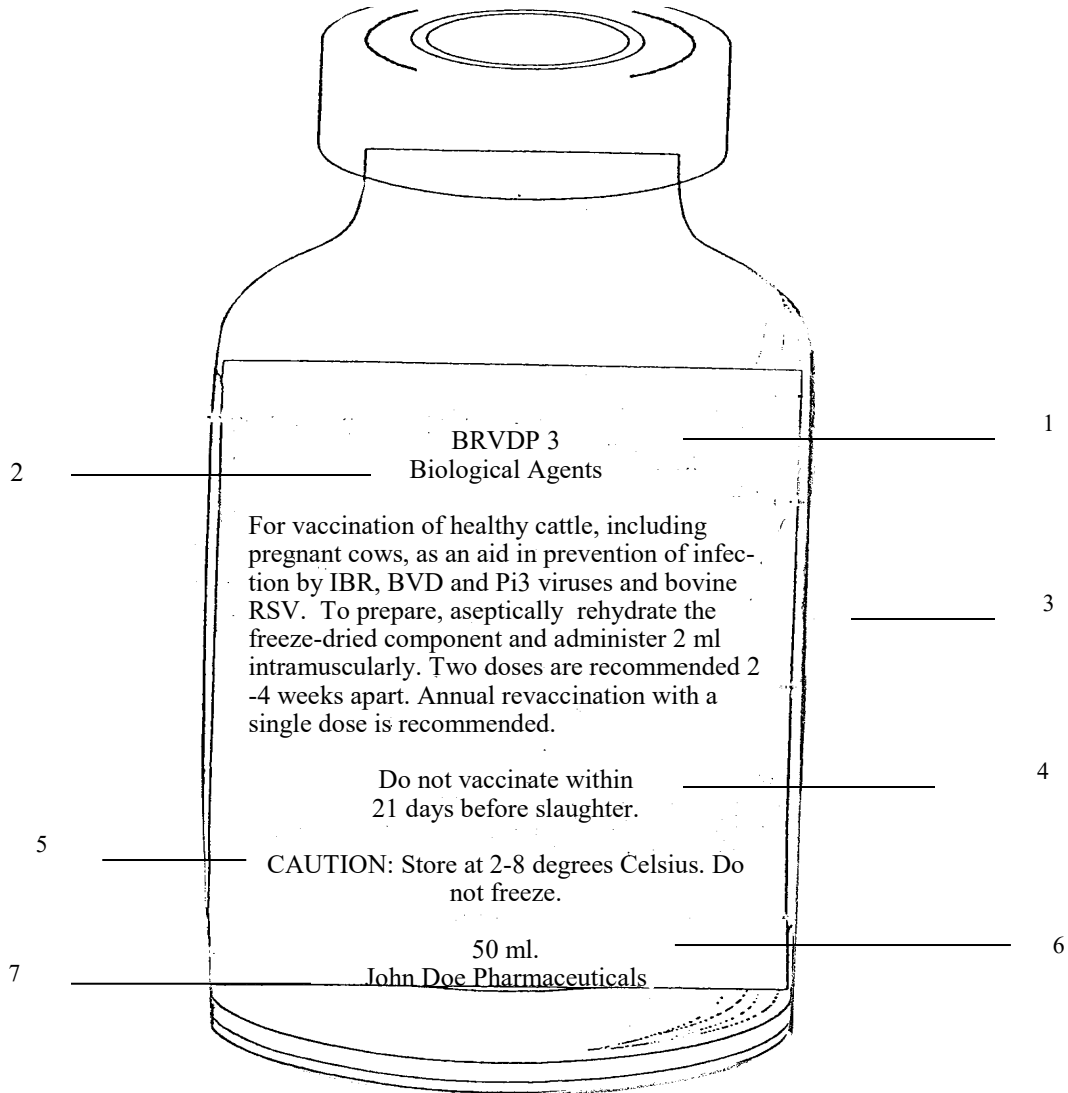
Advantages:

Disadvantages:

# SENIOR MEDICATION LABEL

## Activity #3

Enter the correct number next to the part and description



### Parts

- \_\_\_\_\_ Withholding Times/Cautions and Warnings
- \_\_\_\_\_ Distributor Name
- \_\_\_\_\_ Directions
- \_\_\_\_\_ Amount of Contents
- \_\_\_\_\_ Name of Medication
- \_\_\_\_\_ Storage
- \_\_\_\_\_ Active Ingredients

### Descriptions

- \_\_\_\_\_ Tells how much is in the container. Usually in metric units, (i.e.) ml. or milliliters
- \_\_\_\_\_ Tells how hot or cold to keep the medications or whether or not to expose to light.
- \_\_\_\_\_ Tells the time it takes for the drug/chemical to be used up by the animal's body after it has been administered (or the time it takes a drug/chemical to wear off)
- \_\_\_\_\_ Chemical name(s) of what is in the drug

# SENIOR MEDICATION INSERT

## Activity #4

Use this image to answer the questions below.

# Medication Insert

*(Faint, illegible text representing a folded medication insert)*

**OMNIBIOTIC** *Name of Drug*

(Hydrocillin in Aqueous Suspension) *Active Ingredient(s)*

For use in Beef Cattle, Lactating and *Species and*  
 Non-Lactating Dairy Cattle, Swine and Sheep *Animal Class*

*Read Entire Brochure Carefully  
Before Using This Product*

**For Intramuscular Use Only**

**Active Ingredient(s):** Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in an aqueous base.

**Indications:** Cattle – bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections. **Swine** – erysipelas, pneumonia. **Sheep** – foot rot, pneumonia, mastitis and other infections in these species caused by or associated with hydrocillin-susceptible organisms.

**Recommended Daily Dosage**  
*The usual dose is 2 ml per 100 lb of body weight given once daily.  
 Maximum dose is 15 ml / day.*

<b>Dosage</b>	}	<i>Body Weight</i>	<i>Dosage</i>
		100 lb	2 ml
		300 lb	6 ml
		500 lb	10 ml
		750 lb or more	15 ml

*Continue treatment for 1 to 2 days after symptoms disappear.*

**Caution:** 1. Omnibiotic should be injected deep within the fleshy muscle of the neck. Do not inject this material into the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animals should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8°C (36° to 46°F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

**Warning:** Milk that has been taken from animals during treatment and for 48 hours after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food.

**How Supplied:** Omnibiotic is available in vials of 100 ml.

Approved Uses

Route of Administration

Storage Requirements

Withholding Time

Cautions and Warnings

SIZES AVAILABLE

TAKE TIME  
OBSERVE LABEL DIRECTIONS

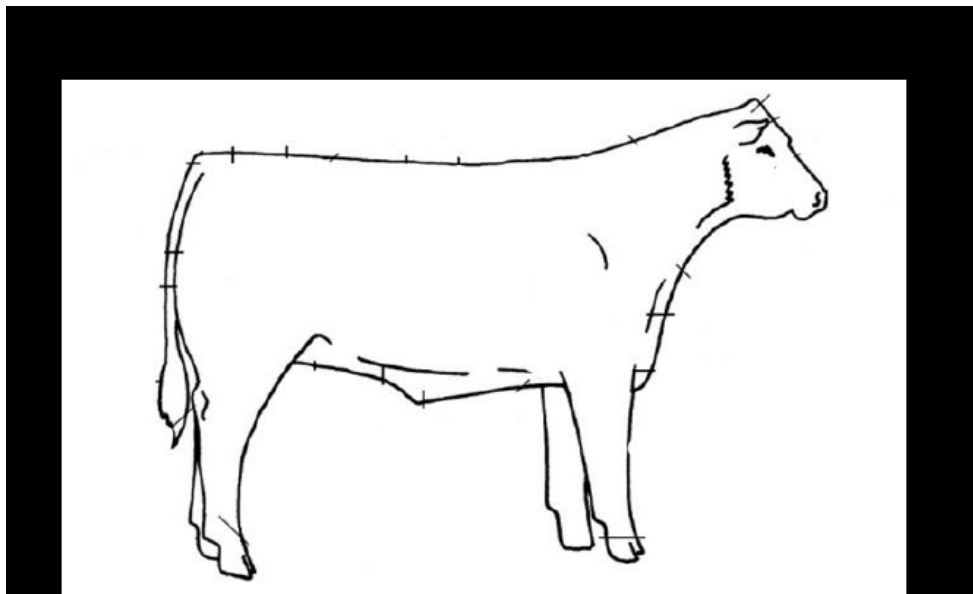
**SENIOR MEDICATION INSERT**  
**Activity #4 Cont.**

1. What is the name of the drug? \_\_\_\_\_
2. For what uses is this product approved? \_\_\_\_\_
3. What is the expiration date? \_\_\_\_\_
4. What are the active ingredients? \_\_\_\_\_
5. Where should this medication be injected? \_\_\_\_\_
6. What is the withdraw period for this medication? \_\_\_\_\_
7. If you have a 1000-pound steer what would the dosage be? \_\_\_\_\_
8. If you have 1000-pound steer how many doses are there be in a vial?  
\_\_\_\_\_
9. What temperature should this medication be kept at? \_\_\_\_\_
10. What kind of environment should this medication be kept in? \_\_\_\_\_
11. How long after injection should the animal be monitored? \_\_\_\_\_
12. What medication can be administered if a reaction is observed?  
\_\_\_\_\_

## SENIOR INJECTION SITES ACTIVITY #5

(Multiple Choice and Fill-in-the-Line)

1. What is meant by the term subcutaneous injection?
  - a. Under the skin
  - b. Deep in the muscle
  - c. In the nasal passages (nose)
2. What is meant by the term intramuscular (I.M.) injection?
  - a. Under the skin
  - b. Deep into the muscle
  - c. In the nasal passages (nose)
3. Where on an animal is the most preferred site to give an I.M. injection? \_\_\_\_\_
4. What is the proper spacing when administering multiple vaccines?
  - a. 2 inches
  - b. 4 inches
  - c. 8 inches
5. Intra-nasal vaccines are administered where?
  - a. Under the skin
  - b. Deep in the muscle
  - c. In the nasal passages (nose)
6. Draw circles on the animal below to select the appropriate injection site locations for a subcutaneous injection.
7. Draw an **X** on the animal below where you should **never** give an injection.



# SENIOR STEER DISEASES

## ACTIVITY #6

Write in the missing **Name** or **Common Name** that corresponds with the cause, major symptoms and prevention of the common diseases.

<b>Name:</b>	
<b>Common Name:</b>	None
<b>Cause:</b>	Bacteria
<b>Major Symptoms:</b>	Infected cattle with a chronic or long lasting infection will usually abort the fetus, have a stillborn, or give birth to a weak calf. In rare acute infections, often in calves, the signs are high fever, jaundice (yellowing of the skin), and death.
<b>Prevention:</b>	Regular herd vaccinations twice a year will help along with the vaccination of any new replacement heifers or bulls. In chronic cases, once abortion has occurred it is too late to vaccinate.

<b>Name:</b>	
<b>Common Name:</b>	Blackleg
<b>Cause:</b>	Bacteria
<b>Major Symptoms:</b>	Depression, swelling of muscles or groups of muscles, skin may become discolored and crackle when touched. Adult cattle may show signs of lameness before any other signs appear. Many calves are found dead before any signs appear.
<b>Prevention:</b>	Vaccination of the whole herd is important, not just for <i>this bacteriai</i> , but for all of this type of bacteria.

<b>Name:</b>	
<b>Common Name:</b>	BSE, "Mad Cow Disease"
<b>Cause:</b>	Prion
<b>Major Symptoms:</b>	Cattle tend to show signs of progressive degeneration of the nervous system and changes in temperament. Abnormal posture, incoordination and difficulty rising are also observed due to the degeneration of the nervous system. There is a decrease in milk production and a loss in body weight, but there is no loss of appetite.
<b>Prevention:</b>	There is no cure for this disease, but there are some guidelines to help prevent an outbreak. Do not feed meat bone meal, or other feed stuff that contains parts from ruminants. Ensure good slaughter and processing procedures so as not to contaminate edible products. Though this disease is not contagious, monitoring the off spring of an infected cow is recommended, even though the transmission of the prion from cow to calf is low. Finally the humane destruction of infected cattle to prevent any possible spreading due to contamination is required. Only 3 cases have been confirmed in US.

<b>Name:</b>	Brucella Abortus Disease
<b>Common Name:</b>	
<b>Cause:</b>	Bacteria
<b>Major Symptoms:</b>	Abortion of first calf in last third of pregnancy and retained afterbirth. Some infected cows show no signs but calves maybe born weak.
<b>Prevention:</b>	Testing for the disease at stages in the cattle's life, such as on the farm, at the stock market, and at the slaughter facilities. Once infected, animal should be culled. If more than one is infected, the whole herd should be quarantined. Good herd management and regular vaccination can help with prevention of outbreaks.

<b>Name:</b>	
<b>Common Name:</b>	BVD
<b>Cause:</b>	Virus
<b>Major Symptoms:</b>	Cattle infected with this disease do not usually show any symptoms, but the immune system is weakened and other diseases are more likely.
<b>Prevention:</b>	Good herd management and good sanitation are the best ways to combat this disease. Vaccination will help prevent outbreaks, but will not stop the infection.

BONUS

<b>Name:</b>	
<b>Common Name:</b>	IBR or Red Nose
<b>Cause:</b>	Virus
<b>Major Symptoms:</b>	Watery to yellow colored discharge from the nose and eyes along with coughing, increased respiration rate and fever. This infection usually follows or is included with other infections such as BVD and or BRSV. So, many of the vaccines come with a strain of this virus to aid in prevention.
<b>Prevention:</b>	Vaccination

<b>Name:</b>	
<b>Common Name:</b>	PI3
<b>Cause:</b>	Virus
<b>Major Symptoms:</b>	Watery to yellow-colored discharge from nose and eyes, coughing, fever, and an increase in respiration rate.
<b>Prevention:</b>	This disease usually infects cattle that are already infected with other diseases such as IBR, BVD, or BRSV so a strand of PI3 is usually pre-mixed with another vaccine. Along with vaccination, good herd management is needed along with good sanitary practices to prevent an outbreak.

<b>Name:</b>	
<b>Common Name:</b>	BRSV
<b>Cause:</b>	Virus
<b>Major Symptoms:</b>	Temperatures of 103-105 degrees F, coughing, and some nasal discharge. In adult cattle that are susceptible, clinical signs are fewer and usually are not noticed until the cattle begin collapsing and die within a few hours.
<b>Prevention:</b>	Vaccination when an outbreak has occurred will only aid in slowing down the spreading of the virus. If the herd is known to not be infected, then vaccination will help in preventing an outbreak.