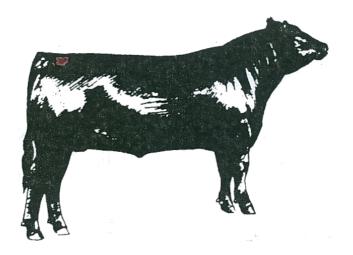
# Osceola County 4-H Market Steer

SKILL-A-THON REFERENCE BOOK

&

JUNIOR SKILL-A-THON ACTIVITIES

2021-2022









	BEEF CATTLE	SWINE	SHEEP
INTACT MALE	BULL	BOAR	RAM
MALE CASTRATED PRIOR TO DEVELOPMENT OF SECONDARY SEXUAL CHARACTERISTICS	STEER	BARROW	WETHER
MALE CASTRATED AFTER DEVELOPMENT OF SECONDARY SEXUAL CHARACTERISTICS	STAG	STAG	STAG
FEMALE THAT HAS PRODUCED PROGENY	COW	SOW	EWE
YOUNG FEMALE WITH NO PROGENY	HEIFER	GILT	EWE
VERY YOUNG PROGENY	CALF	PIG	LAMB

#### STEER SKILL-A-THON

#### Introduction

This manual is provided as a *study guide* for the skill-a-thon competition and should be used as an additional aid to ongoing educational programs. Sections are labeled **Junior**, **Intermediate**, & **Senior** to help exhibitors and educators identify which materials are required for their age level. The topic for this year's Skill-a-thon is **nutrition**.

Topics for the Knowledge and Skills Stations may include the following:

Juniors (age 8-10 as of September 1, 2021)

Body parts

**Breeds** 

Structure

Beef Nutrition Feed Classification & Feed Identification

Common Livestock Terms

Intermediates (age 11-13 as of September 1, 2021)

All of the above plus... Parts of a Feed Label Basic Livestock Terms

Seniors (age 14 and over as of September 1, 2021)

All of the above plus....

**Nutritional Disorders** 

# The contest will be held on January 26, 2022, from 2:00 p.m. until 6:00 p.m. in the KVLS Arena.

#### KVLS Skill-a-thon Rules for 2021-2022

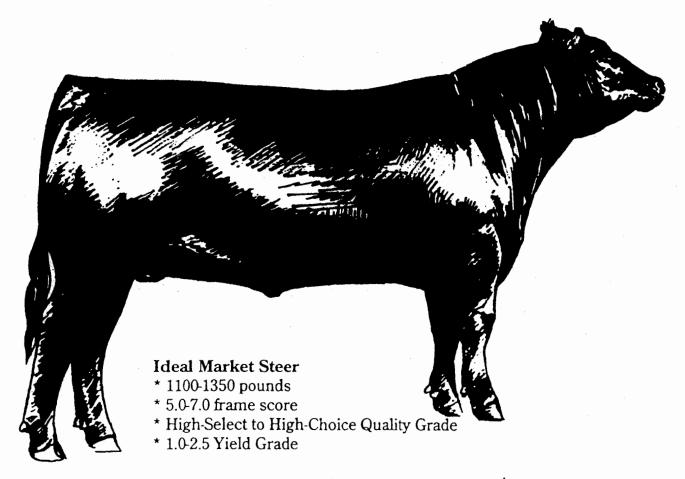
- 1. All market exhibitors <u>must</u> take the Skill-a-thon in their project area for the animal that they are showing in order to participate in the market programs, i.e. steer exhibitors <u>must</u> take the Steer Skill-a-thon. Any exhibitor who does not meet the required grade average on their report card or who does not have a report card <u>must</u> score 70% on the Skill-a-thon to participate in the Market Animal Program.
- 2. All exhibitors must take the Skill-a-thon for the first time on their own, then a reader can be requested the second time, if a passing grade is not achieved.
- 3. Awards will be given on the score of the first Skill-a-thon taken. Top awards are only given for passing scores (70% or above).
- 4. Only those exhibitors who do not make a 3.25 grade point requirement are required to take and make a passing score of 70% or above in order to participate in the market animal program.
- 5. Exhibitors must stay in the testing room once they have signed up to take the Skill-a-thon.
- 6. Exhibitors showing a second animal <u>must stay</u> in the testing room to take the second animal Skill-athon.
- 7. No parents or other adults not on the Committee are allowed in the Skill-a-thon room.
- 8. No exhibitors are allowed to have cell phones while in the Skill-a-thon room.
- 9. No time limit will be imposed on the exhibitors.
- 10. Skill-a-thon handbooks will be given at the start of the project

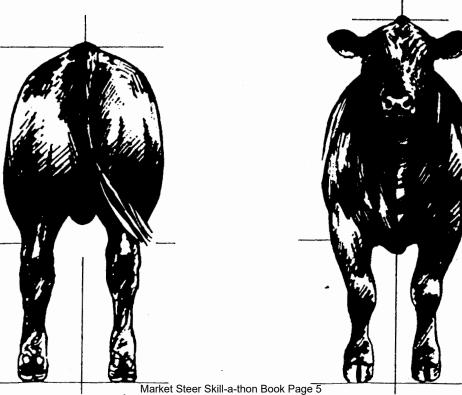
#### **KVLS Awards**

There will be a Junior (8-10), Intermediate (11-13), Senior (14 - graduate from High School) division for the contest. Within each division, 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> place will receive rosette ribbons and a monetary award.

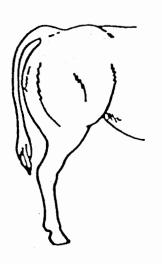
#### BEEF

#### The Ideal Market Steer





#### **Evaluation of Market Cattle**



When selecting and evaluating market cattle, the 4-H member must keep in mind the purpose of these animals. The primary function of market animals is meat production. Therefore, traits such as muscling and finish are emphasized. Frame size and structural correctness are examined but to a slightly lesser degree than in breeding cattle.

#### MUSCLING

- \*Modern market cattle should exhibit extra muscling down their top and through their hind quarters. These are the areas from which the high-priced cuts come. Traits that are found in the ideal market steer include:
  - more natural thickness down the top
  - more muscular loin
  - long, level rump
  - thicker through the center of the quarter
  - wider, deeper stifle

#### **FINISH**

- \*Finish refers to the amount of fat cover a market animal possesses. An ideal market animal should have the minimal amount of body fat and still be able to reach the Choice quality grade. Desirable traits in regard to finish include:
  - smooth and uniform fat cover over ribs
  - uniform depth of body
  - · freedom from fat patches about tailhead
  - no excessive fullness in brisket

#### FRAME SIZE

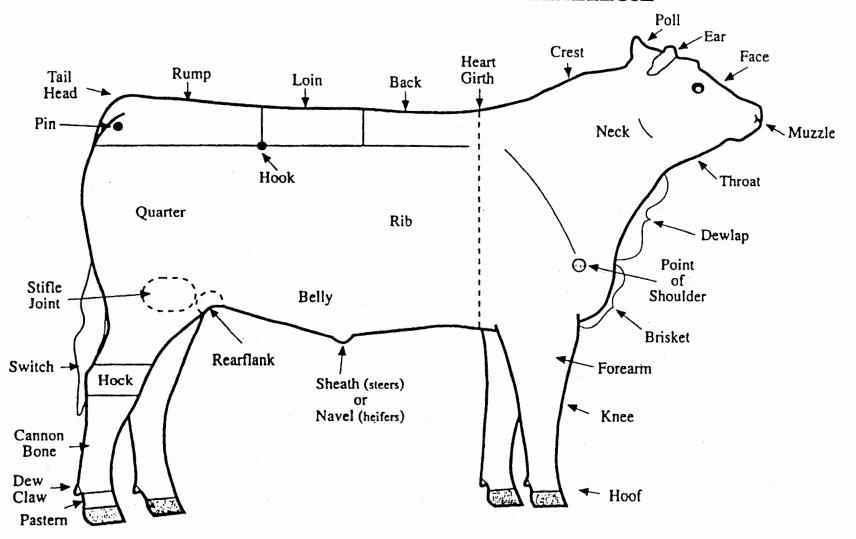
- \*Current trends in market cattle frame size have shifted toward moderation. Market cattle should have enough frame to enable them to reach an acceptable market weight (1,100-1,350 lbs.) at an age of 12-18 months. Acceptable traits for today's frame size include:
  - moderate hip height (frame size 5.0-7.0)
  - extra length of body
  - longer rump

#### STRUCTURAL CORRECTNESS

- \*While it is not emphasized as greatly as it is with breeding cattle, structural correctness is an important selection criteria when judging market animals. As with breeding cattle, look for animals that are:
  - standing squarely on front and rear legs
  - heavier boned
  - moving with a long, reaching stride
  - more nearly level from hooks to pins
  - possessing adequate set to the hocks

It is important for livestock producers to share a common language. Using the correct names for various body parts is one way to be certain your message is understood. Study the pictures with the names of the body parts labeled so that you can communicate with other producers using correct terms.

# Parts of a Beef Animal





#### **BRANGUS**

The Brangus breed was developed by crossing Brahman and Angus cattle. Brangus cattle are based on foundation stock that is 3/8 Brahman and 5/8 Angus. Brangus cattle have sleek solid black hides and are polled. An inspection is necessary to determine conformation and breed character before the animal may be registered.



#### **BEEFMASTER**

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. Selection has been mainly for good disposition, fertility, gain, conformation, hardiness, and milk production.



#### **MAIN-ANJOU**

Maine-Anjou 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.



#### **BRAFORD**

The color of the Braford 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.



# GELBVIEH (a big yellow cow)

This breed originated in Germany. They are solid cream to reddish yellow in color. These animals are known as a general-purpose breed with good milking abilities.



# ABEERDEEN-ANGUS (polled, black cow)

This breed originated in Scotland. These animals are polled with a black coat. They are known for their carcass quality, milking, mothering, and reproductive abilities.



# LIMOUSIN (a long, sleek cow)

This breed originated in the west-central part of France. They are solid-red to golden-red in color with lighter circles around the eyes and muzzle. When slaughtered at an early age, these animals yield a high percentage of lean meat with a minimum amount of fat.



# SANTA GERTRUDIS (a saggy, solid cherry red cow)

This 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.



# CHAROLAIS (a big, white, pink-nosed cow)

This breed was developed in France and imported into the United States from Mexico in 1936. These animals are large and white. They are noted for their fast growth and lean meat.



# CHIANINA (the biggest/tallest cow)

This breed was developed in Italy. These animals are white with black skin pigmentation. They are large. A mature bull can weigh up to 4,000 pounds and stand 6 feet tall. They are noted for their working, mothering, and beef producing abilities.



# HEREFORD (a white-faced cow)

This breed was developed in England and brought to the United States in 1817. These animals have red bodies with white faces. They are known for their foraging ability, vigor, hardiness and quiet dispositions.



#### SHORTHORN (a red-and-white, red, white, or roan-colored beef cow)

This breed was brought to the United States from England in 1783. These animals can be red, white, or roan in color. They are noted for their good disposition, mothering and milking abilities.



#### **BRAHMAN**

The Brahman breed was developed in the southwestern part of the United States. The major use of the Brahman is in crossing with other breeds. The color of the Brahman is light gray or red to almost black. In addition to the characteristic hump over the shoulders, they have loose skin under the throat and large drooping ears. Brahman cattle have a very high heat tolerance.

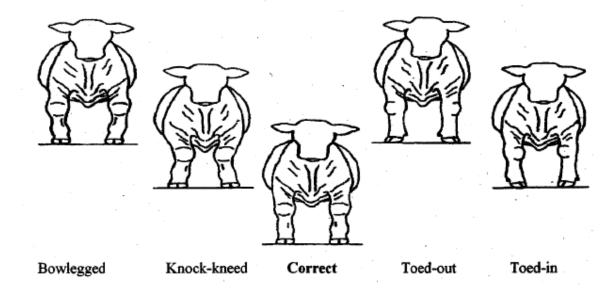


#### **SIMMENTAL**

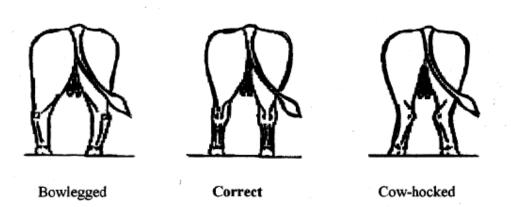
This breed was imported into the United States from Switzerland, France, and Germany. These animals can be red to dark red, brown, or black with spotted bodies and white faces. They are noted for their fast growth and milking abilities.

#### STRUCTURAL DIFFERENCES FRONT & REAR VIEWS

#### Front Leg Alignment

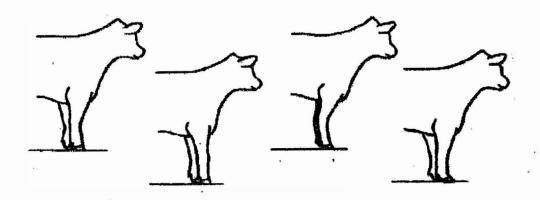


#### Rear Leg Alignment



# STRUCTURAL DIFFERENCES SIDE VIEWS

Front Leg Set



Correct

Buck-kneed

Calf-kneed

Weak Pasterns

Hind Leg Set



Post-legged



Correct



Sickle-hocked

# STRUCTURAL DIFFERENCES DESCRIPTIONS

Buck-kneed When the calf is "over at the knees" or buck-kneed, full

extension of the knee cannot occur when observed from the side. This is usually seen in cattle that are also too straight

in their shoulder.

Calf-kneed This is the other extreme, where the calf stands "back at the

knees" when viewed from the side.

Weak Pastern Having an angle greater than 45 degrees in the pastern/hoof

alignment, putting too much pressure on the joint.

Postlegged The hock has too little angle or set. The calf is too straight

through the joint, resulting in very stiff, constricting movement because of the lack of flexibility. More cattle become unsound because of being postlegged than sickle

hocked.

Sickle-hocked When viewing the rear legs from the side, the hock has too

much angle or set, causing the steer to stand too far underneath itself. Often these calves also will droop

excessively from hooks to pins.

Bowlegged When viewed from the front or rear, the knees set too far

out.

**Knock-kneed** When viewed from the front, the knees are close together.

Toed-out (splayfooted) The feet toe out away from each other. This problem is

often seen in extremely light-muscled, narrow-chested cattle, where the legs are naturally set too close together.

**Toed-in (pigeon-toed)** Toes turn in towards each other.

Cow-hocked When viewing the rear legs from the rear, the hocks are

turned in or placed too close together.

#### **Beef Nutrition**

What an animal eats, how it is digested, absorbed, utilized and what is excreted is the essence of *nutrition*. Good nutrition is basic to good health and production. Proper feeding management requires knowledge of the nutrients in the feedstuffs available to the producer and the nutrient needs of their animals. It also includes an understanding of animal behavior and a management strategy that allows the animals to consume all that is required without causing digestive upset. Though general rules of thumb are helpful, each situation may require adjustments in order to optimize growth and production.

**Nutrients** are substances in the diet that support normal body functions. Some nutrients can be manufactured in the animal's body and are classified as *dietary non-essential*. *Dietary essential* nutrients must be provided in the ration. **Nutrients can be classified into six groups:** *water*, *carbohydrates*, *fats (lipids)*, *proteins*, *vitamins and minerals*.

<u>Water</u> is the most essential <u>nutrient</u> and is involved in all body functions. It is the most abundant and therefore the cheapest nutrient. Animals receive water from drinking as well as from feeds that contain water. An animal that is not receiving enough water will not eat well. Factors which affect an animal's water consumption are the animal's size, feed intake, environmental temperature, humidity, and water quality.

**Proteins** function as the basic structural unit of the animal body and in metabolism. Protein is the main component of the organs and soft structures of the animal body with the exception of water. The dietary requirement for protein is highest in young, growing animals. All proteins are composed of simple units called amino acids. The particular amino acids in a protein determine the quality of that protein. Protein is one of the most expensive portions of the diet.

**Carbohydrates** are organic compounds formed in plants by the process of photosynthesis. They make up about 75% of the dry weight of plants and grain. Carbohydrates serve as a source of energy in the body. A surplus of carbohydrates is transformed into fat and stored.

**Fats** function much like carbohydrates in that they serve as a source of energy. Fats produce 2 ¼ more energy than carbohydrates when digested; therefore a smaller amount is required to serve the same function. Some fats are essential for proper metabolism in the animal.

**Vitamins** are essential for the development of normal tissue and necessary for metabolic activity. They are effective in the animal body in small amounts. When not consumed in an adequate amount a specific deficiency disease can result, or toxicity may result if eaten in extremely high amounts. Vitamins are classified as being either fat soluble (A, D, E, K) or water soluble (B complex & C). Fat soluble vitamins must be consumed in the diet.

*Minerals* are inorganic, solid, crystalline chemical elements. They are classified as being either macro (Ca, P, Na, Cl, K, Mg & S) meaning required in high concentrations or micro (Cr, Co, Cu, F, Fe, I, Mn, Mo, Ni, Se, Si, & Zn) meaning required in trace amounts. Calcium makes up nearly 50% of the total body mineral, phosphorus composes 25%, and other minerals make up the remaining 25%. Minerals function in protein synthesis, oxygen transport, and in skeletal formation and maintenance.

#### **Feed Classification and Identification**

Though we generally group feeds into roughages (high fiber, >18% crude fiber, less digestible) and concentrates (low fiber, <18% crude fiber, more readily digestible). **There are 8 international feed classes that are based on content and use.** 

1. <u>Dry forages and roughages</u> -cut and cured products with >18% CF like hay,, straw, corn cobs, shells and hulls, paper, wood by-products and stover.



Hay



Cottonseed Hulls

2. Pasture, range plants and forages fed fresh - all forages not cut or cut and fed fresh.



**Grass Pasture** 

3. <u>Silages and haylages</u> - plant material preserved through the ensilin process, forages like corn, alfalfa and grass.



Baleage

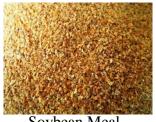


Silage

4. Energy feeds – products with <20% CP, <18% CF and > 70% TDN, like cereal grains (corn, oats, barley, wheat), mill byproducts, beet and citrus pulp, molasses, animal, marine and vegetable fats, nuts, roots and tubers. Energy content of a feedstuff is expressed as percent total digestible nutrients (TDN) because it is strongly correlated with digestible energy.

Whole Corn Cracked Corn Wheat Grain Sorghum (Milo) Barley Oats Rye Wheat Middlings Distiller s Grain

5. Protein supplements – products with >20% CP or more; protein from non-ruminant animal origin, oilseed meals like soybean or cotton, legume seeds, milling by-products of grains, brewery and distillery by-products, yeast, non-protein nitrogen.







Fish Meal



**Dried Wheat** 

#### 6. Mineral supplements



Dicalcium Phosphate



White Salt



Trace Mineral Salt



Ground Limestone (Calcium Carbonate)

#### 7. Vitamin supplements

8. <u>Non-nutritive additives</u> – supplements such as antimicrobials, antifungals, antibiotics, antioxidants, probiotics, buffers, coloring material, flavors, hormones and medicines.

#### **COMMON LIVESTOCK TERMS**

When working with cattle the following terms are important to know.

**BULL** Intact male of cattle

**COW** Female that has produced progeny in cattle

**PROGENY** Offspring, young

**CALF** Very young progeny

**HEIFER** A female in cattle under three years old, which has not

produced a calf

STEER Male castrated prior to development of secondary sexual

characteristics in cattle

**CARCASS** The dressed body of a slaughtered meat animal, offal

having been removed.

**FINISH** Refers to the amount of external fat covering on an animal.

**MARBLING** Refers to flecks of fat distributed within the muscle.

MILKING ABILITY Refers to the amount of milk an animal can produce

**HINDOUARTER** The rear half of a side of a carcass, divided between the

12<sup>th</sup> and 13<sup>th</sup> rib.

**FOREQUARTER** The front half of a side of a carcass, divided between the

12<sup>th</sup> and 13<sup>th</sup> rib.

**POLLED** Naturally hornless

**PARASITES** Organisms living on other organisms - doing harm

**CROSSBREEDING** Is the mating of two animals from different breeds.

**HYBRID** The offspring produced from crossbreeding.

#### **Feed Label Information**

A commercial law requires each bag or bulk load to be accompanied by a label showing several key items:

- Net weight
- Product name and brand name
- Drug additives
- Guaranteed analysis of the feed crude protein, crude fat and crude fiber must be guaranteed on all feeds except straight mineral or vitamin supplements, molasses or drug compounds.
- Minimum percentage of crude protein, percentage of equivalent protein from nonprotein nitrogen, if any. The amount of crude or total protein in a feed is guaranteed. Crude protein is determined by multiplying the nitrogen content of a feed by the factor 6.25.
- When non-protein nitrogen (NPN) is applied to feedstuffs, a statement "for ruminants only" must appear underneath the name of the feed. Additionally, it must also have a guarantee for crude protein which has been supplied from non-protein nitrogen.
- Minimum crude fat content Fat has an energy value approximately 2.25 times the value of carbohydrate feedstuffs.
- Maximum crude fiber content Crude fiber is a measure of the indigestible or non-useful portion of a feed. Feeds having low fiber values tend to be higher in digestible energy or total digestible nutrients than those feeds having high fiber values.
- Minerals feeds containing 6.5 percent or more minerals must show a guarantee of: calcium – minimum and maximum; phosphorous- minimum; salt – minimum and maximum
- Vitamins, only if guaranteed
- Common and usual name of each ingredient or the collective term for each grouping of feed ingredients
- Directions for use and cautionary statements
- Name and principle mailing address of the manufacturer

50 lbs net weight

# Brand Name Show Feed (for ruminants only)

#### Medicated

Feed for 28 days as an aid in the maintenance of weight gains in the presence of respiratory diseases, such as shipping fever.

**Caution:** Use only as directed. Discontinue use 14 days prior to slaughter.

#### **Active Drug Ingredients:**

Chlortetracycline 7.6 grams/ton

#### **Guaranteed Analysis**

**CRUDE PROTEIN,** not less than 12% This includes not more than 1.00% equivalent crude protein from non-protein nitrogen.

**CRUDE FAT,** not less than 2.0% **CRUDE FIBER,** not less than 19%

Ingredients: Grain products, roughage products, plant protein products, processed grain by-products, forage products, molasses products, calcium carbonate, salt, vitamin E supplement, vitamin A supplement, ferrous sulfate, potassium iodide, manganese oxide copper chloride, cobalt glucoheptonate, vitamin D3 supplement, sodium selenite.

RUMINANT MEAT AND BONE MEAL FREE

**FEEDING DIRECTIONS:** Feed at the rate of 12 pounds per head per day.

#### **MANUFACTURED BY:**

The Best Feed Company P. O. Box 00000 Small Town, USA

#### **Basic Livestock Terms**

- 1. **Condition, Finish or Covering** All are used to denote fat. The terms finish and covering are used to describe fat on market animals, while condition is used when describing breeding stock.
- 2. **Growthiness** The characteristics of having size and weight at a certain age.
- 3. **Balance or Symmetry** A proper proportion and blending of parts of the animal. Balance or symmetry is evaluated from a side view.
- 4. **Ruggedness, Stoutness** The quality of being heavy or large boned. This is usually determined by the size of the cannon bone (from the knee to the ankle).
- 5. **Quality** A general term that combines smoothness and refinement. Refinement of hair coat, freedom of wrinkles in hogs and freedom of roughness, patchiness in cattle indicates quality.
- 6. **Scale** The size of the animal as determined by skeletal structure, independent of weight. The height, length and width of the animal.
- 7. **Style** The general eye-appeal or attractiveness of the animal. Includes balance, structural correctness and quality.
- 8. **Broodiness** Female breeding stock term that means she has a favorable combination of characteristics to be a good mother. Depth, capacity, prominence of teats and/or mammary system, stoutness and correctness of vulva.
- 9. **Breed Character** Characteristics that separate breeding stock of one breed from other breeds, primarily by differences of the head: shape, length, dish of face, width of muzzle, shape of poll and ears; color markings and wool covering in sheep.
- 10. **Trimness** Freedom from fat or finish.
- 11. **Meatiness/Muscling** having a high proportion of muscle in the areas of the high-priced cuts. This is shown primarily by the relative width, length and fullness of the quarter, leg or ham, and by the thickness and fullness through the rib, rack or loin.
- 12. **Type** A combination of characteristics that make an animal useful for a specific purpose. Determined by the general shape and form of an animal. Desirable types are constantly changing.
- 13. **Tight Framed** The ability of the animal to hold itself together. Indicated by a strong top (back), tightness of shoulder and squareness of feet and leg placements.
- 14. **Structural Soundness** The desirability or correctness of the skeletal structure with major emphasis on straightness of top and proper feet and leg structure.
- 15. **Femininity** Characteristics that distinguish the female from the male. Indicated by refinement of the head, neck and shoulders.
- 16. **Masculinity** Characteristics that distinguish the male from the female. Indicated by boldness or massiveness of head and chest, thickness of the neck and development of the forequarters.

#### **Common Nutritional Disorders\*\***

<u>Disorder</u> <u>Chief Cause</u>

Hardware disease Wire or nails lodged in reticulum

Ketosis Sudden need for extra energy caused by a change in production

demand and fat mobilization

Acidosis Excess grain consumption

Grass tetany Mg deficiency caused by consumption of lush grass

Night blindness Vitamin A deficiency
Goiter Iodine deficiency

Rickets Ca, P, or vitamin D deficiency (young animals)

Anemia Fe, Cu, vitamin B<sub>12</sub>, or folic acid deficiency

Founder (laminitis)

Too rapid change in the ration

Liver abscesses Bacteria in the gut that grows quickly when cattle are on low

roughage/high concentrate finishing rations

Photosensitization Some feeds or forages or accumulation of metabolites

Bloat Slime producing bacteria increase and slime traps rumen gas.

Most common on lush legume pastures

Calf scours Severe diarrhea

Polioencephalomalacia Associated with inadequate thiamine status or high sulfur intake

# **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. You do not need to attach the activity page you have completed in the record book.

#### **Helpful Study Resources:**

https://animalscience.tennessee.edu/youth-resources//

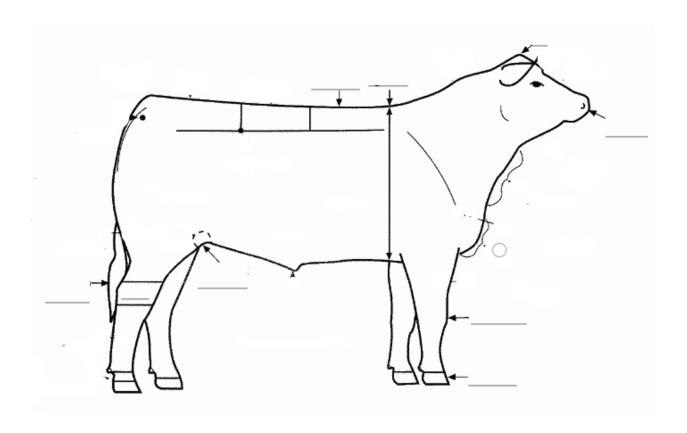
https://osu.az1.qualtrics.com/jfe/form/SV cTR1YeOMFV0MTml

## JUNIOR STEER

#### PARTS ACTIVITY #1

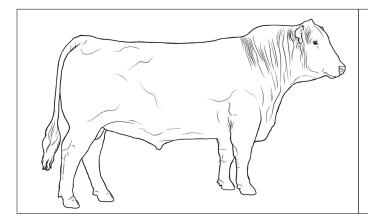
Write the name of the part on the numbered lines below.

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



#### JUNIOR STEER BREEDS ACTIVITY #2

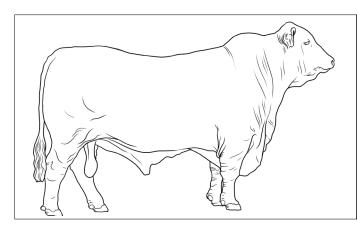
Use the breed pictures in the skill-a-thon book to color in each animal. List two interesting facts about each breed.



## **Breed: Angus**

\*

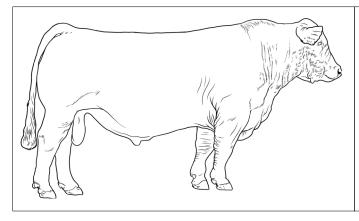
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## **Breed: Brangus**

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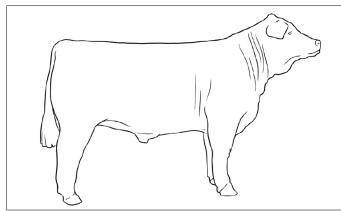
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#### **Breed: Charolais**

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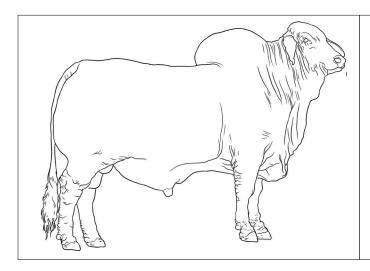
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#### **Breed: Hereford**

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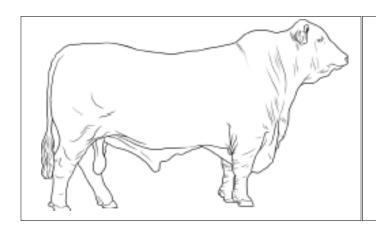
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#### **Breed: Brahman**

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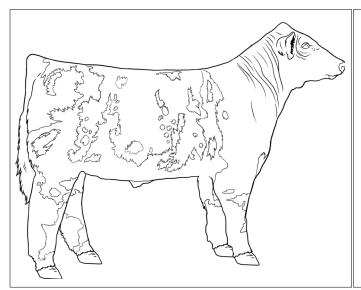
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#### **Breed: Beefmaster**

\*

\*



## **Breed: Shorthorn**

\*

\*

#### JUNIOR STEER STRUCTURAL DIFFERENCES FRONT & REAR VIEW

#### **ACTIVITY #3**

Fill in the blank with the correct FRONT LEG Alignment

**CORRECT** 

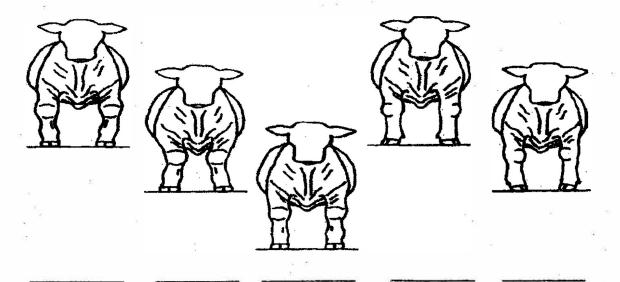
KNOCK-KNEED

**BOWLEGGED** 

TOED-IN

TOED-OUT

Front Leg Alignment



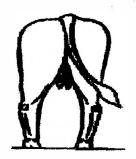
Fill in the blank with the correct REAR LEG Alignment

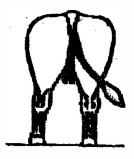
COW-HOCKED

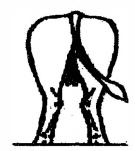
**BOWLEGGED** 

**CORRECT** 

Rear Leg Alignment







#### JUNIOR STEER STRUCTURAL DIFFERENCES SIDE VIEWS

#### **ACTIVITY #3**

Fill in the blank with the correct Front Leg Set

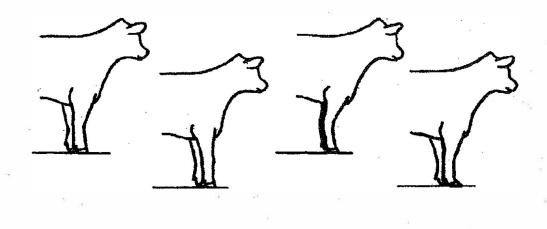
CALF-KNEED

CORRECT

**WEAK PASTERNS** 

BUCK-KNEED

Front Leg Set



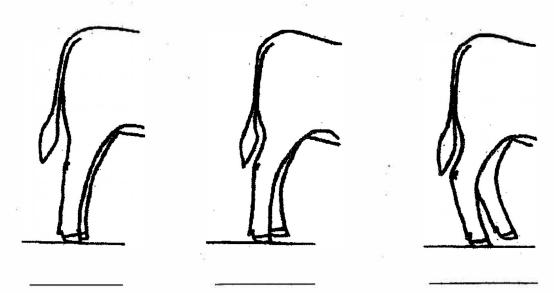
Fill in the blank with the correct Hind Leg Set

**CORRECT** 

SICKLE-HOCKED

POST-LEGGED

Hind Leg Set



#### JUNIOR STEER NUTRIENTS ACTIVITY # 4

#### Please match the nutrient to the definition

- A. Protein
- B. Water
- C. Carbohydrates

1.	This is the most essential nutrient. It is needed for digestion, temperature control, waste removal, and many other purposes. Without this nutrient an animal will not eat well. It is the most abundant and cheapest nutrient
2.	The dietary requirement is highest in young, growing animals and is one of the most expensive portion of the animal's diet. Composed of amino acids.
3.	Serves as a source of energy in the body. Makes up about 75% of dry weight is plants and grains.

# JUNIOR STEER FEED CLASSIFICATION & IDENTIFICATION ACTIVITY # 5

Please write the feed class and feed identification for each picture below.

Example: Feed Classification:  Energy Feed  Cracked Corn
Feed Classification:
Feed Classification:Feed Identification:
Feed Classification: Feed Identification:
Feed Classification:  Feed Identification:

#### JUNIOR MARKET STEER WORD (TERMS) ACTIVITY #6

Match the word with the definition:

1. 2. 3. 4. 5. 6. 7. 8. 9.	BULL CARCASS FINISH MARBLING MILKING ABILITY HINDQUARTER FOREQUARTER POLLED PARASITES HEIFER
A.	Refers to the amount of milk an animal can produce
B.	Refers to the amount of external fat covering on an animal
C.	Intact male of cattle
D.	A female of cattle under three years old, which has not produced a calf
E.	The front half of a side of a carcass, divided between the 12 <sup>th</sup> and 13 <sup>th</sup> rib
F.	The dressed body of a slaughtered meat animal, offal having been removed
G.	Naturally hornless
H.	Refers to flecks of fat distributed within the muscle
I.	Organisms living on other organisms, doing harm
J.	The rear half of a side of a carcass, divided between the 12 <sup>th</sup> and 13 <sup>th</sup> rib