



Livestock Judging

A 4-H Animal Science Project

CREDITS AND ACKNOWLEDGMENTS



4-H LIVESTOCK JUDGING was developed through a team effort with the Florida 4-H Youth Development Program, Department of Family, Youth and Community Sciences, and the Department of Animal Science, The Institute of Food and Agricultural Sciences, University of Florida.

This edition of the Livestock Judging curriculum package was created by Chad Carr, Assistant Professor, Justin Crosswhite, Graduate Assistant, and Amanda Johnson, Undergraduate Assistant, Department of Animal Sciences. Authors of previous editions include: Julie Sexton and Karen Strickland, former Project Assistants, Allen Stateler, former Graduate Assistants; Sandra TenBroeck, Associate Professor and Youth Livestock Extension Specialist, Department of Animal Sciences, Tim Marshall, Associate Professor, Department of Animal Sciences and Deborah J. Glauer, Extension Youth Development Specialist and Animal Science Design Team Leader, Department of Family, Youth and Community Sciences.

Technical review and assistance for this edition was provided by members of the 4-H Life Skills Animal Science Action Team—Amanda Thein, Nassau County 4-H Agent, Chris DeCubelis, Gilchrist County 4-H Agent, and Joy C. Jordan, Associate Professor a/4-H Youth Development Curriculum Specialist, Department of Family, Youth and Community Sciences, University of Florida, Institute of Food and Agricultural Sciences.



The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.

PREFACE

4-H LIVESTOCK JUDGING

An Animal Science Curriculum for 11-18 year olds

The Florida 4-H Livestock Judging Curriculum, a part of the OUR LIVING WORLD curriculum framework, includes the basic premise that judging activities provide youth with an excellent opportunity to develop communication, decision making and organizational skills, and enhance their confidence and self esteem. The 4-H Animal Science program provides an opportunity for young people to practice a variety of life skills while learning subject matter.

Serving as a judging coach or leader can be a very rewarding and educational experience. So often, potential leaders will not become involved because they fear they lack knowledge, qualifications or experience that they need to work with youth in this area. However, some of the most effective and successful judging programs are organized by leaders who have very little subject matter background. You will have a tremendous influence on the young people with whom you will be working.

To the informed Florida citizen, it is not surprising that animal science commands a priority within the total Florida 4-H education curriculum. An investment in young people's knowledge, understanding and attitudes about animals affects their lives and cannot be ignored now or in the future.

TABLE OF CONTENTS

I. INTRODUCTION

Credits	2
Preface	3
Table of Contents	4
About Livestock Judging	5
Activity Profiles	6-7
Training A Team Basics	8-11
About Experiential Education	12-13
Overview to Activities	14-17

II. LIVESTOCK JUDGING

TEACHING OUTLINES

Activities

1. Parts is Parts	18
2. Different Strokes	30
3. The Bottom Line	44
4. What You See Is What You Get!	54
5. Express Yourself	77
6. Judging a Class	95
7. How Do I Rate?	97
8. What's My Line?	106
9. What's Your Score?	116

About Livestock Judging...

The development of this 4-H Animal Science Project Kit was driven by two basic principles:

1. Judging activities provide youth with an excellent opportunity to develop communication, decision making and organizational skills, and enhance their confidence and self esteem.
2. 4-H volunteer teaching activities must be ready-to-use. This project includes materials needed to conduct livestock judging animal science activities in an easy-to-use format. It was designed to be teacher friendly and takes much of the guesswork out of teaching this subject.

AGE OR GRADE LEVELS

This project was developed for youth ages 11-18. Both group and individual activities encourage participation and action in all aspects of animal science livestock judging education. Teachers and volunteers should use all of the activities and in the order that they are provided. They were designed sequentially so that youth could build upon skills developed in each activity.

CONTENTS

The following resource is the component of the 4-H Animal Science Livestock Judging Program:

- **LEADER'S GUIDE** - This curriculum contains a complete, easy-to-read outline for activities which are a mix of games, experiments, role plays or demonstrations that help to teach the basic principles and concepts of livestock judging. The activities conclude with discussion questions for youth to REFLECT and APPLY.

ACTIVITY PROFILES

A brief description of the nine LIVESTOCK JUDGING Activities:

ACTIVITY 1: PARTS IS PARTS

All animal body parts have a specific function and are necessary for daily survival. Adequate knowledge of parts is essential for evaluation of livestock and participation in the livestock industry. This activity introduces youth to this vital first step information for livestock judging.

ACTIVITY 2: DIFFERENT STROKES

Like humans, all animals have a genetic make-up. In livestock, it is easy to categorize groups based on their breed and sex characteristics. It is important to be able to recognize and distinguish between the types, breeds, and sexes, and be able to discern ideal type within each breed. This is the next step involved in the livestock judging process and this activity helps youth identify these essential characteristics.

ACTIVITY 3: THE BOTTOM LINE

This activity introduces youth to the livestock industry and allows them to become comfortable with the ever-changing demands placed on producers. It assists with the idea that producers must have goals for production that equate with economic gain or loss. The industry in which animals are expected to perform has the greatest impact on the selection of desirable characteristics.

ACTIVITY 4: EXPRESS YOURSELF

Common terminology is an important consideration when communicating with others in the livestock industry. This activity introduces the basic vocabulary, meanings and the synonyms that will be crucial to understanding and relating to industry demands and for oral reasons.

ACTIVITY 5: WHAT YOU SEE IS WHAT YOU GET!

The process of visual appraisal and selection involves the weighing of good and bad points of the individual animal. This activity introduces this concept and relays that the emphasis which is placed on each characteristic in visual selection depends on species, breed, sex, age and use.

ACTIVITY PROFILES

ACTIVITY 6: JUDGING A CLASS

Evaluating an entire class of animals is much easier when you have a plan. This activity builds upon the skills developed and knowledge gained in the previous activities. It solidifies specific concepts which are an essential part of livestock judging.

ACTIVITY 7: HOW DO I RATE?

Performance data is often confusing to livestock judging members who do not understand its purpose and use in placing a class. This activity provides an explanation and rationale for performance data and offers sample scenarios that youth might see in a contest.

ACTIVITY 8: WHAT'S MY LINE?

Communication is a key to the future. Being able to express yourself, beliefs, goals and opinions is a skill that will have great impact on career goals. This activity enhances communication skills and builds on them for lifelong use.

ACTIVITY 9: WHAT'S YOUR SCORE?

This activity explains the basic scoring system used in most livestock judging events. It involves the use of cuts from a perfect score of 50.

Supplemental Online Resources:

<http://extension.usu.edu/cyberlivestock/html/livestock-judging/>

<http://livestock.colostate.edu/youth/judging/index.html>

<http://www.youtube.com/watch?v=b2kvkbsV6Xk>

<http://www.thejudgingconnection.com/education.php>

<http://www.animal.ifas.ufl.edu/extension/meat/youth/Market%20Hogs%20Eval/Hogs%20All%202010.pdf>

<http://www.animal.ifas.ufl.edu/extension/meat/youth/Market%20Steer%20Eval/Steers%20all%202010.pdf>

<http://www.judging101.com/>

<http://www.onlinesheepshow.com/>

TRAINING A TEAM BASICS

Let's review the sequence of events which should be followed to train a judging team. We will assume that you have the team members identified and there is a limited amount of experience among them. Remember that livestock judging is like any other endeavor, not all youth have the same ability, so do not be impatient with hard working slow learners as they benefit greatly from this experience.

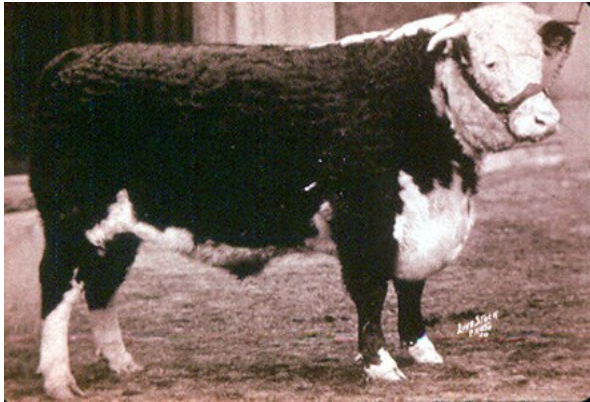
The first steps of teaching animal evaluation and selection (judging) are not necessarily taken in the presence of an animal. There is much that youth must understand prior to actually evaluating a live animal. However, one must understand that judging teams are voluntary and should be fun. When the youth cannot differentiate between "judging" and "school", they will lose interest and quit the team. Keep the mix of fun and education, and you will be able to recruit and retain members.

STEPS OF TEACHING LIVESTOCK EVALUATION

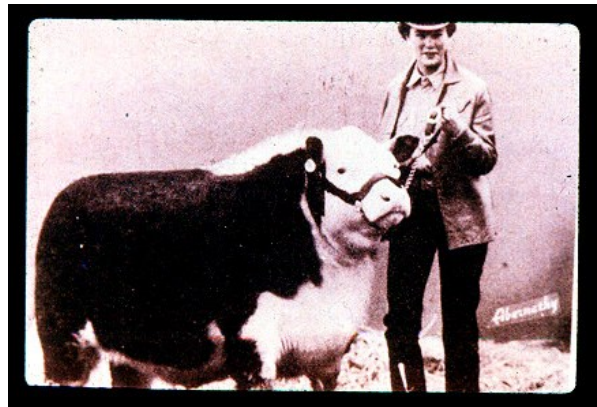
Livestock judging is a science-based art. We certainly have more science incorporated in livestock selection today than ever before, but an element of subjectivity remains when evaluating live animals. There is no equation, magic bullet, or cut and paste scenarios to train youth in livestock judging.

1. Establishment of the ideal animal

- ⇒ Animals are ranked on their value, with the ideal animal having optimum value. Animals with more positive traits (or less negative traits) should be placed above those with more negative traits.
- ⇒ There is an ideal market animal for each meat-animal species. This ideal market animal should utilize as little feed resources as possible and should generate a carcass deemed desirable relative to the current market conditions. These ideals have changed and will continue to change over time, with differences in consumer preference and production practices.
- ⇒ There is also an ideal breeding animal for each species, of both genders. The ideal breeding animal should display the performance, type and reproductive soundness which should allow it to efficiently produce offspring as replacement or market animals. Additionally, animals of different purebred breeds have different genetic strengths and weaknesses, thus the traits of ideal breeding animals differ between breeds.
- ⇒ The changes in type for the ideal Hereford market steer over the past 70 years are depicted on the next page.



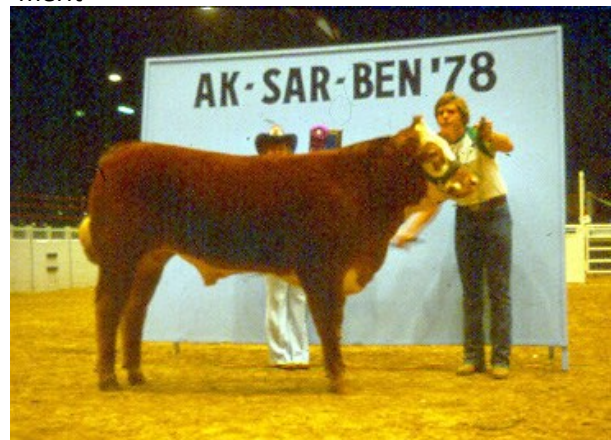
Champion Hereford Steer—1932 International—
Exhibited at 1240 lbs at 19 months of age—Respectable
growth and carcass merit



Champion Hereford Steer— 1953 International
Exhibited at 1005 lbs- Inferior growth and carcass
merit



Champion Hereford Steer—1971 National Western
Stock Show—Exhibited at 1250 lbs—Still very desirable
growth and carcass merit today



High Placing Crossbred Steer— 1978 AK-SAR-BEN Show
Exhibited at 1250 lbs— Inferior carcass merit



Champion Hereford Steer—2007 Ft. Worth Stock Show
Exhibited at 1280 lbs—Desirable growth and carcass
merit

TRAINING A TEAM BASICS

2. Understanding meat-animal production

Students should learn as much as possible about all facets and phases of meat-animal production. A good start can be gained by watching educational DVDs, browsing the Internet, and educational PowerPoint slide shows. Students who understand how all the phases of meat-animal production work together will develop a more thorough understanding of the importance of different traits. The next step is to make as many industry tours as possible. These should not be judging team practice sessions, but true tours complete with a preplanned list of objectives which are given to the tour host before arriving on site. At the conclusion of the tour, be sure to allow time for questions and discussion.

3. Establish the traits which are important to evaluate for breeding and market animals of each species.

Students must know what the traits are, the level of performance that is desired, and how to prioritize traits.

a. Visual Evaluation

Beginning judges need a list of priorities for each type of class which they will evaluate. Create a list of priorities for them to use as a guide. For breeding animals, the prioritization of traits will change with given circumstances.

b. Performance Evaluation and Management Scenarios

Performance records and management scenarios may be provided on classes of breeding animals. This may include the actual performance records, adjusted ratios, or expected progeny differences (EPDs) for growth, reproductive, carcass, or convenience traits. Students will be given scenarios of how the breeding animals will be used in production and what will occur with their offspring.

Students should receive classroom instruction on what different performance records mean and how they should be incorporated with live evaluation and the given management scenario.

4. Establish correct terminology to communicate with others in meat-animal agriculture.

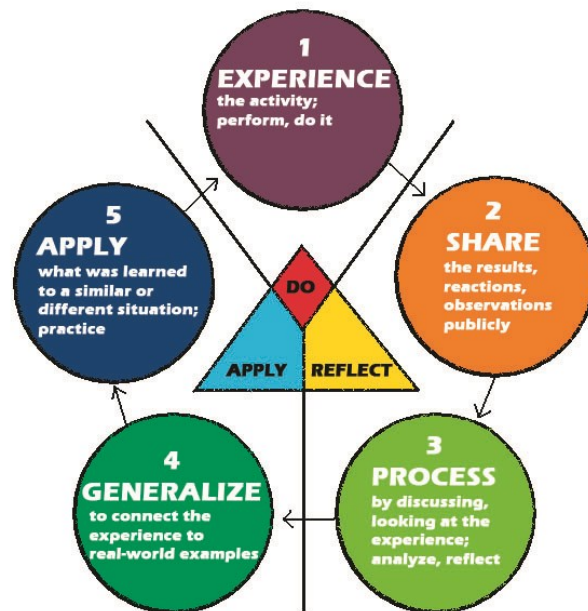
Much of the terminology and many of the phrases used within meat-animal agriculture is unique, so students who do not use the proper terminology will not be understood by others in animal agriculture. Students must know the proper terminology to describe body parts of animals and understand how to properly describe differences between animals. A strong grasp of proper terminology for body parts and functions will be necessary for students to become successful with oral reasons.

5. Teach students to communicate and defend their placing

Oral reasons are a brief (1-2 minute) justification of why animals were placed a given way. Generally, reasons are scored on accuracy, organization, and oral presentation and delivery. Reasons are given to one official in a private setting. Teach students to be natural, comfortable, and conversational when describing their placings to officials.

THE EXPERIENTIAL PROCESS... STEPS AND TECHNIQUES

The 4-H Program has a long history of providing for a cooperative teaching—learning process between adults and youth. The activities in each project lesson strive to involve young people in experiences that require them to interact, analyze, question, reflect, and transfer what they have learned to personal application. The activity comes first, the “learning” comes from the “discovery” of new knowledge and skills as a result of the experience. This is the 4-H “learn-by-doing” process. However, to end with the experience without building upon it through REFLECTING and APPLYING does not help the young person understand the significance of what he/she saw, heard, or did. It is the transfer of this significance from one experience to another that helps young people apply their “learning” in future situations.



DO Each lesson topic identifies the activity or series of activities to DO involving youth in a common EXPERIENCE.

REFLECT At the conclusion of the activities, allow time for the youth to REFLECT (share and process) what they learned from experience. Each lesson guide outlines some key questions to assist you in this process.

APPLY Help youth to APPLY their new knowledge and skill to real life situations. You can do this by helping them to identify key principles that are important for future decisions or personal action. Again, each lesson has outlined a few questions to direct this process.

STEPS

This model illustrates the cooperative teaching-learning process that is used in the 4-H curricula. A further description of the steps in the process may be helpful as you become an active facilitator Livestock Judging!

Experience—Begin with concrete experience. This can be an individual activity or a group experience, but it involves “doing something.”

Share—Next, get the participants to talk about the experience. Share reactions and observations. Let the group talk freely. Acknowledge ideas; listing them visually is helpful. Encourage group members to answer questions posed by others. Avoid having the leader answer questions

Process—Discuss how themes, problems and issues are brought out by the exercise. Speak to specific problems and issues that the group discovers from the exercise or recalls from personal experiences. Look for recurring themes.

Generalize—Find general trends or common truths in the experience. Draw out and identify the principles that are important— that apply to “real life”, not just the activity. This focuses on the key messages.

Apply—Concentrate on how the new learning can be applied to everyday situations. Discuss how issues raised by this activity can be useful in the future. Describe how more effective behaviors can grow out of what is learned.

TECHNIQUES

Use a Variety of Activities

You might consider any one or a combination of the following: tours, interviews, judging, games, pantomimes, skits, puzzles, demonstrations, problems to solve, experiments, using a specific tool, systematic observations, creating a product, visualization, brainstorming, group initiatives, case studies, simulations, surveys leading to an event or activity, or sharing and presenting to others through talks and exhibits.

Develop Questions to Ask

The types of questions asked will vary with the activity, some questions may relate to the content but must go beyond it. If a specific life skill is to be enhanced, then the youth should have the opportunity to become as involved with understanding the life skill as understanding the subject related skill. Questions to help move in this direction may be as straightforward as these examples:

Sharing Questions

1. What did you do?
2. What happened?
3. How did you feel?
4. How did it feel to...?
5. What was most difficult? Easiest?

Processing Questions (Use data generated from sharing questions)

1. What problems or issues seemed to occur over and over?
2. What similar experiences have you had?

Generalizing Questions

1. What did you learn about yourself through this activity?
2. What did you learn about (life skill, i.e., making decisions)?
3. How do the major themes or ideas relate to real life and not just the activity?
4. How did you go about making your decision?

Applying Questions

1. How can you apply what you learned (making decisions) to a new situation?
2. How will the issues raised by this activity be useful in the future?
3. How will you act differently in the future as a result of this activity?

Each of these general questions could be enhanced by adding specific language referring to the experience in a particular project.

OVERVIEW TO ACTIVITIES

Each activity begins with this sidebar outlining the key concept and objectives and skills that is the purpose of the activity, the materials needed, time, and any advance prep you will need to do.

PURPOSE

To become familiar with the principles and procedures of evaluating and selecting the ideal animal for a given situation.

OBJECTIVES

Youth will be able to:

- identify body parts, breeds, sex characteristics and industry demands to develop priorities in evaluating animals based on information available.
- discover all components of a livestock judging event including visual appraisal, interpreting performance data, oral reasons and contest scoring.
- explain industry terminology and enhance communication skills through presentation of oral reasons.

ACTIVITY TIME

Activity time will vary depending upon number of youth involved. Most activities are approximately 1½ hours.

ADVANCED PREPARATION

Any advance preparation that you will need to do is noted in this side bar.

Each activity outlines begins with the EXPERIENCE—what you do with the youth—here's the summary of all activities in the manual.

DO —Learning New Knowledge and Skills

- Discover animal body parts and proper terminology in PARTS IS PARTS.
- Investigate species breeds and sex characteristics in DIFFERENT STROKES.
- THE BOTTOM LINE introduces the importance of industry and individual demands in livestock judging.
- Discover industry priorities through WHAT YOU SEE IS WHAT YOU GET!
- EXPRESS YOURSELF improves communication skills, develops memory skills and instills confidence.
- JUDGING A CLASS ties the knowledge gained together.
- Analyze performance data in HOW DO I RATE?
- WHAT'S MY LINE? introduces the contest component oral reasons.
- Discover the scoring system for livestock judging events in WHAT'S YOUR SCORE?

REFLECT— *Sharing and Critical Thinking about Experiences*

Then the activity provides you with questions(and answers in bold) to assist you with reflection —assessing what youth have learned. Here are some questions to use for the final review once you have completed all the activities in the manual.

- What parts have a similar name and location on all three species?
loin, cannon bone, knee, hock, pastern
- Why is it important to identify the body parts?
the knowledge of body parts is an important foundation of knowledge to build on within the livestock industry and judging events. You will use this knowledge to communicate with others, evaluate animals and understand how animal parts are put together in the live animal.
- How are breeds and species different?
A breed is a group of animal with similar traits within a species
- What is the bottom line in the livestock industry?
Profitability
- Do industry goals affect the individual producer?
yes, the producer must know what kind of animal the industry demands in order to raise a marketable product.
- Why are some animal cuts more expensive than others?
cuts that contain more connective tissue (in lower leg and shoulder) will not be as tender as cuts found in the loin and upper regions of the animal. These less tender cuts often require more cooking time and have to be cooked in a moist cooking method (i.e. pot roast). For this reason, people are willing to pay the extra money to have the cut that is tender and requires less cooking time.
- Why is there a variety of ways to express the same thing?
to provide ways to express a certain trait in almost any situation; to give some variety to a set of reasons.

OVERVIEW TO ACTIVITIES

REFLECT continued

- When selecting a market animal, which trait is most important?
the animal's potential carcass value, as evaluated by muscling, external fatness, and animal weight.
- Which traits are especially important if you are breeding a bull to a group of yearling heifers?
a low birth weight record and desirable calving ease score are crucial in this situation, because heifers usually have a difficult time delivering large calves and the calves and/or heifers could die as a result of calving problems (called dystocia).
- What is an official “cut” when judging a class of animals?
The points that are subtracted when the animals are placed incorrectly

APPLY— *Act on New knowledge*

The ultimate outcome from any of the 4-H learning experiences and activities is for youth to apply the knowledge and skills to future situations. Each of the activities provide with ideas to help youth apply what they have learned in a variety of ways—from completing activity tasks, being able to engage in a quality discussion within the industry, applying the knowledge to their daily life. For this particular project being successful at judging and selecting quality livestock as well as applying the same principles and practices to any decision-making opportunities in future.

Here are some sample ideas for wrap-up and application activities for youth at the conclusion of their livestock judging activity sessions.

- Use blank copies of each Parts of the Animals to test youth's memory of the parts at future meetings.
- Complete the FULL OF CHARACTER Crossword puzzle.
- Take an industry tour of an animal operation.
- Visit the meat department at a local grocery store and inspect the meat cuts and their prices
- Show a picture of an animal and have the youth describe it on its own merit using proper terminology.
- Set up a field trip to a ranch, livestock market, farm or fair to evaluate livestock.

Activity 1

OBJECTIVES:

For youth to:

- Identify body parts of cattle, swine and sheep.
- Identify terminology associated with species parts.

LIFE SKILLS:

- Working with groups.
- Acquiring, analyzing and using information.

MATERIALS: Two copies of PARTS OF THE ANIMALS pieces

Two copies of each BLANK PARTS OF THE ANIMALS Sheets

Hook and Loop tape

Copies of BLANK PARTS OF THE ANIMALS for each youth

TIME: 1½ Hours

SETTING: A comfortable room with tables and chairs.

ADVANCE PREPARATION:

Blow up two copies of each BLANK PARTS OF THE ANIMALS Sheets, attach loop tape near bullets for parts identification. Cut out Parts pieces and attach hook tape to back.



PARTS IS PARTS

BACKGROUND BASICS...

All animal body parts have a specific function and are in some way necessary for the daily survival of that animal. There are parts for locomotion, support, sensory, reproduction and digestion.

Parts for locomotion purposes are generally found in the lower leg of the animal. Muscles and bones work together to provide movement. Some of the common bones/joints include the pastern, hock, and knee; some of the muscle groups include the forearm, shoulder and stifle regions.

Support parts are muscle groups that support the locomotive parts and do not require as much active muscle movement. Examples of support muscles are the loin and rib. Since these parts do not require active movement, they have less connective tissue and ligaments, and therefore provide more tender retail cuts.

Sensory parts are the easiest for the beginner to learn, as they are very similar in type and function to our own. They include the ears, eyes, and nose (snout or muzzle).

Reproductive parts are different for each species and sex. This will be discussed more in Activity 2, but some of the reproductive parts are the teats, testicles and vulva.

Most parts used for digestion are found inside of the animal, however, the mouth, throat, and anus are visible parts that are used in digestion.

INTRODUCTION

Adequate knowledge of live animal body parts is essential to the evaluation of livestock and participation in the livestock industry. Much of what you will learn about judging relies on this basic knowledge. Some body parts have the same name and location on cattle, swine and sheep. Other parts indicate a similar location on each of the species, but have differing terminology for each (i.e. quarter, ham, leg), while others are species specific (i.e. snout, dock). Still, other parts are called species specific parts and are only found on one of the species (i.e. snout). Today we are going to identify the body parts, and learn about the terminology and functions of those parts.

DO *PARTS IS PARTS RELAY*

- Divide the youth into two teams and have them form two lines.
- Place the two blank outlines of the beef animal on the wall at the front of the room. Be sure to allow about ten feet between the two outlines.
- The object of the game is to see which team can correctly place all parts of the animal in the shortest amount of time.
- Place one adult at the front of each line. Have them give one body piece to each youth as they approach the front of the line.
- Have a referee by the outlines, if a part is placed incorrectly, it should be removed and the youth should find the correct spot.
- When they find the correct place on the animal for their part, they may go to the back of the line.
- Replay the game using a different animal until all 3 have been used.
- Divide the youth into groups of four.
- Hand out blank animal sheets, one of each species, and pens/pencils to each youth.
- Have youth fill in the correct parts of each animal species as a group.
- Have youth compare their sheets with the animal outlines. Allow youth to correct any mistakes.



REFLECT

- What body parts did you have difficulty remembering?
- Did you use memory association (mnemonics) to help you remember certain parts? (ie. pastern is past the knee)
- What parts have a similar name and location on all three species?
loin, cannon, knee, hock, pastern
- Why is it important to identify the body parts?
the knowledge of body parts is an important foundation of knowledge to build on within the livestock industry and judging events. This knowledge can be used to communicate with others, evaluate animals and understand how animal parts are put together in the live animal.

APPLY

- What is the purpose of differing terminology across the species?
people involved with each species have developed terminology which is specific to the parts use and essential to traditional communication.
- What body parts in each of the species are used for locomotion purposes?
lower leg muscles and bones are the primary parts involved in locomotion.
- For support purposes?
The loin, ribs, and flank are just a few of the parts that are involved in supporting the locomotion parts.
- What animal parts are the same for humans?
examples: sensory parts (eyes, ears, tongue)

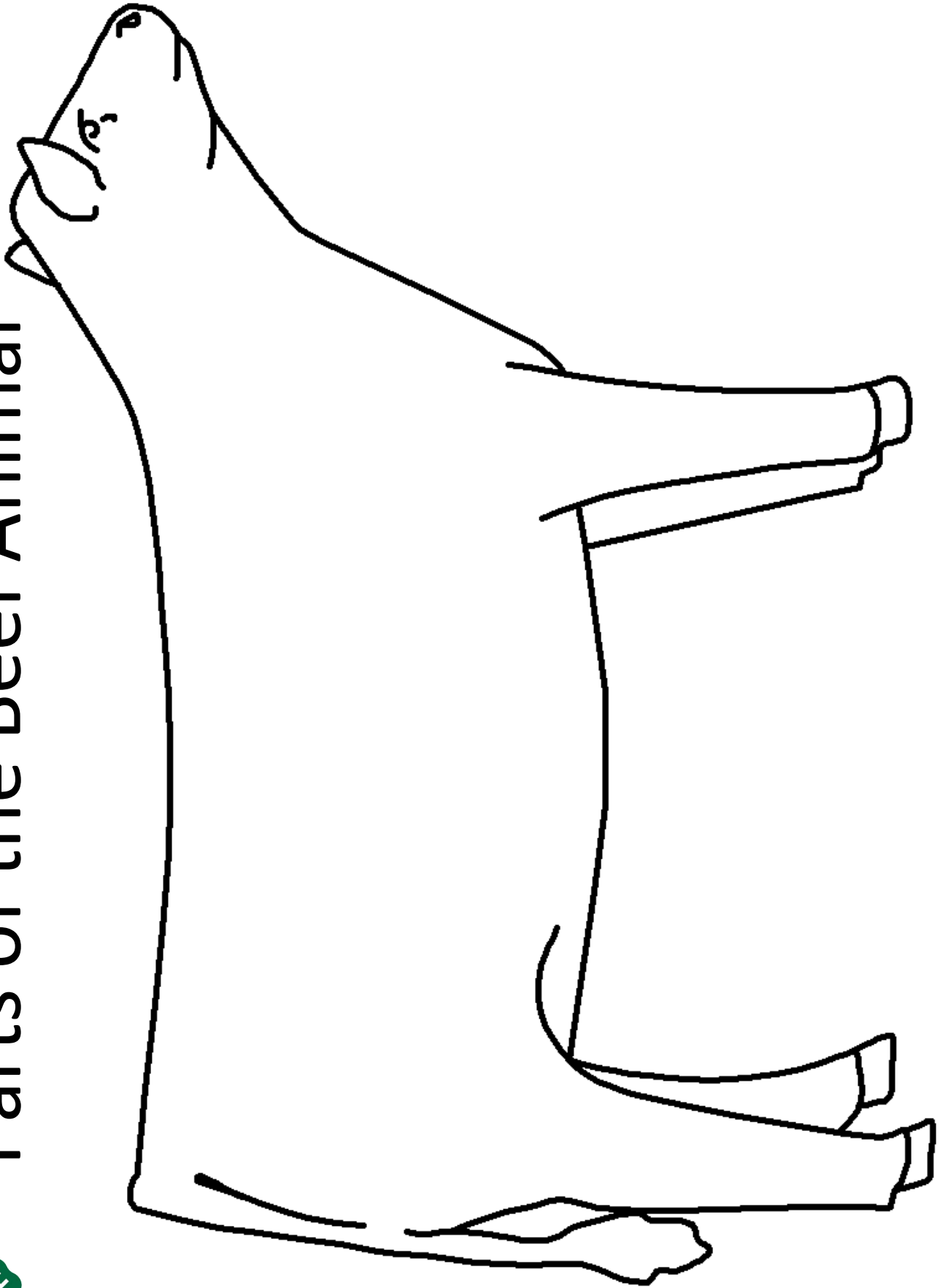


Parts of the Beef Animal

Rump	Tailhead	Pins
Quarter	Hock	Hip
Flank	Top	Rib
Hooks	Loin	Shoulder
Forearm	Knee	Cannon Bone
Foot	Heel	Brisket
Pastern	Neck	Rib Shape
	Poll	



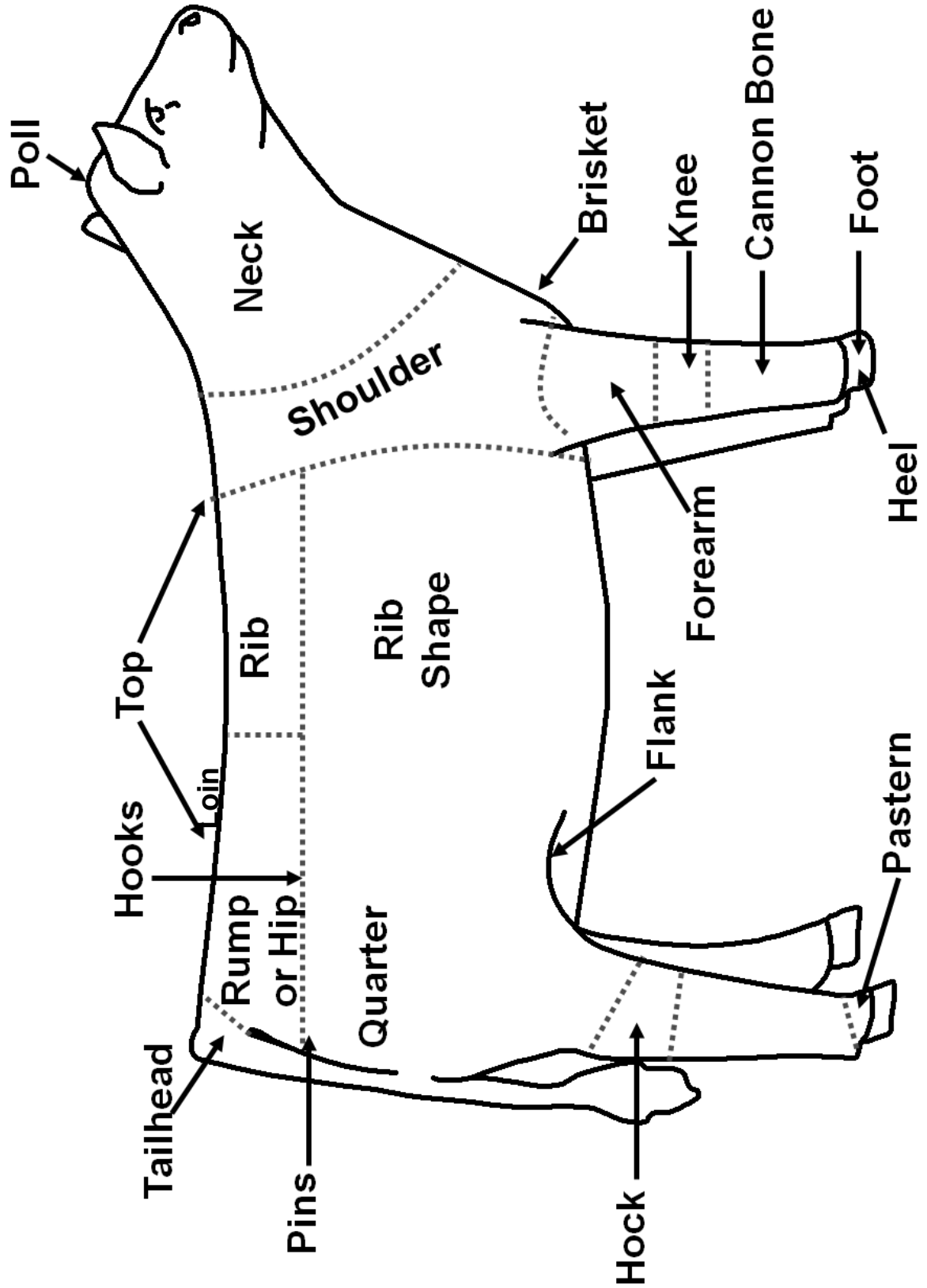
Parts of the Beef Animal





Parts of the Beef Animal

Answer Sheet

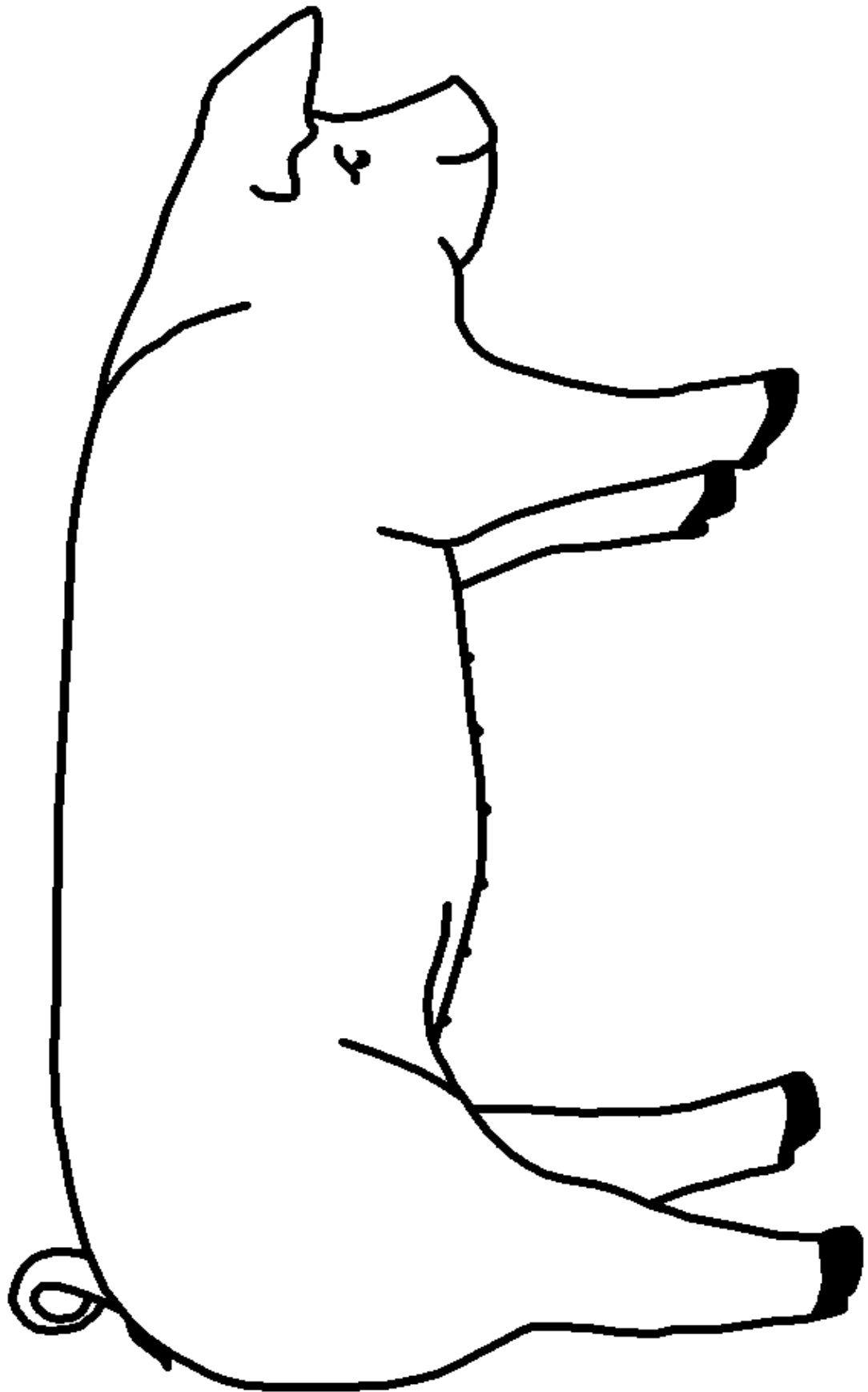


PARTS OF THE HOG

Shoulder	Ham	Underline
Hock	Hip	Rib Shape
Flank	Foot	Loin
Top	Jaw	Elbow Pocket
Cannon Bone	Pastern	Neck
Jowl	Knee	Head
	Dew Claw	



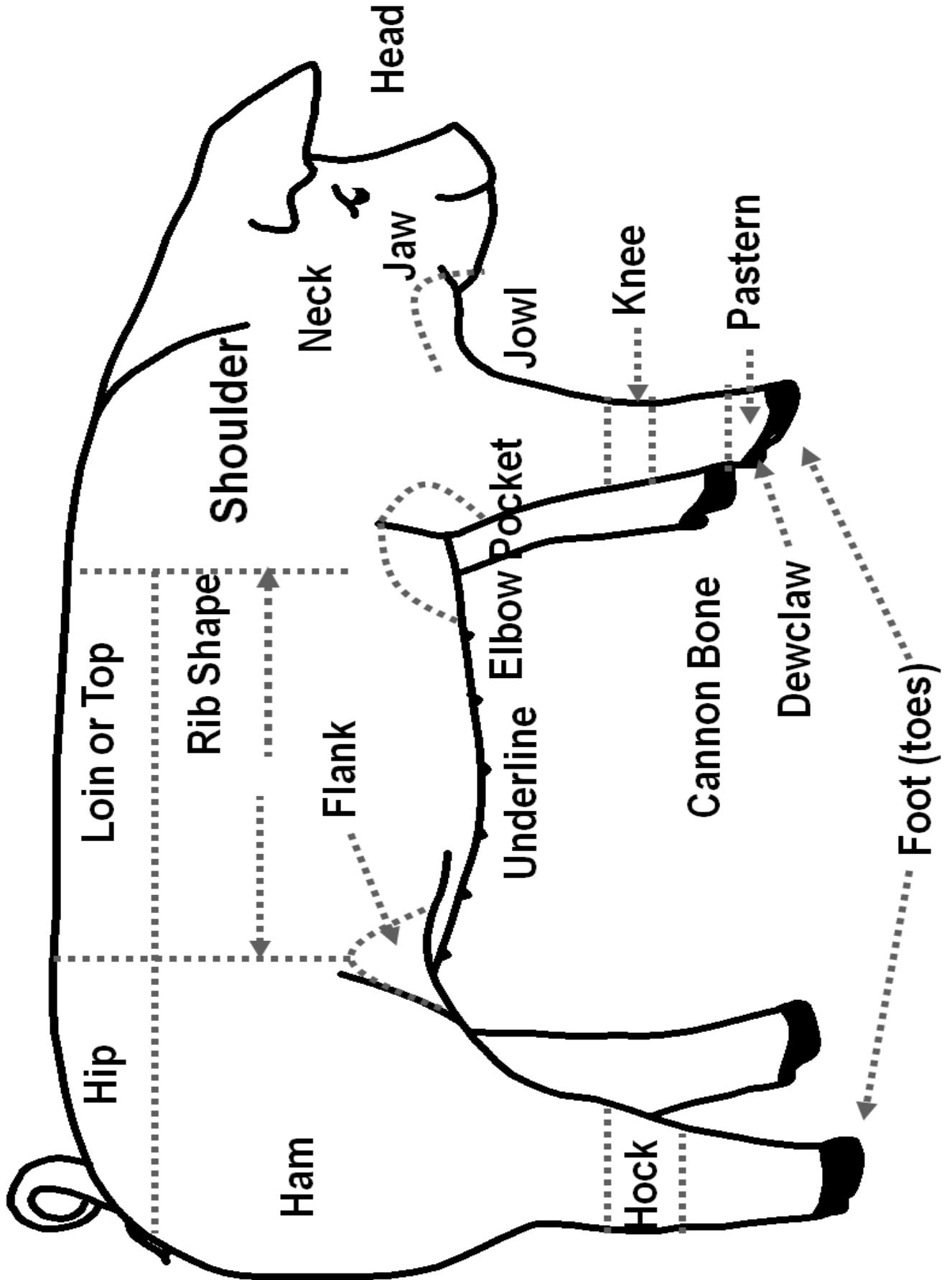
Parts of the Hog





Parts of the Hog

Answer Sheet

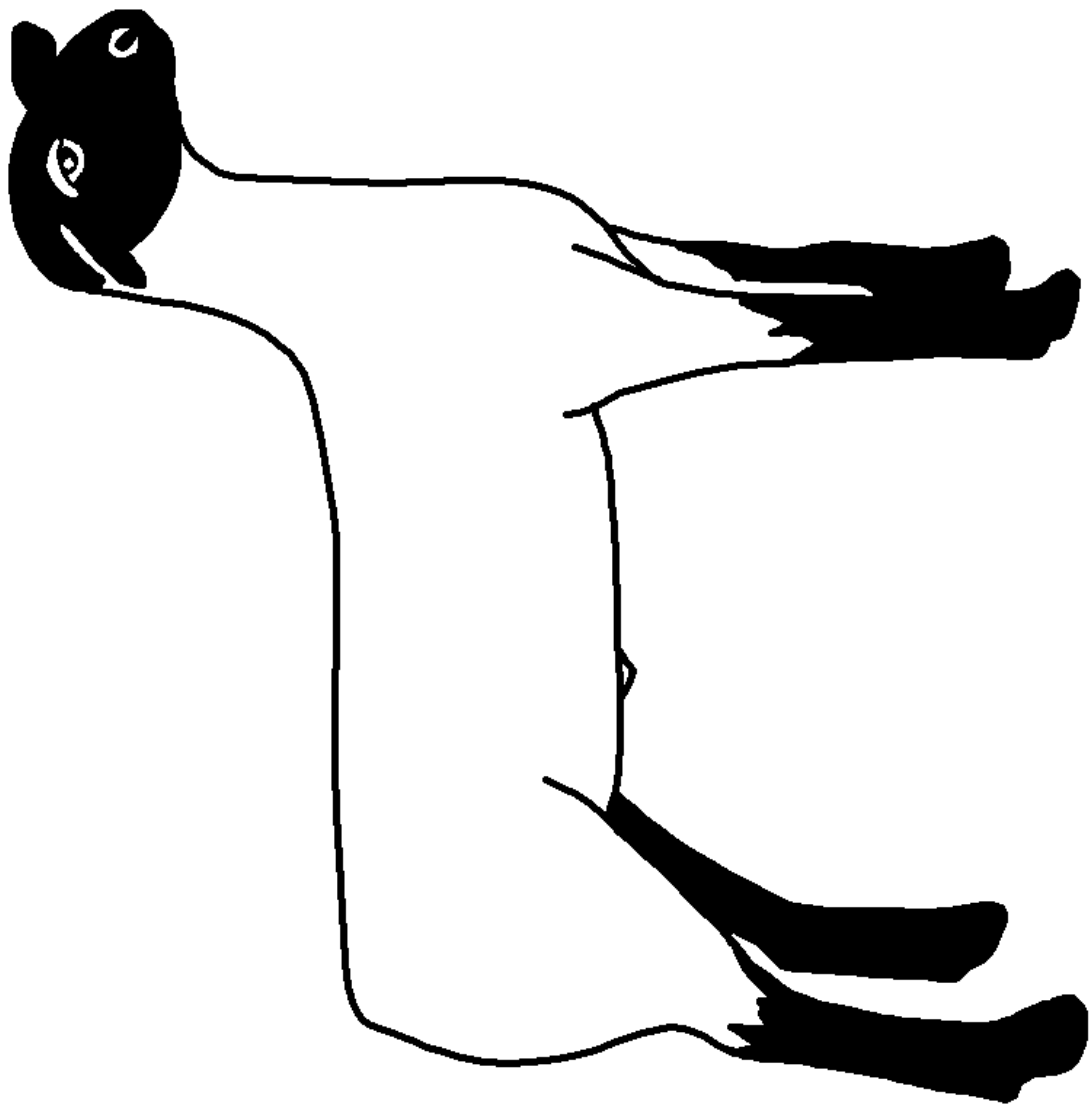


PARTS OF THE SHEEP

Hock	Top	Neck
Shoulder	Neck	Top Of Shoulder
Rack	Loin	Hindsaddle
Rump	Dock	Flank
Twist	Leg	Hock
Pastern	Forearm	Cannon Bone
	Breast	



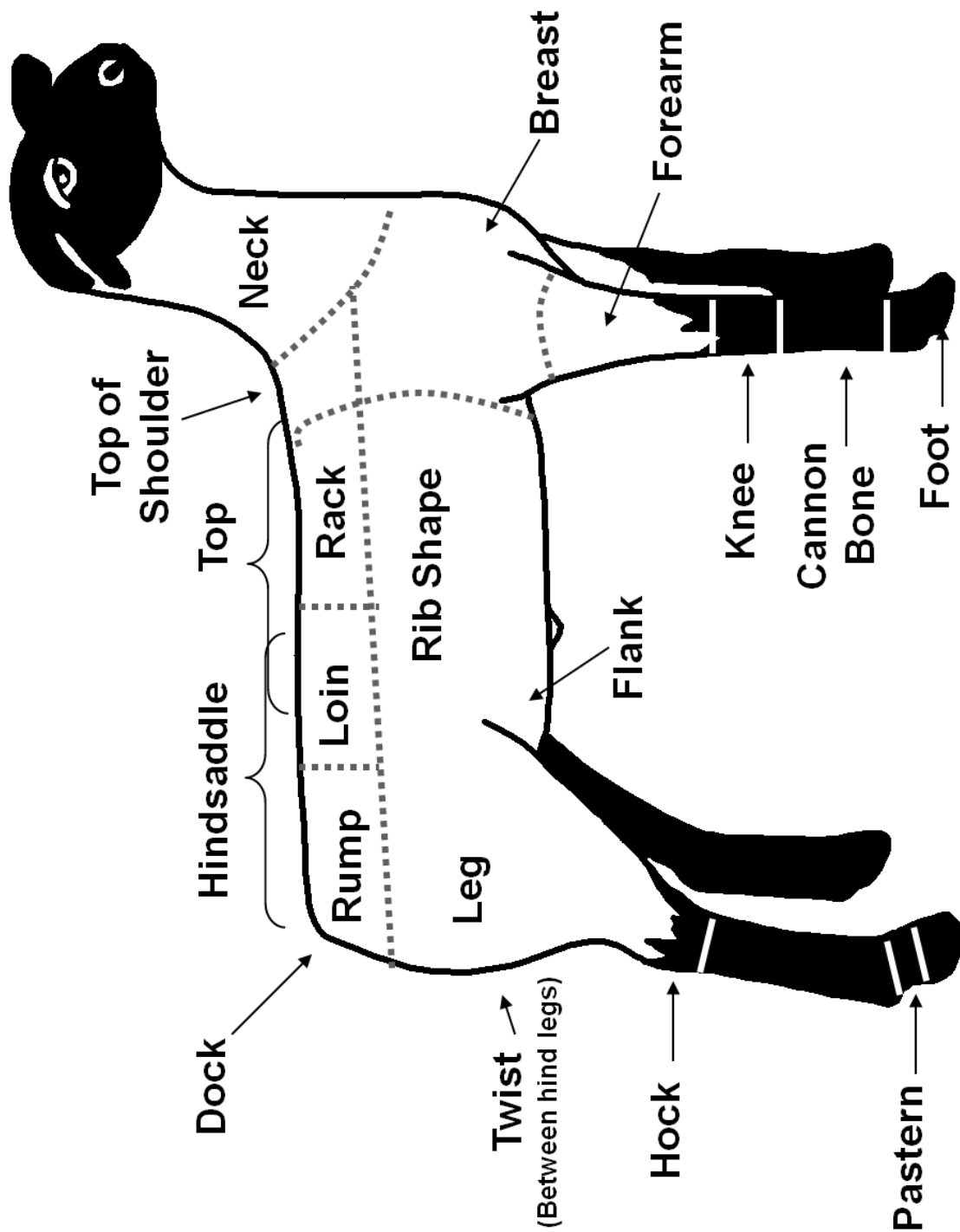
PARTS OF THE SHEEP





Parts of the Sheep

Answer Sheet



Activity 2

OBJECTIVES: For youth to:

- distinguish between breeds within a species.
- identify sex characteristics within a species.

LIFE SKILLS:

- Acquiring, analyzing and using information.
- Communicating and relating to others.

MATERIALS:

Copy of BREED IDENTIFICATION CARDS

Copy of BREED CHARACTERISTICS CARDS

Copies of FULL OF CHARACTER crossword puzzle for each youth

TIME: 1½ Hours

SETTING: A comfortable room with tables and chairs.

ADVANCE PREPARATION:

Cut out BREED IDENTIFICATION and BREED CHARACTERISTICS CARDS. Write to breed associations requesting pictures of the breed. Pictures of the common breeds will help the youth to recognize breed characteristics.



DIFFERENT STROKES

BACKGROUND BASICS...

A breed is defined as a group of animals with a common origin which are distinguished by characteristics within a species. Breed character is defined as the characteristics that allow the breed of the individual animal to be easily determined. Different purebred breeds have different genetic strengths and weaknesses.

The offspring or progeny of different purebred breeds result in an animal that has genetic advantages compared to its parents. This is called, hybrid vigor or *heterosis*.

Hog Breeds

The eight purebred breeds of hogs most utilized in the United States are the Landrace, Yorkshire, Duroc, Hampshire, Berkshire, and Chester White, Poland China and Spotted breeds.

Generally, the three white breeds—Yorkshire, Landrace, **and** Chester White—excel at mothering or maternal traits, compared with the remaining breeds which have primarily been selected for growth, and carcass merit, or terminal traits.

More information on the eight major purebred hog breeds can be found at <http://www.ansi.okstate.edu/breeds/swine/>

Cattle Breeds

Numerous cattle breeds give influence to the U.S. beef industry. Cattle breeds actually represent animals from two different species, *Bos taurus* and *Bos Indicus*.

The *Bos Taurus* breeds can be categorized into three groups: Dairy, British, and Continental. The *Bos Indicus* breeds used within the U.S. are categorized as American breeds. More information on these and other breeds can be found at <http://www.ansi.okstate.edu/breeds/cattle/>

The Dairy breeds—Ayrshire, Brown Swiss, Guernsey, Holstein, Jersey, and Milking Shorthorn—are primarily utilized for milk production, but castrated bull calves certainly contribute to the beef industry.

The British breeds—Angus, Red Angus, Hereford, and Shorthorn—excel at reproductive efficiency, and marbling deposition or the amount of taste fat within the muscle tissue.

The Continental breeds—Charolais, Chianina, Gelbvieh, Limousin, Maine-Anjou, Salers, and Simmental—generally possess a large mature size, rapid growth rate, and heavy muscling. Each breed displayed distinct color patterns when imported into the U.S., however, the Charolais is now the only Continental breed which does not have black-hided animals.

American breeds—American Brahman, Braford, Brangus, Beefmaster, Red Brangus, and Santa Gertrudis—are all *Bos indicus* breeds of beef cattle developed in the United States. These cattle are known for heat tolerance and resistance to parasite populations. Most of these breeds are a result of crossing two or more breeds.

Sheep Breeds

There are more breeds of sheep than any other meat-animal species. More information on sheep breeds can be found at <http://www.ansi.okstate.edu/breeds/sheep/> Sheep breeds can primarily be categorized into three groups: hair, wool, and meat breeds.

The two primary hair breeds—Dorper and Katahdin—are both easy care breeds which do not require shearing, primarily having hair rather than wool. The Merino, Rambouillet, and Columbia breeds are wool breeds specifically described as finewools which generate a high quality fleece which has a greater processing value for garments. The Lincoln and Cotswald breeds are also wool breeds known as longwool breeds which have a longer fleece. The primary meat breeds used in the U.S. are the Dorset, Hampshire, Montadale, Oxford, Southdown, and Suffolk. These breeds are much faster growing and have greater carcass merit than the wool breeds. The fleece quality is much poorer compared with the wool breeds. These breeds are often referred to as medium-wool breeds.

The table below shows the correct gender terminology within each of the species. These terms will often be combined to give even more information about a specific animal (i.e. heifer calf, wether lamb).

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



INTRODUCTION

Like humans, all animals have a genetic make-up. In livestock, it is easy to categorize groups based on their breed and sex characteristics. It is important for you to be able to distinguish among the types, breeds, and sexes. Ideal types and desirable characteristics vary widely among the sexes, breeds and use of the animal. Industry demands have the greatest impact on the desirable types within a breed or sex category and these will be discussed further in Activity 3. Today we will explore the different breed and sex characteristics within each species and learn to identify some of the more prominent traits of each. You will also get to know each other and learn to work together as a team through the "What Am I?" game.

DO

PLAY WHAT AM I?

- Divide youth into two groups
- Give each youth in the first group one BREED IDENTIFICATION Card. The youth in the second group each get one BREED CHARACTERISTICS clue card.
- Have the youth circulate around the room finding the match to their breed characteristics clue or their breed card. This can be done by asking yes/no questions, by process of elimination and by the members helping each other find the person with their matching card.
- Have youth sit down when they find their matches.
- After everyone is seated, have each pair stand up and tell the group about the characteristics of their breed. If the information is incorrect, have youth continue their search.
- Be sure that all the breeds and characteristics are covered.



REFLECT

- Did you have difficulty finding your breed's characteristics or breed identification?
- Which sheep breed has the greatest fleece quality?

Merino

- List some similarities among the swine breeds.

Example: Poland China and Berkshire each are black with six white points.

- How are American breeds of beef cattle different from the British or Continental breeds?

American breeds were all developed here in the US and are a hybrid cross of at least two breeds. These animals are more adapted to tropical environments than British or Continental breed cattle.

- What is the purpose of crossing the breeds during reproduction?

This results in heterosis or hybrid vigor.

- Does the proper development of sexual characteristics influence the animal's net worth? Why?

yes. the improper development of necessary sexual characteristics could produce an animal who is infertile or has other reproductive malfunctions and is of very little use to the producer. Development of desirable sexual characteristics could influence whether the animal gets chosen for reproductive or slaughter purposes, therefore having an influence on the animal's net worth.

- Did you make any friends or meet someone new?

APPLY

- Visit an exhibit of animals (Fair, youth show...) or a local ranch or farm. Discuss the characteristics and positive/negative attributes of each breed that you encounter, as well as identify the animal's sex.
- Complete the FULL OF CHARACTER Crossword puzzle.



Breed Identification

Angus —English, black, polled cattle breed, known for meat quality and reproductive efficiency.

Charolais —Continental cream colored cattle breed, known for growth, which originated in France.

Oxford —Meat sheep breed which is a Cotswold and Hampshire hybrid.

American Brahman — *Bos indicus* (cattle of India) cattle breed that is grey or red, has a large hump and drooping ears. Known for heat tolerance and parasite resistance.

Berkshire —Black hog breed with six white points, erect ears, known for meat quality.

Dorper— Hair sheep breed known for meat yield that is solid white or white with a black head. Developed in S. Africa.

Shorthorn —English cattle breed that can be red, white, or roan.

Landrace —Maternal white hog breed with very large, floppy ears.

Beefmaster —American, *Bos Indicus* cattle breed that is Brahman, Hereford and Shorthorn. Developed at the Lasater Ranch.

Montadale—Meat sheep breed which is solid white. Developed in Ohio.

Braford —American, *Bos Indicus* cattle breed developed in Florida which is a Hereford and Brahman hybrid.

Brangus —American, *Bos Indicus* cattle breed which is an Angus and Brahman hybrid.

Chianina —Continental cattle breed from Italy known for extreme frame. Original animals were solid white.

Dorset —Meat sheep breed which is solid white and will often produce more than one lamb crop per year.

Hampshire —Terminal hog breed which is black with a white belt around the shoulders, known for meat yield.



Chester White —White hog breed with medium sized, droopy ears, best meat quality white breed.

Katahdin—Hair sheep breed that is solid white. Developed in Maine.

Spotted —Terminal hog breed with large black spots. Primary current use- show pig genetics.

Yorkshire —Maternal white hog breed of hogs with erect ears.

Shropshire—Meat sheep breed appearing similar to Hampshires, with a more moderate frame and more significant wool cap.

Gelbvieh —Continental cattle breed from Germany known for maternal performance. Original animals were red.

Hereford —English cattle breed with a red body and white face and underline.

Southdown —Meat sheep breed that is mousey-colored and smaller framed, but produces a well-muscled carcass.

Maine-Anjou —Continental cattle breed from France, currently used extensively in show cattle genetics. Original animals were red and white spotted.

Salers—Most recent continental cattle breed imported from France. Original animals were dark red.

Red —Red colored American, *Bos Indicus* cattle breed that is an Angus and Brahman hybrid.

Cotswald —Long wool sheep breed with more moderate mature size.

Simmental —Continental cattle breed from Switzerland known for milk production and growth. Original animals were red and white.

Columbia—Wool sheep breed developed by USDA which is a Lincoln and Rambouillet hybrid.



Santa Gertrudis—American, *Bos Indicus* cattle breed that is a Shorthorn and Brahman hybrid. Developed in at the King Ranch in Texas.

Suffolk—Meat sheep breed with largest number of U.S. registrations. Has black hair on their face & legs.

Rambouillet —Wool sheep breed which is extensively utilized in western U.S. range sheep production.

Red Angus —English, polled cattle breed, which are red in color.

Poland China —Terminal black hog breed with six white points and droopy ears. Primary current use show pig genetics.

Hampshire —Very popular sheep breed with wool on their black face and legs.

Merino —Wool sheep breed with highest quality fleece.

Limousin —Continental breed from France known for meat yield. Original animals were red.

Duroc —Terminal breed of red hogs with droopy ears. Known for rapid growth.

Lincoln —Long wool sheep breed which has large mature size.

Simbrah — American, *Bos Indicus* cattle breed that is a Simmental and Brahman hybrid.



FULL OF CHARACTER

Breed Crossword Puzzle

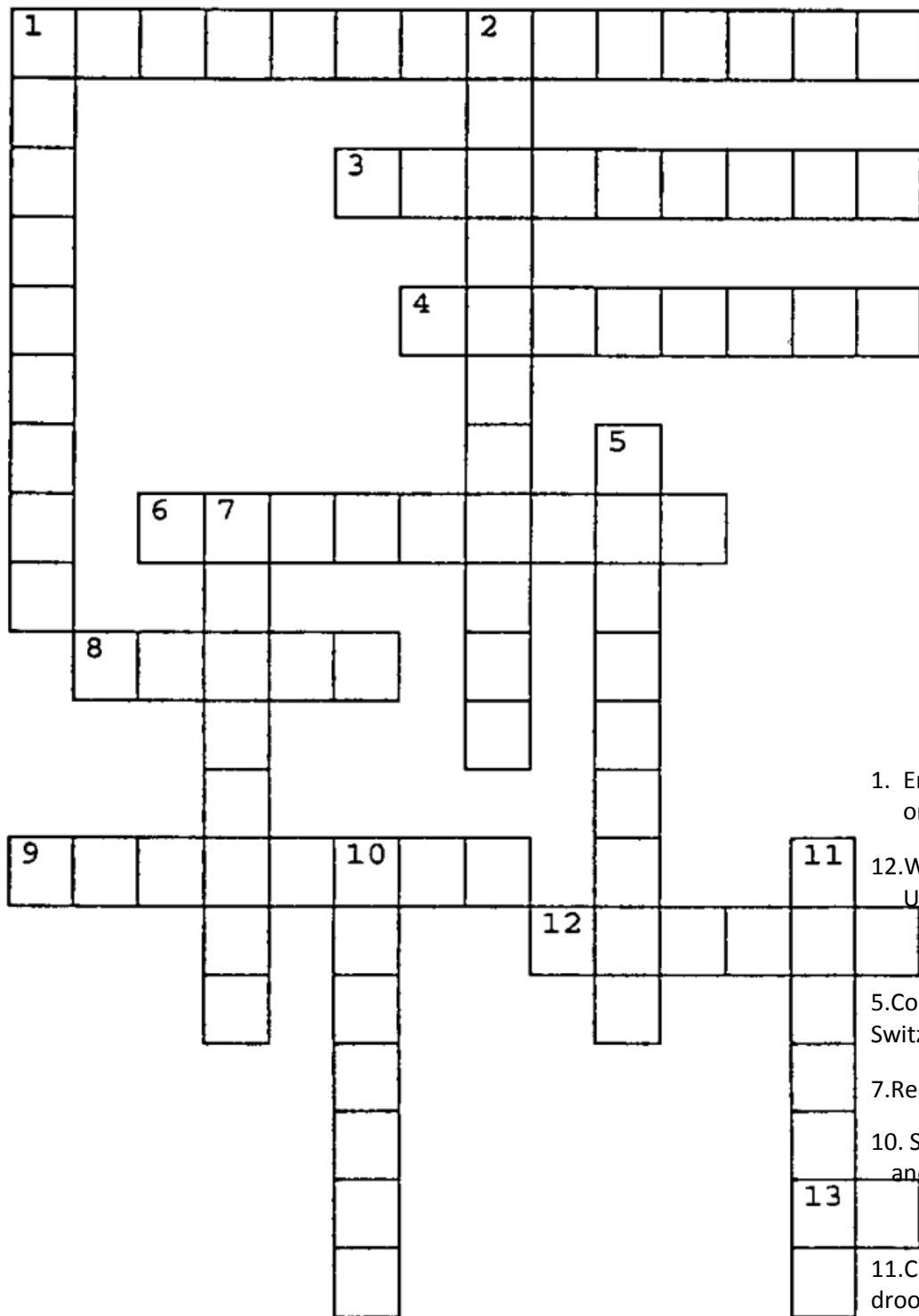
CLUES:

ACROSS

1. Beef cattle breed developed in at the King Ranch in Texas, from Shorthorn and Brahman.
3. Black hog with white belt.
4. Maternal hog breed with large, erect ears and white bodies.
6. Cream colored cattle breed from France.
8. Red hog with droopy ears.
9. Terminal cattle breed from France known for meat yield.
12. White hog breed with very large, floppy ears.
13. Black, polled cattle breed with most U.S. registrations.

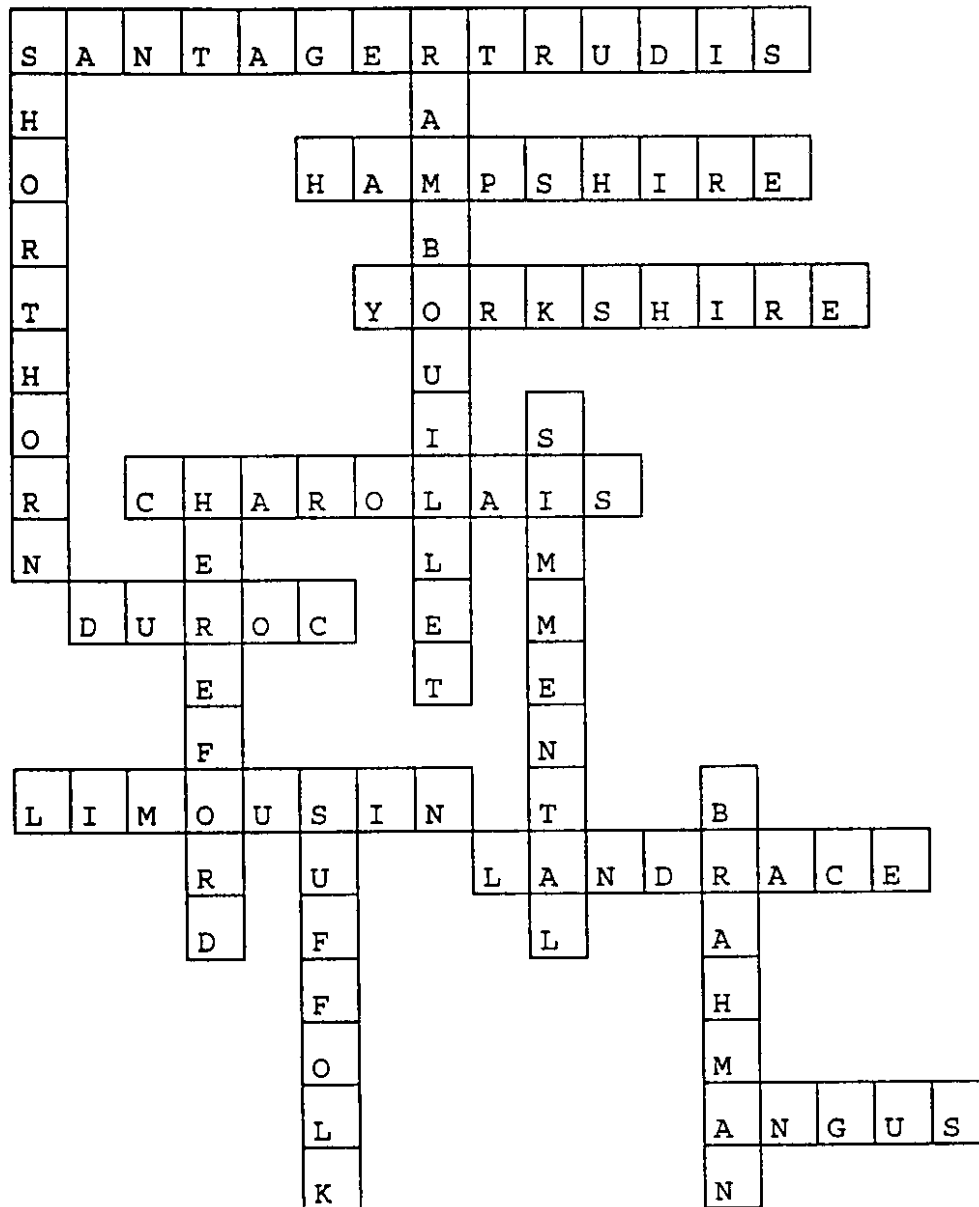
DOWN

1. English breed which can be red, white or roan.
12. Wool breed used extensively in U.S. production.
5. Continental cattle breed from Switzerland.
7. Red cattle with white face markings.
10. Sheep with hair on its back legs and face.
11. Cattle breed with large hump and drooping ears.



FULL OF CHARACTER CROSSWORD

Answer Key



BREED IDENTIFICATION CARDS

ANGUS	BRAHMAN	BEEFMASTER
BRAFORD	BRANGUS	BERKSHIRE
CHAROLAIS	CHIANINA	CHESTER WHITE
COTSWALD	COLUMBIA	DORPER
DORSET	DUROC	GELBVIEH
HEREFORD	HAMPSHIRE	HAMPSHIRE
KATAHDIN	LIMOUSIN	LINCOLN
LANDRACE	MAINE-ANJOU	MERINO
MONTADALE	OXFORD	POLAND CHINA



RAMBOUILLET	RED ANGUS	RED BRANGUS
SALERS	SANTA GERTRUDIS	SHORTHORN
SIMMENTAL	SOUTHDOWN	SPOTTED
SUFFOLK	YORKSHIRE	SHROPSHIRE
	SIMBRAH	

BREED CHARACTERISTIC CARDS

American cattle breed that is $\frac{1}{2}$ Brahman, $\frac{1}{4}$ Hereford & $\frac{1}{4}$ Shorthorn.	American cattle breed that is a Hereford and Brahman hybrid.
Black cattle breed that is an Angus and Brahman hybrid.	White cattle breed known as the world's largest breed of cattle.
Terminal hog breed which is black with a white belt around the shoulders, known for meat yield.	Meat sheep breed which is solid white and will often produce more than one lamb crop per year.
Red colored American cattle breed that is an Angus and Brahman hybrid.	Hair sheep breed known for meat yield that is solid white or white with a black head.
Hair sheep breed that is solid white.	Wool sheep breed developed by USDA which is a Lincoln and Rambouillet hybrid.
Long wool sheep breed which has large mature size.	Meat sheep breed which is a Cotswold and Hampshire hybrid.
Meat sheep breed that is mousey-colored and smaller framed,	Long wool sheep breed with more moderate mature size.
Meat sheep breed which is solid white. Developed in Ohio.	Sheep breed appearing similar to Hampshires, with a more moderate frame and more significant wool cap.



BREED CHARACTERISTIC CARDS

White hog breed with medium sized, droopy ears.	American breed that is a Simmental and Brahman hybrid.
White hog breed with erect ears.	American cattle breed that is a Shorthorn and Brahman hybrid.
Continental cattle breed from Switzerland known for milk production and growth.	Wool sheep breed which is extensively utilized in western U.S. range sheep production.
Sheep breed with and no wool on their black face & legs.	Black hog breed with six white points and droopy ears. Primary current use-show pig genetics.
English, polled cattle breed, which are red in color.	Large framed meat sheep breed with wool on their black face & legs.
Red cattle breed with a white face	Continental breed from France known for meat yield.
Wool sheep breed with highest quality fleece.	Continental cattle breed from Germany known for maternal performance. Original animals were red.
Red hog breed with droopy ears that are known for fast growth rate	Terminal black hog breed with six white points and droopy ears.
Most recent continental cattle breed imported from France. Original animals were dark red.	Continental cattle breed from France, currently used extensively in show cattle genetics.
Black, polled cattle breed.	Cream colored Continental cattle breed.
Black hog breed with six white points, erect ears.	Cattle breed that is usually grey, have a large hump and drooping ears.
English cattle breed that is red, white or roan.	White hog breed with very large, droopy ears.

SWINE BREED ASSOCIATIONS

American Landrace Assn., Inc.

Hampshire Swine Registry

American Yorkshire Club, Inc.

United Duroc Swine Registry

are collectively called

National Swine Registry

P.O Box 2417

West Lafayette, IN 47996-2417

<http://www.nationalswine.com/>

American Berkshire Assn.

P.O Box 2436

West Lafayette, IN 47996 www.americanberkshire.com

Chester White Swine Record Assn.

Poland China Record Assn.

National Spotted Swine Record, Inc.

are collectively called

Certified Pedigreed Swine

Box 9758

Peoria, IL 61612-9758 www.cpsswine.com



CATTLE BREED ASSOCIATIONS

American Angus Association

3201 Frederick Ave.
St. Joseph, MO 64501
www.angus.org

American Brahman Breeders Assn

3003 South Loop West, Suite 520
Houston, TX 77054
www.brahman.org

International Brangus Breeders Assn.

5750 Epsilon Dr.
San Antonio, TX 78249
www.int-brangus.org , www.gobrangus.com

American-International Charolais Assn.

11700 NW Plaza Circle
Kansas City, MO 64153
www.charolaisusa.com

American Chianina Assn.

P.O. Box 159
Blue Springs, MO 64015
www.chicattle.org

United Braford Breeders

P.O. Box 14100
Kansas City, MO 64101
www.brafords.org

Beefmaster Breeders United

6800 Park Ten Blvd.
Suite 290 West
San Antonio, TX 78213
<http://www.beefmasters.org/>

Red Angus Assn. of America

P.O. Box 776
Denton, TX 76201

American Gelbvieh Assn.

311 Livestock Exchange Building
Denver, CO 80216
www.gelbvieh.org

American Hereford Assn.

PO Box 014059
Kansas City, MO 64101
www.hereford.org

North American Limousin Foundation

100 Livestock Exchange Building
4701 Marion Street
Denver, CO 80216
www.nalf.org

American Maine-Anjou Association

204 Marshall Road
PO Box 1100
Platte City MO 64079-1100
<http://www.maine-anjou.org/>

American Salers Association

19590 E. Mainstreet
#202 • Parker, CO 80138
<http://www.salersusa.org/>

American Simmental Association

Simbrah Registry
1 Simmental Way
Bozeman, MT 59715-9733
<http://www.simmental.org/>

American Red Brangus Association

3995 East Hwy. 290
Drippings Springs, TX 78620
<http://www.americanredbrangus.org/>

Santa Gertrudis Breeders International

PO Box 1257
Kingsville, Texas 78364
<http://santagertrudis.com/>

American Shorthorn Association

8288 Hascall Street
Omaha, Nebraska 68124
<http://www.shorthorn.org/>

Beefmaster Breeders United

6800 Park Ten Blvd. Suite 290 West
San Antonio, Texas 78213
<http://www.beefmasters.org/>



SHEEP BREED ASSOCIATIONS

Continental Dorset Club

P.O. Box 506

Hudson, IA 50643

www.dorsets.homestead.com

Columbia Sheep Breeders Assn.

P.O. Box 272

Upper Sandusky, OH 43351

www.columbiasheep.webs.com

American Corriedale Assn., Inc.

PO Box 391

Clay City, IL 62824

www.americancorriedale.com

American Hampshire Sheep Assn.

P.O. Box 345SB

Ashland, MO 65010

www.countrylovin.com/ahsa/index.html

American Rambouillet Breeders Assn.

2709 Sherwood Way

San Angelo, TX 76901

www.rambouilletsheep.org

American Delaine & Merino Assn.

1026 Co. Road 1175, Rt. 3

Ashland, OH 44805

www.admra.org

Montadale Sheep Breeders Assn.

PO Box 603

Plainfield, IN 46168

www.montdales.com

American Southdown Breeder's Assn.

HCR 13, Box 220

Fredonia, TX 76842

www.southdownsheep.org

American Shropshire Registry Assn.

6508 West R Ave.

Schoolcraft, MI 49087

www.shropshires.org

Natl. Lincoln Sheep Breeders Assn.

15603 173rd Ave

Milo, IA 50166

www.lincolnsheep.com

American Oxford Sheep Assn.

8650 Wheatland Road

Burlington, WI 53105

www.americanoxfords.org

American Cotswold Record Assn.

P.O. Box 59

Plympton, MA 02367

www.cotswoldsheep.us.com

United Suffolk Sheep Association

P.O. Box 256

Newton, UT 84327

www.u-s-s-a.org

American Dorper Sheep Breeders Society

PO Box 259

Hallsville, MO 65255-0259

<http://www.dorperamerica.org/>

Katahdin Hair Sheep International Registry

15603 173rd Ave

Milo, IA 50166

<http://www.katahdins.org/>



Activity 3

OBJECTIVES: For youth to:

- distinguish between industry and individual demands.
- "identify relationship between industry demands and producer goals.

LIFE SKILLS:

- Acquiring, analyzing and using information.
- Managing resources.

MATERIALS:

Copy of each blank ANIMAL Sheet

Copy of ANIMAL WHOLESALE CUTS cut-outs.

2-4 copies of INDUSTRY RESPONSIBILITIES Sheet

Copies of QUESTIONS FOR REPRESENTATIVES Sheet for each youth

Glue sticks (several)

TIME: 1½ Hours

SETTING: A comfortable room with tables and chairs.

ADVANCED PREPERATION: Cut the ANIMAL WHOLESALE CUTS cut-outs.



THE BOTTOM LINE

BACKGROUND BASICS...

The value of any slaughter animal is based upon its on-farm growth and endpoint carcass merit. For the most part, livestock industry sales are weight based. This means that a heavier animal will often be sold for more money, provided that the weight is primarily represented as muscle in the live animal. The faster producers can get an animal to reach an optimum market weight, the less feed, hay and management resources they have invested. Ultimately, this means less money and time involved in the production of that animal. For that reason, a fast growing animal is valuable to the producer. The industry also has other criteria that determine market value such as the quality of the meat products produced and the amount of red meat yield generated from an animal.

In slaughter animals, expected carcass grade and yield have the greatest influence on the price paid to the producer. Generally speaking, the carcass quality grade is a measure of quality of meat or palatability (taste), while the yield grade is a measure of quantity of meat (edible cuts). These grades are assigned to the carcass at the processing plant by a qualified meat inspector.

Beef quality grades are issued based on the age of the animal and the degree of marbling (fat within the muscle). There are eight quality grades: Prime (high), Choice, Select, Standard (low), Commercial, Utility, Cutter and Canner (lowest). Beef yield grades are issued based on the ribeye area, hot carcass weight (weight after slaughter), the amount of backfat, kidney, pelvic, and heart fat. Yield grades range from 1 to 5, with 1 yielding the highest percentage of trimmed beef from a carcass and 5 the lowest.

Pork grades are issued based on backfat thickness and a subjective muscle score (1-thin, 3-thick). A formula of $[4 \times \text{backfat thickness} - \text{muscle score} = \text{USDA grade}]$. Pork grades are 1 to 4 with 1 yielding the highest percentage of trimmed pork from a carcass and 4 the lowest. A more accurate measurement of predicting pork yield from

a market hog is called percent fat-free lean. Almost all market hogs are sold on a carcass merit system using carcass weight, loin eye area, and backfat thickness to estimate percent fat-free lean. This equation will predict the percentage of closely-trimmed pork generated from a carcass, thus greater percentages indicate a greater percentage of closely-trimmed pork

Lamb is like beef in that their carcasses receive both a quality and yield grade. Lamb quality grades are issued based on maturity (age), firmness of lean and fat and a conformation score. Quality grades are Prime, Choice, Good, Utility and Cull. Lamb yield grades are a numerical representation of the expected yield of trimmed, boneless retail cuts. The yield grades range from 1 to 5 and are determined using the formula $[\text{.4} + (10 \times \text{fat over the eye}) = \text{yield grade}]$. A yield grade 1 lamb would yield the highest percentage of trimmed lamb from a carcass and 5 the lowest.

In breeding animals, the industry criteria is often set by the breeds. The breed association and members will select traits they would like to see enhanced or eliminated and try to produce animals with or without those traits. There is no set formula for determining the value of a breeding animal. Selection of breeding animals is often a matter of personal preference. Breeders select animals that have traits they like and hope the animal will pass those traits along to their progeny (offspring). However, the animal must be capable of reproducing.

As you can see, the industry holds the "golden key" in the livestock business. The industry can not be singled out as an individual, but is a group of people and businesses that are influenced by trade, supply of livestock, feed resources and land, demand of consumers both domestic and worldwide, value of currency and many more factors. The producer's goal is to try to meet the changing demands of the industry, which is often not an easy task.



INTRODUCTION

The industry in which animals are expected to perform has the greatest impact on the selection of desirable characteristics. Today we will be doing a variety of exercises intended to familiarize you with the livestock industry. By playing "Let's Make A Deal", you will develop a sense of what it is like as a producer to try to meet the ever-changing demands of the industry and how important it is that the producer set goals to meet the industry's demands. By relating the wholesale cuts to the live animal, you will learn to relate money to live animal parts. In judging breeding or slaughter animals, it is imperative that you learn to compare the individual animal to the industry ideal type.

DO

Play LET'S MAKE A DEAL

- Select two to four older members from the group to serve as industry representatives and seat them at a table.
- Give the industry representatives a copy of INDUSTRY RESPONSIBILITIES sheet and allow them time to develop a list of priorities and prices they are willing to pay for certain goods (found around the room, etc.) that other youth will present for consideration, based on their marketability or resell potential. Remember the industry is to reflect the views of the potential consumer.
- The remainder of the group will function as the farmers, growers and producers. Their job is to find things in the room, on their body or things they created and try to sell it to the Industry Representatives at the highest possible price. These negotiations should be done very seriously, as though the seller had something very important to lose (car, farm, house...)
- Proceed through this part of the activity in 20-30 minutes.

REFLECT

- As a producer, how did it make you feel when something you thought was priceless was deemed worthless by the industry representatives?
- As a producer, did you understand to locate items that would be of value to the industry in order to get a good price?
- As an industry representative, did you sometimes feel like you wanted or needed to help the buyer with their price, but couldn't because of preset priorities?



- What is the bottom line in the livestock industry?

Profitability

- Do industry goals affect the individual producer?

Yes, the producer must know what kind of animal the industry demands in order to raise a marketable product.

- Did you like this activity? Why or why not?
- What did you learn from this activity?

DO

Know your wholesale cuts

- Distribute blank animal sheets, the wholesale cuts cut-outs, and a pen/pencil to each youth.
- Have the youth identify each wholesale cut's location for each species by glueing the cut to the animal sheet.
- Have youth draw \$\$\$ sign on the expensive wholesale areas, \$\$ sign on the intermediate value areas, and a \$ sign on the least expensive wholesale areas.
- Review the activity, have youth correct any mistakes.
- Refer to the glossy colored inserts from the National Livestock and Meat Board, review with youth the common retail cuts from each wholesale cut.

REFLECT

- Where are the high priced retail cuts usually located on the live animal?

Most high priced cuts are found along the animal's back, such as the loin, rib, or rack.

- Why are some cuts more expensive than others?

Cuts that contain more connective tissue (in lower leg and shoulder) will not be as tender as cuts found in the loin and upper regions of the animal. These less tender cuts often require more cooking time and have to be cooked in a moist cooking method (ie. pot roast). For this reason, people are willing to pay the extra money to have the cut that is tender and requires less cooking time.

- Why is it important that we know this information?
- What Beef wholesale cut provides the T-bone steak?

Short Loin



APPLY

- Take an industry tour of a cattle, swine and sheep operation. Be sure to ask the host to tell specifics about their operation, industry demands and future outlook. This should not be a judging team practice class session, but an informative, reflective session.
- Visit the meat department at a local grocery store and try to guess the wholesale cuts meat products come from.
- Use these website resources to enhance your knowledge of meat cuts:

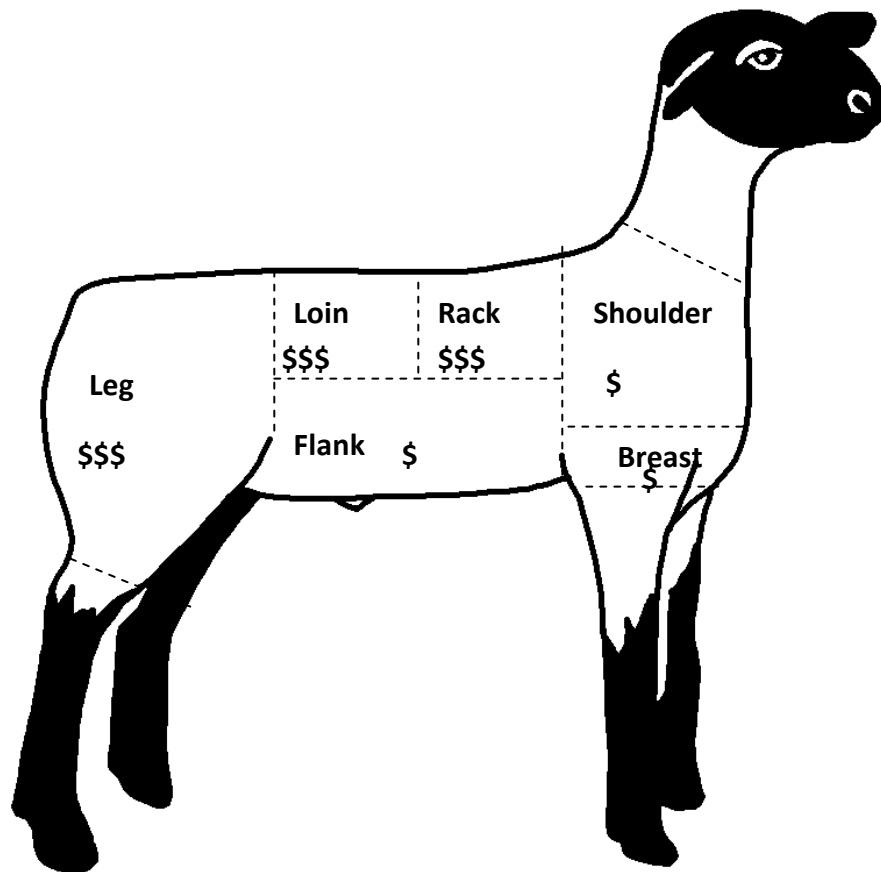
<http://www.americanlamb.com/lamb101/cuts.aspx>

http://www.virtualweberbullet.com/meatcharts_photos/lamb_cuts_poster2005.pdf

<http://www.angus.org/pub/beefchart.pdf>

http://www.virtualweberbullet.com/meatcharts_photos/porkcuts.pdf

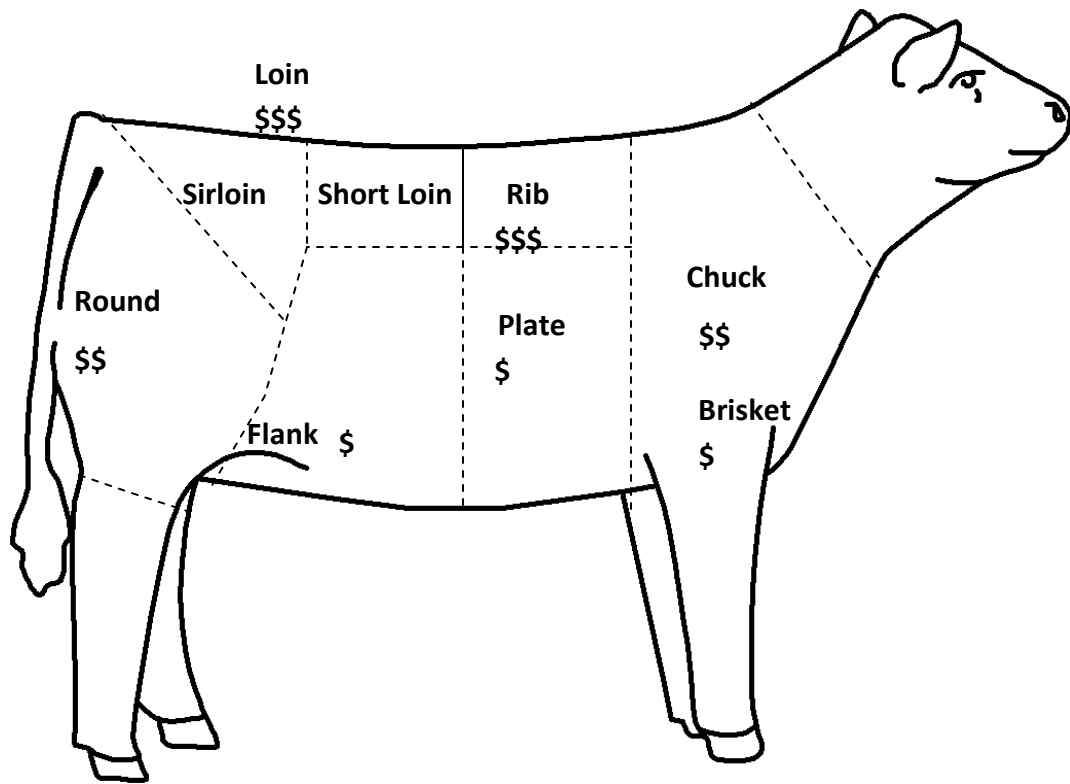
Wholesale Cuts Answer Key



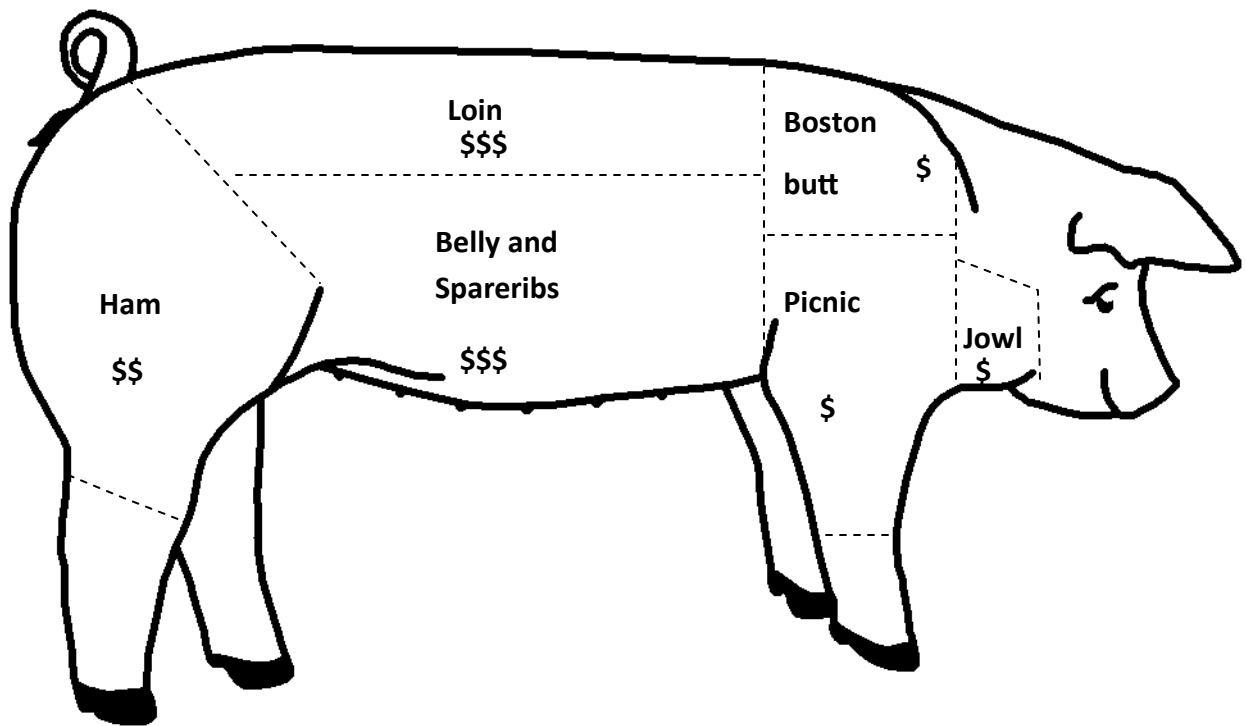
LAMB



Wholesale Cuts Answer Key



Beef



Pork



LET'S MAKE A DEAL...

Questions REPRESENTATIVES need to consider

Would anyone want to buy this item?

How much money would they be willing to pay?

Does this item meet our quality standards?

Is there a need for this product?

Will we need to invest money in this product to be able to resell it?

How will we reach potential customers?

Set a base price you are willing to pay for an item. Consider these questions and above concerns. Be willing to negotiate, but not beyond your profit margin (difference in buying and selling price).



LET'S MAKE A DEAL

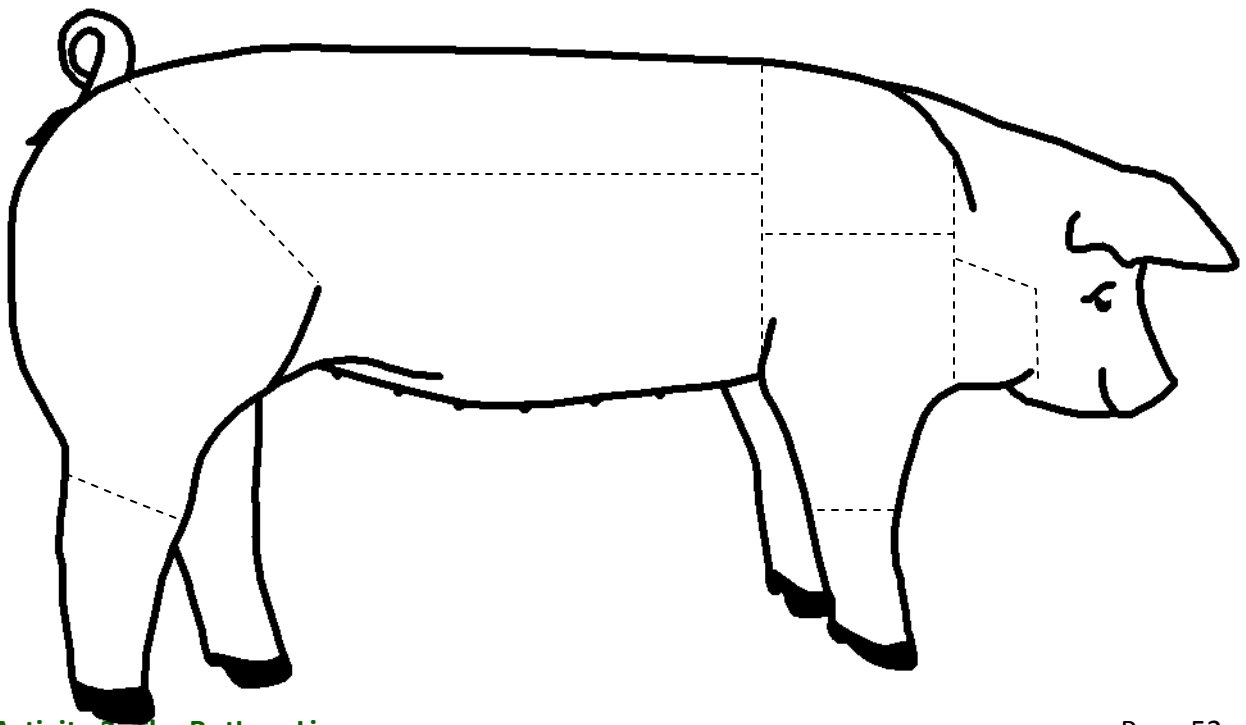
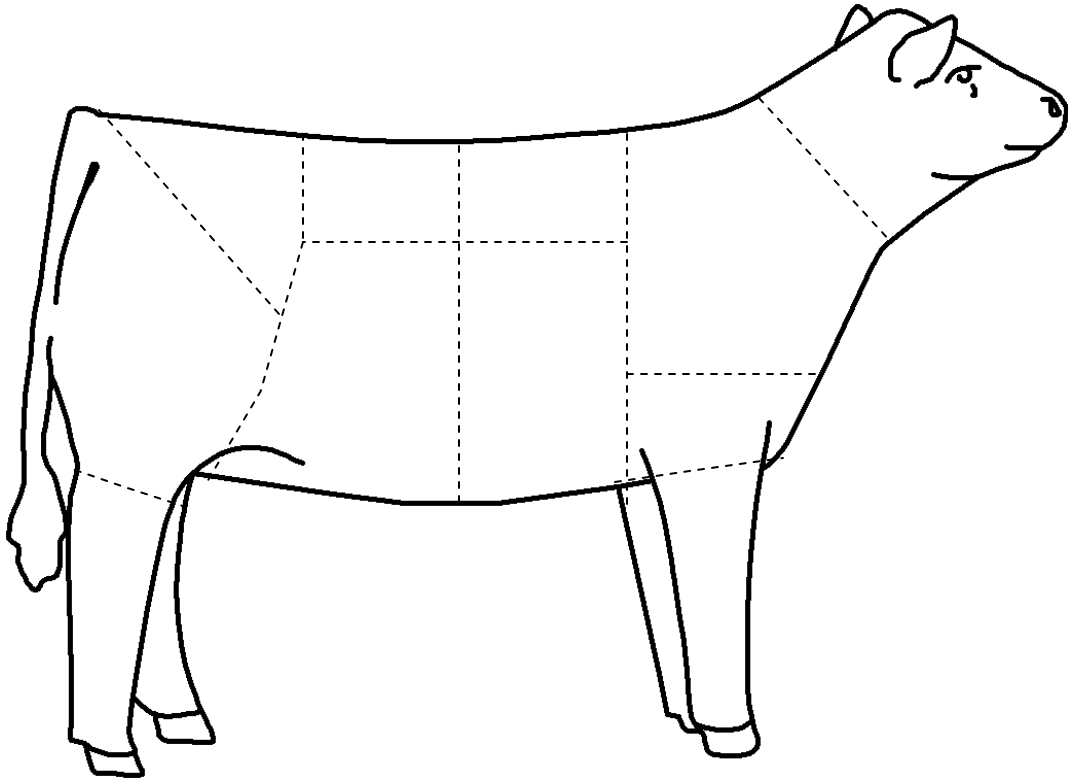
INDUSTRY RESPONSIBILITIES

- Establish a firm price that products are worth - Be willing to negotiate with producers having large amounts of products or excellent quality products.
- Make sure product will be able to be re-sold at a higher price.
- Know consumer demands for type and quality.
- Know consumer concerns, alternatives and problems with products.
- Give producers the highest possible price—remember you need them.
- Sell to consumers at lowest possible price —you want them to buy your product.
- Buy products consumers want and try to sell at the price they want.
- Know information and price of competing products.
- Know information on market influences droughts, floods, land shortages.
- Know how product prices compare with other non-livestock products.



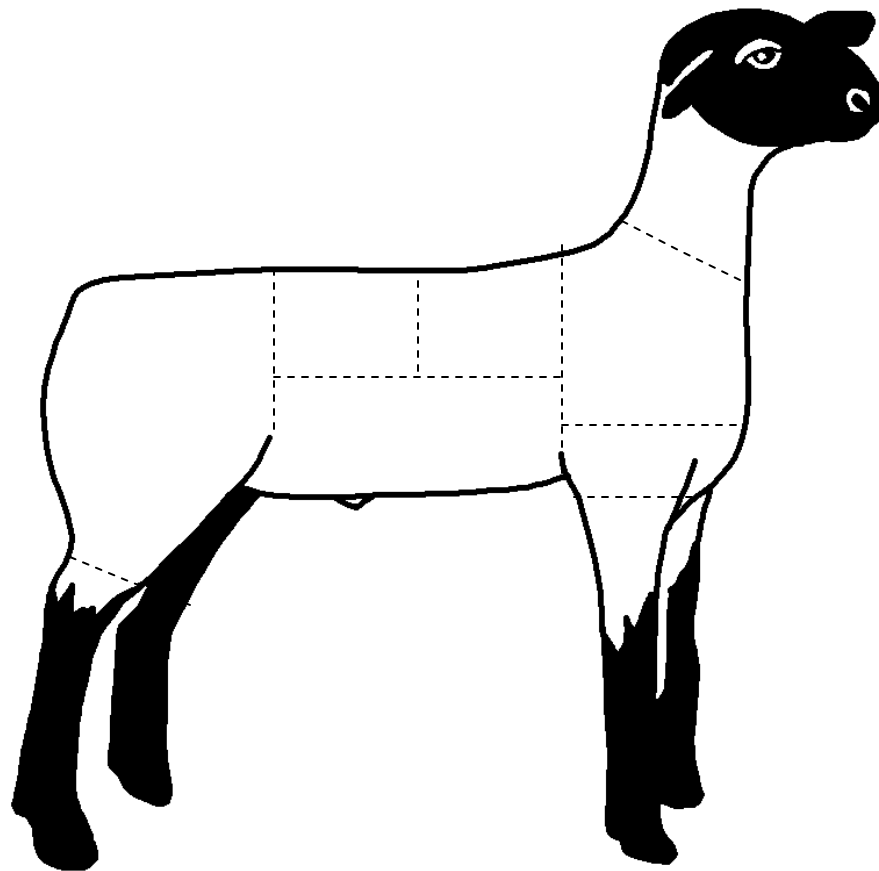
KNOW YOUR WHOLESALE CUTS

Place wholesale cuts-outs on picture



KNOW YOUR WHOLESALE CUTS

Place wholesale cuts-outs on picture



Activity 4

OBJECTIVES:

For youth to:

- Identify priorities for visual appraisal based on species, sex and use.
- Relate priorities to selection.
- Predict usefulness based on priorities.

LIFE SKILLS:

- Acquiring, analyzing and using information.
- Decision making.

MATERIALS:

Copies of CRITERIA FOR PLACING USING VISUAL APPRAISAL for each youth

Flip chart and easel or chalkboard

Markers or chalk

TIME:

1 1/2 Hours

SETTING: Comfortable room

WHAT YOU SEE IS WHAT YOU GET!

INTRODUCTION

The process of visual appraisal and selection involves the weighing of good and bad points of the individual animal. The emphasis which is placed on each characteristic in visual selection depends on species, breed, sex, age and use. In many instances, more than one trait will be of top priority and you will have to weigh the relative worth of each trait in that animal.

You can learn a process to weigh the factors involved in decision making. This process can be beneficial whether you are judging animals, selecting clothing, a college, buying a car or a home. The first step is to set up priorities (already established for you in *Criteria For Placing Using Visual Appraisal* handout), and select based on those priorities. Today we will be doing an exercise to show you how to use this process in your appraisal of livestock.

DO

- Have the youth make suggestions for the ideal characteristics and uses of a pencil. Examples--must have an eraser, dark lead, be #2 quality, sharpen easily, small, long, short, be able to fit in pocket/purse, not be damaged, be yellow, etc.
- Using a flipchart or chalkboard, make a list of the suggestions.
- Rank the traits listed in the order of most important to least important according to the group. The top traits are the priorities. Priorities, reasons and uses are probably different from person to person.
- Have youth justify their reasoning in a short statement.
- Be prepared to select and buy only the pencil that fits the top criteria.
- Repeat the exercise for a shirt and a car. Long/short sleeved, button down collar, pattern; on/off road, 4 wheel drive, CD player, etc.?
- Handout the CRITERIA FOR PLACING USING VISUAL APPRAISAL sheets and discuss the information with youth.

REFLECT

- How did the use of the objects effect your decision in selection?
- How many of your priorities were from personal preference? From experience?
- Did you realize that some of your original priorities weren't as important as others? (ex. pencil that has lead vs. NFL team logo)
- Was it hard to compromise on your original priorities and select on need, rather than want?
- Why is structure one of the most important traits in selecting a breeding animal?
Longevity.
- When selecting a market animal, which trait is the most important?
The animal's potential carcass value, that is driven by muscling, fatness and weight.

APPLY

- Set up a field trip to a ranch, livestock market, farm or fair. Do not set up a class of animals, but have the group single out animals and discuss their positive and negative traits. Be sure to include information on the animals' use, structural soundness, potential carcass value, reproductive potential and balance.
- When judging livestock it is crucial that you have a mental picture of the ideal animal for the species. By keeping the ideal in mind, you will be able to notice individual flaws rather easy. Using the Internet, research and study several of the on-line virtual judging sites for learning to recognize the ideal animals by species.



CRITERIA FOR PLACING

USING VISUAL APPRAISAL

These criteria are only guidelines and vary with market demand, breed, age, management scenario and performance data.

SWINE

MARKET HOGS

Muscling
Leanness/maturity
Growth
Production traits

Growth/Maturity
Structural soundness
Muscling

BREEDING HOGS

Sexual characteristics
Volume

SHEEP

MARKET LAMBS

Muscling
Correctness of finish/maturity
Balance
Production traits

Growth/Maturity
Structural correctness
Muscling
Balance

BREEDING SHEEP

Sexual characteristics
Volume

CATTLE

MARKET STEERS

Muscling
Correctness of finish/maturity
Balance
Production traits

Growth/Maturity
Structural correctness
Muscling
Balance

BREEDING CATTLE

Sexual characteristics
Volume



Answer Keys to Visual Criteria Practice Worksheets

SWINE

Muscling

- A: 4—Very Light muscled
- B: 1—Heavily muscled
- C: 3—Light muscled
- D: 2—Well muscled

Leanness

- A: 3—Acceptable leanness—approximately 0.9” at 10th rib
- B: 4—Fat—approximately 1.1” at 10th rib
- C: 5—Very Fat—approximately 1.3” at 10th rib
- D: 1—Very acceptable leanness—approximately 0.6” at 10th rib
- E: 2—Very acceptable leanness—approximately 0.7” at 10th rib

Growth/Maturity

- A: 1—Fast growing, but short, low set and early maturing
- B: 2—Fast growing and relatively late maturing
- C: 3—Slow growing, frail featured and early maturing
- D: 4—Late maturing and very slow growing

Volume

- A: 1—Bold ribbed, deep bodied, wide tracking
- B: 2—Relatively flat ribbed, shallow flanked, and wide tracking
- C: 3—Bold ribbed and wide tracking
- D: 4—Very flat ribbed, shallow flanked, and narrow tracking
- E: 5—Relatively bold ribbed, deep bodied, and wide tracking

Soundness

- A: 5—A very poor designed, straight shouldered, straight kneed, and short hipped market hog
- B: 3—A well designed, level, and square made market hog with correct joint angulation to both ends of the skeleton
- C: 1—A poor designed, straight shouldered, straight kneed, short hipped market hog
- D: 2—A well designed, level, and square made market hog which is a bit straight though the shoulder and knee



Answer Keys to Visual Criteria Practice Worksheets

SWINE

Sexual Characteristics

Underlines

A: 3—Good underline, good spacing, good teat quality

B: 2—Poor spacing, too far between first and second teat, good teat quality

C: 1—Poor teat quality, too blunt, second teat would be considered “pin” nipple

Vulva

A: 1—Normal vulva

B: 2—Tipped vulva

C: 3—Infantile (small) vulva

D: 4—Swollen vulva

Design

A: 3—Her ill design and inadequate body volume and terminal appearance suggest she should not be kept as a replacement.

B: 2—Her ill design, inadequate body volume, and small vulva suggest she should not be kept as a replacement

C: 1—Her design, body type and external sexual characteristics suggest she should be a desirable brood sow prospect.



Answer Keys to Visual Criteria Practice Worksheets

SHEEP

Muscling

- A: 4—Relatively light muscled
- B: 2—Very heavily muscled
- C: 3—Well muscled
- D: 1—Very light muscled

Finish for Sheep

- A: 1—A correctly finished lamb with 0.15-0.20” of fat thickness
- B: 2—A very over finished lamb with 0.35-0.40” of fat thickness

Growth/Maturity

- A: 3—Relatively fast growing, but early maturing
- B: 1—Growthy, upstanding and late maturing
- C: 2—Upstanding and late maturing—though probably not as fast growing as some
- D: 4—Relatively fast growing, but early maturing

Volume

- A: 2—Flat ribbed, shallow bodied and low volumed
- B: 3—Relatively bold ribbed, deep flanked and high volumed
- C: 1—Bold ribbed, deep flanked and high volumed
- D: 4—Tight ribbed, and very shallow flanked— appears to be low performing

Structural Correctness

- A: 1—A wether which is too straight and forward in his shoulder, short and round out of his dock, and weak in his pasterns
- B: 3—A very level ewe who appears to have the correct angulation to all her joints, and should move correctly when put into motion
- C: 4—A ewe, who appears to have the correct angulation to all her joints, and should move correctly when put into motion
- D: 2 —A very level , square made wether with his feet on all four corners. He does appear to bow out on his rear legs



Answer Keys to Visual Criteria Practice Worksheets

SHEEP

Balance

A: 4—An extended, square made, high volumed ewe

B: 2—A square made, high volumed ewe. She is too coarse and deep in her shoulder and breast, decreasing her balance.

C: 3—A long bodied ewe that rounds out of her dock, easy in her top, somewhat u-necked and deep-breasted, decreasing her balance.

D: 1—Straight lined, upstanding, well balanced ewe. She is a bit short bodied.

Sexual Characteristics.

A: 1—Long bred ewe as evidenced by her udder development. Should make an excellent replacement.

B: 2—A stout , masculine, large testicled ram with proper testicle carriage. Should make an excellent sire.

C: 3—A small testicled ram whose testicles are carried too close to his body, potentially affecting his fertility.



Answer Keys to Visual Criteria Practice Worksheets

CATTLE

Muscling

- A: 1—Very heavily muscled
- B: 3—Very light muscled
- C: 2—Heavily muscled
- D: 4—Well muscled
- E: 5 - Light muscled

Correctness of Finish

- A: 3—Very over finished— approximately 1.0” of fat thickness
- B: 2—Very under finished—approximately 0.10” of fat thickness
- C: 1—Correctly finished—approximately 0.45” of fat thickness
- D: 4—Slightly over finished— approximately 0.65” of fat thickness
- E: 5—Underfinished—approximately 0.25” of fat thickness

Balance

- A: 3—Very poor balanced
- B: 1—Well balanced
- C: 2—Poor balanced

Growth/Maturity

- A: 3—Stout made, high growth steer
- B: 1—Small framed and probably rather slow growing
- C: 2—A steer intermediate for growth and finished weight

Volume

- A: 5—A flat ribbed, shallow bodied, low volumed steer
- B: 2—A bold sprung, deep bodied, high volumed steer,
- C: 4—A steer with an excellent, square rib shape, which needs more depth from forerib to flank
- D: 3—A deep bodied steer, which needs more rib/body shape
- D: 1—A bold sprung, deep bodied, high volumed heifer



Answer Keys to Visual Criteria Practice Worksheets

CATTLE

Structural Correctness

- A: 1—A square made, level steer, who needs more angulation to his shoulder and more set to his hock and pastern
- B: 3—A slightly round made steer that appears to have the correct angulation to all of his joints, and should move correctly when put into motion.
- C: 2—A straight shouldered, short hipped steer who is very straight in his hocks
- D: 4—A relatively square made steer that appears to have the correct angulation to all of his joints, and should move correctly when put into motion.
- E: 5—A very short, round hipped steer who has excess set to his hock (sickle hocked)

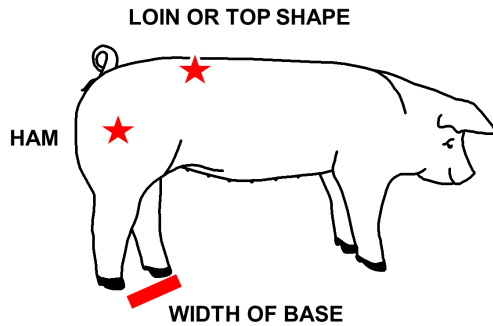
Sexual Characteristics

- A: 2—Stout, masculine, large testicled bull
- B: 1—Long bred heifer as evidenced by her udder development

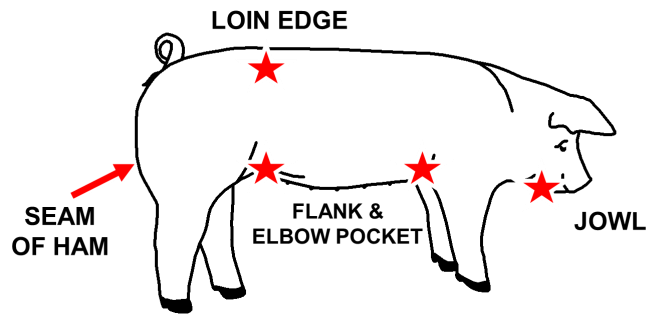


VISUAL CRITERIA FOR SWINE

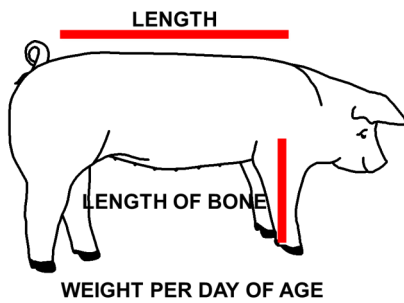
MUSCLING



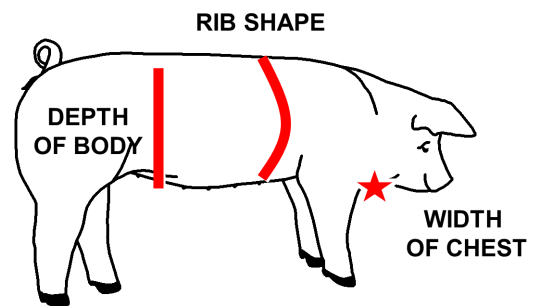
LEANNESS



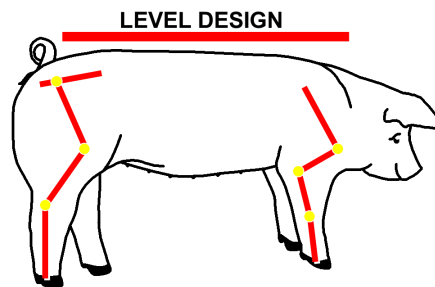
GROWTH/ MATURITY



VOLUME



SOUNDNESS



MUSCLING

Test your visual appraisal of these pigs. Match them up with the visual description: Place the number on the line provided next to the picture.

1. Heavily Muscled

2. Well Muscled

3. Light Muscled

4. Very Light Muscled



A. _____

B. _____



C. _____

D. _____



LEANNESS

Estimate fat thickness on the following market hogs using the word bank of answers.

Place the number on the provided line next to the picture.

1. Very acceptable lean—approximately 0.6" at 10th rib
2. Very acceptable lean—approximately 0.7" at 10th rib
3. Acceptable lean—approximately 0.9" at 10th rib
4. Fat—approximately 1.1" at the 10th rib
5. Very fat—approximately 1.3" at 10th rib



A. _____



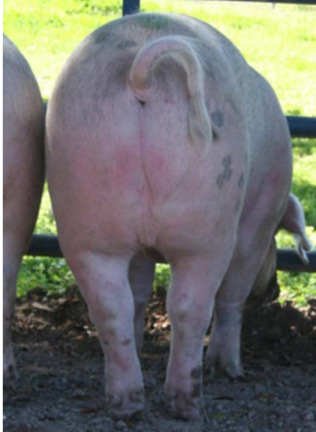
B. _____



LEANNESS

Estimate fat thickness on the following market hogs using the word bank of answers.

(Continued)



C. _____



D. _____



E. _____

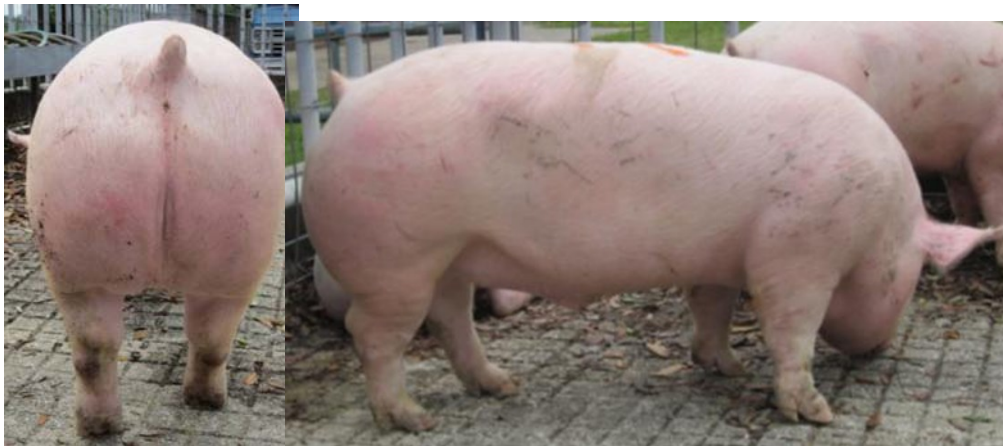


GROWTH/MATURITY

Match the visual descriptions of growth and maturity with the following hogs.

Place the number on the provided line next to the picture.

1. Fast growing, but short, low set and early maturing
2. Fast growing, and relatively late maturing
3. Slow growing, frail featured and early maturing
4. Late maturing and very slow growing



A. _____



B. _____



GROWTH/MATURITY

Match the visual descriptions of growth and maturity with the following hogs.

Place the number on the provided line next to the picture.

(Continued)



C. _____



D. _____



VOLUME

Match the visual descriptions of volume with the following hogs.

Place the number on the provided line next to the picture.

1. Bold ribbed, deep bodied, and wide tracking
2. Relatively flat ribbed, shallow flanked, and narrow tracking
3. Bold ribbed and wide tracking
4. Very flat ribbed, shallow flanked, and narrow tracking
5. Relatively bold ribbed, deep bodied, and wide tracking



A. _____



B. _____



VOLUME

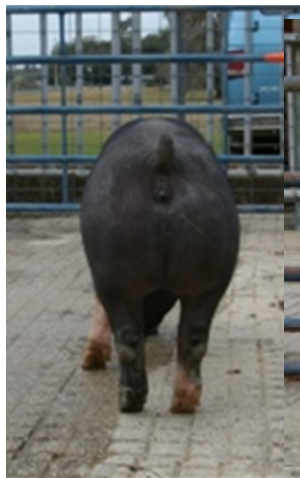
Match the visual descriptions of volume with the following hogs.

Place the number on the provided line next to the picture.

(Continued)



C. ____



D. ____



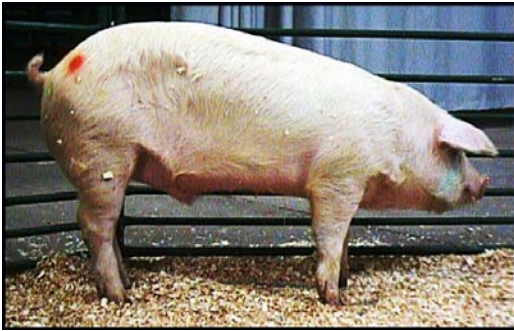
E. ____



SOUNDNESS

Match the following descriptions on soundness to the corresponding picture. Place the number on the provided line under the picture

1. A poor designed, straight shouldered market hog that is straight kneed and short hipped
2. A well designed, level, and square made market hog, that is a bit straight through the shoulder and knee
3. A well designed, level, and square made market hog with correct joint angulation to both ends of the skeleton
4. A very poor designed, straight shouldered, straight kneed, short hipped barrow



A. _____



B. _____



C. _____



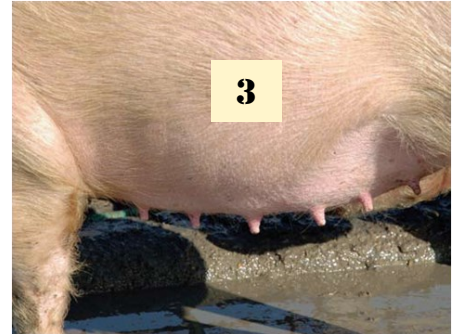
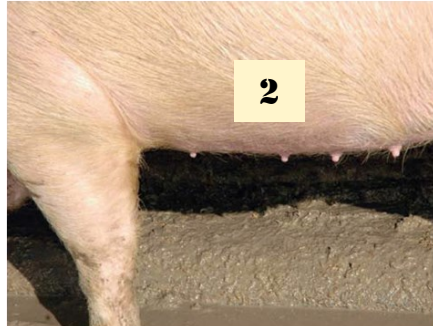
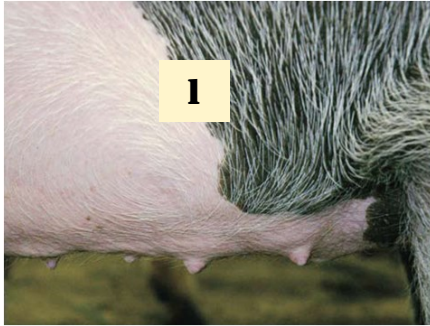
D. _____



SEXUAL CHARACTERISTICS

Underlines: Match the following descriptions of underlines to the pictures below.

- _____ A. Good underline, good spacing, good teat quality
 _____ B. Poor Spacing, too far between first and second teat, but good teat quality
 _____ C. Poor teat quality, too blunt, second teat would be considered a “pin” nipple



VULVAS: Match the following descriptions of vulvas to the pictures above.

- A. Normal Vulva_____ B. Tipped _____ C. Infantile (small)_____ D. Swollen_____



SEXUAL CHARACTERISTICS

Design: Match the following descriptions to the pictures below. Place the number on the provided line below the picture.

1. Her design, body type and external sexual characteristics suggest she should be a desirable brood sow prospect
2. Her ill design, inadequate body volume, and small vulva suggest she should not be kept as a replacement
3. Her ill design and inadequate body volume and terminal appearance suggest she should not be kept as a replacement



A. _____



B. _____

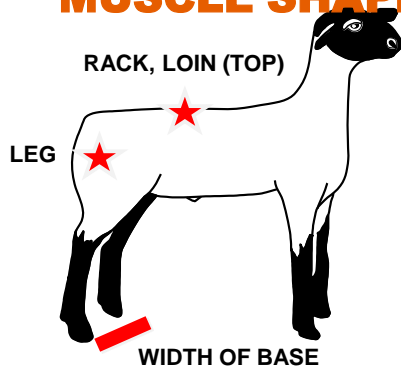


C. _____

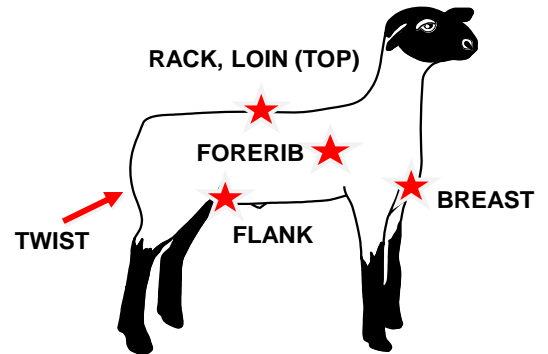


VISUAL CRITERIA FOR SHEEP

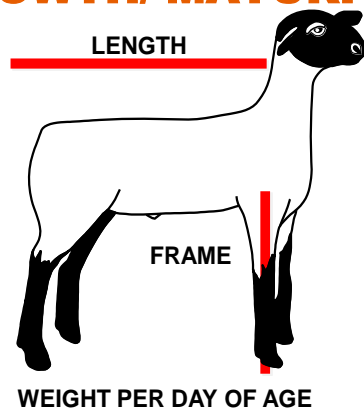
MUSCLE SHAPE



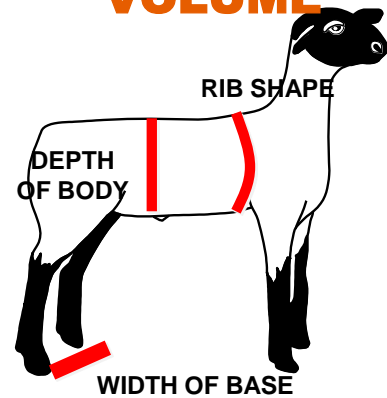
FINISH



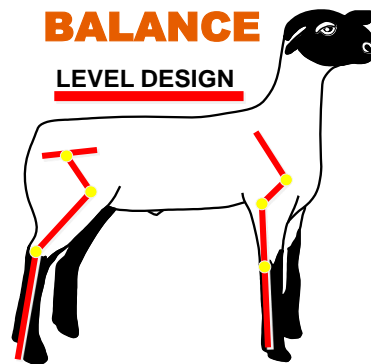
GROWTH/ MATURITY



VOLUME



STRUCTURAL CORRECTNESS & BALANCE



MUSCLE SHAPE

Match the description with the correct picture. Place the number on the line provided next to the picture.

1. Very light muscled 2. Very heavy muscled 3. Well muscled 4. Relatively light muscled



A. _____



B. _____



MUSCLE SHAPE

Match the description with the correct picture. Place the number on the line provided next to the picture.

1. Very light muscled 2. Very heavy muscled 3. Well muscled 4. Relatively light muscled

(Continued)



C. _____



D. _____



FINISH FOR SHEEP

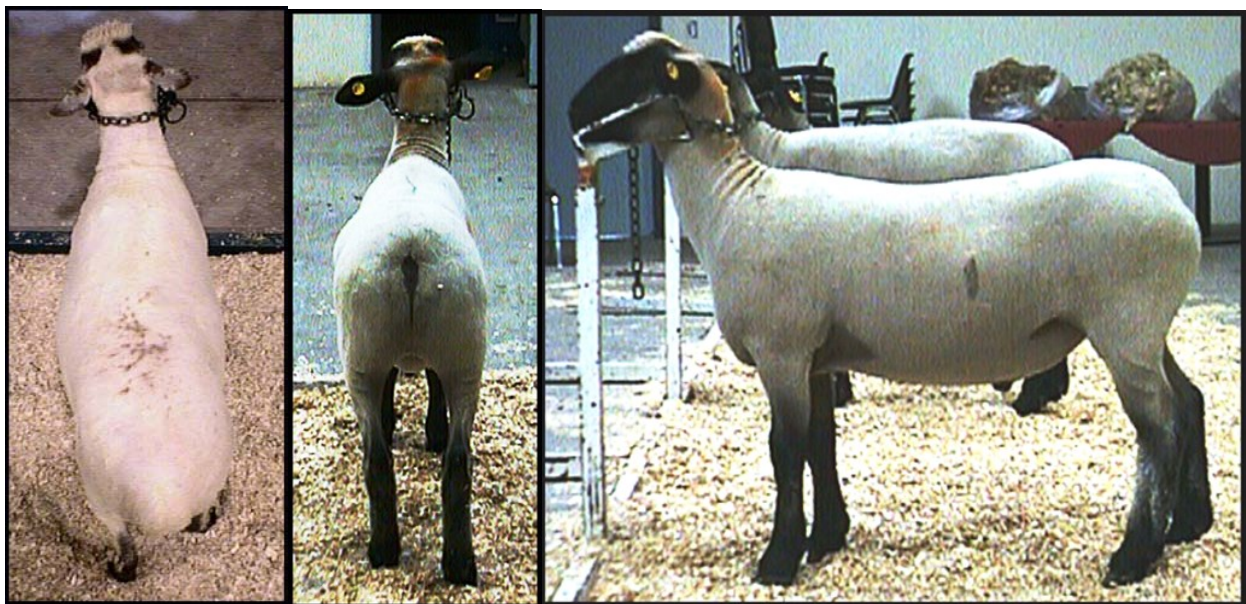
Match the following terms about finish to the correct sheep. Place the number under the corresponding picture.

1. A correctly finished lamb with 0.15-0.20 in of fat thickness

2. A very over finished lamb with 0.35-0.40 in of fat thickness



A. _____



B. _____



GROWTH/MATURITY

Match the following descriptions to the correct picture. Place the corresponding number under the picture on the line provided.

1. Growthy, upstanding, and late maturing- Has the opportunity to still have acceptable fatness at 140-150 lbs
2. Upstanding, and late maturing- though probably not as fast growing as some- Should still have acceptable fatness at 140-150 lbs
3. Relatively fast growing, but early maturing- Will probably be too fat at 135 lbs
4. Relatively fast growing, but early maturing- Will be too fat at 130 lbs



A. _____



B. _____



C. _____



D. _____



VOLUME

Match the correct descriptions about volume to the pictures below. Place the number under the picture.

1. Bold ribbed, deep flanked and high volume
2. Flat ribbed, shallow bodied and low volume
3. Relatively bold ribbed, deep flanked and high volume
4. Tight ribbed, and very shallow flanked. Appears rather low performing



A. _____



B. _____



C. _____



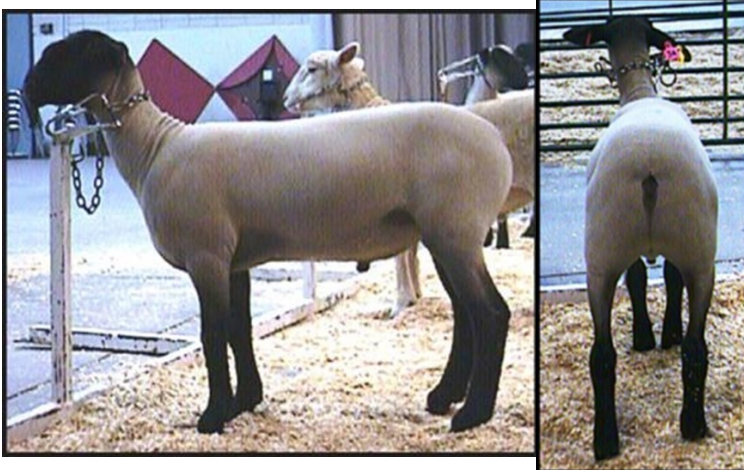
D. _____



STRUCTURAL CORRECTNESS

Match the following descriptions to the correct pictures below. Place the number on the line provided next to the picture.

1. A wether which is too straight and forward in his shoulder, short and round out of his dock, and is weak pasterned.
2. A very level square made wether with his feet on all corners. He does appear to bow out on his rear legs a bit.
3. A very level ewe, who appears to have the correct angulation to all of her joints, and should move correctly when put into motion.
4. A ewe, who appears to have the correct angulation to all of her joints, and should move correctly when put into motion.



A. _____

B. _____



STRUCTURAL CORRECTNESS

Match the following descriptions to the correct pictures below. Place the number on the line provided next to the picture.

(Continued)



C. _____

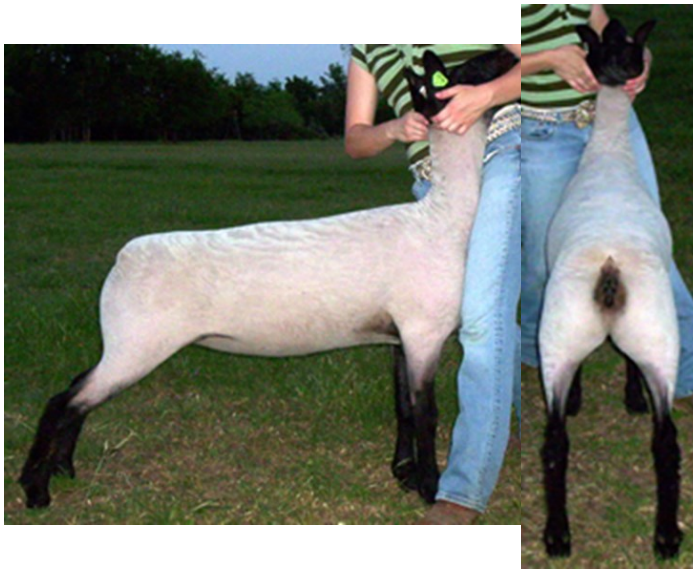
D. _____



BALANCE

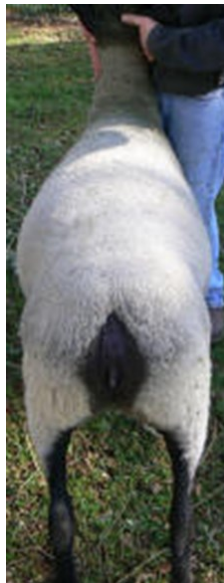
Match the following descriptions about balance to the correct pictures. Place the number to the corresponding picture next to the picture.

1. Straight lined, upstanding, well balanced ewe. She is a bit short bodied.
2. A square made, high volumed ewe. She is too coarse and deep in her shoulder and breast, decreasing her balance.
3. A long bodied ewe that rounds out of her dock, is easy in her top, somewhat u-necked, and deep breasted, decreasing her balance.
4. An extended, square made, high volumed, well balanced ewe.



A. _____

B. _____



BALANCE

Match the following descriptions about balance to the correct pictures. Place the number to the corresponding picture next to the picture.

1. Straight lined, upstanding, well balanced ewe. She is a bit short bodied.
2. A square made, high volumed ewe. She is too coarse and deep in her shoulder and breast, decreasing her balance.
3. A long bodied ewe that rounds out of her dock, is easy in her top, somewhat u-necked, and deep breasted, decreasing her balance.
4. An extended, square made, high volumed, well balanced ewe.



C. _____

D. _____



SEXUAL CHARACTERISTICS

Match the following descriptions about sexual characteristics to the pictures.

Place the number of the description on the line provided next to the picture.

1. Long bred ewe as evidenced by her udder development. Should make an excellent replacement.
2. A stout, masculine, large testicled ram with proper testicle carriage, which should make an excellent sire.
3. A small testicled ram whose testicles are carried close to his body, potentially affecting his fertility.



A. _____



B. _____

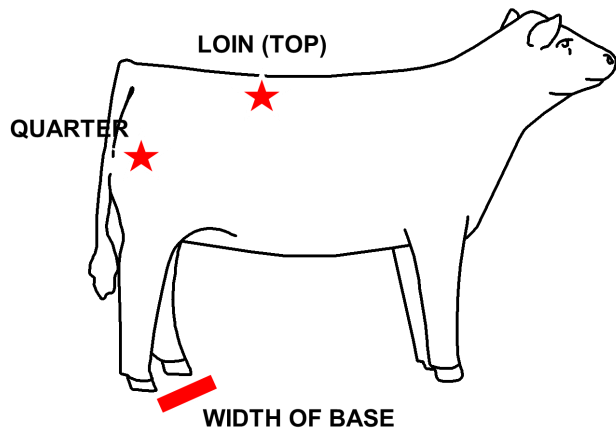


C. _____

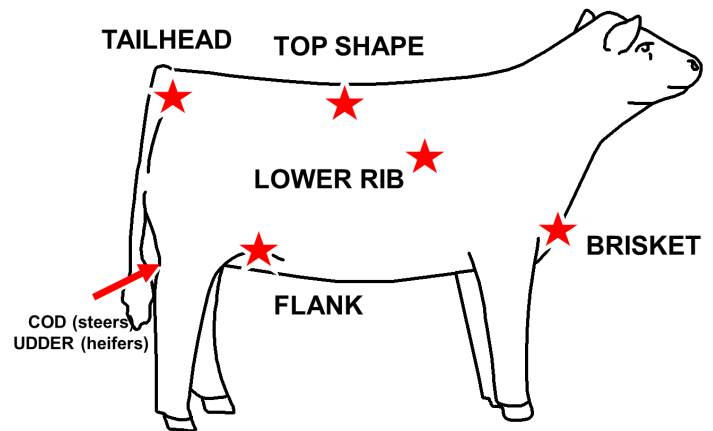


VISUAL CRITERIA FOR CATTLE

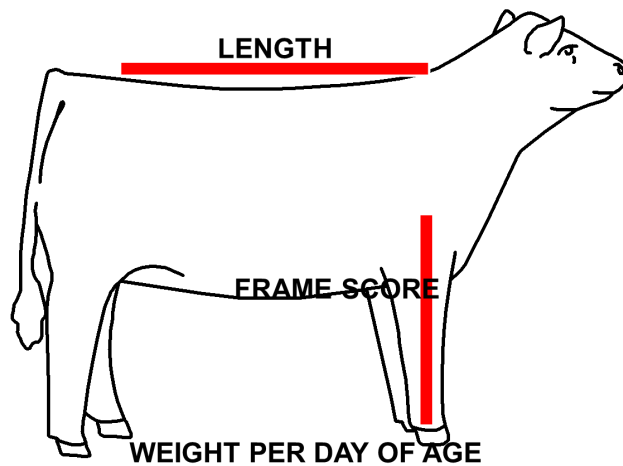
MUSCLE SHAPE



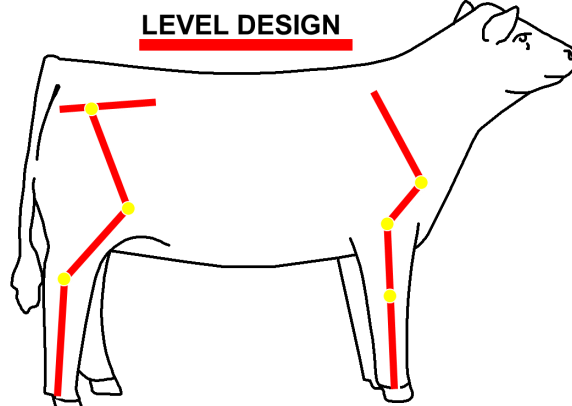
FINISH



GROWTH/ MATURITY



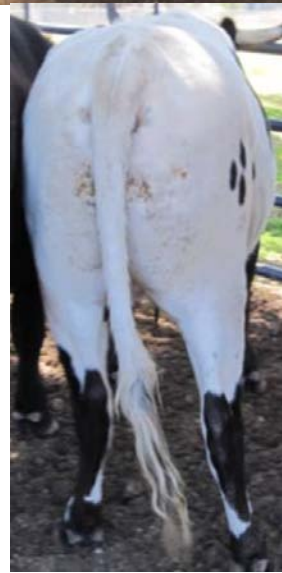
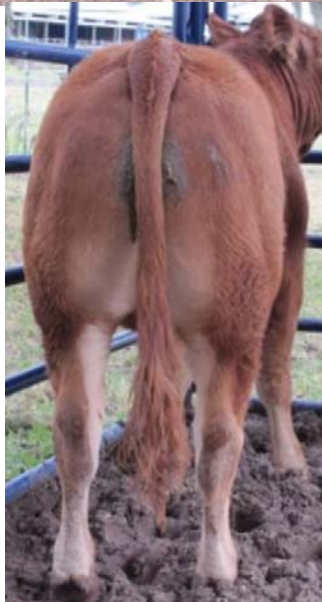
STRUCTURAL CORRECTNESS & BALANCE



MUSCLE SHAPE

Match the descriptions about muscle shape to the correct picture. Place the number under the picture on the provided line.

1. Very heavily muscled 2. Heavily muscled 3. Very light muscled 4. Well muscled
5. Light muscled



A. _____

B. _____



MUSCLE SHAPE

Match the descriptions about muscle shape to the correct picture. Write the number under the picture on the provided line.

(Continued)



C. _____

D. _____



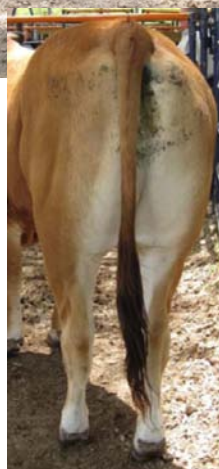
E. _____



FINISH FOR CATTLE: *OVER, UNDER OR JUST RIGHT?*

Match the following descriptions about finish to the correct picture. Place the number under the correct picture.

1. A correctly finished steer at 0.45 in fat thickness. His combination of fatness and muscling suggest he will be a Yield Grade 2.
2. A very underfinished steer at 0.10 in fat thickness.. His combination of fatness and muscling suggest he will be a Yield Grade 1.
3. A very overfinished steer at 1.0 in fat thickness. His combination of fatness and muscling suggest he will be a upper Yield Grade 4.
4. A slightly overfinished steer at 0.65 in fat thickness. . His combination of fatness and muscling suggest he will be a Yield Grade 3.
5. An underfinished steer at 0.25 in fat thickness. His combination of fatness and muscling suggest he will be a Yield Grade 1.



A. _____

B. _____



FINISH FOR CATTLE: *OVER, UNDER OR JUST RIGHT?*

Match the following descriptions about finish to the correct picture. Place the number under the correct picture.



C. _____



D. _____



E. _____



VOLUME

Match the following descriptions on volume to the correct picture. Write the number under the picture on the line provided.

1. A bold sprung, deep bodied, high volumed heifer.
2. A bold sprung, deep bodied, high volumed steer.
3. A deep bodied steer which needs more rib/body shape.
4. A steer with an excellent, square rib shape, which needs more depth from fore rib to flank.
5. A flat ribbed, shallow bodied, low volumed steer.



A. _____

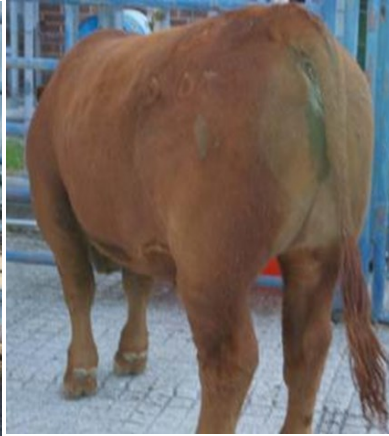
B. _____



VOLUME

Match the following descriptions on volume to the correct picture. Write the number under the picture on the line provided.

(Continued)



BALANCE

Match the following descriptions with the correct picture. Place the number on the line provided next to the picture.

1. A straight lined, nice profiling, level, well balanced steer.
2. A straight shouldered, short, coarse fronted steer, that shallows through his flank, and is short hipped, collectively being very poor balanced.
3. A very low volumed, round made, easy topped steer, that is very poor balanced.



A. _____



B. _____



C. _____



GROWTH/MATURITY

Match the following descriptions about growth and maturity to the following pictures.
Place the number next to the picture of the provided line.

1. A small framed, and probably rather slow growing steer. He would have remained acceptably trim until 1100 lbs, but now is very low cutability.
2. A steer intermediate for growth and finished weight. He appears market ready in this picture at approximately 1225 lbs.
3. A stout made, high growth steer. He appears market ready in this picture at approximately 1325 lbs.



A. _____



B. _____



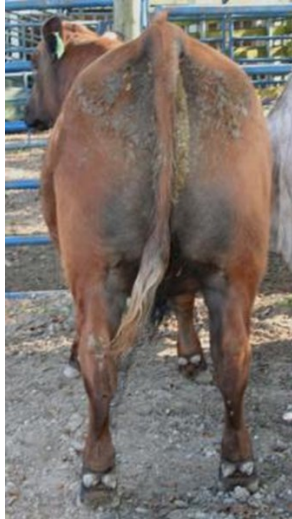
C. _____



STRUCTURAL CORRECTNESS

Match the following descriptions about structural correctness to the correct picture. Place the number below the picture on the provided line.

1. A square made, very level steer, who needs more angulation to his shoulder and more set to his hock and pastern.
2. A straight shouldered, short hipped steer who is very straight in his hock.
3. A slightly round made steer that appears to have the correct angulation to all of his joints, and should move correctly when put into motion.
4. A relatively square made steer that appears to have the correct angulation to all of his joints, and should move correctly when put into motion.
5. A very short, round hipped steer who has excess set to his hock (sickle hocked).



A. _____

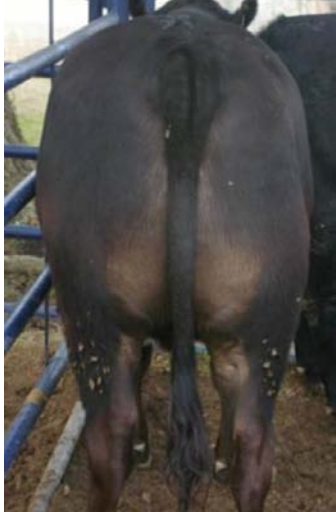
B. _____



STRUCTURAL CORRECTNESS

Match the following descriptions about structural correctness to the correct picture. Place the number below the picture on the provided line.

(Continued)



C. _____

D. _____



E. _____



SEXUAL CHARACTERISTICS

Match the following descriptions to the correct picture. Place the number next to the picture.

1. A long bred heifer as evidenced by her udder development. Should make an excellent replacement.
2. A stout, masculine, large testicled bull, which should make an excellent sire.



A. _____



B. _____



Activity 5

OBJECTIVES: For youth to:

- discover terminology used to describe and compare livestock.
- add to vocabulary by learning livestock terms.

LIFE SKILL:

- Communicating Skills
- Self-confidence

MATERIALS:

Copies of BASIC LIVESTOCK TERMS and SPECIES SPECIFIC TERMS for each youth.

- Easel and flip chart or chalkboard
- markers or chalk

TIME: 1½ Hours

SETTING: A comfortable room with tables and chairs.

ADVANCE PREPARATION:

Ask a youth with livestock judging experience to prepare a set of oral reasons to give in front of the group.

EXPRESS YOURSELF

BACKGROUND BASICS...

The youth have learned and added many new livestock words to their vocabulary in the first three activities. In this activity, they will expand that basic terminology and learn more specific terms that are used in the livestock industry. Below is a list of words or phrases that are used to describe different animals or features. Many of these terms are not species specific and mean the same thing for almost all animals.

- **Condition, Finish or Leanness** - all are used to denote fatness. The term finish is used to describe fat on market cattle and lambs, condition is used with breeding stock, and leanness is used with market hogs.
- **Growth** - the characteristics of having adequate size and weight at a certain age.
- **Balance** - a proper proportion and blending of parts of the animal, essentially “how the parts fit together.” Includes structural correctness, symmetry and quality. Balance is primarily evaluated from a side view.
- **Ruggedness, Stoutness** - traits associated with potential durability and serve as a loose indicator of growth. These include foot size, circumference of the cannon bone (from the knee to the ankle), and structural width.
- **Quality** - a general term that infers smoothness and refinement. Refinement of hair coat, freedom of wrinkles in hogs and lambs, freedom of roughness, patchiness in cattle indicates quality.
- **Scale or Frame** - the size of the animal as determined by skeletal structure, independent of weight. The height, length and width as they predict an animal’s mature size.
- **Broodiness** - female breeding stock term that means she has a favorable combination of characteristics to be a good mother. Depth, capacity, stoutness, prominence of teats and/or mammary system, and correctness of vulva.

- **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.
- **Trimness** - freedom from external fat.
- **Muscling** - having greater meat yield per carcass weight.
- **Maturity** - an animal's degree of physiological development relating to sexual puberty, mature size, and body composition..
- **Structural Soundness** - the desirability or correctness of the skeletal structure, with major emphasis on straightness of top and proper feet and leg structure.
- **Sexual Characteristics** - characteristics that distinguish the female from the male. Femininity- Indicated by refinement of the head, neck and shoulders. Masculinity- Indicated by boldness or massiveness of head and crest, thickness of the neck and development of the forequarter.

Sexual character varies widely in each breed within a species; however, there are some common types and ideals found within most species. These can be broken up into necessary and desirable sexual characteristics. **Necessary** sexual traits are those necessary for reproduction in that individual. Some of these traits might include the development and spacing of the appropriate number of teats, lack of difficulty during parturition (giving birth) and the proper formation of testicles and vulvas. **Desirable** sexual traits are genetic traits that producers wish to pass along to the individual's offspring. The traits that a producer finds valuable vary widely with personal preference, use and breed demands. Some desirable traits might include femininity or masculinity of the head and neck, maximum number of offspring per year or lack of pendulous (hanging) sheaths.



INTRODUCTION

To fully understand and communicate with others in the livestock industry, it is essential that everyone use common terminology. The person to whom you are communicating should be able to understand exactly what you want them to. Today you will develop a basic vocabulary of livestock terms, learn the meanings of basic livestock terms and learn synonyms to be used in oral reasons. So let's get started.

DO

Play "phrase it" in livestock terminology

- Have a youth with livestock judging experience to give a sample set of oral reasons. This will familiarize youth with some terms used to describe and compare livestock animals.
- Play the phrase game. Divide the group into two teams.
- Write the general trait "frame" on the board or flip chart. Have the teams alternate youth (first one answers, then another) and come up with a different phrase or way of describing an advantage in this trait. Examples: long bodied, large framed, standing on length of leg.—write the answers on the board or flip chart.
- The leader or an experienced youth should evaluate and score the phrases. For each good answer, the team gets one point. For each outstanding answer, the team gets two points. For each poor or invalid answer, the team loses a point.
- The number of rounds played depends on the number of youth in the group. Make sure everyone gets at least two turns.
- Repeat game with the terms: muscle, structure, volume and carcass.
- Give youth copies of BASIC LIVESTOCK TERMS handout and discuss the information with youth.



REFLECT

- Why is there a variety of ways to say or express the same thing?
To provide ways to express a certain trait in almost any situation; to give some variety to a set of reasons.
- What is the difference between an animal's frame or scale and its growth?
Frame or scale describes an animal's length, height, and width as serves as a prediction of growth. Growth is used to describe size and weight at a certain age, but also to predict future growth potential of his/her progeny based on performance records.
- List a creative and specific term you used when describing traits.
- Was it challenging to describe a single trait in many different ways?
- Why might it be necessary or important to know this?
It is important to learn the terms used to describe and compare livestock to aid in evaluating the animals and to give effective oral reasons.
- List some examples of new words or phrases you learned in this activity.

APPLY

- Think of different ways to describe your home, pet or family member. Try to use very specific words and avoid general statements.
- Show a picture of an animal or view a live animal and have the youth describe the animal on its own merit, using correct and descriptive terminology.



BREEDING CATTLE TERMINOLOGY

GROWTH/MATURITY

Positives

Higher performing
Faster growing
More weight per day of age
Stouter featured
More powerfully constructed
Heavier boned
More moderate in frame and ultimate mature size

Negatives

Slow growing
Frail featured
Fine boned
Excessively large framed
Excessively small framed

PHRASES:

- a more powerfully made, bigger footed bull with more weight per day of age
- a stouter featured, heavier boned, higher performing bull

STRUCTURAL CORRECTNESS

Positives

More correctly structured
Longer strided
Truer moving
Sounder moving
Bigger footed
More structurally correct
More functionally correct

Negatives

Short strided
Ill structured as evidenced by
Straight shouldered/kneed/pasterned/hocked
Small footed

PHRASES:

- a more structurally correct heifer that was truer and freer moving
- a more correctly structured heifer moving off the more correct hind leg set
- a freer moving heifer that took a longer, more comfortable stride
- a bigger footed more structurally correct bull which should provide more seasons of service



BREEDING CATTLE TERMINOLOGY

MUSCLING

Positives

Heavier muscled
Thicker made
More muscle shape

Negatives

Light muscled
Flat/narrow made
Tapers out of hip

PHRASES:

- a thicker made, heavier muscled bull

BALANCE

Positives

Better/ nicer balanced/patterned
Better/ nicer/ more attractive profiling
Flatter shouldered
Cleaner/more attractive fronted
Longer fronted/bodied/hipped
More extended
Stronger topped
Leveler hiped
More eye appealing

Negatives

Poor balanced
Coarse shouldered
Short/necked/fronted/bodied/hipped
Broken/weak topped

PHRASES:

-a better patterned, longer fronted heifer that is stronger topped, and leveler hiped
-a better balanced, more correctly structured bull that is squarer hiped
-a nicer profiling heifer that is stronger in her topline and becomes progressively deeper from forerib to flank



BREEDING CATTLE TERMINOLOGY

SEXUAL CHARACTERISTICS

Positives– Heifers

More feminine featured
More maternal appearing
Broodier
Larger and more correct vulva size
Longer bred as shown by her udder development
Shorter, more refined teats

Negatives

Coarse featured
Small, missapened vulva
Shorter bred
Long, coarse teats

Bulls

Larger testicled
More ruggedly made
More masculine
Cleaner/less pendulous sheath

Small testicled
Frail
Coarse/pendulous sheath

PHRASES:

- a more feminine featured, broodier heifer, that is heavier bred as shown by her udder development
- a more ruggedly made, larger testicled bull

VOLUME

Positives

Higher volumed
Better/bigger bodied
Bolder sprung/ribbed
More capacious
Should be easier keeping
Deeper bodied/flanked
Wider tracking

Negatives

Low volumed
Tight ribbed/flanked
Shallow bodied
Flat ribbed

PHRASES:

- a better bodied, bolder sprung heifer, that should prove to be the easier keeping brood cow
- a bolder ribbed, higher volumed bull



MARKET CATTLE TERMINOLOGY

BALANCE– See Breeding Cattle Section

MUSCLE

Positives

Heavier muscled
More meat-animal shape
More expressively muscled
More shape/dimension over the rib and loin or top
Squarer hipped
More bulging/bulging/thicker quarter

Negatives

Light muscled
Flat/narrow made
Tapers out of hip
Flattens through quarter
Narrow topped

PHRASES:

- he had more shape over this rib and loin and more mass through his hip and quarter
- more muscle shape from end to end

CORRECTNESS OF FINISH/MATURITY

Positives

More correctly/optimally finished
More market ready
Mellower handling
Trimmer
More compositionally correct

Negatives

Thin finished
Over finished
Bare handling

PHRASES:

- a more correctly finished steer that appears more market ready through his cod, flank, and brisket
- a trimmer patterned, more compositionally correct steer
- a more optimally finished steer which handled mellower down his top and over his lower rib



MARKET CATTLE TERMINOLOGY

PRODUCTION TRAITS

Positives

Stouter made/featured/boned
More powerful
More productive/practical appearing
Easier feeding
More feeding capacity
Sounder

Negatives

Frail
Low volumed
Less feeding capacity
Short strided
Ill structured

PHRASES:

- a more productive appearing, bolder ribbed steer with more feeding capacity
- a sounder footed, bigger bodied, easier feeding steer

CARCASS TERMS

Positives

Whole carcass should rib with a larger eye
Should rail/generate a higher cutability carcass
A carcass with greater red-meat yield
A higher dressing percentage
More apt to make/reach the Choice grade
Better potential yield and quality grade combination
Packer preferred

Negatives

Rib with a small eye
Overfinished, light muscled, low cutability carcass
Low dressing percentage
Least apt to make the Choice grade
The poorest potential carcass merit

PHRASES:

- a more correctly finished, packer preferred steer which should yield a carcass more apt to grade "Choice"
- a heavier muscled steer whose carcass should rib with a larger eye
- a more optimally finished, heavier muscled steer whose carcass should have more value on most traditional grids



BREEDING SHEEP TERMINOLOGY

GROWTH/MATURITY

Positives

Higher performing
Faster growing
More weight per day of age
Larger statured/framed
Stouter featured
More powerfully constructed
Heavier boned
Growthier
More extended
More upstanding
Taller fronted
Later maturing
Trimmer patterned, more youthful and immature
More potential for future growth

Negatives

Slow growing
Frail featured
Small footed
Small statured/framed
Low set
Short coupled
Heavy conditioned and skeletally mature
Early maturing

PHRASES:

- a growthier, more upstanding ewe
- a stouter featured, heavier boned, ram with more weight per day of age
- a taller fronted, more extended, trimmer conditioned ewe which is later maturing

STRUCTURAL CORRECTNESS—see Structural Correctness of Breeding Cattle, substituting ram and ewe for bull and heifer



BREEDING SHEEP TERMINOLOGY

MUSCLING

Positives

Heavier muscled
Thicker made
More muscle shape

Negatives

Light muscled
Flat/narrow made
Tapers out of dock

PHRASES:

- a thicker made, heavier muscled ram

BALANCE

Positives

Better/ nicer balanced/patterned
Better/ nicer/ more attractive/more stylish
profiling
Flatter shouldered
Shallower breasted
Cleaner/more attractive fronted
Longer fronted/bodied/hindsaddled/hipped
Stronger topped
Leveler hipped/docked
More eye appealing
Squarer/leveler docked
Handles with a longer hindsaddle/loin
Handles longer from the last rib back

Negatives

Poor balanced
Round/coarse shouldered
Short/necked/fronted/bodied/hindsaddled/hipped
Broken/weak topped
Rounds out of dock
Steep hipped/docked
Handles with a short hindsaddle/loin
Handles shorter from the last rib back

PHRASES:

-from the side, she is cleaner fronted, longer hindsaddled, and squarer out of her dock
-a more stylish profiling ewe that is shallower breasted and becomes progressively deeper from breast
to flank

SEXUAL CHARACTERISTICS AND VOLUME—see Sexual Characteristics and Volume of
Breeding Cattle, substituting ram and ewe for bull and heifer



MARKET LAMB TERMINOLOGY

BALANCE– See Breeding Sheep Section

MUSCLE

Positives

Heavier muscled

More meat-animal shape

More expressively muscled

Progressively widens from front to rear

Handles with more mass/shape/dimension to top
or rack and loin

Handles deeper/fuller/squarer in loin/down top

More bulging/thicker/fuller leg

Squarer/thicker out of hip/dock

Negatives

Light muscled

Flat/narrow made

Tapers out of hip/dock

Flattens through dock

Narrow topped

Handles narrow/shallow down top

Flattens through the leg

PHRASES:

-handles squarer down his top, and was fuller out of his dock and leg

-progressively widens from front to rear, and handles with a deeper, fuller loin

CORRECTNESS OF FINISH/MATURITY

Positives

More correctly/optimally finished

Trimmer

Firmer/trimmer handling

Handles with a more adequate degree of finish

Negatives

Soft handling

Over finished

Bare handling

PHRASES:

- a trimmer patterned, more correctly finished wether that handles firmer down his top and through is forerib

-a more optimally finished wether which handled with a more adequate degree of finish down his top and through his lower rib



MARKET LAMB TERMINOLOGY

PRODUCTION TRAITS

Positives

Growthier
More upstanding
Larger statured
Stouter made/featured/boned
More powerful
More productive/practical appearing
Bolder ribbed
Deeper flanked
Higher volumed
Stands squarer

Negatives

Low set
Short coupled
Frail
Low volumed
Harder feeding
Stands:
Stand with his front legs/ kneed-in, turned out
Toed out
Buckneed
Stands: sickle hocked/on his rear legs
Cow hocked
With hocks bowed out

PHRASES:

- a growthier, stouter featured, bigger volumed wether which stands squarer on his rear legs
- a larger statured, more productive appearing wether which was deeper through his flank

CARCASS TERMS

Positives

Whose carcass should open with a larger eye
Should rail/generate a higher cutability carcass
A carcass with greater red-meat yield
A higher dressing percentage
A more shapely carcass, with a greater leg score
A more packer preferred carcass, resulting in less cooler shrink
A higher percentage of trimmed hindsaddle

Negatives

Open with a small eye
Overfinished, light muscled, low cutability carcass
Low dressing percentage
The poorest potential carcass merit

PHRASES:

- a leaner patterned lamb who handles with more tone to his top and should rail a higher cutability carcass
- a heavier muscled wether whose carcass should open a larger eye
- a more optimally finished, lamb whose carcass should have less cooler shrink
- handles firmer and longer loined and should yield a carcass with a higher percentage of closely trimmed hindsaddle



BREEDING HOG TERMINOLOGY

GROWTH/MATURITY

Positives

Higher performing
Faster/easier growing
More weight per day of age
Stouter featured/boned/headed
More powerfully constructed
Heavier boned/structured
Taller fronted
Longer boned
More extended
Bigger/larger scaled
Later maturing
Leaner made/designed

Negatives

Slow growing
Frail featured
Fine boned
Short coupled
Low set
Early maturing

PHRASES:

- a faster growing, stouter featured, heavier boned gilt
- a taller fronted, leaner, later maturing gilt

STRUCTURAL CORRECTNESS

Positives

Sounder/looser/more flexibly structured
Greater confinement soundness
More structurally comfortable
Greater skeletal flexibility
More functionally correct in his/her structural design
More functionally sound
Better/leveler designed
Weak pasterned
Bigger footed

Negatives

Tight structured
Straight through shoulder/knee/pastern/hock
Tight in his/her hock
Round/short hipped
Small footed

PHRASES:

- she was more functionally correct in her structural design having more flex to her hip and hock
- a looser structured, more flexibly made gilt
- a bigger footed, sounder structured gilt



BREEDING HOG TERMINOLOGY

MUSCLING— See Breeding Cattle

SEXUAL CHARACTERISTICS

Positives— Gilt

More feminine featured/headed
More maternal appearing
Larger and more correct vulva size
Longer necked
Broodier
Higher quality, more refined underline which starts farther forward
More evenly spaced teats

Negatives

Coarse featured
Short necked
Small, missapened vulva
Coarse underline
Has blind/pin nipples

Boars

Larger testicled
More ruggedly made
More masculine
Cleaner sheathed

Smaller testicled
Frail
Coarse sheath

PHRASES:

- a more maternal appearing, longer faced, more extended gilt with a higher quality, more refined underline
- a more ruggedly made, more athletic, larger testicled boar

VOLUME

Positives

Naturally wider structured
Bolder/more open ribbed
Wider chested/based
Higher volumed
Bolder bladed
Deeper bodied/flanked
More capacious

Negatives

Low volumed
Tight ribbed/flanked
Shallow bodied/flanked
Flat ribbed
Narrow chested

PHRASES:

- a more open ribbed, higher volumed gilt
- a bolder ribbed, higher volumed bull



MARKET HOG TERMINOLOGY

MUSCLE

Positives

Heavier muscled
More meat-animal shape
More expressively muscled
Works more muscle thickness from blade to hip
Works a greater volume of muscle down his top
More dimension of muscle
Bigger/bolder/thicker /squarer topped
More bulging/thicker/fuller ham

Negatives

Light muscled
Flat/narrow made
Narrow hipped
Narrow topped
Flattens through the ham

PHRASES:

- a heavier muscled barrow that has greater muscle dimension from blade to hip
- a thicker made gilt with more shape out of her hip and ham

LEANNESS/MATURITY

Positives

Leaner designed
Reads leaner down his top and in his elbow pocket/jowl/seam of the ham
Taller fronted
Later maturing
Longer boned/bodied
More extended
More natural/practical amount of external fat

Negatives

Fat
Short coupled
Low set
Early maturing

PHRASES:

- a barrow which reads to be leaner down his top, elbow pocket, and jowl.
- a taller fronted, leaner made, later maturing gilt which has more potential for continued lean growth

GROWTH

Positives

Higher performing
Faster/easier growing
More weight per day of age
Pounds heavier

Negatives

Slow growing
Light weight

PHRASES:- See Market Hog Production Traits



MARKET HOG TERMINOLOGY

PRODUCTION TRAITS

Positives

Naturally wider structured
Bolder/more open ribbed
Wider chested/based
Stouter made/featured/boned/headed
More productive/practical appearing
Bolder ribbed/bladed
Deeper flanked
Higher volumed
Sounder footed
Looser structured
Bigger footed

Negatives

Frail made/boned/headed
Low volumed
Harder feeding
Flat ribbed
Narrow chested
Tight structured
Straight through shoulder/knee/pastern/hock
Tight in his/her hock
Round/short hipped
Small footed

PHRASES:

- a stouter featured, wider chested, faster growing barrow
- a higher performing, sounder footed, more productive appearing gilt
- a more open ribbed, easier feeding barrow with more weight per day of age

CARCASS TERMS

Positives

Whose carcass should open with a larger loin eye
A heavier muscled more shapely carcass
A carcass which will probe leaner at the 10th rib
Should rail/generate a higher cutability/percent lean/percent muscle carcass
A carcass with greater lean value
Whose carcass should have improved belly quality

Negatives

Open with a small loin eye
Fat, low cutability/low percent lean/muscle carcass
A carcass with a thin, poor quality belly

PHRASES:

- a heavier muscled, thicker topped barrow whose carcass should open with a larger loin eye
- a leaner designed, gilt whose carcass will probe leaner at the 10th rib
- a leaner, heavier muscled barrow that will rail a carcass with greater lean value
- faster growing, more productive barrow with a more practical amount of external fat whose carcass should have improved belly quality



SYNONYMS

SHOWS:	exhibits, displays, reveals, indicates, evidenced by
GRANT:	concede, admit, realize, agree that, acknowledge, recognize
HOWEVER:	nevertheless, although, yet, nonetheless, but
ALSO:	in addition, furthermore, moreover, likewise
POSSESSES:	has, represents
SURPASSES:	exceeds, excels, overpowers
LACKS:	is deficient, devoid, inferior
MORE:	greater amount or quantity, higher degree, additionally, greater, more extensive, surpasses, exceeds, excels, more abundant
SINCE:	as, because, for the reason that
ESPECIALLY:	definitely, particularly, explicitly, distinctively



Activity 6

JUDGING A CLASS

OBJECTIVES:

For youth to:

- Identify priorities for evaluating items.
- Develop comparative skills.

LIFE SKILLS:

- Acquiring, analyzing and using information.
- Decision making skills.

MATERIALS:

Hats (4 different types)

Paper (to number hats and one per youth)

Footwear (4 different types)

Knives (4 different types)

Pictures of trucks (4 different types)

Pencils

Markers or chalk

Flipchart and easel or chalkboard

TIME:

1 1/2 Hours

SETTING: Comfortable room

INTRODUCTION

Evaluating an entire class of animals is much easier when you have a plan. Knowing your system of individual animal priorities will help you immensely in judging a class. Livestock judging requires complete concentration, careful observation and logical reasoning skills. Let's see how you do.

DO

READY, SET, JUDGE!!

- Set up a class of 4 hats and label them 1, 2, 3 and 4.
- Have the group develop a list of priorities for the hats. Examples are size of brim, mesh or solid, cowboy, cap or beach hat, writing and print on it, UV protection, clean condition with no holes, visibility....
- List them on the flipchart or chalkboard.
- Have each youth judge the class based on the priorities.
- Have each youth discuss their placing and why they placed it the way they did, based on the priorities list.
- Set up additional classes using footwear, knives, and trucks.

REFLECT

- List some priorities the group identified.
- Did you negotiate any priorities because of their importance?
- List some priorities that were the same for all items.
- What similarities were there between priorities for different items?

- Did you have at least one easy pair placing? (ie. bad vs. nice hat)
- Was it challenging to judge items other than livestock?
- Will you look at these items differently in the future?
- Why is it important to know this information?
- What did you learn from this activity?

APPLY

- Developing priorities for livestock selection:
- Judge a class of livestock; either live or from slides or video.
- Start with a live class of 2, then 3, 4, 6, or 8 animals.
- Can you think of other ways you can use this same system in your daily decision-making ?



Activity 7

OBJECTIVES:

For youth to:

- Select animals based on performance potential.
- Interpret performance data.
- Relate data to visual appraisal.
-

LIFE SKILLS:

- Acquiring, analyzing, and using information.
- Problem solving and decision making.

MATERIALS:

PICK YOUR BULL Data sheet

Pens/Pencils

TIME:

1 Hour

ADVANCE PREPARATION:

Make an overhead of the PICK YOUR BULL Data sheet.

SETTING: Comfortable room

HOW DO I RATE?

BACKGROUND BASICS..

There are primarily three types of performance data.

Adjusted performance records (1) are used to make within-herd/flock ratios (2). Expected Progeny Differences (EPDs) (3) are only calculated for purebred herds. The ratios and pedigree information from different herds within a breed are submitted to respective breed registries for EPD calculation

1) Adjusted Performance

This is initial data collected and consists of an animal's actual performance record. Often times, the numbers reflect the adjusted weight of an animal. This means that instead of the animals being weighed at a common day of age, they are weighed on a common day. The weights are then adjusted for age. The following are examples of the most common data given in cattle, swine and sheep. A (+) or (-) follows each trait and indicates whether you generally want the trait's number to be high (+) or low (-). However, in some cases the opposite sign may be acceptable or desirable, depending on the management scenario.

2) Ratios

Ratios provide a method of comparing animal performance to a base number. They do not account for differences in environment or management. Ratios rank an individual animal's deviation of performance to the herd average in a certain trait. The herd average is represented by a ratio of 100. For example, if a bull had a weaning weight ratio of 110, then his weaning weight was 10 percent higher than the herd average. If a heifer has a yearling weight of 92, then she performed 8 percent below the herd average.

3) Expected Progeny Differences (EPDs) and Indexes

EPDs are a prediction of how offspring of each animal are expected to perform relative to the offspring of other animals within the breed's database. The numerical estimate of an animal's EPD excludes the effect of environment, and only considers an animal's genetic ability for that trait, making it a better genetic tool than actual or adjusted data or within herd ratios.

EPDs are computed in the units of measure for the trait, plus or minus (i.e. a bull with a +30 weaning weight EPD would be expected to sire calves that wean 20 pounds heavier than a bull with a +10 weaning weight EPD). However, for other traits, larger values are not always preferred. An index (uses EPDs to develop an index which is formatted in dollars, so a larger value is always preferred).

EPDs are accompanied with an accuracy value between 0 and 1. This represents the accuracy and reliability of the prediction. Older parent animals have a higher accuracy value because of the fact that they have proven results and performance through their progeny, whereas a younger animal doesn't. The larger the accuracy, the more reliable the estimate of genetic potential (EPD). For instance, a young non-parent Angus bull with a birth weight EPD of 2.0 with an accuracy of 0.20 would have a range of "true" EPD values from -0.1 to +4.1, and an aged Angus bull offered within an bull semen catalog with the same EPD of 2.0 and hundreds of progeny resulting in an accuracy of 0.95 would have a range of "true" EPD values from -1.9 to +2.1.

Accuracy values of young non-parent stock are quite low, generally less than 0.20 and often very similar, therefore accuracies of animals used in judging contests are seldom shown.

INTRODUCING PERFORMANCE DATA

What do the letters and numbers mean?

In a judging contest, students can use the performance information to compare traits between animals, but also to the current breed averages for that trait. Review the codes for performance data on page 100 with the youth then provide a the sample chart below for discussion.

Consider the following two Angus bulls—if both bulls were mated to comparable cows, over time, what would be expected, assuming comparable increases in accuracy?

	BW	WW	YW	Milk	Scrotal	REA	MARB	FAT	\$B
Bull A	8.2	37	73	12	+.95	+.25	+.10	+0.03	35.15
Bull B	1.2	54	91	23	+.45	+.65	+.45	-0.04	50.25
2011 Average	2.0	46	83	22	+.42	+.19	+.41	+0.01	45.95

For growth traits, Bull A's calves should be 8 lbs heavier at birth (BW), 17 lbs lighter at 205 days (WW), and 18 lbs lighter at 365 days (YW), than Bull B's calves. For maternal performance, Bull A's daughters should wean calves 11 lbs lighter than Bull B's, due solely to maternal performance (Milk). Bull A's sons should have 0.5 cm greater scrotal circumference than Bull B's sons (Scrotal). Bulls with stronger scrotal circumference EPDs will tend to have improved seminal quality and their daughters will be



INTRODUCING PERFORMANCE DATA continued

quicker to reach sexual maturity. For carcass traits, Bull A's progeny will have a 0.40 in² smaller ribeye (REA), 0.35% less intramuscular fat or marbling within the ribeye (MARB), and have 0.07 in greater fat thickness opposite the ribeye (FAT). The \$Beef (\$B) index suggests Bull A's progeny should be worth \$15.10 less than Bull B's progeny due to their YW, REA, FAT, carcass weight, and MARB EPDs.

Now, consider these two Yorkshire gilts—what do these numbers mean?

Consider the two Yorkshire gilts—if both gilts were bred by comparable boars, over time, the following would be expected.

	DAYS	BF	NBA	LWT	TSI	SPI	MLI
Gilt A	-4.6	-0.06	+0.20	+2.55	112	106	112
Gilt B	+0.6	-0.02	+0.65	+6.55	104	115	112
2011 Average	-0.75	-0.01	+0.24	+2.80	106.1	109.7	112.3

For terminal traits, Gilt A's progeny should reach 250 lbs in 5 fewer days (DAYS) and have 0.04 in less fat thickness opposite the loin eye (BF), than Gilt B's progeny. For maternal performance, Gilt A's daughters should have 0.45 fewer pigs born alive per parity (NBA) and have and have 4 lbs lighter 21 day litter weights (LWT) at weaning. The Terminal Sire Index (TSI) is developed from the DAYS and BF EPDs, the Sow Productivity Index (SPI) is developed from the NBA and LWT EPDs, and the Maternal Line Index (MLI) is developed from all four listed EPDs, but puts 75% of the emphasis on the two maternal traits.

How should these data be interpreted and used in judging contests?

Students should be instructed how to identify “red flags” within the data set.

For instance, Bull A was substantially above breed average for birth weight, substantially below breed average for milk and \$Beef, and was in the wrong genetic direction for both marbling and fat. All of those would serve as a red flag. Bull B was in the correct genetic direction for all reported traits. Bull B's data would be preferred, for most scenarios.

Gilt A was below breed average for NBA, LWT and accordingly SPI. Gilt B was in the wrong genetic direction for DAYS, but posted a very strong SPI. Even though both gilts had the same MLI, Gilt B's data would be preferred for most scenarios.



INTRODUCTION

Scenarios are often given to contest participants. These describe the situation in which the animals are going to be used. Scenarios usually tell the intended use of the animal, the intended use of their progeny, feed and labor resources available, and how progeny will be marketed.

Performance data can be confusing when you don't understand its purpose and use in placing a class. However, once you are shown a way to analyze and simplify the information, classes with performance data often become your favorites. EPDs and indexes are genetic tools that when used in combination with phenotypic evaluation, improve the efficacy of livestock selection.

DO

How Do I Rate?

- Review the how to read and interpret the data charts and situations. Use the INTRODUCING PERFORMANCE DATA to orient youth to analysis process.
- Divide the youth into pairs.
- Distribute paper and pens/pencils to each group.
- Display the PICK YOUR BULLS chart.
- Assign youth a column to defend. They should be prepared to tell why the data in that column is important, what priority it should be given and which column is the most profitable trait and why.
- Distribute one scenario per pair and allow them time to evaluate and select which bull they would choose to best fit the scenario.
- Have each pair read their scenario to the entire group and discuss and defend their decision.

Performance Data Codes

Common Beef Cattle EPD's and Indexes

Growth

BW= Birth Weight

WW= Weaning Weight

YW= Yearling Weight

Maternal

MM= Maternal Milk,

TM= Total Maternal,

SC= Scrotal Circumference

Carcass

REA= Ribeye Area,

%IMF= Intramuscular fat

BF= Backfat

American Angus Assoc. Indexes

\$F= Feedlot,

\$G= Grid,

\$B= Beef

Common Swine EPD's and Indexes

Growth

DAYS= Days to 250

Carcass

BF= Backfat

Maternal

NBA= Number Born Alive

LWT= 21 day litter weight

Indexes

SPI= Sow Productivity Index,

MLI= Maternal Line Index,



REFLECT

- Which traits are especially important if you are breeding a bull to a group of yearling heifers?

A low birth weight record and desirable calving ease score are crucial in this situation, because heifers usually have a difficult time delivering large calves and the calves and/or heifers could die as a result of calving problems (called dystocia).

- Assuming the producer has no calving, milking or feed problems, if the producer's ultimate goal is to sell all calves at weaning age, which trait is the most important?

High weaning weight data indicates the producer will get the calves to a sellable weight in less time, which provides cash in the bank for the producer.

- Did you find it difficult to determine which columns represented the most important information based on the scenario?

Remember to look for the items in the scenario which will have a significant impact on the producer's profit margin. For example, if the producer is retaining heifers, low milk EPDs could indicate a lack of maternal performance; if the producer sells cull heifers and steers as yearlings, the yearling weight data would be far more important than the weaning weight data. To help you develop a system of analyzing the data, try marking a large \$ sign on the money making data and a small \$ sign on the data that is important but in a lesser way.

APPLY

- Go to a farm or ranch and work performance classes.

(Youth will need performance data in order to do this.)

- Find calculated breed averages for breeds of beef cattle, hogs, and sheep, available at their breed websites.



Scenario Answer Key

In Scenario 1, the producer needs a calving ease sire, to produce daughters with strong maternal performance. Also, it would be desired to have strong records for yearling growth, because that is when steer and cull heifers are marketed. Bull 2 was the only bull below breed average for birth weight, and was above breed average for milk, scrotal circumference and yearling growth, thus would have the most scenario adaptable data set.

In Scenario 2, the producer needs excellence in weaning growth with little concern for calving ease due to mating with mature cows. Bulls 2, 3, 4, and 5 are all above breed average for weaning weight, with Bull 4 having the strongest data for weaning growth. Bull 4 has below average carcass EPDs, but the producer plans to have already marketed the calves, thus Bull 4 would be the most scenario adaptable.

Scenario 3, is another terminal scenario with the producer retaining ownership of all calves through feeding and marketing calves at slaughter on a traditional carcass merit grid. Bulls 2, 3, 4, and 5 are all above breed average for yearling weight, with Bull 4 having the strongest data for post-weaning growth. However, Bull 4 has below average EPDs for ribeye area and marbling. Bull 3 has the second strongest yearling weight EPD and the strongest set of carcass EPDs, thus Bull 3 would be the most scenario adaptable.

Scenario 4 describes a limited forage scenario where all the emphasis is upon producing reproductively efficient daughters. Heavier milking cows have greater nutritional needs, thus this bulls daughters need to be marginal for milk production. Only Bulls 1 and 3 were below breed average for milk, and only one of those, Bull 1, was above breed average for scrotal circumference, which is a predictor of sexual maturity. Bull 1 is the most scenario adaptable.

Scenario 5 is for a purebred producer who needs an excellent and balanced genetic profile. Both Bulls 2 and 5 have a strong genetic profile, with Bull 5 having the strongest data and would be deemed the most scenario adaptable.



PICK YOUR BULL

	BW	WW	YW	MAT	TMAT	Scrotal	REA	FAT	MARB
1	1.0	21	33	-4	6.5	1.5	0.00	-0.004	0.00
2	-6.0	26	45	9	22	1.9	0.25	-0.01	0.05
3	2.2	39	62	0	19.5	0.0	0.95	-0.03	0.40
4	5.5	50	80	18	43	-0.2	-0.12	-0.015	-0.18
5	1.0	35	55	10	27.5	2.1	0.66	-0.03	0.25
2011 Average	0.6	24	42.1	6.5	18.5	0.6	0.20	0.000	0.03

The EPD's for Charolais bulls are shown above. The following scenarios will illustrate the use of EPD's to meet specific herd needs of beef cattle producers.

BW - Birth weight

WW - Weaning weight

YW - Yearling weight

MAT - Maternal Milk

TMAT - Total maternal

Scrotal—Scrotal circumference

REA—Ribeye area

FAT— Fat thickness

MARB— Marbling



PICK YOUR BULL SCENARIOS

Scenario 1:

Select a bull to be mated to mature black-baldie cows and heifers on a commercial cow-calf operation in central Florida. The top fifty percent of the heifer calves will be kept as replacements and the remaining heifers are marketed through elite commercial replacement heifer sales. The producer retains ownership of the steer calves and sells them at the conclusion of the stockering phase.

Scenario 2:

Select a bull to be utilized as a terminal sire on mature commercial cows in central Florida. After a 45 day preconditioning period, all calves will be marketed through graded feeder calf sales in large commingled groups.

Scenario 3:

Select a bull to be mated to mature Brahman-influenced cows on a commercial cow-calf operation in central Florida. The producer retains ownership of the steer calves and heifers through finishing in a commercial feedyard and markets them to a fed beef slaughter operation whose pricing schedule for fed cattle is based on a low Choice yield grade 3 carcass as the base value.

Scenario 4:

Select a bull to be mated to Brahman-influenced cows on a large commercial cow-calf operation in the arid American southwest. This operation has made the financial decision not to fertilize any native range or improved pastures for the past three years, thus forage is limited and of marginal quality. Ranch management wants to increase the number of brood cows within the operation, so they plan to keep all heifer progeny of acceptable quality.

Scenario 5:

Select a bull to be purchased as a clean up bull on mature cows for a small, but high quality, purebred Charolais operation. This bull must have the genetic flexibility to produce sons that can be sold through an invitational bull sale, which is the primary source of income, as well as competitive females as junior show prospects.



PERFORMANCE CLASS PHRASES—FOR REASONS

CATTLE:

- Calving ease scenario—should cause less dystocia (or calving difficulty)—↓er BW EPD
- Replacement female scenario—should have heavier milking daughters— ↑er MILK EPD
- Replacement female scenario—whose daughters should be younger at their first estrus—↑er Scrotal EPD
- Retained ownership sell as yearlings should have faster growing yearling progeny—↑er YW EPD
- Retained ownership sell on carcass merit—should have more valuable terminal progeny—↑er YW EPD and stronger more balanced carcass EPDs
- Limited forage scenario—should produce easier keeping, lower maintenance daughters—↓er MILK EPD

HOGS

- Maternal scenario—should have heavier milking, more prolific daughters—↑er NBA and LWT EPDs
- Terminal scenario—should have the leaner, faster growing terminal progeny—↓er BF and DAYS EPDs



Activity 8

OBJECTIVES:

For youth to:

- Develop note taking skills.
- Identify the importance of oral reasons.
- Follow the format of oral reasons.
- Analyze the different styles of oral reasons.
- Develop skill in presentation of oral reasons.

LIFE SKILLS:

- Communicating and relating to others.
- Acquiring, analyzing and using information.

MATERIALS:

Copies of blank TAKING NOTES
Handout for each youth

Copies of TAKING NOTES Handout for
each youth

Copies of MAJOR SPEAK UP
Points for each youth

Copies of REASONS FORMAT for each
youth

Pens/pencils

Sunglasses (4 different types)

TIME:

Depends on number of judging
members

SETTING: Comfortable room



WHAT'S MY LINE?

BACKGROUND BASICS...

In judging, oral reasons enable the participants to express their opinions and knowledge about the animals they previously placed. Teams and members which strive for excellence in oral reasons usually outscore other teams and gain more overall knowledge from the judging opportunities. On the surface, reasons involve telling someone how and why a class of animals were placed the way they were. However, reasons communicate more about oneself than you realize: The industry knowledge, confidence level, ability to solve problems and perhaps most importantly, the ability to express truthful views on a subject.

In the competitive job market of today, many corporate executives cite communication skills as the most lacking skill of job applicants. We are very fortunate in livestock judging to have a tool which can cultivate confidence and aptitude in oral presentation; oral reasons.

Giving reasons will help youth to:

- Develop a system for analyzing a class of livestock,
- Think clearly on their feet,
- State their thoughts clearly,
- Improve their speaking, poise and presentation
- Develop their memory.

Taking Notes

Unless youth have a photographic memory, accurate and complete note taking is imperative to the presentation of oral reasons. There are several hours between the actual viewing of a class and the presentation of the oral reasons on that class. Therefore, notes that are complete and accurate are vital to recall the image of the class in the members mind.

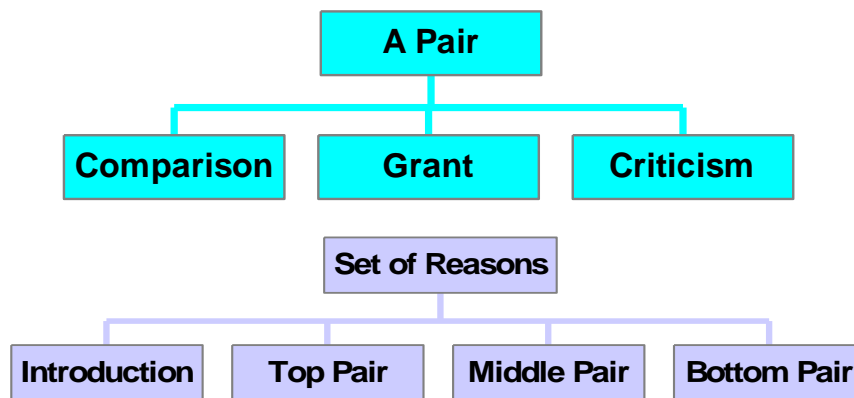
BACKGROUND BASICS...continued

There are many different methods of note taking, and the method used by each member should be what he/she is most comfortable using. However, there is a basic format which should be used. Due to time constraints on each class, members should develop their own shorthand for taking notes. The less time spent on taking notes, the more time available for decision making.

The standard format for taking notes can be found on the **TAKING NOTES HANDOUT**.

Format

Reasons should be organized, logical and easy to listen to. The following format will help students to organize their thoughts and to present them with confidence.



Outline for a Set of Reasons

1. Opening Statement
 - a. Name of class
 - b. Placing
 - c. Superlative statement about the top animal
 - d. Descriptive criticism of the top animal
2. Top Pair
 - a. Talk 1st over 2nd using comparative terminology
 - b. Grant 2nd over 1st using comparative terminology
 - c. Criticize 2nd with descriptive terminology
3. Middle Pair
 - a. Talk 2nd over 3rd using comparative terminology
 - b. Grant 3rd over 2nd using comparative terminology
 - c. Criticize 3rd with descriptive terminology



BACKGROUND BASICS...continued

4. Bottom Pair

- a. Talk 3rd over 4th using comparative terminology
- b. Grant 4th over 3rd using comparative terminology
- c. Criticize 4th with superlative and descriptive terminology

Making Comparisons

Comparisons should be made by using superlative, comparative, and descriptive terminology.

Superlatives include terminology containing most, best, worst, least or adjectives ending in “est”. This terminology compares one animal to the remaining animals within the class. These superlative statements should only be used in the opening statement and in criticism of the fourth placed animal.

For example...“I placed the market steers 1234 starting with the stoutest made, heaviest muscled, highest volumed steer. I realize, 1 is not the niciest balanced.”

Within the top, middle, and bottom pairs it is appropriate to use comparative terminology, or terms ending in “er” when comparing two animals to each other.

For example...“Even so, I liked 1 over 2 as he was a heavier muscled, better bodied steer. Granted, 2 was longer bodied and leveler hipped.”

Criticisms are most effective when describing an animal’s individual weaknesses.

For example... “however, I criticize 2 and placed him second as he was a somewhat flat ribbed steer that narrows out of his hip.” This criticism will stand on its own in describing 2s deficiencies, and is more effective than comparative criticism.

An example of comparative criticism would be...“however, I criticize 2 and place him second as he is flatter ribbed and narrower hipped than 1....” Although this maybe a true statement, it tells the reasons taken no more about number 2 than what we have already stated when giving 1s advantages over 2 in the top pair.

Support and Patience Required!

Proficiency in oral reasons is not achieved overnight. It takes dedication and patience to develop the oral reasons skills required to be competitive. You will find that this will be the greatest area of frustration for most youth. Therefore, your diligence and patience are important in helping youth overcome the obstacles in the presentation of oral reasons.



INTRODUCTION

Communication holds the key to your future. Being able to express your beliefs, goals and opinions is a skill that will help you relate with people throughout your lifetime.

DO

WHAT'S YOUR LINE

- Distribute TAKING NOTES Handout and go over the format and information contained with youth.
- Pass out BLANK TAKING NOTES Handout and have youth take notes on a class of sunglasses.
- Hand out MAJOR SPEAK UP Points and REASONS FORMAT.
- Have youth prepare a set of oral reasons on the class of sunglasses.
- Allow youth 20 minutes to prepare.
- Randomly assign a reasons order.
- Listen to the youths' reasons and offer constructive criticism and acknowledge the good points.
- As the youth become more adept at giving oral reasons, assign several sets back to back, allowing each member to have 15 to 20 minutes between sets of reasons.

REFLECT

- How did the TAKING NOTES Handout help you reorganize the class information?
- Why is it important to abbreviate while taking notes for reasons?
Saves time; note taking should take the least amount of time possible. You need time to look at and analyze the class so you will remember the animals later.
- How did taking notes help you organize your thoughts for oral reasons?
- How will this information help you in the future?



APPLY

- Have youth divide into pairs and give a set of oral reasons to each other at the same time. This will develop their availability to concentrate on the task at hand.
- Videotape reasons and critique reasons with the individual.
- Ask questions on each class.

NOTE Answers are usually the id# of one animal in the class, or T/F, yes/no. Sometimes questions are used that require the number of animals in the class which meet certain criteria. (ex: how many bulls are polled? Answer 2)

The old saying "Practice Makes Perfect" must have been said with oral reasons in mind. Developing your livestock judging vocabulary, learning to take notes, and memorizing the basic reasons format takes time.



MAJOR SPEAK UP POINTS

ACCURACY of statements—Above all, what the member says must be correct.

CONCISENESS of statements—Members should provide specific explanations and avoid general statements.

COMPLETENESS—All important characteristics must be covered.

EMPHASIS of the most important characteristics of the two animals being compared.

VOCABULARY—Members should exhibit a knowledge of livestock terminology.

VARIATION in use of terms—Members should avoid excessive repetition.

GRAMMAR—Members should use good grammar, much like writing.

DELIVERY—Presentation should be persuasive, sincere and clear. Be natural and comfortable. Be confident, but not loud or arrogant.

ENUNCIATION of words should be clear and understandable. Remember to open your mouth, to use your jaw and mouth to clearly enunciate each syllable.

VOICE INFLECTION should be used to provide emphasis.

MODULATION of voice—Speak clear and loud, but remember to account for room size and listener distance.

ORGANIZATION of reasons, should be easily followed by the listener.

EYE-TO-EYE CONTACT to help keep listener interested.

NON-VERBAL COMMUNICATION— movement of the eyes, eyebrows, head, shoulders and torso can emphasize points. This is not to be taken as extreme animation, which could be distracting.

POSTURE— Members should stand with feet shoulder width apart, the upper body should be leaning slightly forward to show enthusiasm and hands should be held together either in front or back of the body.

PRESENTATION—Members should wear nice, comfortable clothing. Gestures and noises should be avoided while presenting oral reasons.




REASONS FORMAT

INTRODUCTION ? I placed the _____ (CLASS NAME) 1-2-3-4, starting with the 1) _____ est, 2) _____ est, 3) _____ est (ANIMAL) in the class. Ideally, my class winner could have been _____.

TOP PAIR ? But even so, in my top pair, I selected 1 over 2 because 1 was

1)_____er, and 2)_____er than 2. *COMPARE* I admit
that 2 was _____ than 1. *GRANT* But, I criticized 2, and placed it
second, because 2 was (DESCRIPTIVE CRITICISM) . *CRITICIZE*

MIDDLE PAIR  In my middle pair, I selected 2 over 3 because 2 was

1)_____er, and 2)_____er than 3. *COMPARE* I admit
that 3 was _____ than 2. *GRANT* But, I criticized 3, and placed it
third, because 3 was _____(DESCRIPTIVE CRITICISM). *CRITICIZE*

BOTTOM PAIR 2 In final pair, I chose 3 over 4 because 3 was _____er,
and _____er than 4. *COMPARE* I realize that 4 was
_____er than 3, *GRANT* but placed 3 last, because it was the _____est,
est, and _____est (ANIMAL) in the class.*CRITICIZE*



TAKING NOTES HANDOUT

1)		
2)		
3)		
4)		
COMPARE	GRANT	CRITICIZE
COMPARE	GRANT	CRITICIZE
COMPARE	GRANT	CRITICIZE



Taking Notes Handout with Animal Descriptions

1-Red Baldy- Well Muscled, Extended, True Moving, A Little Underfinished

2-Char Cross- Heavy Muscled, Correctly Finished, Straight Shouldered, Coarse Fronted

3-Black Baldy- Extended, Straight Lined, Correctly Finished, Light Muscled

4-Black- Heavy Muscled, Correctly Finished, Well Balanced, Little Round Hipped

Comparison	Grant	Criticism
Comparison	Grant	Criticism
Comparison	Grant	Criticism



SAMPLE NOTES

with Animal Descriptions, Pair Comparisons, and Descriptive Criticisms

1—Red Baldy—*well muscled, extended, true moving, a little underfinished*

2—Char Cross—*heaviest muscled, correctly finished, straight shouldered, coarse fronted, light boned*

3—Black Baldy—*extended, straight lined, correctly finished, light muscled*

4—Black—*stout, heavy muscled, correctly finished, well-balanced, a little round hipped*

4/2 Stouter B. Balance	2/4 H. Muscled	2 Coarse, Straight Shouldered
2/1 H. Muscled M. Correctly Finished	1/2 Better Structured	1 Thin finished Flattens in quarter
1/3 Stouter H. Muscled	3/1 M. Correctly Finished	3 Lightest Muscled



Activity 9

OBJECTIVES:

For youth to:

- Compute judging scores.
- Work on placing problems.
- Compute cuts and scores.

SETTING: Comfortable room

LIFE SKILLS:

- Problem solving.

MATERIALS:

Copies of WHAT'S YOUR SCORE?
Activity Sheet for each youth.

Record/tape player & fast-paced
music.

Pens/pencils

TIME:

1 1/2 Hours

WHAT'S YOUR SCORE?

BACKGROUND BASICS...

The scoring system used in the judging portion of most livestock judging events involves the use of cuts (subtractions) from a perfect score of 50. Cuts have point values assigned to them and indicate the differences in the livestock. There are three cuts in each class, with one assigned to each pair. The total cuts can be no more than 15. Leaders and officials learn how to assess a cut's value through experience and practice. The list below describes situations in which a cut would be determined:

CUT : DESCRIPTION OF PAIRS

- 1 point — The animals are very similar or their differences cancel each other out. A cut of 1 means the pair could be placed in either animal's favor.
- 2 points—The animals are alike, but one animal has slight advantages over the other. In most cases, this pair would be classified as a logical switch.
- 3 points— The animals are of similar quality, but one animal has clear advantages.
- 4 points—The animals aren't of similar quality and one animal has clear advantages over the other. The pair is an obvious placing.
- 5 points— One animal is clearly more outstanding than the other. The placing is obvious after only a short observation.
- 6 points— The animals are not even comparable.
- 7 points—The largest cut used, usually reflects a superior animal and a inferior animal.

After a correct placing and cuts have been established, points for each wrong placing are subtracted from the possible score of 50. A bust is a placing that involves more than one pair switch. In calculating a score, you must make six comparisons: Compare 1st to 2nd, 1st to 3rd, 1st to 4th, 2nd to 3rd, 2nd to 4th, and 3rd to 4th. Calculate the cut penalty of each pair and add them together for the final penalty; subtract this amount from 50.

BACKGROUND BASICS... continued

Follow these examples to calculate individual scores.

EXAMPLE #1

OFFICIAL PLACING: 1 - 2 - 3 - 4

CUTS: 3 2 5

STUDENT'S PLACING: 3 - 2 - 1 - 4

Use the official placing to withdraw the proper pairs and cuts, and then determine point deductions based upon student's placing.

Did you place 1/2? No, you lost 3 points

Did you place 1/3? No, you lost $3 + 2 = 5$ points

Did you place 1/4? Yes, you lost no points

Did you place 2/3? No, you lost 2 points

Did you place 2/4? Yes, you lost no points

Did you place 3/4? Yes, you lost no points.

Total deductions = 10 points

Score = $(50 - 10) = 40$

EXAMPLE #2

OFFICIAL PLACING: 4 - 3 - 1 - 2

CUTS: 3 4 2

STUDENT'S PLACING: 1 - 2 - 3 - 4

Did you place 4/3? No, you lost 3 points

Did you place 4/1? No, you lost $3 + 4 = 7$ points

Did you place 4/2? No, you lost $3 + 4 + 2 = 9$ points

Did you place 3/1? No, you lost 4 points

Did you place 3/2? No, you lost $4 + 2 = 6$ points

Did you place 1/2? Yes, you lost no points.

Total deductions = 29 points

Score = $(50 - 29) = 21$

HORMEL scoring cards can also be used to score member's placings. These cards will give you all possible placing scores once an official placing and cuts have been entered. This scoring device is handy and is available from George A. Hormel Company, Box 800, Austin, MN 55912.

Oral reasons are scored in a different manner. Guidelines established in Activity 8 are the basis for scoring oral reasons (i.e. accuracy, terminology, delivery...) Judging team leaders or contest officials listen and watch for those aspects of an individual's oral reasons presentation and score them accordingly.



INTRODUCTION

While scores are a small part of the big picture and lesson of any judging competition, they are a method to reward success and practice. They can be easily calculated by any member. It is a simple process of subtracting points from a perfect score. This method is similar to grading done in schools, where 100 serves as perfect and points are lost through wrong answers on homework and tests. Through today's activity, you will learn a method to calculating your own and your team's scores.

DO

PLAY MUSICAL CHAIRS

- Select four members to serve as animals in a judging class. Select one youth to play fast-paced music when a switch is underway.
- Pin the numbers 1-4 on the front of the four members shirts and place four chairs at the front of the room. Have member one sit in chair #1, two in chair #2 and so on.
- Assume this is the way that the group placed a class, 1-2-3-4. However, the official class placing was 1-4-2-3 and cuts were 4-2-5. The group has a bust.
- Use the six step method, outlined in Background Basics, to score the class. Each time you correct a pair, the members must move into the correct position. For example, start at the beginning, placing 1 over 2, 3 or 4 was not an error, so no one moves and no cuts are required. Placing 2 over 3 is correct as well, no one moves. However, placing 2 over 4 is incorrect and causes the 2 to swap places with the 4, (music), and deducts a two point penalty. Finally, placing 3 over 2 is incorrect, the youth should swap places, (music), and deduct 5 points. The final score is then 43 points.
- Once everyone is in the right place and a final score has been tabulated, choose four more members and repeat the game with the group seated as 3-2-4-1 and an official placing of 1-2-4-3 and cuts of 4-3-4.
- This game will work for simple switches and busts. However, for more complex busts, taking members out of place before comparing to all of the others, will lead to fewer deductions than is actually warranted.



REFLECT

- What is an official cut?

The number of points subtracted from the perfect score of 50, when the animals are placed incorrectly

- Do you think you could score your own placings now?
- Why are some cuts larger than others?

The decisions to place one animal over another varies in difficulty, relative to the animal's value.

- What is the six-step scoring method?

Outlined in Background Basics

- What is the maximum that the 3 cuts can equal?

15 points

DO

WHAT'S YOUR SCORE?

- Have members figure the placing scores of the judging cards on the WHAT'S YOUR SCORE? Activity Sheet.

REFLECT

- Were the scores easy to calculate?
- Did John, Jamar, Maria or Angela have the highest score?

Jamar

- Did everyone get the right scores? If not where did you go wrong?

APPLY

- At your next judging practice with live animals classes, divide the members up and assign them a class. On their assigned class, have them develop an official placing and cuts. They should be prepared to discuss why they selected the pairs and cuts.



WHAT'S YOUR SCORE?

<p>John placed a market hog class 2-3-1-4</p> <p>The official placing was 3-2-4-1</p> <p>The official cuts were 3-2-5</p> <p>John's score: _____</p>	
<p>Jamar placed a Limousin bull class 4-2-1-3</p> <p>The official placing was 4-2-3-1</p> <p>The official cuts were 4-1-3</p>	
<p>Maria placed a gilt class 3-4-1-2</p> <p>The official placing was 3-2-4-1</p> <p>The official cuts were 5-2-4</p>	
<p>Angela placed a market lamb class 1-3-2-4</p> <p>The official placing was 4-2-3-1</p> <p>The official cuts were 4-3-2</p> <p>Angela's score: _____</p>	



WHAT'S YOUR SCORE? - KEY

SCENARIO 1 - John simply has a top and bottom switch. He loses 3 points for placing 2 over 3 in a top switch. He loses 5 points for placing 1 over 4 in a bottom switch. This results in a total loss of 8 points, so his score is 42.

If you did not realize that this was a combination of switches, you could have used the six comparison bust calculation method:

Did you place 3/2? No, you lost 3 points

Did you place 3/4? Yes, you lost no points

Did you place 3/1? Yes, you lost no points

Did you place 2/4? Yes, you lost no points

Did you place 2/1? Yes, you lost no points

Did you place 4/1? No, you lost 5 points.

Total deductions = 8 points

Score = $(50 - 8) = 42$

SCENARIO 2 - Jamar has a bottom switch. Simply deduct 3 points for his incorrectly placing 1 over 3 and he has a score of 47.

SCENARIO 3 - Maria has a bust (more than one switch). Calculate her score using the six-step method:

Did you place 3/2? Yes, you lost no points

Did you place 3/4? Yes, you lost no points

Did you place 3/1? Yes, you lost no points

Did you place 2/4? No, you lost 2 points

Did you place 2/1? No, you lost $2 + 4 = 6$ points

Did you place 4/1? Yes, you lost no points

Total deductions = 8 points

Score = $(50 - 8) = 42$

SCENARIO 4 - Angela also has a bust.

Did you place 4/2? No, you lost 4 points

Did you place 4/3? No, you lost $4 + 3 = 7$ points

Did you place 4/1? No, you lost $4 + 3 + 2 = 9$ points

Did you place 2/3? No, you lost 3 points

Did you place 2/1? No, you lost $3 + 2 = 5$ points

Did you place 3/1? No, you lost 2 points

Total deductions = 30 points

Score = $(50 - 30) = 20$





Name

4-H Club Motto

"To make the best better"

Address

4-H Pledge

I Pledge:

**My head to clearer thinking
My heart to greater loyalty**

My hands to larger service, and

My health to better living

**for my club, my community,
my country, and my world.**

Name of Club/School

Leader/Teacher's Name

4-H Colors

Green and White

UF | **IFAS Extension**
UNIVERSITY of FLORIDA

This document is 4H ASJ 20, (formerly 4H AJL 20), one of a series of the 4-H Youth Development Department, UF/IFAS Extension. Original publication date October 1996. Revised January 2012. Reviewed January 2015. Visit the EDIS website at <http://edis.ifas.ufl.edu>.

The Institute of Food and Agricultural Sciences (IFAS) is an Equal Opportunity Institution authorized to provide research, educational information and other services only to individuals and institutions that function with non-discrimination with respect to race, creed, color, religion, age, disability, sex, sexual orientation, marital status, national origin, political opinions or affiliations. For more information on obtaining other UF/IFAS Extension publications, contact your county's UF/IFAS Extension office.

U.S. Department of Agriculture, UF/IFAS Extension Service, University of Florida, IFAS, Florida A & M University Cooperative Extension Program, and Boards of County Commissioners Cooperating. Nick T. Place, dean for UF/IFAS Extension.