

Activity Sheet - 2017 Level 2 - Grades 6-7-8

What you will do in this project:

- Enroll in the 4-H program by January 15.
- Complete the project by completing a minimum of two (2) activities in this activity sheet and turning it into the Extension Office **by June 30** or earlier. This activity sheet consists of activities, and a record sheet.
- Attend County 4-H Beef & Dairy Beef workshops when offered.
- Recommend that the 4-H family purchase and review the project resource manual.
- Refer to the Allen County 4-H Rules Book for a complete listing of all regulations concerning this project.
- To show Market Beef steers, Commercial Beef heifers and Dairy Beef steers born before January 1 – bring animals to February Weigh-In and identify animals in Indiana 4honline by deadline.
- To show Registered Beef Heifers - identify animals in 4honline by May 15. You will need RFID and Tattoo #/Registration papers.
- To show DAIRY BEEF feeder calves born after January 1, bring animals to April Weigh-In and identify animals on Indiana 4honline by deadline.
- To show Beef feeder calves or Beef Junior heifers born after January 1 current year, call the Extension Office prior to May 15 to receive an assigned tag number. Identify animal in Indiana 4honline by deadline. Note - Beef Committee will come to your farm to tag this animal with the assigned RFID and County tags by June 1st.
- Complete FairEntry online by published deadline.

Management Tips:

- Provide clean, fresh water to cattle at all times. A calf will drink about 8% of its body weight a day in cold weather and up to 19% a day in hot weather.
- Feed steers about 2.5 pounds dry feed for every 100 pounds of body weight each day.
- Feed twice daily so you can see how much the animals really eat.
- Feed growing cattle about 12-16% crude protein in their diet depending on weight and growth rate.
- Check daily (or twice a day) for injuries, sickness, unusual things or changes in behavior.
- Provide shade from the sun and protection from wind, snow and rain.
- De-worm and treat steers for external parasites.
- Replace bedding often if cattle are stalled.
- Rinse cattle to clean hair and make it grow better.
- Brush cattle to calm them and clean and train their hair.
- Exercise tied cattle daily, or let them loose in the evening.
- To finalize preparation for showing, train animals at least three times a week for one month prior to the show.

4-H Member: _____ 4-H Club: _____

Grade in School (January 1, 2017) _____ Years in this project _____

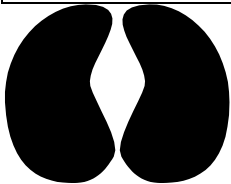
Signature of 4-H Member verifying that you have completed these activities:

Signature of Parent that you have reviewed this information:

4-H Animal Care:

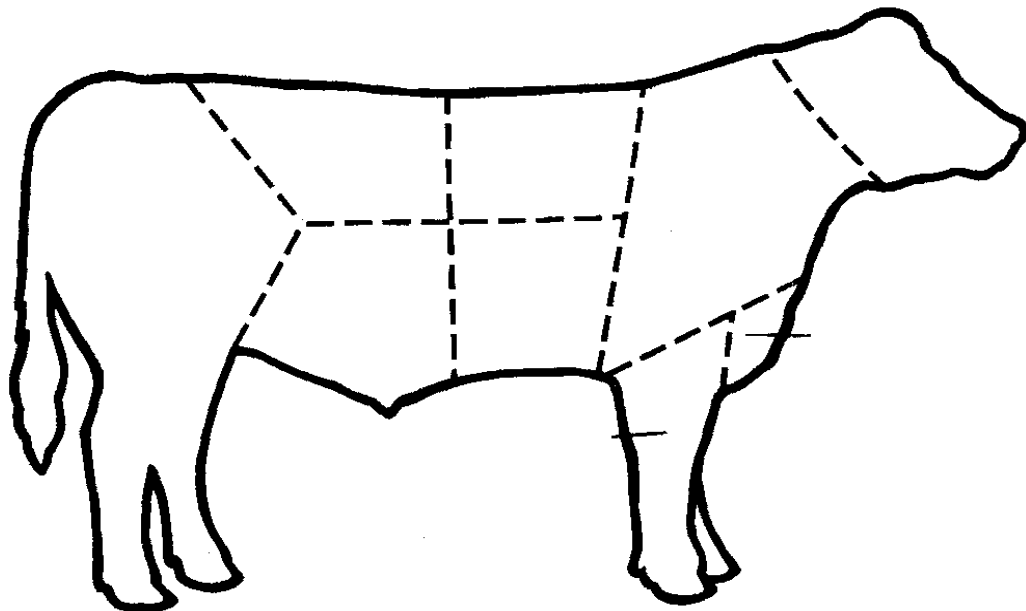
The Indiana 4-H program strongly supports positive animal care and strongly opposes animal abuse. 4-H is also dedicated to the mission of developing youth and volunteers through “Learning by Doing” programs. 4-H livestock projects teach life skills such as acquiring knowledge, making decisions, and applying leadership skills.

- When working and caring for animals, it is important to insure that appropriate safety measures are in place for both the animals and the persons who care for them. Therefore, there is no substitute for knowledge, common sense, and experience.
- Animal handlers should study and learn to anticipate an animal’s reaction and try and avoid problem situations. It is most important that 4-H members understand an animal’s behavior so one can “**outsmart**” not “**out-muscle**” an animal. Foremost, to the 4-H’er should always be safety of the handler and the animal. Moving animals is more of an art than a science. Movement of animals requires planning and knowledge to accomplish it with the least amount of time, effort and stress to the animal.
- An animal’s good health is often directly related to the environmental factors associated with its living space. The presence of predators, dust, odors, pests, temperature, and humidity has a direct effect on an animal’s well-being.
- Animals react favorably to daily care and comfortable housing. Consideration should also be given to specific animal needs such as size of their housing space, lighting, and ventilation. The best facilities and equipment cannot and should not be a substitute for daily observation and careful attention to signs of illness, injury, and/or unusual behavior.
- Frequent consultation with your veterinarian is a must. Reasonable attention must always be given to the use of drugs and their approved withdrawal times.



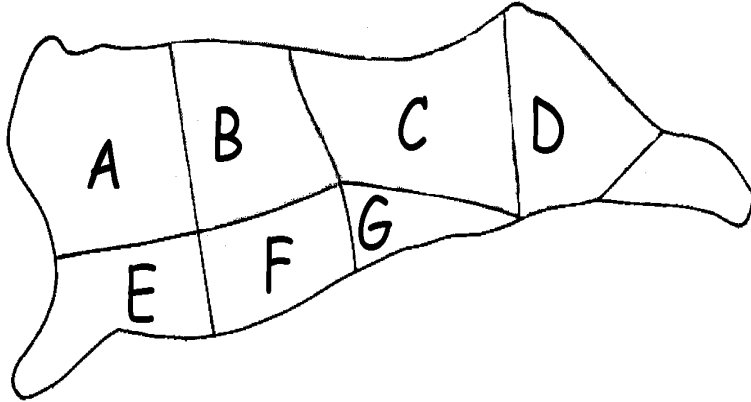
On the Hoof Activity 1

WHOLESALE CUTS OF BEEF *Both BEEF and DAIRY BEEF Complete*



1. Label each wholesale cut of beef on picture above.

2. On the lines beside the retail cut, put the letter or letters to show which wholesale cut they come from.



- Roasts _____
- Round Steak _____
- Stew _____
- Sirloin Steak _____
- Brisket _____
- Ground Beef _____
- Short Ribs _____
- T-bone Steak _____
- Flank Steak _____
- Rib Steak _____
- Porterhouse Steak _____
- Club Steak _____

3. Which 4 wholesale cuts make up 49% of the carcass weight and 69% of the carcass value:

4. What are the 2 commonly used grading systems? Circle the one that uses carcass cut ability for grading.

5. What is the average dressing percentage for a market animal? _____

What is the dressing percentage of a 1300 lb animal whose carcass weighs 806 lbs? _____

6. What is Rib Eye Area? _____

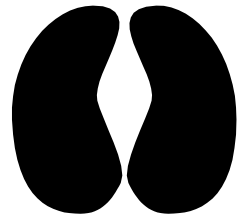
What Rib Eye Area would you expect the animal in # 5 to have? _____

(Answers to this activity may be found in Chapter 8 of the OSU Beef Reference)



Body Types

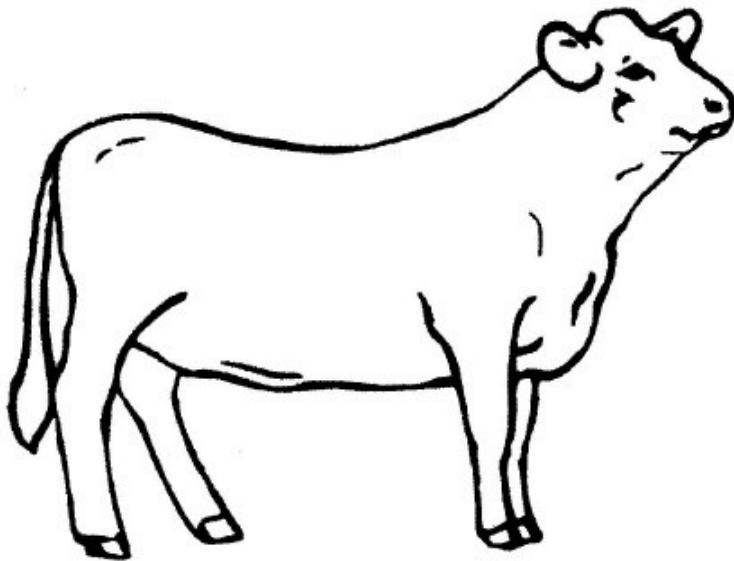
Both BEEF and DAIRY BEEF Complete



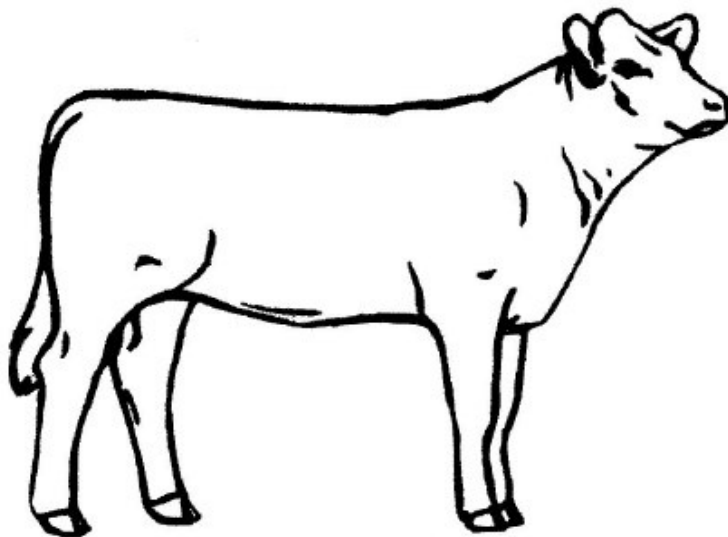
On the Hoof Activity 2

This activity will review selecting your calf. Use the Beef Resource Manual Section 2 and the Glossary for terms for information. Then do the following Activities.

Use the terms provided below to describe the Calves that are pictured.



Calf 1



Calf 2

Activity Continued on next page.

Terms

1. Trimmer, leaner, conditioned
2. Heavier muscled
3. Longer bodied, more extended
4. Better balanced
5. Straighter lined
6. Lighter rear quarter
7. More structurally correct
8. Poorer set to rear legs
9. Fatter, heavier conditioned
10. Weaker top
11. Coarser, heavier fronted

Did You Know?

Here are where the breeds originated...

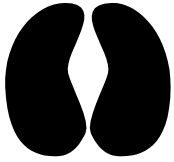
- | | |
|------------------------------|----------------------------|
| Hereford – England | Angus – Scotland |
| Limousin – France | Gelbvieh – Austria |
| Murray Grey – Australia | Pinzgauer – Germany |
| Simmental – Switzerland | Chianina – Italy |
| Scotch Highland – Scotland | Zebu – India |
| Senepol – Virgin Islands | Charolais – France |
| Belgian Blue – Belgian | Beefalo – California, USA |
| Santa Gertrudis – Texas, USA | Polled Hereford - Scotland |

Answer the following questions.

1. What are the ideal mature market steer weights? _____

2. How can frame size affect the overall finishing of a market animal? _____

3. Name 3 things that you are looking for when selecting your calf this year? _____



DAIRY BREEDS

DAIRY BEEF Complete

On the Hoof Activity 3

1. Draw a line to match the Breed to their description:

BREED	DESCRIPTION
Brown Swiss	This breed originated in the Netherlands and is the most popular breed used for dairy beef production.
Ayrshire	These can be red, white or roan in color and are moderately sized.
Holstein	This is one of the oldest breed of dairy cattle and originated in Switzerland.
Guernsey	This breed is known as the "Royal Breed" of dairy cattle. It originated nearly 10 centuries ago.
Jersey	This is the smallest breed of dairy and have a black muzzle.
Milking Shorthorn	This breed originated in Scotland and is white with deep cherry red markings.

2. Which 2 Dairy Beef breeds are often rejected by packers because of their yellow fat?

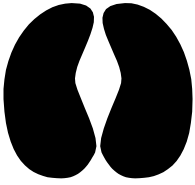
A.

B.

3. Why are Holsteins the most popular breed used for dairy beef production?

(Answers to this activity may be found in Chapter 11 of the OSU Beef Reference)





BEEF BREEDS

BEEF Complete

This activity will review the different breeds of beef cattle. You can find the information in the Beef Resource Handbook, Chapter 2 and Color Pictures.

On the Hoof Activity 4

The following table lists the breeds acknowledged at the 2016 Indiana State Fair and their requirements for percentage of pure breed that the animal must have.

Minimum %	Aberdeen Angus	Charolais	Chianina	Belted Galloway	Gelbvieh	Hereford	Limousin	Maine-Anjou	Mainfainer Heifer	Red Angus	Red Poll	Shorthorn Plus	Shorthorn and Polled Shorthorn	Simental	Simm Solution	Salers	Santa Gertrudis	Dairy Steer & Feeder Steer	Crossbred Steers & Commercial Heifers
Heifer	100%	100%	registerable	100%	75%	100%	62%	75%	25%	100%	100%	50%	93.75%	76%	50%	50%	100%	--	—
Steer	100%	50%	registerable	50%	50%	100%	50%	25%		87%	100%	50%	93.75%	50%		50%	100%	100%	—

Answer the questions that follow. This will complete the activity sheet.

List the Breeds that require 100% pure blood	Steers	Heifers
List the Breeds that require LESS than 100% pure blood		

Questions:

1. Purebred heifers must have what kind of papers from their breed association to be eligible to show at the county and state fair?
2. What kind of permanent identification is used in the ear to show your animals ID?

ALLEN COUNTY 4-H LIVESTOCK RECORD



Records serve as a way to measure your own success with a project. When answering these questions, you should be able to see where improvements can be made for next year and if you wish to continue with this project for another year.

For this Project Record:

Why did you decide to raise and care for these animals this year?

How many animals did you manage during the past 12 months? _____

How many were market animals? _____

How many were breeding animals? _____

How many animals did you purchase or add during the past 12 months? _____

Did you purchase these animals alone or in partnership with someone else? _____

If you did purchase animals, why and how did you determine which animals to buy?

Did you sell any of your animals during the past 12 months? _____

If yes, how did you find a buyer for your animals?

Describe improvements you made to your animal's housing during the past 12 months. (Include equipment, buildings, land, etc...)

List two new things that you learned about your project animals or the breed that you did not know before.

1.

2.

Where did you go to find more information about the care of your animals?

What health practices did you use with your animals the past 12 months?

In regards to raising these animals, what is one thing you will do differently the next 12 months that you did not do this past 12 months?

Premise ID Number where cattle are coming from _____

_____ Completed On Line 4-H Enrollment by January 15, 2017

_____ Completed Animal ID on Line by April 1, 2017 for All Market Steers (Beef and Dairy Beef) & Commercial (Crossbred) Heifers

_____ Completed Animal ID on Line by May 15, 2017 Registered Heifers & Dairy Beef Feeder Steers, Beef Junior Heifers, Beef Feeder Calves

_____ Completed Fair Entry on line by June 30, 2017