2019 Skillathon Packet



Beef Projects

2019 Beef Project Requirement Guide

Project Information

Please note that project information can change. Members are responsible for reading correspondence including newsletters and letters.

Project Book:

- Your book will consist of a packet. The book guidelines for completion are reflected by the score sheet in the front cover. A new book must be completed each year. Members can purchase the book for \$2.00 from their club advisor, or download the book and print it for free at http://vanwert.osu.edu.
- Resource Guides are a one-time purchase for projects. Members should plan on purchasing this guide for reference and to study for skillathon.

Quality Assurance:

- Quality Assurance is a state required training program for any 4-H or FFA member who is exhibiting market livestock at the Jr. Fair.
- ▶ Dates for 2019 Include: Sunday, March 3 starting at 2:00pm, Monday, April 22 starting at 7:00pm at the Jr. Fair Building. Rabbit Quality Assurance will be Saturday, April 6 starting at 8:00am in the Jr. Fair Building (Open to All Species).
- > **Test Out:** Members eligible for test out it will be offered starting at 1 hour prior to the beginning at the Jr. Fair Building. Test out is offered to youth 12-14 or 15-18 as of January 1 of the current year. Youth who need special accommodations for testing should contact the Extension Office for details.
- Quality Assurance Certification MUST be completed no later than June 5, 2019. Failure to complete will result in disqualification from the Jr. Fair for 2019.

❖ Possession Deadline:

- > Beef Feeder Calves must be in possession by August 1 of current year.
- Possesion date for Performance & Market Steers is January 1 of current year.

Mandatory Tagging/Weigh-In Date

- Performance, and Market Steers weigh in on January 12, 2019.
- Fair Weigh In will be on Tuesday, August 27, 2019 from 12:00noon-8:00pm.

Book & Interview Judging:

- Judging will be completed on Monday, July 29th, 2018 from 3:00pm-7:00pm at the Jr. Fair Building on the Fairgrounds. Times are scheduled by appointment. Full information on judging and expectations are Included in this packet and titled "Judging Day Information".
- Members who do not complete their judging at this time will need to have their Advisor submit their Project Book Grade and Interview Grade and plan to attend a makeup session for their Skillathon for completion (see back of page for details).





- > There are two options for make-up of Livestock Project Interviews and Skillathons:
 - Attend Makeup on Sunday, August 4, 2019 from 3:00-6:00pm at the Extension Office (No appointment needed).
 - Attend Black Inc. on Monday, August 5, 2019 from 3:00-7:00pm at the Extension Office (No appointment needed, wait times may vary).

❖ Exhibit Limit:

Limit of two (2) entries per exhibitor in each class. See fair book for age guidelines and classes.

❖ Fair Entry Deadline

- You will be able to enter your projects for exhibition at the Fair. Please note that the entry deadline is August 3, 2019. Entries are made through a website and information will be mailed directly to your home.
- During the summer months, a livestock newsletter will be sent out with tips, suggestions, and information regarding what to expect at the Jr. Fair. This will serve as a guide to Fair preparation and what to expect the week of fair.

Weight/Age/Breed Requirements:

- > Show steers, performance steers, dairy steers, must be calved on or after January 1 of 2018.
- > Dairy Steers must be 100% dairy breed.
- > Dairy/Beef cross will be shown in the beef feeder class only.
- > See fair book for age guidelines and classes.

Health Requirements:

- Not required unless animal originated from or was shown out-of-state.
- > Completed DUNF at the time of weigh in/arrival at the Jr. Fair for Market animals.
- Dairy feeder bulls must be castrated and dehorned.
- > Beef Feeder bulls do not need to be castrated and dehorned.

2019 Livestock Project Judging Day Information

Please allow for one hour to complete your entire judging per species. Times will vary. Age divisions for judging are as follows: (Your age as of January 1 of the current year)

- ➤ Juniors 8-10
- ➤ Intermediate 11-13
- ➤ Senior 14-18

Station 1: Project Book

20 points

Present your completed 2019 Livestock Project Book to the judge. The judge will review your records and completed project book. Point values for each section are included in the front of your project book. Judges will award points for degree in which the book is completed. The entire book (with exception of any bonus sections) must be completed. Age/experience will be taken into consideration when giving points.

Station 2: Interview Station

20 points

You will have an interview for the project you are exhibiting. You will be asked questions based on your experience level. You will earn points for each correct question. Sample interview questions are included with this guide. All questions are based from your project books and the Resource Handbook or are general "Tell me about your animal" questions.

Station 3: Quality Assurance

20 points

Information for this station will be based on 2019 Good Production Practices #6, #7, or #8. Jr Level is Proper Footwear, Intermediate is Questions about EAP, and Senior is Daily Observations. This information will be/was covered in Quality Assurance Sessions and those who have tested out should study accordingly.

Station 4: Skillathon - Year A _

20 points

Wholesale Meat Cuts/Mammary Structures: Note that for full points Juniors will only need to get ½ correct, Intermediate will need to get ½ and Seniors will need to get ¾ correct.

Station 5: Skillathon – Year A

20 points

Leg Structures/Conformation: Most species have a worksheet included in this packet.

Total Grade is out of 100 points. Incomplete grades are not eligible for exhibition in the Jr. Fair. Other grades can be salvaged if you take the time to contact the office. It is YOUR responsibility to fix your grades, not the Extension Office's responsibility.

A: 100-80

B: 79-60

C: 59-40

I: 39 and Under

Please note that accommodations can and will be made for those youth who need and qualify for them. For more information on filling out a "Winning 4-H Plan", please contact Heather at the Extension Office for details!

EVERYONE HAS THE OPPORTUNITY TO SUCCEED WITH PROPER PLANNING!





Breeding Livestock Record Book & Interview Scoring

Name:		As of Jan 1 of Current Year Junior: 8-10	
Club:		Intermediate 11-13 Senior 14-18	
Page	Section	Market Project Point Value	
Cover	Youth Information	1	
3	Youth Agreement	1	
4	Project Animal Information	5	
5	Treatment Record	1	
5	Supplies and Other Expenses	2	
6	Feed Record Summary	3	
6	Other Animal Income	1	
7	Breed Characteristics	3	
9	Profit/Loss Statement	3	
	Station #1: Project Book Score	20	
	Station #2: Interview	20	
	Station #3: Quality Assurance	20	
	Station #4: Skillathon A	20	
	Station #5: Skillathon B	20	
	Total Points Available	100	

Market Livestock Record Book & Interview Scoring

Name:		As of Jan 1 of Current Year Junior: 8-10					
Club:	Club:						
Page	Section	Market Project Point Value					
Cover	Youth Information	1					
3	Youth Agreement	1					
4	Project Animal Information	1					
5	Treatment Record	1					
5	Animal Project Weights	3					
6	Feed Record Summary	2					
7	Livestock Feeding and Performance Evaluation	3					
8	Supplies and Other Expenses	1					
9	Closing Animal Inventory	3					
9	Other Animal Income	1					
11	Profit/Loss Statement	3					
	Station #1: Project Book Score	20					
	Station #2: Interview	20					
	Station #3: Quality Assurance	20					
	Station #4: Skillathon A	20					
	Station #5: Skillathon B	20					
	Total Points Available	100					



117B Beef Breeding Interview Questions—Beginning

Use two or three of these or similar standard questions as part of the interview judging process.

- What breed is your animal? Describe your animal to me.
 Answers will vary.
- 2. How long is a heifer/cow pregnant before she calves? Gestation is 283 days. (page 6-3)
- 3. Why should you look at the records of a calf's parents (sire and dam) before buying it? The performance of their parents is an indication of the calf's future performance. (page 6-17)
- 4. What is colostrum? Why it is important to the calf?

Colostrum is the first milk of the mother. It is important because it is high in antibodies and because it helps provides immunity for the calf. It provides vitamin A, which helps prevents disease. (page 6-8)

- 5. Grass tetany is caused by a deficiency of what mineral?

 Magnesium (page 7-5)
- What are parasites? Name the two types.

Parasites are organisms that live off another animal. The two types are internal parasites and external parasites. (pages 5-2 and 5-3)

- 7. What is the difference between a purebred and crossbred animal?
 - A purebred animal is an animal from only one breed, while a crossbred animal is an animal with parents from two or more breeds. (page 6-14)
- 8. Why separate new breeding stock from rest of the herd? How long should they be separated? They could bring disease organisms into the herd. Separate for 30 to 60 days. (page 5-1)
- Name three ways to identify cattle.

Nose printing, ear tagging, tattooing, freeze branding, hot branding (which isn't recommended) (page 3-7)

10. What are the name(s) given to a breeding female?

Cow or heifer.

11. Describe what your animal's pen looks like. What is in it?

Answers will vary but could include; clean bedding area, exercise area, water, hay rack, feed trough, salt/mineral feeder, how you enter exits the pen, and etc. (page 3-2)







117B Beef Breeding Interview Questions—Intermediate

Use two or three of these or similar standard questions as part of the interview judging process.

- 1. What is another term to describe calving difficulty?

 *Dystocia (page 6-8)
- 2. What is a good measure of the mothering ability of a cow? The weight of her calf at weaning (page 6-18)
- Name two ways that crossbreeding is beneficial to a breeding program/project.

It combines the desirable characteristics of two or more breeds' results in the strong points of one breed complementing the weak points of another breed.

It helps through heterosis (hybrid vigor), a phenomenon that causes crossbreds to out-produce the average of their straightbred parents. (page 6-14)

- 4. What care practices should you perform on a calf soon after it is born?
 - 1) Make sure it's breathing
 - 2) Make sure calf nurses (to get colostrum milk)
 - 3) Clear mucus from nose and mouth
 - 4) Tag or tattoo calf

- 5) Rub or shake calf
- 6) Possibly castrate bull calves
- 7) Dip navel chord in iodine
- 8) Other necessary health practices (page 6-8)
- 5. When do you plan to breed your heifer? If she is bred, when will she calve? Answers will vary.
- 6. A heifer's size is more important than her age when deciding on a breeding time. A heifer should weigh ______ of her mature body weight before the onset of the breeding season? She should be 2/3 of her expected mature body weight. (page 6-1)
- 7. Has your heifer(s) been vaccinated for any disease(s)? If yes, which ones? Answers will vary.
- 8. List three (3) advantages of artificial insemination.

Increases use of outstanding sires (even sires that are deceased).
Helps control reproductive and genetic defects and reproductive diseases.
Increases the uniformity of calves, replacement heifers, and the cow herd.
Improves marketing. (pages 6-5 and 6-6)

- 9. What does "free choice" mean? Give an example.

 "Free choice" means available at all times. Examples are minerals and water. (page G-5)
- 10. What are frame scores and what are they based on?

A way of estimating what size cattle will be when they are fully grown. Scores range from 1 to 7 and are based on the height of an animal at the hips at different ages. It is a way of estimating the size cattle will be when they are full grown. (page 2-16)







117B Beef Breeding Interview Questions—Advanced

Use two or three of these or similar standard questions as part of the interview judging process.

1. What type of performance records is most valuable to a commercial producer that sells feeder calves?

205-day adjusted weight weaning weights (page 6-18)

- 2. If you are interested in purchasing a herd sire, what information would you use to select him?

 His own performance records, EPD information (page 6-21)
- 3. Identify several ways to market feeder calves.

Direct sales, graded feeder cattle sale, weekly auctions, background and sell later, sell through breed association sales, club calf sales (page 10-3)

4. List or share two production practices a beef producer can do to avoid calving difficulties in heifers.

Breed heifers to bulls that have low EPD figures for birth weight.

Encourage daytime calving by feeding at night.

Feed adequately and away from mature cows.

Select growth heifers and breed them over a short period of time. (pages 6-9 and 6-10)

Describe the benefits of estrous synchronization to a herd.

It brings all the females into heat at the same time to be bred, improving conception rates and reducing labor. (page 6-4)

- 6. What is the recommended range in age of calves for calculating the 205-day adjusted weight? 160-250 days (page 6-18)
- 7. Explain how MPPA (Most Probable Producing Ability) is used in a beef cow herd.
 - Records gathered on a cow to predict her future level of performance in comparison to other cows in the herd (page 6-19)
- 8. What does it mean to use disease prevention as a part of a health program?

It means keeping cattle from getting sick by vaccinating, keeping facilities clean, separating newly purchased animals, feeding a proper ration, keeping other animals and visitors out of the lot or pasture area, using clean equipment, and working with a veterinarian to stay up-to-date with a herd health program. (pages 5-1 and 5-2)

9. What is heritability? What is its impact on genetic improvement?

Heritability is the degree that genes, not environment, control a trait. The higher the heritability, the greater the rate of genetic improvement that can be made in the trait. (page 6-12)

10. What is the mature weight of a heifer with a frame score of 5?

1151-1250 pounds (page 2-16)

11. How long should you wait after a two-year-old heifer calves to re-breed her? 60-75 days (page 6-2)







117BF Beef Feeder Interview Questions—Beginning

Use two or three of these or similar standard questions as part of the interview judging process.

- Is your beef feeder a purebred or crossbred? Describe your animal.
 Answers will vary.
- 2. Name two of the five classes of nutrients that make up a diet.

 Water, energy (carbohydrates and fats), minerals, protein, and vitamins (page 7-2)
- 3. What are four breeds of beef cattle that are found in the area where you live?

 Some beef cattle breeds are Angus, Beefmaster, Belgian Blue, Belted Galloway, Brahman,
 Brangus, Charolais, Chianina, Gelbvieh, Hereford, Limousin, Maine-Anjou, Murray Grey,

Brangus, Charolais, Chianina, Gelbvieh, Hereford, Limousin, Maine-Anjou, Murray Grey, Piedmontese, Pinzgauer, Polled Hereford, Red Angus, Red Poll, Salers, Santa Gertrudis, Scotch Highland, Shorthorn, Simmental, Tarentaise, Texas Longhorn, and etc. (pages 2-4–2-9)

4. Calf scours are caused when a calf is stressed. Name two ways you can make sure that your animal is not stressed.

Make sure they are not chilled, overfed, or underfed, and make sure that their living and feeding areas are clean at all times, etc. (page 5-5)

5. Name two minerals important for your project animal.

Salt, calcium, phosphorus, magnesium, potassium, sulfur, cobalt, copper, iodine, iron, manganese, molybdenum, and selenium (page 7-5)

- 6. When working around or with your animal, what are two important rules to follow? Be calm and be patient. (page 9-2)
- 7. How did you get ready for your calf?

Answers will vary. They could speak about preparing its pen, buying feed, buying equipment, or etc. (page 12-2)

8. What is a withdrawal time as it relates to giving medicine?

A period of time that must pass between the last treatment and the time the animal may be slaughtered (page 12-3)

9. What do you plan on doing with your animal after you show it? In other words, how will you sell it or do you plan on keeping it?

Answers will vary. (page 10-3)

10. Is your animal polled or horned? Explain what this means.

Answers will vary. Polled = no horns, horned = has horns (horns have probably been removed.)







117BF Beef Feeder Interview Questions—Intermediate

Use two or three of these or similar standard questions as part of the interview judging process.

1. Name the major nutrient class found in corn.

Energy. (page 7-3)

What are external parasites? Give an example.

External parasites are organisms found outside of the body that live off the animal. Examples may include flies, lice, worms, or grubs. (pages 5-2 and 5-3)

- 3. What is in the ration you're feeding to your animal(s)? How much do you feed it?

 Answers will vary.
- 4. Give two examples of feedstuffs that are high in protein.

 Cattle feed—soybean meal, alfalfa hay (legumes), and others. (page 7-3)
- When judging a beef carcass, where is fat thickness measured?
 At the 12th rib. (page 8-4)
- 6. Name the two types of grading that are used when grading beef carcasses. *Yield grade and quality grade. (page 8-5)*
- 7. What is Coccidiosis and what is the best way to prevent it?

Coccidia are bacterium that may cause scours (diarrhea) in older calves. Coccidium infects and destroys the cells lining the calf's intestine, which causes bleeding and scours. The best prevention is a clean feeding area and dry bedding. (page 5-5)

8. Explain the difference between cow hocked (splayfooted) and bowlegged (pigeon toed).

Bowlegged—When viewed from the front or rear, the knees set too far out, causing the toes to turn inward.

Cow Hocked—When viewing the hind legs from the rear, the hocks are turned inward or are placed to close together, causing the toes to turn outward. (page 2-12)

9. What are frame scores and what are they based on?

A way of estimating what size cattle will be when they are fully grown. Scores range from 1 to 7 and are based on the height of an animal at the hips at different ages. (page 2-16)

10. Name five of the nine items listed on a medication label.

Name of drug, active ingredients, cautions and warnings, withholding times, quantity of contents, storage instructions, name of distributor, lot number, and date of expiration. (page 12-10)







117BF Beef Feeder Interview Questions—Advanced

Use two or three of these or similar standard questions as part of the interview judging process.

Describe an ideal beef feeder. Discuss how you would like to improve your beef feeder.
 Answers will vary. (Terms to look for would be frame score, structural correctness, muscling, and etc.) (page 2-15)

2. Name two of the four practices you can implement to reduce yourself being exposed to a livestock accident or illness. Discuss why.

Understand animal behavior

Provide proper and safe equipment

Wear personal protective equipment

Protect against zoonotic diseases (page 4-5)

- 3. If a horned cow is mated to a homozygous polled bull, what percentage of the calves will be horned? 0%. (page 6-11)
- 4. What is the major vitamin that needs supplemented to cattle? *Vitamin A. (page 7-6)*
- 5. Why is hot branding not a desirable form of identification?

 It damages the hide, stresses the animal, and it requires special equipment. (page 3-7)
- 6. Why is it important to have a good VCPR (veterinarian client-patient relationship)?

 By having this relationship, your veterinarian has seen and has knowledge your animal and has discussed a health plan with you. Your plan should include vaccinating, castrating, dehorning, internal/external parasite control, and etc. (page 12-3)
- 7. How long before you take your animal to a show should you start feeding it out of the feed pan that it will be eating out of at the show? Why?

One week. (7-26)

Name five different careers that you could pursue in the beef industry. Explain, generally, what each of them does.

Answers will vary. (page 15-4)

9. Identify several ways to market feeder calves?

Direct sales

Graded feeder cattle sale

Weekly auctions

Background and sell later

Market through breed association sales

Club calf sales (page 10-3)







117DF Dairy Beef Feeder Interview Questions—Beginning

Use two or three of these or similar standard questions as part of the interview judging process.

 Tell me about your dairy beef feeder. What does it look like, why did you select it, what does it weigh, etc.

Answers will vary.

What did you like best about the Dairy Beef Project? Answer will vary.

3. Name three of the six dairy breeds found in the United States.

Ayrshire, Brown Swiss, Guernsey, Holstein, Jersey, Milking Shorthorn. (pages 11-2 and 11-3)

4. What is colostrum? Why is it important to a calf?

It is the first milk produced by the cow after calving. It is high in vitamins and antibodies that help the calf stay healthy. (pages 11-13 and 11-14)

5. How long should a calf receive colostrum?

For three days after it was born. (page 11-13)

6. How many times a day should you feed your calf?

Twice, in the morning and in the evening. (page 11-15)

7. What kinds of feed does your calf need during its first six months?

A calf needs milk, grain, and hay. (pages 11-13 and 11-17)

8. Share one way to keep calves healthy?

The main way to keep calves healthy is to keep their living quarters, feed trough, hay rack, and water clean at all times. (pages 11-7 and 11-8)

9. What is the biggest cost of raising a dairy beef feeder?

The cost of feed. (page 11-12)

10. How did you teach your calf to lead?

Answers will vary. (pages 3-8 and 3-9)







117DF Dairy Beef Feeder Interview Questions—Intermediate

Use two or three of these or similar standard questions as part of the interview judging process.

1. Name two methods of dehorning?

Methods of dehorning include electric dehorner and caustic stick or caustic paste. (page 11-8)

- Dairy Beef Feeders are especially vulnerable to three diseases. What are they? Scours, Pneumonia, and Navel III. (pages 11-10 and 11-11 or 11-19))
- Name the four (4) parts of a beef animal's stomach:
 Rumen, Reticulum, Abomasum, Omasum. (page 7-2)
- 4. Share two possible causes of calf scours?

Stress—chilled, big changes in weather, overfeeding, underfeeding Unclean living and feeding area. These conditions allow bacteria or infections to cause scours. (page 5-5)

- 5. Why is it recommended to raise your calf in an individual hutch, pen, or stall from birth to weaning?

 It helps to control the spread of diseases, such as scours, and will keep calves from suckling each other. (page 11-7)
- 6. What is ringworm? Why is it important to wear gloves when treating it?

Ringworm is a fungus that gets into the skin and develops a rough skin condition where the hair drops out in patches. You should wear gloves to prevent from contracting it yourself or spreading it to other animals. Ringworm is a zoonotic disease. (page 5-6)

7. Name six things you should consider when purchasing a dairy beef feeder.

Timing of the purchase, health, conformation, structural soundness, frame size, thickness, thriftiness, breed, ability to gain, disposition, smoothness, and eye appeal. (page 11-4)

8. Name three of the six major minerals that cattle need.

Salt, calcium, phosphorus, magnesium, potassium, sulfur. (page 7-5)

9. When should you wean your calf?

When your calf consumes 1½ pounds of starter grain per day for three consecutive days, usually at five to six weeks of age. (page 11-16)





117DF Dairy Beef Feeder Interview Questions—Advanced

Use two or three of these or similar standard questions as part of the interview judging process.

- 1. A dairy-beef feeder is usually marketed in what weight range? 400–600 pounds. (page 11-4)
- 2. Why should the milk replacer you use contain only milk protein and no vegetable protein?

 The calf's digestive system is not developed enough to digest vegetable protein. (page 11-14)
- 3. What percentage of all fed steer and heifers marketed annually in the United States are Holstein-fed steers and heifers?

12% to 15% (page 11-1)

4. What is pinkeye?

A bacterial infection spread by face flies that gather around the eye. The first sign is that the eye begins to water and then the eyelids begin to close and may become cloudy. In severe cases the animal can go blind. (page 5-6)

5. Explain what it means to "spread out" the stress points during a calf's life.

Management procedure such as dehorning, castration, and weaning are very stressful on a calf, if all of these procedures are done at one time, there is an increased chance that the calf may become sick or die due to the stress of these procedures. (page 11-8)

6. What do the letters TDN represent?

Total Digestible Nutrients. (page 7-3)

7. Name five feed ingredients that are high in energy.

Whole grain barley, whole grain oats, wheat, wheat middlings, corn, milo, beet pulp, hay, molasses, whole grain rye, whole cottonseed, buckwheat, soybean hulls, dried whey. (page 7-7)

8. What is acidosis and how can you prevent it?

If your animal is eating a diet high in grain with little or no roughage, your steer may be at risk of developing it because the rumen environment becomes unsuitable for the rumen bacteria to survive. This causes the animal not to digest its food properly.

Acidosis can be prevented by feeding a small amount of roughage or by using an ionophore. (page 11-11)

9. Why is correct hoof trimming important?

It can change the way an animal stands and walks and the animal's total balance. (page 11-21)







117M Market Beef Interview Questions—Beginning

Use two or three of these or similar standard questions as part of the interview judging process.

- 1. What are three things to look at when choosing a calf for your market beef project?

 Breed, size, and quality. (page 2-1)
- 2. What are the definitions of purebred and crossbred cattle? Is your project animal a purebred or crossbred?

Purebred—An animal whose parents are from the same breed. (page G-8)

Crossbred—An animal whose parents are from two or more different breeds. (page 6-15)

3. Describe what your project animal eats each day. What are three ingredients that are found in your feed?

Answers will vary.

4. Where is the proper location to give an injection?

In the neck muscle ahead of the slope of the shoulder. (page 12-8)

5. Describe how you trained your animal to lead. Did you have any challenges? Is there anything that you would do differently next time?

Answers will vary. (page 9-2)

6. Cattle are ruminants, what does this mean?

They have a four-compartment stomach. (page 7-1)

7. What are the benefits of being a ruminate?

Ruminants are able to produce vitamins B and K; they can digest low-quality feeds that other animals cannot; they can digest large amounts of grass and hay; and use many types of feeds. (page 7-1)

8. How can you tell if your animal is bloated?

An accumulation of gasses will make the animal's upper left side bulge. (page G-1or 5-4)

9. Why is it important to send the buyer of your animal a thank you note as soon as you can after the auction?

To show your buyer that you appreciate their efforts and it encourages the buyer to support future sales. (page 10-10)

10. Can you demonstrate for me how you tie a knot when you are tying up your animal? (Judge, it is helpful to have a rope halter available.)

Ensure that the knot does not slip and is secure enough to hold their animal ties. (pages 3-10 and 3-11)







117M Market Beef Interview Questions—Intermediate

Use two or three of these or similar standard questions as part of the interview judging process.

- 1. Has your market steer or heifer been vaccinated for any disease(s)? If yes, which ones? Answers will vary.
- 2. What is the rumen and what is its function?

One of the four parts of cattle's stomach and is the big vat that helps cattle digest cellulose. Cellulose is found in plants. It also has microorganisms that produce vitamins B and K. (pages 7-1 and 7-2)

- 3. What are the two (2) main sources from which your beef animal gets it energy from? Carbohydrates and fats. (page 7-3)
- 4. The two categories of vitamins are _____ and ____. Name one of each.

 Water soluble—Complex B
 Fat soluble—A, D, E, K (page 7-6)
- 5. What is ringworm? Why is it important to wear gloves when treating it?

 Ringworm is a fungus that gets into the skin and develops a rough skin condition where the hair drops out in patches. Ringworm is a zoonotic disease. (page 5-6)
- 6. Name five different beef breeds and give two physical or genetic characteristics of each.

 Answers will vary. (pages 2-4 through 2-9)
- 7. What is a frame score and why is it important to your market beef project?

A way of estimating what size cattle will be when they are fully grown. Scores range from 1 to 7 and are based on the height of an animal at the hips at different ages. Why it is important: to meet the industry standards, to meet the needs of meat packers who desire a certain size animal, to accurately plan for the cost of feeding an animal. (page 2-16)

Explain the structural difference between sickle hocked and postlegged.

Sickle hocked—When viewing the rear legs from the side, the hock has too much angle or set, causing the steer to stand too far underneath himself. Postlegged—The hock has too little angle or set. The calf is too straight through the joint, resulting in very stiff, restricted movement because of the lack of flexibility. (page 2-12)

- 9. What is the weight range for an ideal market steer?
 - 1,100-1,350 pounds. (page 2-11)
- 10. Name ten pieces of equipment you need to exhibit your project animal at a show or fair.

Answers will vary. Some examples could include; rice root brush, scotch comb, feed pans, buckets, clippers, soap, hose, show haler, show stick, clippers, pitch fork, neck ropes, and etc. (A list is included in table 11.04 on page 11-21)







117M Market Beef Interview Questions—Advanced

Use two or three of these or similar standard questions as part of the interview judging process.

1. Give two examples of dominant and recessive gene inheritance found in cattle.

Answers will vary but some examples are polled (dominant) vs. horned (recessive), black color dominant over red, dwarfism (recessive), white face color in Herefords (dominant). (page 6-11)

2. What is the function of selenium? What deficiency signs are looked for? How do you provide it in your animal's diet?

Selenium acts as a carrier of vitamin E. The deficiency is known as white muscle disease, which can cause heart failure and paralysis in calves. Selenium can be added to trace mineralized salt or injections are also available to use in calves. (page 7-5)

Livestock waste must be handled properly. Name two of the four reasons this is important.

To protect the environment and public health.

Protect surface waters and the plant and animal life that lives in or depends on those waters.

Protect groundwater quality that affects drinking water quality on your farm and in your neighborhood.

Protect the air quality of your home and that of your neighbors. (page 13-1)

4. What is extra-label drug usage? When is it allowed? Who can prescribe or order extra-label drug usage?

Extra-label drug use is using a medication in a way other than that stated on the label by the manufacturer. This is only allowed when a veterinarian prescribes it. (page 12-7)

5. Thoroughly describe an ideal market steer or heifer. How does your animal differ from this? How would you like to improve your animal?

Answers will vary. Terms to listen for are located on page 2-11.

6. What cattle disease is treated by inserting a magnetic bolus into the reticulum compartment of the stomach?

Hardware disease. (page 5-6)

7. Name five beef by-products and identify which part of the animal it comes from.

Answers will vary. (pages 8-14 and 8-15)

8. Has taking a beef cattle project helped you to decide what you would like to do in the future for a career? If yes, how?

Answers will vary. (Chapter 15)

9. What is the average dressing percentage of a market beef animal? How is dressing percentage this calculated?

The average is 62%. Dressing percentage = carcass weight/live weight. (page 8-5)





2019 Livestock Project Judging Day Information

Please allow for one hour to complete your entire judging per species. Times will vary. Age divisions for judging are as follows: (Your age as of January 1 of the current year)

- ➤ Juniors 8-10
- > Intermediate 11-13
- ➤ Senior 14-18

Station 1: Project Book

20 points

Present your completed 2019 Livestock Project Book to the judge. The judge will review your records and completed project book. Point values for each section are included in the front of your project book. Judges will award points for degree in which the book is completed. The entire book (with exception of any bonus sections) must be completed. Age/experience will be taken into consideration when giving points.

Station 2: Interview Station

20 points

You will have an interview for the project you are exhibiting. You will be asked questions based on your experience level. You will earn points for each correct question. Sample interview questions are included with this guide. All questions are based from your project books and the Resource Handbook or are general "Tell me about your animal" questions.

Station 3: Quality Assurance

20 points

Information for this station will be based on 2019 Good Production Practices #6, #7, or #8. Jr Level is Proper Footwear, Intermediate is Questions about EAP, and Senior is Daily Observations. This information will be/was covered in Quality Assurance Sessions and those who have tested out should study accordingly.

Station 4: Skillathon - Year A_

20 points

Wholesale Meat Cuts/Mammary Structures: Note that for full points Juniors will only need to get ½ correct, Intermediate will need to get ½ and Seniors will need to get ¾ correct.

Station 5: Skillathon – Year A

20 points

Leg Structures/Conformation: Most species have a worksheet included in this packet.

Total Grade is out of 100 points. Incomplete grades are not eligible for exhibition in the Jr. Fair. Other grades can be salvaged if you take the time to contact the office. It is YOUR responsibility to fix your grades, not the Extension Office's responsibility.

A: 100-80

B: 79-60

C: 59-40

I: 39 and Under

Please note that accommodations can and will be made for those youth who need and qualify for them. For more information on filling out a "Winning 4-H Plan", please contact Heather at the Extension Office for details!

EVERYONE HAS THE OPPORTUNITY TO SUCCEED WITH PROPER PLANNING!



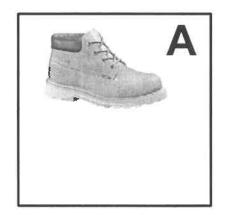


'_ivestock Skillathons QA- Proper Footwear

Junior Level

Instructions

Under each of the pictures indicate whether the footwear would be "safe" or "unsafe" to be worn around livestock.

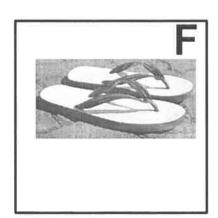
















Bonus:

Which letter would you wear if your barn/stall was wet, muddy, or snow covered?

Livestock Skillathons QA- Proper Footwear

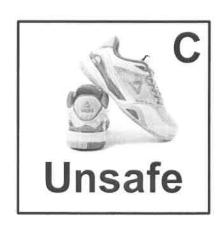
Junior Level

Instructions

Under each of the pictures indicate whether the footwear would be "safe" or "unsafe" to be worn around livestock.





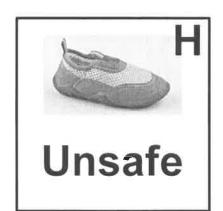












Bonus:

Which letter would you wear if your barn/stall was wet, muddy, or snow covered?

G



Livestock Skillathons Intermediate QA-Emergency Action Plan (EAP)

Instructions

Read the Emergency Action Plan below. Answer the questions to the right numbers 1-5 with the most correct answer.

CFAES

Emergency Action Plan

Site/Farm Name: Chris Clover Stock Farm/Clover Family Farms

Address: 1234 A.B. Graham Way, Van Wert, OH 45891

Fhone: 419-238-FARM
Directions: Located north of the intersection of Champion Blvd and A.B. Graham Way, Farm is back the drive to the south of the house, and is the brown and white building.

Other Emergency Contacts

Type	Company	Contact
Fire Department	Van Wert Fire Department	419-238-4918
Sheriff/Police	County Sheriff's Office	419-238-3866
Ambulance	Emergency Services	9-1-1
Poison Control	National Holline	(800) 222-1222
Veterinarian	Deiphos Animal Hospital	Dr. John or Dr. Bonnie Jones, 419-692-9941
Hospital	Van Wert Health	419-238-2390
Doctor	Van Wert Family Physicians	Dr. Adams, 419-238-6251
Dentist	Van Wert Family Dentistry	419-238-1219
Insurance Agent	Central Insurance Company	419-238-1010
Electric	American Electric Power	1-800-277-2177
Water/Plumbing	Wallace Plumbing	419-203-6539
Propane	Van Wert Propane	419-238-2681
Ventilation	N/A	
Feed Dealer	Grain Dealer Company	419-238-4444

- Fire Extinguishers are located; at both entrances on the east and north sides.
- First Aid Kits are located: In the interior tack stall.
- Location of Severe Weather Shelter: Immediate Danger use tack stall with most interior wall space. With advance notice travel to the farm house to the north and use the basement.

Animal numbers per barn:

- 1 Horse
- 2- Pigs
- 11- Turkeys

Note: This EAP was made based off immediate knowledge, searches, and shows no likeness or favoritism to any of the businesses or contractors above. Local content was used to make it as realistic as possible.



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- 1. How many pigs are located in this facility?
- Two (2) Α.
- Three (3)
- Four (4)
- 2. What colors are the building?
- 3. You need to report a power/electrical outage. What phone number do you call?
- 4. What is the Veterinarians phone number?
- 5. Where is the First Aid Kit Located?
- Interior Tack Stall
- East Wall
- On Floor





Livestock Skillathons Intermediate QA-Emergency Action Plan (EAP)

Instructions

Read the Emergency Action Plan below. Answer the guestions to the right numbers 1-5 with the most correct answer.

CFAES

Emergency Action Plan

Site/Farm Name: Chris Clover Stock Farm/Clover Family Farms

Address: 1234 A.B. Graham Way, Van Wert, OH 45891

Phone: 419-238-FARM

Directions: Located north of the intersection of Champion Blvd and A.B. Graham Way, Farm is back the drive to the south of the house, and is the brown and white building.

Other Emergency Contacts

Туре	Company	Contact
Fire Department	Van Wert Fire Department	419-238-4918
Sheriff/Police	County Sheriff's Office	419-238-3856
Ambulance	Emergency Services	9-1-1
Poison Control	National Hotline	(800) 222-1222
Veterinarian	Delphos Animal Hospital	Dr. John or Dr. Bonnie Jones, 419-692-9941
Hospital	Van Wert Health	419-238-2390
Doctor	Van Wert Family Physicians	Dr. Adams, 419-238-6251
Dentist	Van Wert Family Dentistry	419-238-1219
Insurance Agent	Central Insurance Company	419-238-1010
Electric	American Electric Power	1-800-277-2177
Water/Plumbing	Wallace Plumbing	419-203-6539
Propane	Van Wert Propane	419-238-2681
Ventilation	N/A	
Feed Dealer	Grain Dealer Company	419-238-4444

- Fire Extinguishers are located; at both entrances on the east and north sides
- First Aid Kits are located; In the interior tack stall
- Location of Severe Weather Shelter; Immediate Danger use tack stall with most interior wall space. With advance notice travel to the farm house to the north and use the basement.

Animal numbers per barn:

- 1 Horse
- 2- Pigs
- 11- Turkeys

Note: This EAP was made based off immediate knowledge, searches, and shows no likeness or favoritism to any of the businesses or contractors above. Local content was used to make it as realistic as possible.



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criminatory books. For many information, 154,60 à. For an accessible format of this

- 1. How many pigs are located in this facility?
- Α. Two (2)
- Three (3)
- Four (4)
- 2. What colors are the building? **Brown and White**
- 3. You need to report a power/electrical outage. What phone number do you call?
- 1-800-277-2177 (American Electric Power)
- 4. What is the Veterinarians phone number?

(419) 692-9941

- 5. Where is the First Aid Kit Located?
- A. Interior Tack Stall
- East Wall B.
- On Floor





Livestock Skillathons QA- Daily Observations

Senior Level

Instructions

Read each of the following daily observation charts. Select the best answer (action) to take from options A, B, or C. If A is circled, explain why in one-2 (1-2) sentences.

DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
6/29	2:45 PM	010	✓	✓	1	√	✓	Lots of coughing while eating feed	TW
6/30	5:14 PM	010	✓		✓	✓	✓	Only ate ½ his feed	TW
6/30		010	SHAPPING THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF T	The second secon		- in the street contraction		Only ate ½ his feed	

Α.	Quar	antine/	Iso	late
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B. Consult Vet/Parent

		— 1	
C.	Normal	Beh	avior

Whv?	(If A	pplicable	Only)
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DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
10/13	3:34 PM	234	✓	✓	✓	1	✓		TW

A. Quarantine/Isolat	te
----------------------	----

B. Consult Vet/Parent

C. Normal Behavior

Why? (If Applicable Only)



Livestock Skillathons QA- Daily Observations

Senior Level

DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
2/14	3:34 PM	22	✓	✓	✓	✓	√ ·	Nasal discharge from animal	TW
2/15	2 PM	22	~		✓	√	Rabbit is sneezing excessively, consumed about ½ of feed and still has nasal discharge		TW

Α.	Quara	intine/	Isolate

- B. Consult Vet/Parent
- C. Normal Behavior

Why?	(If	An	nlica	hle	Only	
VVIIV:	$\{H\}$	$\neg \nu$	viica	NIC	Ulliy	1

DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
9/20	9:33 PM	987	✓		1			Does not look like he touched any feed	TW
9/21	9:02 PM	987	1		✓			Some feed consumed, still not active or acting normal	TW
9/22	8:30 AM	987	~					Animal is sluggish and not alert acting, no food consumed	TW

Α.	Quarantine/Isolate
八.	Qualantine/150iati

B. Consult Vet/Parent

C. Normal Behavior

Why? (If Applicable Only)



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Livestock Skillathons QA- Daily Observations

Senior Level

Instructions

Read each of the following daily observation charts. Select the best answer (action) to take from options A, B, or C. If A is circled, explain why in one-2 (1-2) sentences.

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6/29	2:45 PM	010	✓	✓	✓	✓	1	Lots of coughing while eating feed	TW
6/30	5:14 PM	010	✓		✓	✓	✓	Only ate ½ his feed	TW

Α. •	Quarantine <i>l</i>	'Isol	ate

B. Consult Vet/Parent

C. Normal Behavior

Why?	(If Applicab	le Only,
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DAILY OBSERVATION CHART

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10/13	3:34 PM	234	✓	V	✓	✓	✓		TW

A.	Quara	antine/	Isolate
----	-------	---------	----------------

B. Consult Vet/Parent

C. Normal Behavior

Why? (If Applicable Onl	Why?	(If	Appi	licable	Only
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Livestock Skillathons QA- Daily Observations

Senior Level

DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
2/14	3:34 PM	22	/	✓	✓	1	✓	Nasal discharge from animal	TW
2/15	2 PM	22	~		~	√		Rabbit is sneezing excessively, consumed about ½ of feed and still has nasal discharge	TW

- A. Quarantine/Isolate
- B. Consult Vet/Parent
- C. Normal Behavior

Why? (If Applicable Only)

Animal is no longer consuming feed, or acting normally. It also has nasal discharge.

DAILY OBSERVATION CHART

This chart should be completed at least once each day for your animals.

Date	Time	Animal ID	Water: Clean & in supply	Feed: consumed	Animal is Alert	Animal is Active	Expressing Typical Behavior	Comments	Initials of person completing observation
9/20	9:33 PM	987	✓		✓			Does not look like he touched any feed	TW
9/21	9:02 PM	987	✓		1			Some feed consumed, still not active or acting normal	TW
9/22	8:30 AM	987	~					Animal is sluggish and not alert acting, no food consumed	TW

- A. Quarantine/Isolate
- B. Consult Vet/Parent
- C. Normal Behavior

Why? (If Applicable Only)



Livestock Beef Feet and Leg Structure

On the blanks, write the letter of the term that corresponds to the diagram below.

- A. Knock kneed or splayfooted
- B. Bowlegged or pigeon toed
- C. Correct
- D. Cow hocked or splayfooted
- E. Bowlegged or pigeon toed

- F. Correct
- G. Buck kneed
- H. Calf kneed
- I. Sickle hocked
- J. Postlegged

Identification

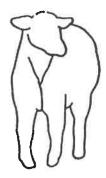
In this activity you will:

 identify the various feet and leg structure diagrams.



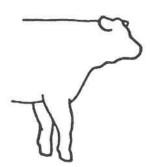


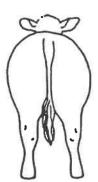


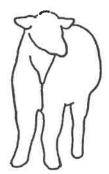


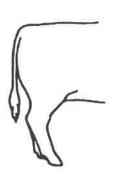












References: Beef Resource 4-H Handbook; Beef Livestock Learning Laboratory Kit; Beef, Sheep and Swine Selection and Evaluation 4-H #103R
Prepared By: Jodi Black, State Extension Associate, 4-H/Animal Sciences; Andrea Auker, Animal Sciences Student

Livestock Beef Feet and Leg Structure

On the blanks, write the letter of the term that corresponds to the diagram below.

- A. Knock kneed or splayfooted
- B. Bowlegged or pigeon toed
- C. Correct
- D. Cow hocked or splayfooted
- E. Bowlegged or pigeon toed

- F. Correct
- G. Buck kneed
- H. Calf kneed
- Sickle hocked
- J. Postlegged

Identification—Key In this activity you will:

 identify the various feet and leg structure diagrams.



D



Н



C or F



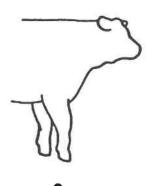
B or E



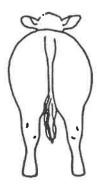
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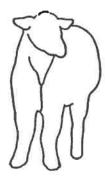
B or E



G



C or F



Α



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



'_ivestock Skillathons Wholesale Cuts of Beef

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Instructions

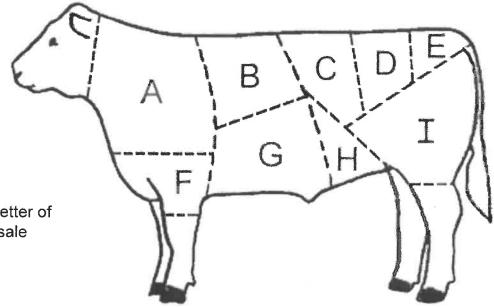
On the blanks below, write the letter of the are that matches the wholesale meat cut.

Brisket	Rump
Chuck	Short Loin
Flank	Shortplate
Rib	Sirloin
Round	

References: Beef Resource Handbook; Beef Livestock Learning Laboratory



Livestock Skillathons Wholesale Cuts of Beef



Instructions

On the blanks below, write the letter of the are that matches the wholesale meat cut.

F	Brisket
Α	Chuck
Н	Flank
B	Rib

E	Rump
ᆫ	Rump

D Sirloin

References: Beef Resource Handbook; Beef Livestock Learning Laboratory

