

**National 4-H Livestock Quiz Bowl Contest**  
**The following is an Example Question Round**

**Round 1 - Phase 1**

1. This is the largest breed of cattle and was originally used as a draft animal in Italy, so it is known for extreme size and strength. The American version of this breed is commonly black. **Chianina**
2. **Multiple Choice:** The average gestation length for swine is how many days?  
a. 95 days      **b. 114 days**      c. 145 days      d. 205 days
3. What breed of cattle has the most animals in its United State breed registry?  
**Angus**
4. What is the name for a male animal in which one or both testes remain in the body cavity because they did not descend into the scrotum during embryonic development?  
**Cryptorchid**
5. The goal of this breed of swine is to be a source of durable mother lines that contribute to longevity and carcass merit. It is a white breed with erect ears. **Yorkshire**
6. Which breed of sheep from southern England has both ewes and rams that are horned, and has a tendency to produce out-of-season lambs, and has a white face and legs? **Dorset**
7. **Multiple Choice:** Pigs are typically what age when they reach slaughter weight?  
a. 3 months of age      **b. 6 months of age**      c. 9 months of age      d. 12 months
8. Intermuscular (spell out - inter) fat is also known as \_\_\_\_\_ fat, or describe where this fat is found. **Seam fat - found between muscles**

**Round 1 - Phase 2**

1. Based on the NPPC Pork Quality Standards for the attributes of color, firmness and exudation, name or describe two of the four major classifications of pork.
  - **PSE: pale, soft and exudative**
  - **RSE: red, soft and exudative**
  - **RFN: red, firm and normal**
  - **DFD: dark, firm and dry**
2. Name three inherited defects in sheep. Generally, sheep with these defects should not be kept for breeding.
  - **Entropion**
  - **Face Covering (wool blind)**
  - **Jaw Defects (over or undershot)**
  - **Color (dark patches in wool)**
  - **Cryptorchidism**
  - **Dwarfism**
  - **Rectal Prolapse**
  - **Skin Folds**
  - **Spider Lambs**

3. Name three contributing factors to a lamb dying of starvation. An example is that the ewe won't claim the lamb.
- **Lamb doesn't get started, doesn't get colostrum**
  - **Mastitis**
  - **Teats too big or too low and lamb can't find them**
  - **Sore mouth (the disease)**
  - **Ewe doesn't have enough milk for twins**
  - **Pneumonia**
  - **Joint injury or illness**
  - **Difficult birth**
4. Ground beef is primarily made from beef trimming that can either come from the domestic or import market. Name one of the two countries that supply the majority of imported beef trimmings. **Australia and New Zealand** **USDA – Feb 2024**
5. The male hormone testosterone has several major effects on the body. Name two of these effects.
- **Development and maintenance of male repro tract**
  - **Development and maintenance of secondary sex characteristics (crest, heavy shoulders, etc.)**
  - **Normal sex drive and behavior**
  - **Increases muscular and skeletal growth**
  - **Needed for normal sperm production**
6. Name two reasons to cull a sow.
- **Failed to rebreed**
  - **Small litters**
  - **Poor milk production**
  - **Farrowing problems**
  - **Damaged repro tracts (prolapse or infection)**
7. Name the four major wholesale cuts of a lamb carcass?
- **Shoulder**
  - **Rack (rib)**
  - **Loin**
  - **Leg**
8. The Sow Productivity Index (SPI), combines what two reproductive/production traits into one index? **Number born alive and 21-day litter weight**

### **Round 1 - Phase 3**

1. What breed of cattle is known for its heat tolerance and disease resistance? They have large, floppy ears. **Brahman**
2. Name four USDA beef quality grades.  
**Prime, Choice, Select, Standard, Commercial, Utility, Cutter, Canner**
3. What does parturition mean? **Process of giving birth**

4. Sheep with this inherited defect have severe abnormalities of the muscular and skeletal systems, such as bent-leg deformities and extreme fineness of bone.  
**Spider Syndrome**
5. This value of feeds represents the total of the digestible components of crude fiber, protein and fat. Although less accurate than using Net Energy values, this value is still used to calculate rations where the diet is primarily forage. **TDN, Total Digestible Nutrients**
6. **Multiple Choice:** On average, a cow is in standing heat for how many hours?  
a. 8 hours    **b. 18 hours**    c. 28 hours    d. 48 hours
7. What compounds are the result of sugar and starch breakdown in the rumen? The most common of these compounds is acetic acid. **VFA's or volatile fatty acids**
8. Which compartment of the ruminant stomach functions as a storage area and works to break down coarse feeds through bacterial action? **Rumen**
9. This infectious swine disease is caused by a herpesvirus and goes by the acronym PRV. What disease is this? **Pseudorabies**
10. A castrated male goat is known as a? **Wether**
11. What part of the beef animal's stomach resembles a honeycomb? **Reticulum**
12. What mineral is most commonly linked to grass tetany? **Magnesium**

### **Team Bonus**

1. Name the top five states with the most beef cows according to the 2023 Census.  
**Texas, Oklahoma, Missouri, Nebraska, and South Dakota (Drovers April 2024)**
2. The amount and kind of feed that should be fed to a farm flock ewe depends on several things. Name three factors that should be considered when developing a ewe ration.
- **Age of ewe**
  - **Size of ewe**
  - **Stage of production**
  - **Desired production level (i.e., how much should nursing lambs gain)**
  - **Current condition score**
  - **Previous nutrition status**
  - **Environment**
  - **Disease and parasites**
3. Name a common supplemental or non-feed source of calcium.
- **Calcium carbonate or limestone**
  - **Bone meal**
  - **Dicalcium phosphate**
  - **Monocalcium phosphate**
  - **Calcium sulfate**
  - **Calcium chloride**

4. What do beef quality grades estimate or predict?  
**Expected palatability or eating satisfaction of the meat (also accept juiciness and tenderness)**