

Senior Market Beef Study Guide

Please reference the Beef Resource Handbook and Fremont County Fair Book

Beef Resource Handbook can be ordered online from this link:

<https://extensionpubs.osu.edu/beef-resource-handbook/> or checked out at the Extension Office

Terms to be defined:

- Yield Grade:
- Total Digestible Nutrients:
- Soybean meal:
- Roughage:
- Finish:
- Conformation:
- Withdrawal Time:
- Zoonotic Diseases:
- Calcium to Phosphorus ratio:

Know how to calculate average daily gain using the following formula:

$$\text{Average Daily Gain} = \frac{\text{Final Weight} - \text{Initial Weight}}{\text{Days}}$$

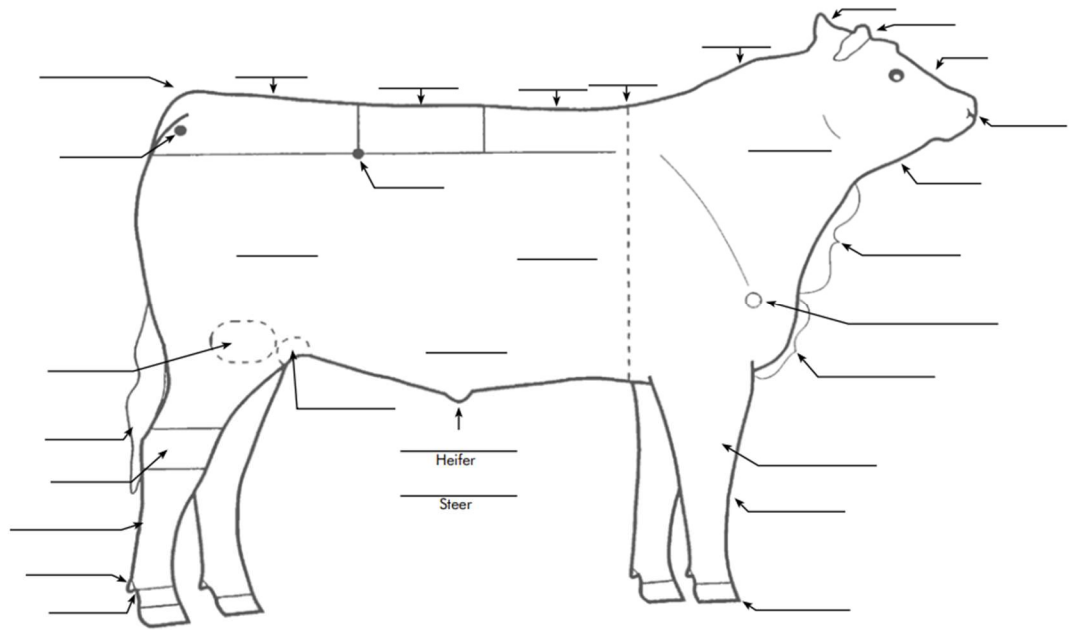
Example: If a steer weighed 800lbs. at weigh-in and weighed 1,200lbs. at fair weigh-in 160 days later, what was its average daily gain?

Know how to calculate steer weight using the following formula:

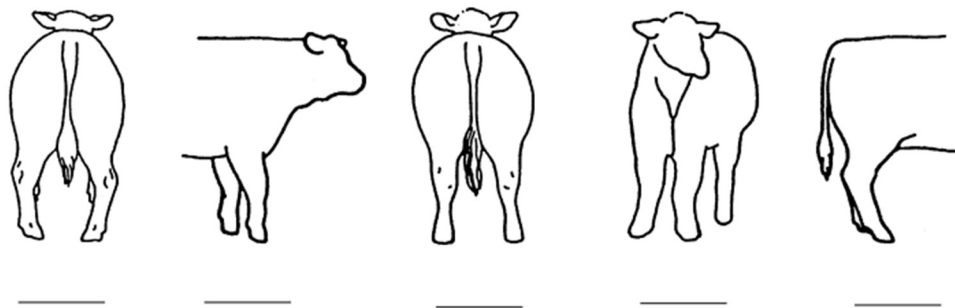
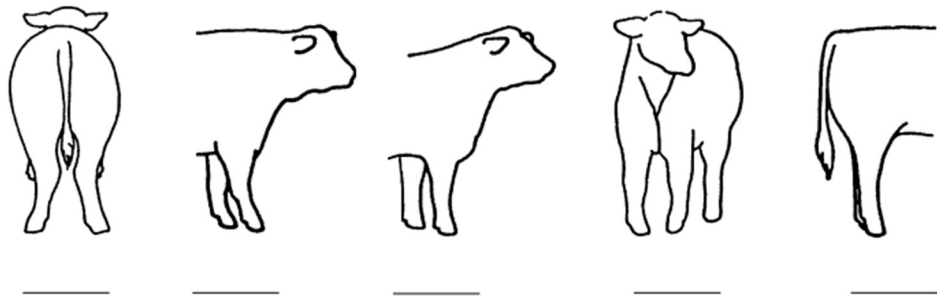
$$(\text{LBS. per Day} * \text{Days}) + \text{Weigh In Weight} = \text{Weight at Fair}$$

Example: If a steer weighs 800lbs. at fair and gained 2.5lbs. per day, how much did the steer weigh at fair 180 days later?

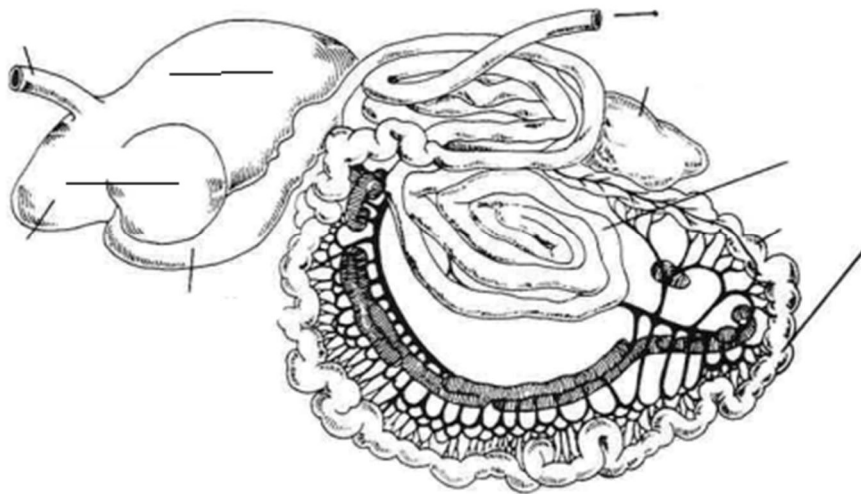
Be able to identify parts of a steer using the following diagram from the 4-H Beef Resource Handbook.



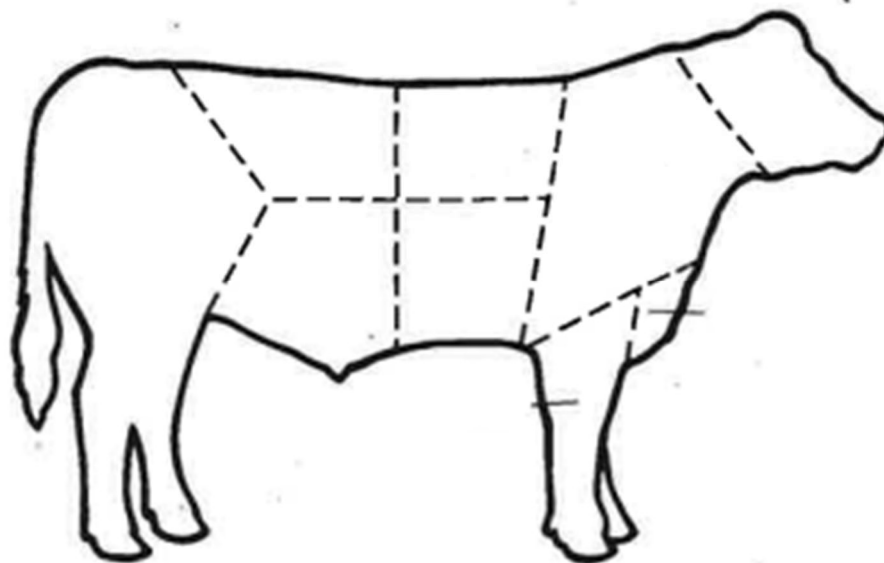
Be able to identify structural differences using the following diagrams from the 4-H Beef Resource Handbook.



Be able to identify parts of the ruminant digestive system using the following diagram from the 4-H Beef Resource Handbook.



Be able to identify wholesale cuts of beef using the following diagram from the 4-H Beef Resource Handbook.



Understand the following topics:

- Requirements for animal shelters, specifically space requirements
- Fremont County Fair minimum weight for fair
- Different parts of a feed label such as purpose of feed, guaranteed analysis, ingredient statement, and feeding instructions
- Qualities of the ideal market steer
- Fremont County Fair minimum and maximum ages of animal
- Fremont County Fair mandatory classes
- How feeds are categorized into the 5 essential nutrients for beef cattle and the purpose of each group which includes water, energy, protein, minerals, and vitamins
- USDA Yield Grade scale and what each number means
- How to treat and what causes certain common illnesses such as coccidiosis, bloat, and grass tetany
- What information is needed to calculate rations
- Topics that contribute to quality assurance
- Desirable traits for finished cattle
- Injection site protocols and routes of administration
- Where the point of balance is and what it means