

4-H Beef Bowl Study Information

- 1) Name 3 breeds of beef cattle.
A. Angus, Hereford, Shorthorn, Charolais, Limousin, Brangus, etc.
- 2) What should a finished steer ready to butcher weigh? _____ to _____
A. 1000 to 1400 lbs.
- 3) How many compartments do cattle have in their stomachs?
A. Four.
- 4) How much water per day might a feeder steer need?
A. 10 to 15 gallons
- 5) List five items you would need if you had a steer project.
A. Pen, water trough, feed storage, halter, brush, scotch comb, show stick.
- 6) How big of a pen do you need for one steer (in square feet)?
A. 900 sq. ft.
- 7) Which of these is not a nutrient: Water, Protein, Antibiotics, Minerals
A. Antibiotics
- 8) What do you call the amount of feed an animal eats in a 24 hour period?
A. Ration.
- 9) What are the two categories of feed?
A. Concentrates and roughage
- 10) Which category of feed is known to be low in digestibility and high in fiber?
A. Roughage
- 11) Which category of feed is highly digestible and low in fiber?
A. Concentrate
- 12) What kind of digestive system do cattle have that enables them to digest grass and hay?
A. Ruminant
- 13) Normal rectal temperature for a steer is _____.
A. 100 to 102 degrees F.
- 14) True or False: Heterosis is something that is observed in purebred animals.
A. False
- 15) Normal respiration (breathing) rate for a beef animal is _____.
A. 20 to 30 breathes per min.
- 16) Give an example of a way to mark an animal so it can be identified.
A. Brand, Tattoo, Number & Neck Chain, Ear Tag.

- 17) The most valuable cuts of meat come from the rump, loin, flank or shoulder?
A. Loin.
- 18) You should never inject more than _____ cc into a single site when giving intramuscular injections.
A. 10
- 19) “Prime”, “Choice” and “Standard” are examples of what?
A. Quality grades.
- 20) What is the difference between a heifer and a cow?
A Heifer is a female that has not had a calf, a cow has had a calf before.
- 21) What is a crossbred?
A. It is the offspring from parents of two different breeds.
- 22) Name a disease that cattle may get.
A. Blackleg, Leptospirosis, Influenza, Pneumonia, Pink eye, Hoof Rot, etc.
- 23) Name four different external parasites of beef cattle.
A. Flies, ticks, grubs or lice.
- 24) Which quality grade will usually receive the largest bonus when finished cattle are sold on a quality basis?
A. Choice.
- 25) Where is the greatest part of the cattle industry located in the United States?
A. The Great Plains (Texas to the Canadian Border).
- 26) Which one of the four compartments to a steer’s stomach is most like a persons?
A. Abomasum.
- 27) When you measure frame size what are you trying to estimate?
A. The minimum weight a beef animal must reach to grade choice.
- 28) Name two feeds that are high in proteins.
A. Cottonseed, Soybean, Linseed, Alfalfa Hay.
- 29) Name six major nutrients.
A. Water, carbohydrates, fats, proteins, vitamins and minerals.
- 30) Name 3 energy concentrate feeds.
A. Barley, corn, oats, wheat, milo, beet pulp and molasses.
- 31) Proteins are made from chains of smaller particles called what?
A. Amino Acids.
- 32) What nutrient has the greatest energy density?
A. Fat.

- 33) What do you call a ration that has the correct amount of the six nutrients?
A. A balanced ration.
- 34) A steer who's live weight was 1000 lbs. And carcass weight was 650 lbs. has a dressing weight of?
A. Carcass weight divided by live weight x 100 $(650/1000) \times 100 = 65\%$
- 35) What is the length of the gestation period of the cow?
A. 272-292 days
- 36) What is the main cause of bloat in beef cattle?
A. Consuming lush legumes like alfalfa, clover or high concentrate finishing rations.
- 37) What is the "flight zone" in beef cattle?
A. This is the area you enter that causes the animal to become anxious and run.
- 38) True or False. Ruminants digest plant fiber with stomach acids.
A. False.
- 39) Give an example of a mineral.
A. Calcium Phosphorous, Magnesium, Iron, Selenium, Sodium, etc.
- 40) Cattle grubs found on the back of the animal are the larvae of what parasite?
A. Heel fly
- 41) A well muscled steer will have at least _____ inches of rib eye area for every 100 lbs. live weight.
A. 1.1 inches

Beef Terms

- 1) Bull- Male animal of any age that are uncastrated.
- 2) Calves- Young cattle of either sex under one year of age.
- 3) Cow- Female bovine that has produced one or more calves.
- 4) Dam- A female parent.
- 5) Polled- Cattle born without horns.
- 6) Registered Animal- Purebred animal that has a registered certificate and number issued by the breed association. The animal's name is recorded with the names of the sire (father) and Dam (mother).
- 7) Steer- Male animal that has been castrated before sexual maturity.
- 8) Breed- Animals of like color, type and other characteristics similar to those of parents or past generations.
- 9) Feeder- A weaned animal that being fed for market.
- 10) Finish- Degree of fatness and readiness for market.
- 11) Fitting- The process of grooming an animal for show or sale.
- 12) Grade Animal- A beef animal that has one or both parents not registered with a breed association.
- 13) Parturition- Act of birth.
- 14) Pedigree- A table that gives a line of ancestors for an animal, a genealogical tree.
- 15) Purebred Animal- An animal of a recognized breed kept pure for many generations. A purebred animal may or may not be registered, but all registered animals are suppose to be purebred.
- 16) Ration- The total feed given to an animal during a 24 hour period.
- 17) Nutrition- The study of the feeding process and how an animal uses feed.
- 18) Genetics- The study of how animal or plant characteristics are passed from parent to offspring.
- 19) Colostrum- The first thick milk a mother gives, it provides nutrients, immunity to some diseases and a laxative to the offspring.
- 20) Marbling- Very small flecks (speckling, spots) of fat distributed throughout the muscle of the rib eye (rib steak). Marbling is important for tenderness and juiciness of the meat.
- 21) Rib Eye- A cross section of the loin muscle.
- 22) Gestation- Pregnancy.
- 23) EPD - Expected Progeny Difference (or Deviation).