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 person’s?
   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 \( \frac{650}{1000} \times 100 = 65\% \)

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).