

2021 Reno County Ag Challenge of Champions

Wednesday, July 21, 2021

Name _____ Age _____

4-H Club/FFA Chapter _____

RULES:

1. A county extension agent or FFA Instructor must certify each contestant as a Reno county student.
2. The superintendent and committee of the contest shall be in charge of the contest. They shall have the authority for interpretation of the rules.
3. No contestants will be allowed to have books or notes during the contest.
4. While the contest is in session, there shall be no communication between contestants.

GOOD LUCK!!!

2021 Ag Challenge of Champions Written Test

Multiple Choice: (Circle the letter of the correct answer)

Agricultural/Livestock Industry

1. Which region of the United States produces the most beef cattle?
 - a. Pacific
 - b. Corn Belt
 - c. Southwest**
 - d. Lake States
2. Since 1970, which breed of sheep has had the largest number registered with their breed association?
 - a. Hampshire
 - b. Rambouillet
 - c. Southdown
 - d. Suffolk**
3. The first successful cloning of a vertebrate organism from mature body cells occurred in 1996 with which species?
 - a. cow
 - b. pig
 - c. sheep**
 - d. goat
4. Which breed of swine has the highest performance in average litter size ratio?
 - a. Yorkshire**
 - b. Berkshire
 - c. Poland China
 - d. Hampshire
5. According to the USDA, the greatest expense in the production of livestock is:
 - a. contract and hired labor
 - b. livestock purchased
 - c. fuel and electricity
 - d. feed purchased**

6. Which of the following terms should be used when talking reasons for breeding cattle and NOT for market classes?
- a. balance
 - b. condition**
 - c. finish
 - d. muscling
7. The physical appearance of an animal is referred to as:
- a. phenotype**
 - b. genotype
 - c. dominance
 - d. codominance
8. Which breed of goat is primarily used for breeding meat goats?
- a. Boer**
 - b. Angora
 - c. Toggenburg
 - d. Pygmy
9. Adapting the behavior of animals to fit the needs of humans is called:
- a. breeding
 - b. culling
 - c. domestication**
 - d. training
10. A visual evaluation of the amount of muscle on a hog is best seen by looking at which view of the animal?
- a. front
 - b. rear**
 - c. side
 - d. top

Farm Equipment

11. Which of the following is **NOT** a purpose for a tractor?
- a. a remote power source
 - b. a machine to pull/carry another machine
 - c. a way to transport coworkers and friends**
 - d. a transporter of materials

12. When refueling your tractor, you should always:

- a. shut off the engine
- b. let the engine cool off
- c. refuel outdoors or in areas with good ventilation
- d. **all of the above**

13. When driving tractors and equipment on roads, what should you do to ensure your safety?

- a. display the slow-moving vehicle sign
- b. use escort vehicles
- c. drive with the rollover protection structure down so you can jump away in the event of a crash
- d. **both a and b**

14. What does PTO stand for?

- a. Pizza Take Off
- b. Power Turn On
- c. **Power Take Off**
- d. Power Turn Off

15. Combines are used to do what?

- a. **cut and thresh crops**
- b. swath and windrow crops
- c. move crops to market
- d. get other machinery out of the field

16. What farm equipment is used to cultivate soil?

- a. baler
- b. combine
- c. **disk**
- d. rake

17. What type of engines do most farm tractors usually have?

- a. **diesel**
- b. electric
- c. gasoline
- d. steam

18. A _____ is used to harvest crops such as grass and/or alfalfa.

- a. **baler**
- b. combine
- c. tractor
- d. truck

19. A _____ is a machine that cuts and windrows hay in one pass over a field.

- a. combine
- b. cotton picker
- c. **swather**
- d. tractor

20. What is the most common vehicle used in agriculture?

- a. truck
- b. **tractor**
- c. swather
- d. combine

Farm Management

21. Little pigs grow really fast. A piglet weighed 4 pounds at birth. He nurses his mother for 21 days and gains 16 pounds. What does the pig weigh at weaning time?

- a. 7
- b. **20**
- c. 25
- d. 37

22. A Hereford crossbred heifer is 14 months old. Farmer Joe wants her to have a calf at 24 months of age. It takes 9 months for a baby calf to be born. How long does Farmer Joe want to wait until he can turn this heifer with the bull?

- a. **1**
- b. 2
- c. 5
- d. 10

23. Dairy cattle spend 6 hours a day grazing. If there are three Jersey and three Holstein cows grazing in a field. How much time do these cows in the field spend grazing each week?
- a. 6
 - b. 12
 - c. 24
 - d. **42**
24. A doe has had three kiddings. The most recent kid was a single. The other two have been a set of twins (2) and a set of triplets (3). What is the average kidding that this doe has?
- a. 1
 - b. **2**
 - c. 3
 - d. 4
25. Mr. Baker can shear a sheep in 4 minutes. He has three (3) left to shear and it takes two (2) minutes to change sheep. How long will it take Mr. Baker to finish?
- a. 7
 - b. 12
 - c. **16**
 - d. 18
26. An older sow raised 11 pigs. The litter of pigs weighed 35 pounds at birth. The pigs weighed 158 pounds at the weaning age of 21 days. How many pounds did the litter of pigs gain while nursing their mother?
- a. 112
 - b. **123**
 - c. 142
 - d. 213
27. A very stylish Angus heifer is 7 months old weighing 555 pounds. She is gaining 3 pounds per day. She will be a year old in 152 days. What will she weigh on her birthday?
- a. 456 pounds
 - b. 807 pounds
 - c. 915 pounds
 - d. **1,011 pounds**

28. A dairy cow produces 75 pounds of milk a day or nearly 9 gallons. Farmer Wendell receives 12 cents a pound or about \$1.03 for a gallon milk picked up at the farm. The retail price is 30 cents per pound or \$2.60 a gallon. What percent of retail price did Farmer Wendell receive?
- a. 20%
 - b. 30%
 - c. **40%**
 - d. 50%
29. Goats are selling for \$1.00 per pound. Five kids sold for \$52, \$62, \$49, \$55 and \$66. How much money did Farmer John receive for his five goats?
- a. \$102
 - b. \$264
 - c. **\$284**
 - d. \$324
30. A black ewe lamb is 150 days old and weighs 135 pounds. She was weaned at 60 days weighing 72 pounds. She was a single lamb and got all of her mother's milk. How long has she been weaned?
- a. 63 days
 - b. 75 days
 - c. 78 days
 - d. **90 days**

General Agriculture

31. Which industry ranks first in the nation as an employer?
- a. **agriculture**
 - b. manufacturing
 - c. retail
 - d. technology
32. Which fabric contains a farm product?
- a. acrylic
 - b. nylon
 - c. polyester
 - d. **wool**

33. Only _____ out of every 100 Americans work on a farm.

- a. 2
- b. 10
- c. 15
- d. 20

34. A beef/dairy cow has a _____-compartment stomach that enables it to digest and convert all types of vegetation into energy.

- a. 1
- b. 2
- c. 3
- d. 4

35. Which of these plants is **NOT** a grain crop?

- a. corn
- b. cotton
- c. oats
- d. wheat

36. The largest segment of U.S. agriculture is the _____ industry.

- a. beef cattle
- b. dairy cattle
- c. soybean
- d. wheat

37. One farmer produces enough food for about how many people?

- a. 10
- b. 25
- c. 90
- d. 165
- e. 300

38. Milk is an important source of which nutrient?

- a. vitamin A
- b. vitamin C
- c. calcium
- d. carbohydrates
- e. iron

39. Which of the following has allowed farmers to increase production during the past 100 years?

- a. larger farms
- b. computers
- c. farm machinery such as tractors
- d. pesticides
- e. **all of the above**

40. An acre of land is roughly the size of a:

- a. a basketball court
- b. a city block
- c. **a football field**
- d. a swimming pool