

# 2022 Reno County Ag Challenge of Champions

## Wednesday, July 20, 2022

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!!!**

# 2022 Ag Challenge of Champions Written Test

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

## Agricultural/Livestock Industry

1. The period of time which an animal is pregnant is called:
  - a. parturition
  - b. estrus
  - c. ovulation
  - d. **gestation**
2. When organisms are genetically identical, they are said to be:
  - a. **clones**
  - b. twins
  - c. genetically engineered
  - d. siblings
3. Swine are typically identified for registration by the use of:
  - a. tattoos
  - b. ear tags
  - c. **ear notches**
  - d. freeze brands
4. Which nutrient has the highest energy value?
  - a. proteins
  - b. carbohydrates
  - c. fiber
  - d. **fats**
5. Which gland in the male produces the sperm cells?
  - a. Vas deferens
  - b. urethra
  - c. epididymis
  - d. **testicles**
6. The release of the egg from the ovary is called:
  - a. fertilization
  - b. **ovulation**
  - c. parturition
  - d. reproduction

7. Which of the following wholesale beef cuts are high-value?
- a. chuck
  - b. plate
  - c. brisket
  - d. **rib**
8. A visual evaluation of the amount of muscle on a hog is best seen by looking at which view of the hog?
- a. side
  - b. **rear**
  - c. front
  - d. top
9. What type of parasites are the most serious health problem for sheep?
- a. external
  - b. **internal**
  - c. live
  - d. mutated
10. What is a common disqualification in rules for registering animals in a breed association?
- a. weight
  - b. size
  - c. **color markings**
  - d. eyes

### **Farm Management**

11. A litter of healthy pigs weighed 20 pounds each at weaning. They each gained 36 pounds while spending 4 weeks in the nursery. What did each pig weigh when coming out of the nursery?
- a. 24 pounds
  - b. 40 pounds
  - c. **56 pounds**
  - d. 60 pounds

12. A pen of calves is being weighed as they sell. The group of 15 calves (14 black and 1 red) weighed 7,650 pounds. The manager decided to take the red calf off and just sell the black calves. The new weight was 7,110 pounds. How much did the red calf weigh?
- a. 525 pounds
  - b. 540 pounds**
  - c. 7,095 pounds
  - d. 7,635 pounds
13. Ten calves are on milk replacer. They each weigh 85 pounds. How much do all of the calves weigh together?
- a. 185 pounds
  - b. 260 pounds
  - c. 500 pounds
  - d. 850 pounds**
14. A goat weighs 70 pounds today. He was sold at the auction for \$70. How much was this goat worth per pound?
- a. \$1**
  - b. \$7
  - c. \$10
  - d. \$70
15. Farmer DeeDee has a lot of beautiful lambs. She counted 61 ram lambs (males) and 76 ewe lambs (females). How many lambs does DeeDee have?
- a. 18 lambs
  - b. 68 lambs
  - c. 137 lambs**
  - d. 152 lambs
16. A large litter of 17 pigs were born. Farmer Joe wanted to help, so he moved 6 of the pigs onto other sows who had just farrowed (given birth) litters of 7 and 8. This process is called cross-fostering. The sows raised all the pigs. How many pigs did the sow raise that had the litter of 17?
- a. 2 pigs
  - b. 9 pigs
  - c. 10 pigs
  - d. 11 pigs**

17. A milking parlor can milk 60 cows in one hour. It takes two hours to milk Farmer Joe's herd. Since it takes him two hours, how many cows does Farmer Joe milk?
- a. 60 cows
  - b. 62 cows
  - c. **120 cows**
  - d. 240 cows
18. A calf was born in January. He was weaned at 7 months (July) at 550 pounds. Five months later it is now December, and the calf weighs 850 pounds. How much did this calf gain each month after he was weaned?
- a. 30 pounds
  - b. **60 pounds**
  - c. 90 pounds
  - d. 300 pounds
19. An excellent wether goat weighed 72 pounds and sold for \$1.50 per pound. What price was received for this goat?
- a. \$82.00
  - b. **\$108.00**
  - c. \$158.00
  - d. \$204.00
20. A ewe has lambed the past four years. She had twins (2), triplets (3), twins (2) and then a single (1). What is the ewe's lambing average?
- a. 1
  - b. **2**
  - c. 3
  - d. 4

### **Farm Equipment**

21. What is the most common vehicle used in agriculture?
- a. truck
  - b. combine
  - c. **tractor**
  - d. swather

22. Before the advent of machinery, farmers used \_\_\_\_\_ to help in farming?

- a. **domesticated animals**
- b. solar energy
- c. astrology
- d. wind pressure

23. What is an agricultural machine used to harvest cotton?

- a. stone picker
- b. cotton puller
- c. cotton huller
- d. **cotton picker**

24. What does "PTO" stand for?

- a. power take over
- b. **power take off**
- c. power transfer object
- d. power tractor output

25. What is the benefit of practicing conservation tillage on a farm?

- a. less soil erosion
- b. fewer trips across the field, thereby saving fuel and machinery costs
- c. less groundwater contamination by pesticides
- d. **all of the above**

26. What type of engines do modern farm tractors usually have?

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

27. What farm equipment is used to cultivate the soil before planting?

- a. combine
- b. **plow**
- c. rake
- d. swather

28. A \_\_\_\_\_ is used to cut forage crops such as grass and/or alfalfa.

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

29. After plowing, a \_\_\_\_\_ is used to make the soil smoother and finer.

- a. **disk/cultivator**
- b. drill
- c. planter
- d. rake

30. A \_\_\_\_\_ is used to harvest forage crops such as grass and/or alfalfa.

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

### **General Agriculture**

31. Which of the following farm crops are used in cereals?

- a. wheat
- b. corn
- c. rice
- d. oats
- e. **all of the above**

32. What fabric contains a farm product?

- a. nylon
- b. **cotton**
- c. polyester
- d. acrylic

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

- a. 16
- b. 26
- c. 96
- d. **166**
- e. 306

34. During the past 50 years, the number of farms in the U. S. has:

- a. increased
- b. stayed about the same
- c. **decreased**

35. Milk is an important source of which nutrient?

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

36. Carrots are an important source of which nutrient?

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

37. Out of every 100 people in the United States, how many are farmers?

- a. **1-2 people**
- b. 3-4 people
- c. 5-7 people
- d. 10 people

38. 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**

39. Erosion of the soil is:

- a. soil which crumbles easily
- b. controlled by using lots of fertilizer
- c. **the wearing away of the land**
- d. controlled by allowing cattle to graze the land in unlimited numbers
- e. all of the above



40. World food production in the future will need to \_\_\_\_\_ to feed everyone on the planet?

- a. **increase**
- b. decrease
- c. stay the same