

# 2023 Reno County Ag Challenge of Champions

## Wednesday, July 19, 2023

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!!!**

# 2023 Ag Challenge of Champions Written Test

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

## Agricultural/Livestock Industry

1. Beef cattle or sheep born without horns are commonly referred to as:
  - a. Hornless
  - b. Polled**
  - c. Scurred
  - d. Bald
  
2. What is an animal resulting from the mating of two different breeds?
  - a. Purebred
  - b. Inbred
  - c. Crossbred**
  - d. Feral
  
3. Animals that through selection and breeding have come to resemble one another and pass those traits uniformly to their offspring are defined as:
  - a. A breed**
  - b. A hybrid
  - c. Progeny
  - d. Genetics
  
4. Feedstuffs such as hay and silage are classified as:
  - a. Proteins
  - b. Concentrates
  - c. Roughages**
  - d. Minerals
  
5. What is the most important nutrient in a swine ration?
  - a. Water**
  - b. Soybean meal
  - c. Corn
  - d. Roughage

6. The first milk produced by a female sheep (ewe) after giving birth is known as:
- a. Buttermilk
  - b. Lactose
  - c. **Colostrum**
  - d. Lecithin
7. The physical appearance of an animal is known as:
- a. Genotype
  - b. Pedigree
  - c. Performance
  - d. **Phenotype**
8. The removal of the testicles from a male animal is:
- a. Vaccination
  - b. Dehorning
  - c. Insemination
  - d. **Castration**
9. In swine, a male that has been castrated before reaching sexual maturity is called a:
- a. Wether
  - b. Stag
  - c. Boar
  - d. **Barrow**
10. The removal of all or part of the tail from sheep is referred to as:
- a. Castration
  - b. Notching
  - c. Dehorning
  - d. **Docking**

### **Farm Equipment**

11. Where is the power take-off (PTO) shaft typically located on a tractor?
- a. At the front
  - b. At the side
  - c. In the cab
  - d. **At the rear**

12. What is an agricultural machine used to harvest cotton?
- a. Stone picker
  - b. Cotton puller
  - c. Cotton huller
  - d. **Cotton picker**
13. A \_\_\_\_\_ is used to harvest grain crops such as wheat and corn.
- a. Baler
  - b. **Combine**
  - c. Swather
  - d. Tractor
14. What farm equipment is used to cultivate the soil before planting?
- a. Combine
  - b. **Plow**
  - c. Rake
  - d. Swather
15. A \_\_\_\_\_ is used to harvest forage crops such as grass and/or alfalfa.
- a. **Baler**
  - b. Combine
  - c. Tractor
  - d. Truck
16. What is the most common vehicle used in agriculture?
- a. **Tractor**
  - b. Combine
  - c. Truck
  - d. Baler
17. Most modern tractors also provide what type of power via hoses?
- a. Air
  - b. **Hydraulic**
  - c. Solar
  - d. All of the above

18. What type of engines do modern farm tractors usually have?
- a. **Diesel**
  - b. Electric
  - c. Gasoline
  - d. Steam
19. After plowing, a \_\_\_\_\_ is used to make the soil smoother and finer.
- a. **Disk/Cultivator**
  - b. Drill
  - c. Planter
  - d. Rake
20. 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**

### **Farm Management**

21. A little pig is growing really fast. He 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. **20 pounds**
  - b. 25 pounds
  - c. 37 pounds
  - d. 41 pounds
22. The Belted Galloway breed is known for their pretty white belt and excellent meat quality. A heifer weighs 475 pounds today. She will need to weigh 1,000 pounds before being ready for market. How many pounds does this heifer need to gain before going to market.
- a. 474 pounds
  - b. **525 pounds**
  - c. 555 pounds
  - d. 1,475 pounds

23. Daisy is a big Holstein cow. She is milked twice a day, with all of the other dairy cows. At her first milking, she gives 40 pounds of milk and she does that again at her evening milking. There are 19 other cows in Farmer Fred's dairy herd, which all average 40 pounds of milk per milking. How much milk do all of the cows produce during the morning milking?
- a. 80 pounds
  - b. 600 pounds
  - c. **800 pounds**
  - d. 1,000 pounds
24. Five goats eat 10 pounds of feed each day. They are growing really fast! How much feed does each kid eat per day?
- a. **2 pounds**
  - b. 5 pounds
  - c. 15 pounds
  - d. 50 pounds
25. A baby lamb will typically nurse the mother for 60 days. The ewe (mother) gives special milk the first three days called colostrum which protects the lamb from diseases. The lamb will take 6 ounces the first day, 10 ounces the second day and 12 ounces the third day. How much colostrum did the ewe give?
- a. 16 ounces
  - b. 18 ounces
  - c. 22 ounces
  - d. **28 ounces**
26. A red spotted pig weighs 153 pounds. He must weigh 265 pounds to be ready for market. How many pounds must he gain before being market ready?
- a. 92 pounds
  - b. 102 pounds
  - c. **112 pounds**
  - d. 212 pounds

27. A black-white faced feeder calf is eating 8 pounds of feed and 24 pounds of grass to gain 4 pounds each day. How many pounds will this calf gain in a week?
- a. 20 pounds
  - b. 24 pounds
  - c. **28 pounds**
  - d. 32 pounds
28. A Jersey cow produced 80 pounds of milk a day. A gallon of milk weighs about 8 pounds. How many gallons of milk did she produce a day?
- a. 4 gallons
  - b. **10 gallons**
  - c. 12 gallons
  - d. 64 gallons
29. A wether goat weighs 63 pounds at 4 months old. This wether is gaining 1 pound each day. How much will he gain during the month of July?
- a. 30 pounds
  - b. **31 pounds**
  - c. 60 pounds
  - d. 63 pounds
30. Three lambs weigh 366 pounds. What is the average weight of these lambs?
- a. 33 pounds
  - b. 111 pounds
  - c. **122 pounds**
  - d. 366 pounds

### **General Agriculture**

31. Which industry ranks first in the nation as an employer?
- a. **Agriculture**
  - b. Manufacturing
  - c. Retail
  - d. Technology

32. Today, the average U.S. farmer produces enough food and fiber to feed \_\_\_\_\_ people.
- a. 154 people
  - b. 168 people**
  - c. 180 people
  - d. 215 people

33. Which state has the most farm acreage?
- a. Kansas
  - b. Missouri
  - c. Tennessee
  - d. Texas**

34. The largest segment of U.S. agriculture is the \_\_\_\_\_ industry.
- a. Beef cattle**
  - b. Dairy cattle
  - c. Soybean
  - d. Wheat

35. Only \_\_\_\_\_ out of every 100 Americans works on a farm.
- a. 2**
  - b. 10
  - c. 15
  - d. 20

36. 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

37. 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**



38. Which of these plants is NOT a grain crop?

- a. Corn
- b. Oats
- c. **Soybeans**
- d. Wheat

39. The largest agricultural employment sector in Reno County for 2016 was the \_\_\_\_\_ industry.

- a. **Beef cattle ranching & farming**
- b. Farm machinery & equipment manufacturing
- c. Grain farming
- d. Meat processing

40. The top five agricultural products grown or raised in Kansas does NOT include:

- a. Cattle and calves
- b. Corn
- c. Soybeans
- d. **Sunflowers**