2019 Reno County Ag Challenge of Champions

Wednesday, July 17, 2019

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!!!2019 Ag Challenge of Champions Written Test**

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

***Agricultural/Livestock Industry***

1. The removal of the testicles from a male animal is:
2. dehorning
3. **castration**
4. vaccination
5. insemination
6. Fat present in muscle tissue is known as:
7. condition
8. tallow
9. **marbling**
10. finish
11. An animal that has extremely straight hind legs is best described as being:
12. sound
13. cow-hocked
14. **post-legged**
15. sickle-hocked
16. How well an animal likes or accepts a feed is referred to as the:
17. digestibility
18. composition
19. **palatability**
20. balance
21. According to USDA, the greatest expense in the production of livestock is:
22. contract and hired labor
23. livestock purchased
24. **feed purchased**
25. fuel and electricity
26. The period of time which an animal is pregnant is called:
27. estrus
28. ovulation
29. parturition
30. **gestation**
31. The most common sheep identification system is:
32. freeze branding
33. ear notching
34. **ear tags**
35. tattooing
36. A \_\_\_\_\_ animal is one that is of a particular breed.
37. outcrossed
38. **purebred**
39. crossbred
40. linebred
41. Subcutaneous injections are given:
42. **under the skin**
43. in the muscle
44. orally
45. in the ear
46. Newborn animals receive immunity to diseases by drinking:
47. **colostrum**
48. sterile water
49. fibrinogen
50. vaccines

***Farm Management***

1. Two pigs are out of the nursery pen and headed for the finishing house. They will each gain 200 pounds in the finishing house. They ate 168 pounds of feed in the nursery and will eat 1,306 pounds in the finishing house. How much did these two pigs eat?
2. 368 pounds
3. 568 pounds
4. **1,474 pounds**
5. 1,674 pounds
6. One of Farmer Joe’s calves weighed 615 pounds at 205 days of age. Farmer Joe’s other calves averaged 512 pounds at 205 days of age, or at weaning. How much more did his first calf weigh than the average of Farmer Joe’s other calves?
7. **103 pounds**
8. 307 pounds
9. 410 pounds
10. 1,127 pounds
11. 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 to milk his cows, how many cows does Farmer Joe milk?
12. 60 cows
13. **120 cows**
14. 240 cows
15. 152 cows
16. Three kids (goats) are eating very well, which means they are gaining weight. The three kids weigh 210 pounds together this week. Last week, they weighed 198 pounds together. What was the average weight of each kid this week?
17. 12 pounds
18. 66 pounds
19. **70 pounds**
20. 408 pounds
21. Dee Dee’s daughter has a lamb. This lamb acts silly sometimes when Farmer Dee Dee lets her run in the yard, so they named her Goofy. Goofy’s mom has had triplets (3), twins (2) and twins (2). How many lambs has Goofy’s mom raised?
22. 4 lambs
23. 5 lambs
24. **7 lambs**
25. 12 lambs
26. A market hog weighs 265 pounds. The hog is 153 days of age, and is extremely free of fat and has been very efficient in converting feed to gain. The market hog has eaten 682 pounds of feed since leaving her mother at 3 weeks of age. The hog ate 66 pounds in the nursery, leaving the remainder of the feed being eaten in the finishing house. How much feed did the hog eat in the finishing house?
27. 112 pounds
28. 417 pounds
29. 529 pounds
30. **616 pounds**
31. A young steer is ready for market. He is 14 months old and weighs 1,070 pounds. The selling price is 70 cents per pound. How much will this steer sell for?
32. $149.80
33. **$749.00**
34. $980.00
35. not enough information
36. A dairy cow produces 75 pounds of milk a day or nearly 9 gallons per day. Farmer Wendell receive 12 cents a pound or about $1.03 for a gallon of milk picked up at the farm. The retail price is 30 cents a pound or $2.60 a gallon. What percent of the retail price did Farmer Wendell receive?
37. 12%
38. 16%
39. 30%
40. **40%**
41. A Boer buck named Buford was used for 5 years siring 47 kids per year. Buford had 55 daughters retained as replacements and 14 sons sold as bucks. How many kids (goats) did Buford sire in total?
42. 69 kids
43. 116 kids
44. 121 kids
45. **235 kids**
46. Parasite prevention is costly on farmers, but is a necessity to keep healthy stock. George, the sheep farmer, spends $2,600 on parasite prevention each year. The medication is $13 per lamb. George is giving parasite medication to how many lambs?
47. 7 lambs
48. **200 lambs**
49. 216 lambs
50. cannot be determined

**Farm Equipment**

1. Which agricultural machine causes the greatest number of serious injuries to youth?
2. corn pickers
3. **tractors**
4. combines
5. hay balers
6. The slow-moving vehicle (SMV) emblem is only used on machines that travel at speeds less than \_\_\_\_\_ miles per hour.
7. 10
8. 20
9. **25**
10. 35
11. Where is the power take-off (PTO) shaft typically located on a tractor?
12. **at the rear of the tractor**
13. at the front of the tractor
14. along the side of the tractor
15. in the cab of the tractor
16. Most modern tractors also provide what type of power via hoses?
17. air
18. chemical
19. **hydraulic**
20. water
21. What type of engines do modern farm tractors usually have?
22. **diesel**
23. gasoline
24. nuclear
25. steam
26. What farm equipment is used to cultivate soil?
27. baler
28. combine
29. **disk**
30. rake
31. A \_\_\_\_\_ is an agricultural machine used to harvest cotton.
32. stone picker
33. **cotton picker**
34. cotton huller
35. cotton puller
36. A \_\_\_\_\_ is a machine that reaps, threshes, and cleans grain while moving over a field.
37. baler
38. **combine**
39. swather
40. tractor
41. A \_\_\_\_\_ is a machine that cuts and windrows hay in one pass over a field.
42. combine
43. cotton picker
44. **swather**
45. tractor
46. What do you usually do first before you plant a field of crops?
47. **plow it**
48. water it
49. fertilize it
50. spray it for weeds

**General Agriculture**

1. Which industry ranks first in the nation as an employer?
2. **agriculture**
3. manufacturing
4. retail
5. technology
6. Which state has the most farm acreage?
7. Kansas
8. Missouri
9. Tennessee
10. **Texas**
11. Only \_\_\_\_\_ out of every 100 Americans work on a farm.
12. **2**
13. 10
14. 15
15. 20
16. A beef/dairy cow has a \_\_\_\_\_-compartment stomach that enables it to digest and convert all types of vegetation into energy.
17. 1
18. 2
19. 3
20. **4**
21. The largest agricultural employment sector in Reno County for 2017 was the \_\_\_\_\_ industry.
22. **beef cattle ranching & farming**
23. farm machinery & equipment manufacturing
24. grain farming
25. meat processing
26. Which of the following farm crop(s) is/are used in cereals?
27. wheat
28. corn
29. rice
30. oats
31. **all of the above**
32. One farmer produces enough food for about how many people?
33. 10
34. 25
35. 90
36. **165**
37. 300
38. Milk is an important source of which nutrient?
39. vitamin A
40. vitamin C
41. **calcium**
42. carbohydrates
43. iron
44. Which of the following has allowed farmers to increase production during the past 100 years?
45. larger farms
46. computers
47. farm machinery such as tractors
48. pesticides
49. **all of the above**
50. World food production in the future will need to \_\_\_\_\_ to feed everyone on the planet?
51. **increase**
52. decrease
53. stay the same