

2008 National FFA Poultry Evaluation CDE Team Activity

Watch the short video carefully. You may need to take notes during the video. Then answer the fifteen multiple questions over the video after you have discussed them with your team. Make sure that team member "1" records the answers onto the scantron.

1. In order to have broiler chicks reach 7 weeks of age and be ready for the county fair, Billy needed to place the eggs in the incubator on:
 - A. July 4
 - B. July 11
 - C. July 18
 - D. July 25
 - E. August 1

2. When Billy was learning to candle, he candled six eggs that had been incubated for a week. He had to determine the number of eggs that contained developing embryos. Out of six eggs candled, the number of eggs with developing embryos was:
 - A. 2
 - B. 3
 - C. 4
 - D. 5
 - E. 6

3. What was the percent fertility of the first 100 broiler breeder eggs that he set?
 - A. 35%
 - B. 45%
 - C. 55%
 - D. 65%
 - E. 100%

4. The best explanation for this low fertility is that
 - A. the eggs were too large.
 - B. there was a power failure.
 - C. the wan an incorrect mating ratio.
 - D. the eggs were set upside down.
 - E. the eggs were contaminated.

5. What was the percent hatchability of the first 100 broiler breeder eggs that he set?
 - A. 40%
 - B. 45%
 - C. 50%
 - D. 55%
 - E. 89%

6. Which of the following was the most likely reason for the exploding eggs?
- A. Bacterial contamination from the reproductive tract of the hens
 - B. Bacterial contamination from the nests
 - C. Bacterial contamination due to spraying bleach on the shells
 - D. Hatching eggs should not be washed, so bacterial contamination due to washing eggs in cold water caused the problem
 - E. It is normal for some eggs to explode
7. Billy's grandma forgot to label the cartons of hatching eggs she picked up for him while he was at school. Which of the following statements is correct?
- A. The brown eggs were from New Hampshires and the white eggs were from Brown Leghorns.
 - B. Billy knew something was wrong because both New Hampshires and Brown Leghorns lay brown eggs.
 - C. The brown eggs had to be from Brown Leghorns because White Leghorns lay white eggs. Thus the white eggs had to be from the New Hampshires.
 - D. Billy knew that because both New Hampshires and Brown leghorns were from the American Class that they would lay white eggs, so the seller had sent the wrong eggs.
 - E. Billy told his grandma that it was impossible to tell which eggs were which, so they should just scramble them for breakfast.
8. Billy candled the fresh white eggs that he had purchased on Ebay before he started incubating them and found large air cells. He had judged Poultry in FFA, so he knew what large air cells meant. He then sent an email to the seller. From the candled appearance, he should tell her that
- A. large air cells indicate that the hens were not fed enough protein.
 - B. large air cells are indicative of old eggs that been stored too long.
 - C. large air cells are indicative of eggs that are produced by old hens.
 - D. large air cells are indicative of infertility.
 - E. large air cells are due to rough handling of the eggs during shipping.
9. Billy candled the same white eggs a week later, then sent another email to the seller. From the candled appearance, he should let her know that
- A. none of the eggs contained embryos and as he suspected, the eggs were not good.
 - B. about half of the eggs contained embryos, so the large air cells were not an indication of freshness.
 - C. all of the eggs were developing and he owed her an apology.
 - D. he would have to wait another week to be able to tell if the eggs were good.
 - E. he would have to wait until the eggs hatched to know for sure.
10. Unhealed, red and open navels are an indication that
- A. conditions are too dry in the incubator.
 - B. the male parents too young.
 - C. there are genetic disorders.
 - D. the eggs were stored too long.
 - E. the humidity was too high during days 20 and 21.

11. When Billy weighed the hatching eggs he was able to calculate the weight change. Which of the following statements is correct?
- A. The egg weight loss was too high for 18 days indicating that the humidity was too low
 - B. The egg weight loss was too low for 18 days indicating that that the humidity was too high
 - C. The egg weight loss was too high for 18 days indicating that that the temperature was too high
 - D. The egg weight loss was too low for 18 days indicating that that the temperature was too low
 - E. The egg weight loss was just right
12. Billy visited with the student whose chicks were not doing well. Based on the symptoms he observed and by the fact that as soon as he saw the litter, he knew what the problem was, what litter material do you think Billy saw that would most likely explain the problem?
- A. Pine Wood Shavings
 - B. Chopped Straw
 - C. Rice Hulls
 - D. Peanut Hulls
 - E. Oak Wood shavings
13. Billy decided that he might be able to market feed to his customers. So he balanced a ration and named it "Billy's Super Meat Maker." He wanted the ration to have plenty of xanthophylls for good coloration. To do this his base grain should be
- A. Milo
 - B. Wheat
 - C. Oats
 - D. Yellow Corn
 - E. Soybean Meal
14. Billy wanted to prepare a guide sheet for his market broiler customers. He read that market broilers would probably have a feed conversion ratio of 2.0 or less. If a customer bought ten baby chicks that would weigh 5 pounds each by show time, how much feed should Billy tell the customer to buy?
- A. 25 pounds
 - B. 50 pounds
 - C. 100 pounds
 - D. 200 pounds
 - E. 300 pounds
15. Billy eventually set 400 broiler hatching eggs. How much income did he have from the chicks that hatched from these eggs?
- A. \$8000
 - B. \$800
 - C. \$6400
 - D. \$640
 - E. \$64

A N S W E R K E Y *

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1. A It takes 21 days for eggs to hatch and 7 weeks for birds to grow. Students had to note from the video that the county fair was September 12 – 13.
2. C Students should see from the video that there were 4 of the 6 eggs that candled dark (Page C 29).
3. B 45 fertile eggs out of 100 eggs
4. C There should be a minimum of 10 to 11 males per 100 hens (Page C 101).
5. B 40%, because 40 chicks hatched out of 100 eggs.
6. D Eggs washed in cold water are likely to pull bacteria in through the shell. Page C 84 indicates that hatching eggs should not be washed.
7. A (Page C 144)
8. B Students should observe from the video that all of the fresh eggs had large air cells. They should know from their egg grading skills that eggs with large air cells means the eggs were not fresh.
9. A Students should observe from the video that none of the eggs had any development by 7 days of incubation (Page C 29).
10. E (Page C 93)
11. B Eggs should lose 12% of the initial weight during the first 18 days of incubation (Page C 88). The video indicates that each egg weighed 60 grams and 18 days later weighed 55 grams. That calculates to 8.3% weight loss $[(60-55)/60 \times 100 = 8.3\%]$, which is not enough. This indicates that humidity was too high.
12. E Page C 113 indicates that splinters in hardwood wood shavings are likely to cause perforations of the gizzard.
13. D Xanthophylls are discussed on page C 146.
14. C It takes 2 pounds of feed per one pound of gain, so a 5-pound chicken needs 10 pounds of feed. Because the customer bought ten chicks, they need 100 pounds of feed total.
15. D The video indicates that 320 eggs hatched out of the 400 eggs; because the chicks sold for \$20 per 10 chicks, the answer is \$640 $[(320/10 \times 20 = \$640)]$.