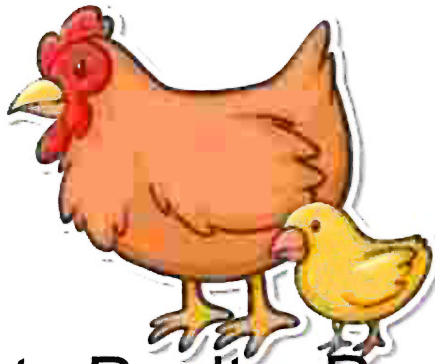




Darke County Poultry Resource Book

This is the Skillathon study guide for all ages. It is meant to be a guide for studying for the Skillathon but it is not all encompassing. Each year the Skillathon is reviewed, and changes are made to encourage learning and fairness to everyone.

The age divisions are below. The ages on the app are as of January 1st of the current year.

Beginners 8-11

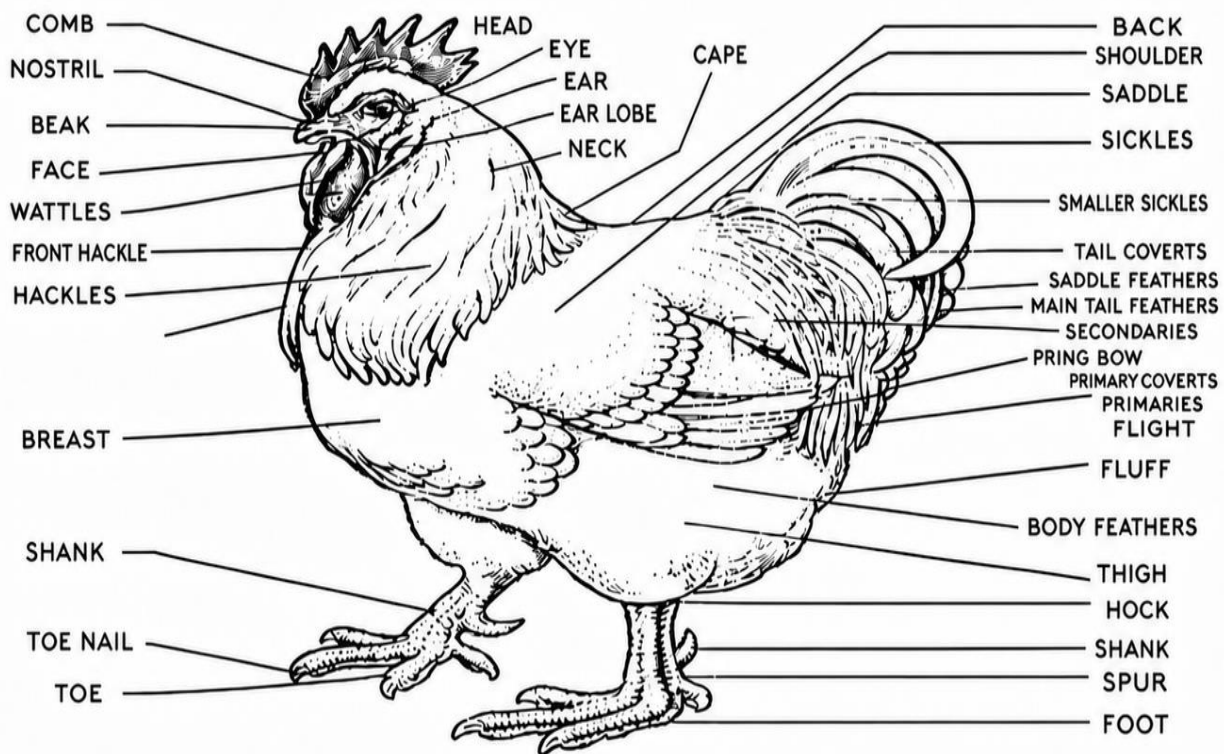
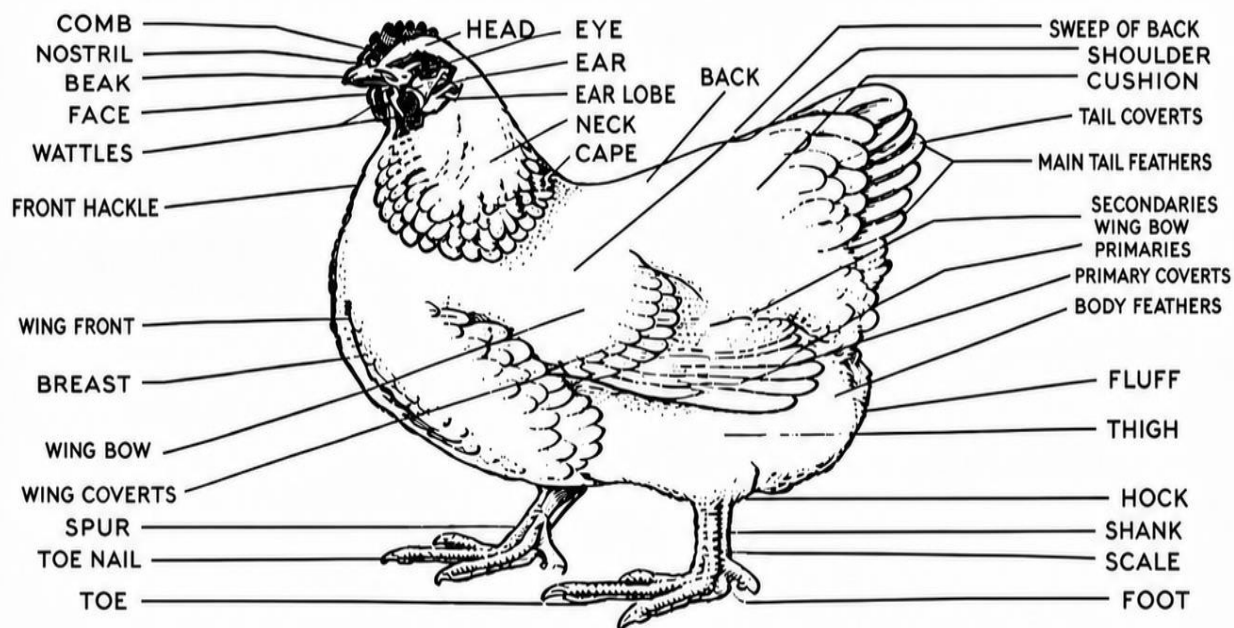
Juniors 12-14

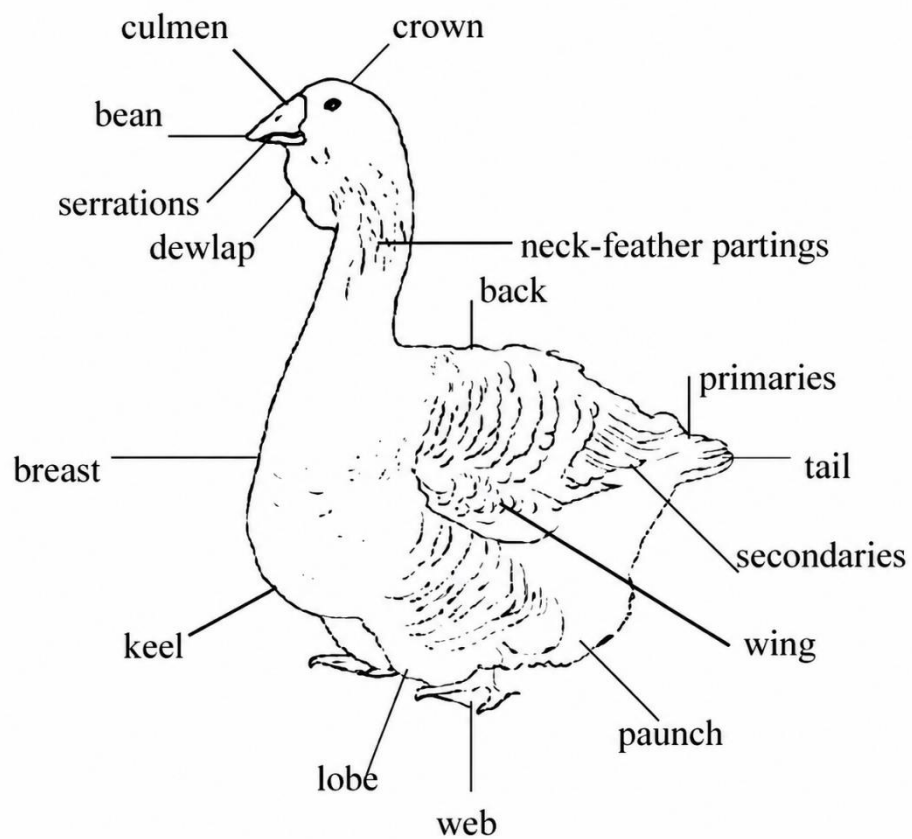
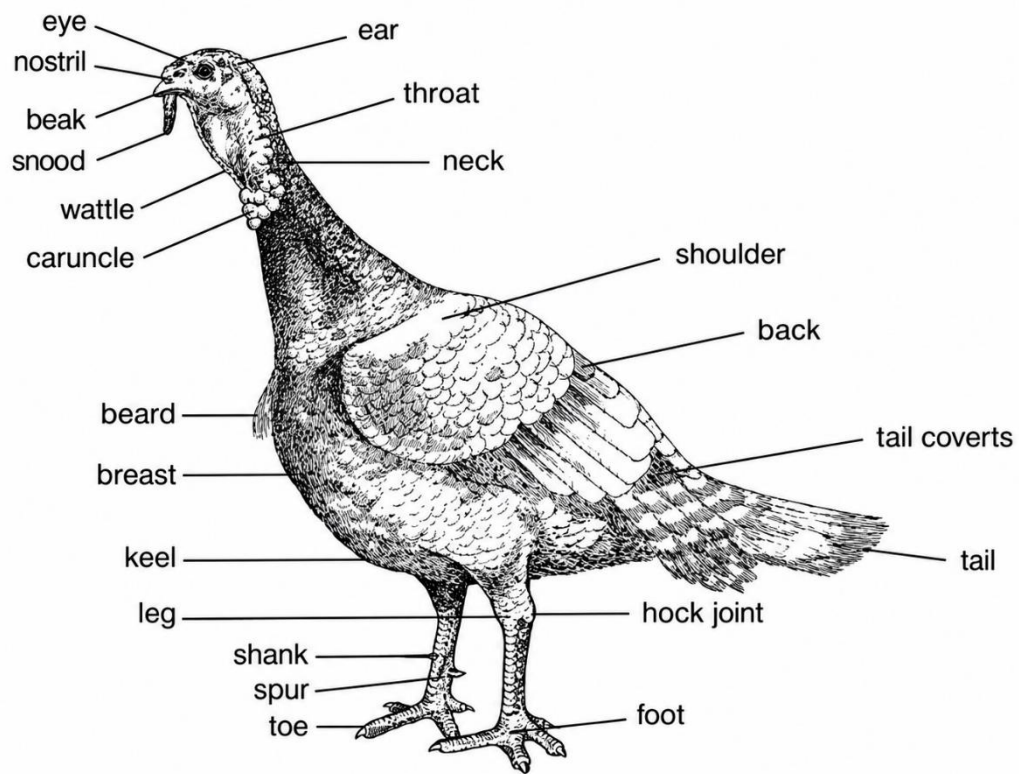
Seniors 15-18

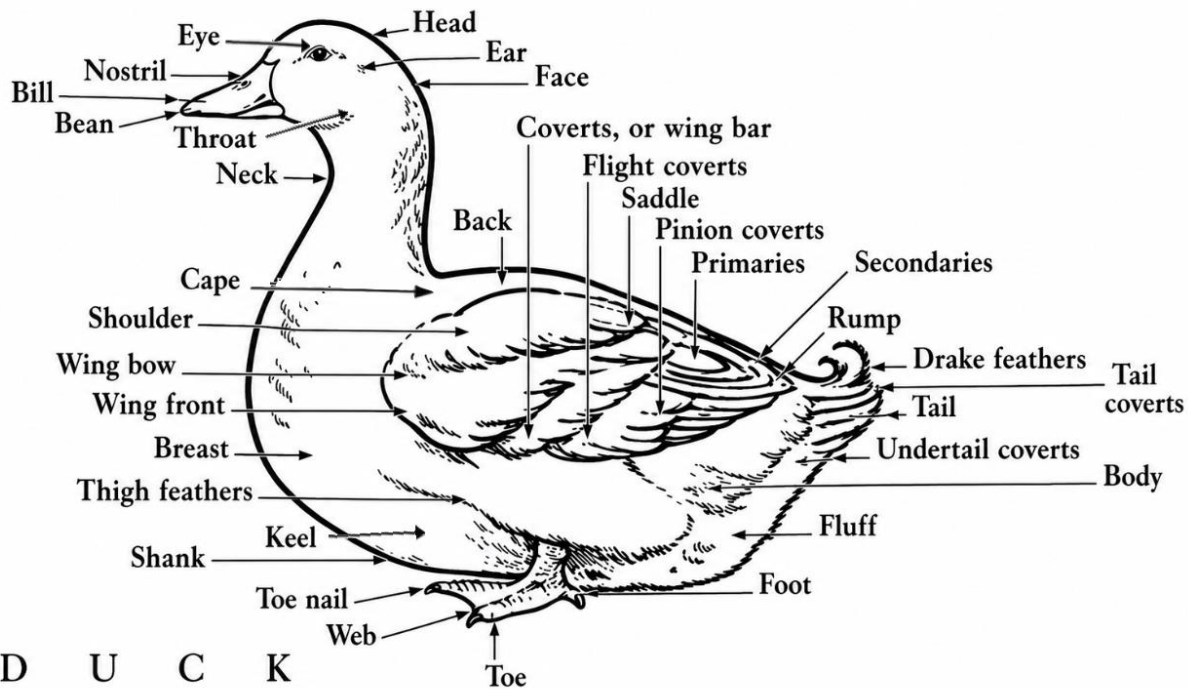
At Skillathon, there will be stations set up and you will demonstrate your knowledge by labeling all the given diagrams.

Parts For All Ages -The Exhibitor chooses which bird(s) they want to do.

- **Junior**- 1 bird, 10 parts
- **Intermediate**- 2 birds, 10 parts
- **Senior**- 2 birds, 15 parts







Each age bracket will be asked to identify 7 different types of feed and label them correctly, again above is just a sample of some of the feeds that will be chosen. It is up to the tester's discretion on which feeds they want to use and test on.

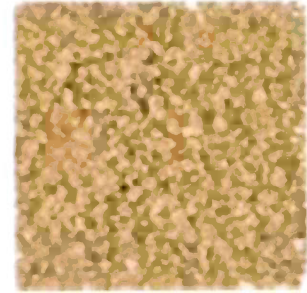
All Ages Feeds



Pellets



Crumbles



1. Mash 2. Whole Corn, there will be Cracked Corn too | 3. Pellet 4. Scratch Grain

Pellet size crushed
oyster shell and coral calcium.



All Ages Medicine Label

- Below is a labeled example of the medication label, the **Junior**, and the **Intermediate** will be asked to label all 7 parts of the medication label.
-

<u>Name of Drug</u> OMNIBIOTIC	
(hydrocillin)	<u>Active Ingredient(s)</u>
Directions for use: See package insert	
<u>Cautions and Warnings</u>	Warning: Milk that has been taken from animals during treatment and for 48 hours after the last treatment must not be used for food. The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food. Exceeding the highest recommended dosage level may result in antibiotic residues in meat or milk beyond the withdrawal time.
	<u>Withholding Times</u>
Store between 2° and 8°C (36° and 46°F)	
<u>Quantity of Contents</u>	Keep dry and away from light <u>Storage</u>
Net contents: 100 ml	
Distributed by	
USA Animal Health, Inc. <u>Name of Distributor</u>	
<u>Lot Number</u>	Lot # 0009900-Q123
Expiration Date 05/17/XX <u>Date of Expiration</u>	
	

Beginners Combs



Single



Pea



Strawberry



Cushion



Walnut



Buttercup



V-Shaped



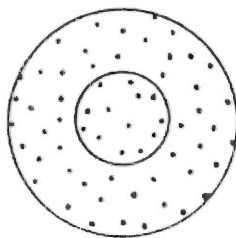
Rose

- The Juniors will be asked to label 6 of the 8 combs listed above in a match setup.

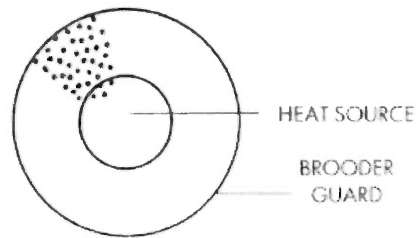
Juniors Brooder Setup

Body Language and Brooder Heat

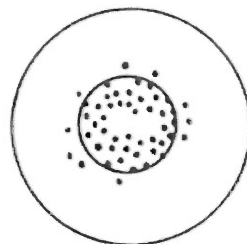
JUST RIGHT



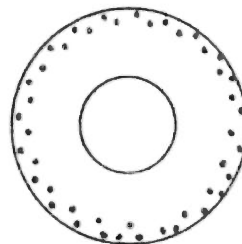
TOO DRAFTY



TOO COLD



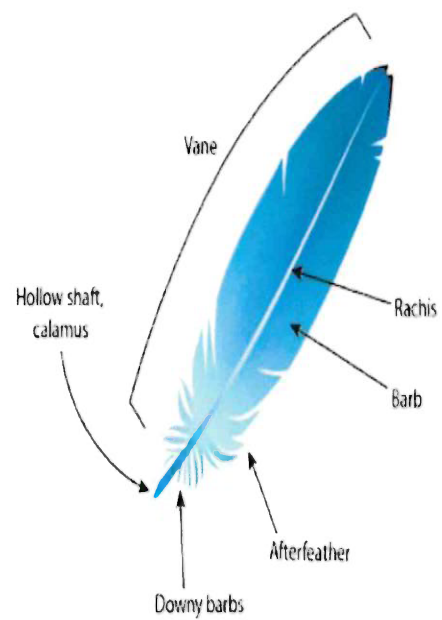
TOO HOT



- Only the juniors will have to do the Brooder Arrangement. There will be photos placed on the table and the correct situation will need to be matched with the description.

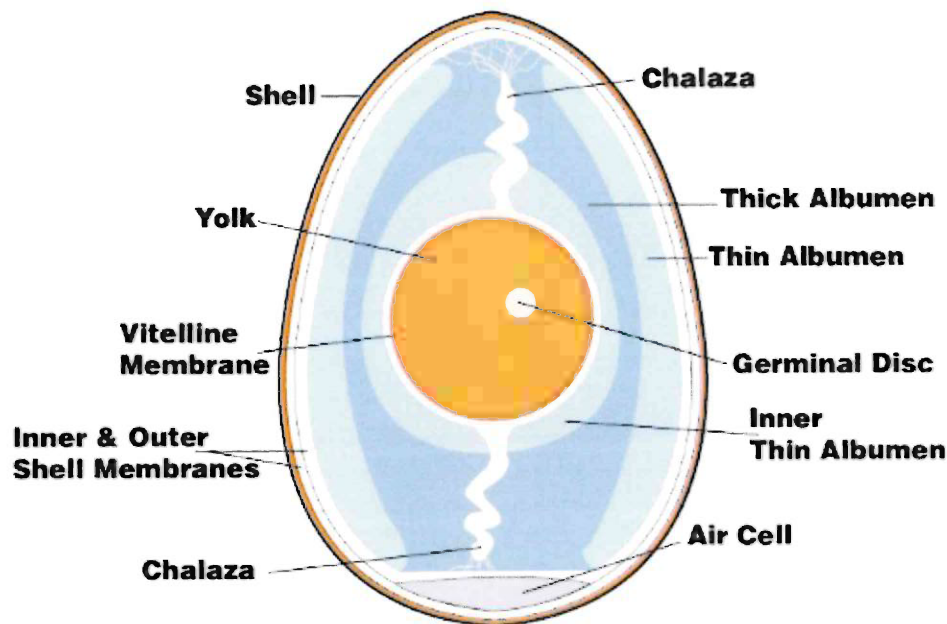
Juniors. will have to place labels on the feather. There will be 6 parts that will have to be labeled.

Juniors Parts of the Feather



The **Seniors** will be asked to match correctly the parts of an egg.

Seniors Parts of the Egg



Each of the age brackets will be asked to write a thank you note as part of Skillathon to send to our buyers after the fair to thank them for their generous donations throughout the year. Each bracket of kids will also need a copy of their current record book as that will be looked at when scoring Skillathon.

Exterior Egg
Grading for
Intermediates
and Seniors-
Please see
listed resources

NATIONAL 4-H POULTRY JUDGING MANUAL
Revised February 21, 2021
MARKET EGGS - EXTERIOR QUALITY

Evaluating eggs for exterior quality reduces the number of eggs with defects that detract from the eggs' appearance or that would have a low probability of surviving the rigors of handling in normal market channels. In other words, we want the consumer to have clean, unbroken eggs with practically normal shape and texture. Contestants should not be too harsh in assigning a grade to eggs that may have minor defects. This is especially important when judges have gained experience in evaluating eggs with various degrees of abnormalities. Shell color does not affect the quality of the egg and is not a factor in the U.S. standards and grades. Eggs are usually sorted for color and sold as either "whites" or "browns." For the 4-H poultry judging contest exterior egg classes, all chicken eggshell colors can be used. In a contest, excessively speckled brown eggs should not be used.

Table 1 summarizes the descriptive terminology used in the USDA Egg Grading Manual to help determine an egg's grade by exterior quality. Grades AA and A have identical standards for exterior quality. For 4-H poultry judging contests, therefore, eggs will be assigned the grades of A, B, Dirty, or Loss. The factors that affect exterior quality are discussed below. Eggs graded for exterior quality cannot be handled during the contest. Since contestants are not able to handle the eggs, the eggs are placed sideways on egg cartons and contestants must assume the unseen side is free of any stains, adhering material, cracks, or defects.

Table 1. USDA standards for grading exterior quality of market eggs

FACTOR	GRADE			
	AA/A	B	DIRTY	LOSS
STAIN	Clean - may show small specks, stains, or cage marks that do not detract from general clean appearance of the egg; may show traces of processing oil	Slight to moderate localized stain covering less than 1/32 of shell or scattered stains covering less than 1/16 of shell	Prominent stains or Slight to moderate localized stain covering more than 1/32 of shell or scattered stains cover more than 1/16 of shell surface	N/A
ADHERING DIRT OR FOREIGN MATERIAL	N/A	N/A	Any adhering dirt or foreign material	N/A
EGG SHAPE	Approximately the usual egg shape	Unusual or decidedly misshapened (long, round, or distorted)	N/A	N/A
SHELL TEXTURE	May have rough areas and small calcium deposits that do not materially affect shape or strength	Extremely rough area that may be faulty in soundness or strength May have large calcium deposits	N/A	Checked: Broken or cracked shell, but membranes intact, no leaking Leaker: Has broken or cracked shell with membranes broken and contents leaking or free to leak
RIDGES	Free of ridges	May have pronounced ridges	N/A	N/A
SHELL THICKNESS	Free of thin spots	May have pronounced thin spots	N/A	N/A
BODY CHECKS	Absence of body checks	May have pronounced body checks	N/A	N/A

CLEANLINESS

Grade A eggs must be clean (see Figure 1). Grade A eggs may show small specks, stains, or cage marks that do not detract from the general clean appearance of the egg. Grade A eggs can also show traces of processing oil (used to preserve freshness). The processing oil may create a shiny or opaque appearance.

'Cage marks' is the term used to refer to dirty marks, dirty lines, or translucent lines on the shell when eggs are collected (see Figure 2). Dirty marks or lines are due to rusty or dirty wires in the cage floor or egg roll-out trays. Translucent lines result when the shell fails to dry out quickly after laying. Grade A eggs may show small cage marks that do not detract from the general appearance of the egg. Darker cage marks that do detract from the appearance of the egg would be Grade B. Eggs with large cage marks having a 3-dimensional appearance would be considered dirty eggs.

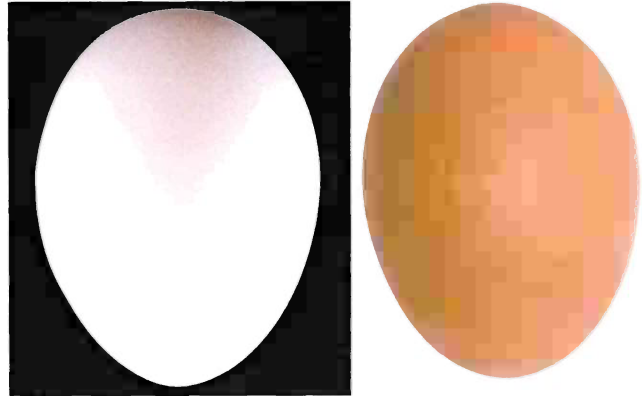


Figure 1. Clean, normal shaped white and brown shelled eggs.

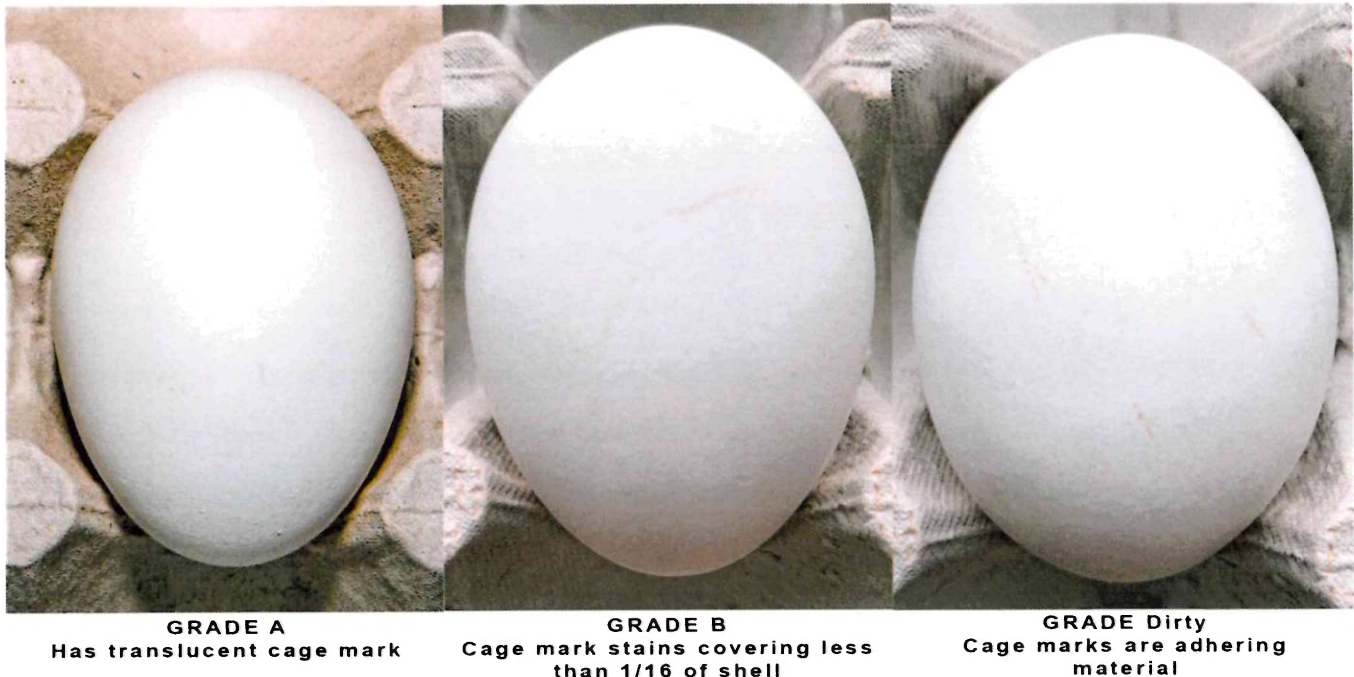


Figure 2. Examples of eggs with cage marks

Any eggs with slight to moderate stains can be Grade B or dirty depending on the number and size of the stains. If there is a single stain, it is referred to as a localized stain. A Grade B egg can have a slight to moderate stain that covers less than $1/32$ of the entire shell (see Figure 2 for relative sizes). If there are two or more stains, these are referred to as scattered stains. The amount of stain is added up, and if the total covers less than $1/16$ of the entire shell, it is a Grade B egg. Any eggs with slight to moderate stains covering an area larger than these allowed amounts are classified as dirty eggs. All prominent stains are considered dirty eggs. See Figure 3 for eggs with various levels of stain(s) on the eggshells.

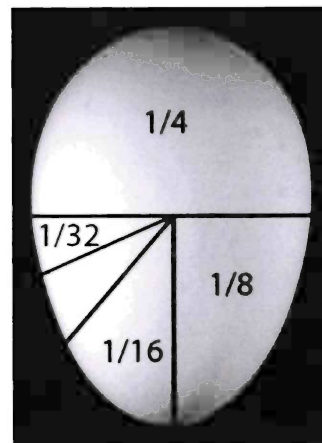


Figure 3. Marked egg showing the amount of shell for $1/16$ and $1/32$

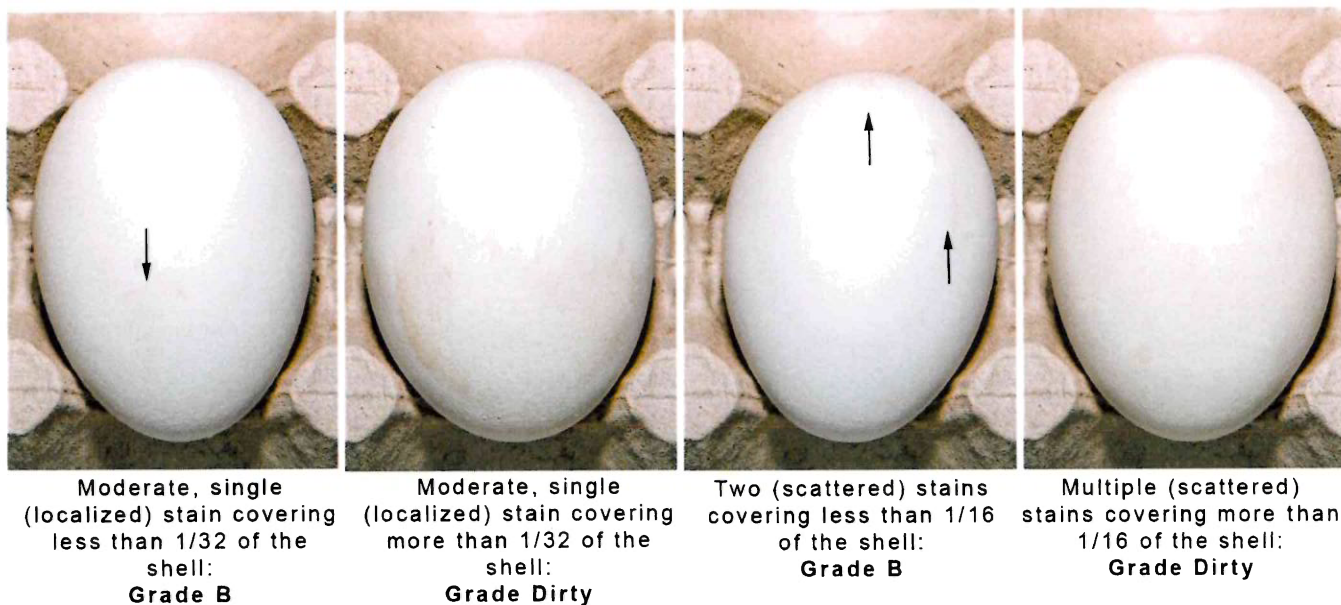


Figure 4. Examples of eggs with various numbers (localized and scattered) and sizes of stains resulting in different egg grades.

Eggs with adhering material (3-dimensional) larger than a speck will be classified as dirty. Small specks of dust, eyelashes, pencil marks, or lint that may have settled out of the air should not be considered. An attached feather, however, would be considered adhering material. See Figure 5 for examples of eggs with adhering material.



Figure 5. Examples of eggs with adhering material (left to right: manure, feather, and egg yolk)

SHAPE

A considerable range of egg shapes may be considered “approximately the usual shape” or Grade A (see Figure 1). Eggs that are spherical (round) or too long to fit in the egg carton should be graded B quality (see Figure 6). B quality grades include eggs that are clearly misshapen or that have definite flat areas.

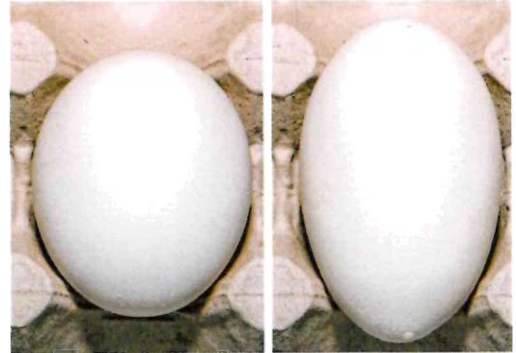


Figure 6. Examples of Grade B eggs for being too round or too long.

TEXTURE

Eggs with faulty texture are much weaker in shell strength and may be broken during distribution. Occasionally, calcium deposits will appear on eggshells. Unlike stains, the calcium deposits are not added together. If the calcium deposits on an egg are less than 1/8 inch in diameter, the egg is Grade A. There is no standard for the number of calcium deposits allowed on an egg, which means that an egg with small calcium deposits over the entire shell be classified as Grade A, as long as all the calcium deposits are each less than 1/8 inch in diameter (see Figure 7).

If any of the calcium deposits are larger than 1/8th inch in diameter, the egg is classified as Grade B. A good rule of thumb is that if you were to run your fingernail across a calcium deposit and a good size hole would be created if it came off, then the egg would be classified as Grade B.

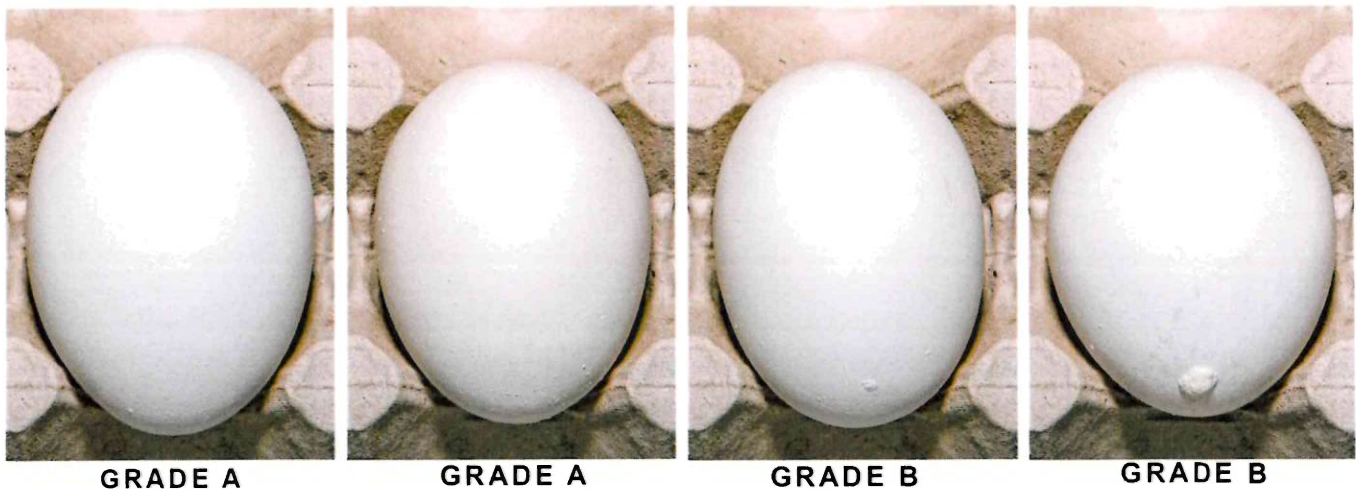


Figure 7. Examples of eggs with various numbers and sizes of calcium deposits

Grade A eggs may have slight rough areas to the shell that do not materially affect egg shape or the strength of the shell. Eggs with extremely rough areas that may be faulty in soundness or strength are Grade B (see Figure 8).

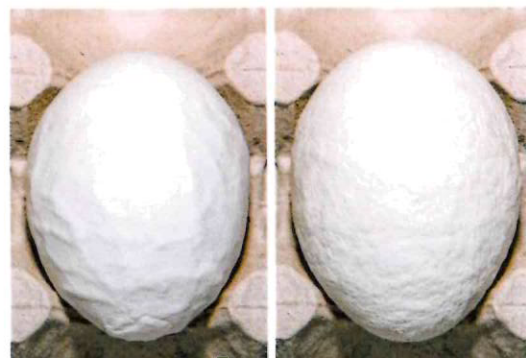


Figure 8. Grade B eggs because of extreme roughness of shell

RIDGES

Ridges can result in weakened shells. Eggs with large ridges are Grade B (see Figure 9).

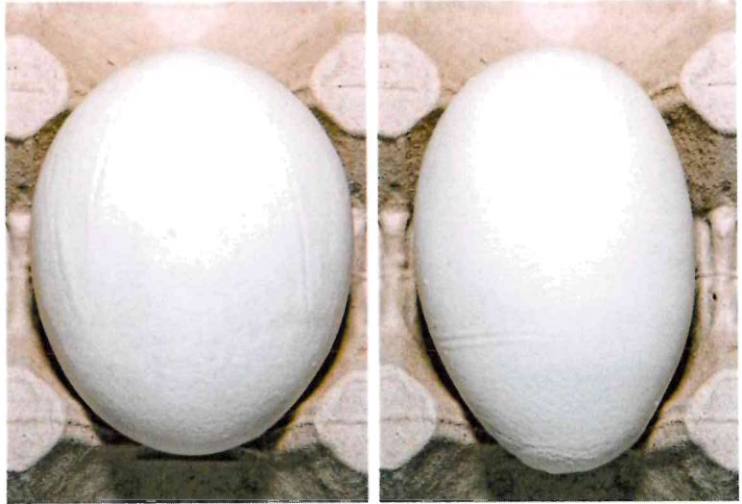


Figure 9. Examples of Grade B eggs because of shell ridges.

SHELL THICKNESS

The shell should appear thick enough to withstand reasonable handling without breaking. Grade A eggs must have thick shells with no thin spots. Thin shells or thin spots would place an egg in Grade B. In all cases, the shell must not be broken. The thin spots can be large or small as in Figure 10. Small thin spots are referred to as 'windows.' To be considered a window, the thin spot must be three-dimensional. It is important that cage marks (see Figure 2) not be confused for windows.

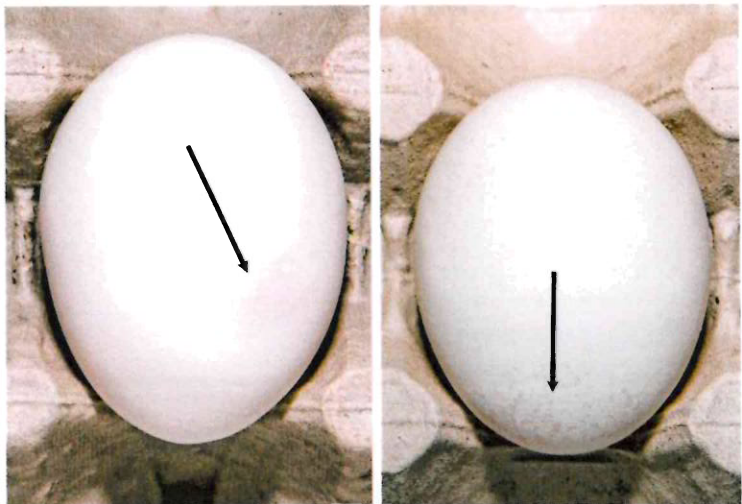


Figure 10. Examples of Grade B eggs for shell thickness.

BODY CHECKS

Body checks can cause weakened shells. This is a condition in which the eggshell looks like it is cracked but the shell is intact. Body check occurs during shell formation when the shell is cracked and then partially calcified before being laid. An egg with body check is classified as Grade B. When candled (see Figure 11), the shell can be seen to be intact, but weak. This should not be confused with a 'Check egg' which is graded as a Loss egg.

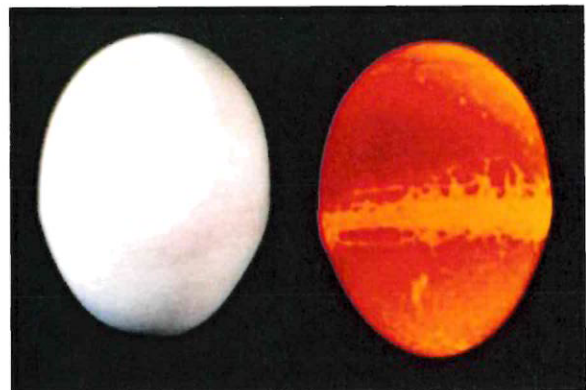


Figure 11. A Grade B egg with a body check and what it looks like when candled

LOSS EGGS

An egg that has a broken shell or a crack in the shell, but its shell membranes are intact, and egg contents do not leak, is considered checked and should be classified as a Loss. An egg that has a crack or breaks in the shell and the egg contents are exuding or free to exude through the shell, are considered as leakers and should be classified as a Loss. **The national 4-H poultry judging contest does not use leakers.**

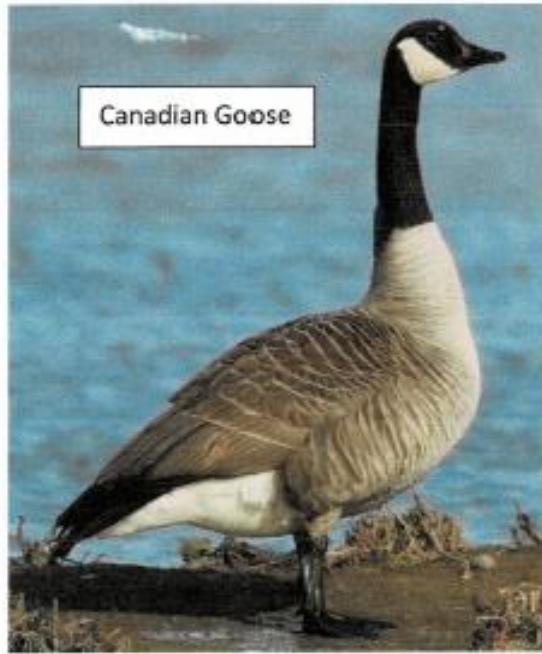


Figure12. Loss egg due to crack in that is not leaking egg contents.

Breeds-Juniors,
Intermediates and
Seniors-Each will need
to identify 10 breeds,
not limited to the
posted breed pictures



Brown African



Canadian Goose



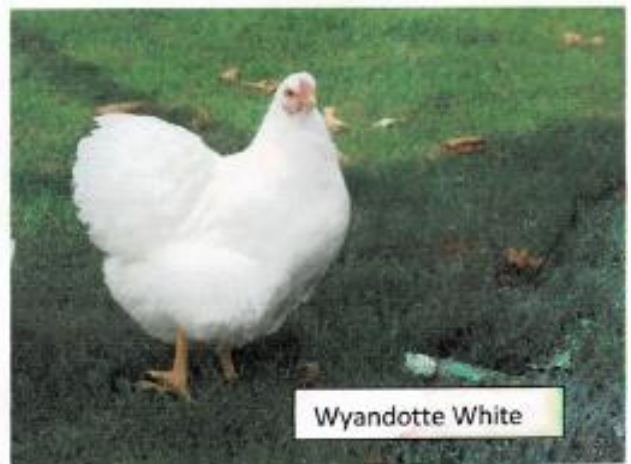
Brahma Light



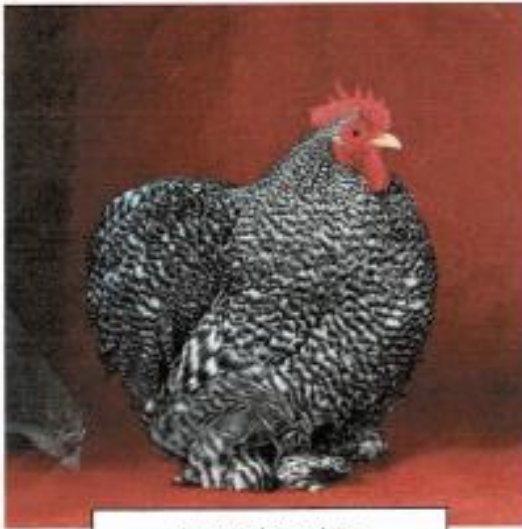
Cochin Buff



Buff Brahma



Wyandotte White



Barred Cochin



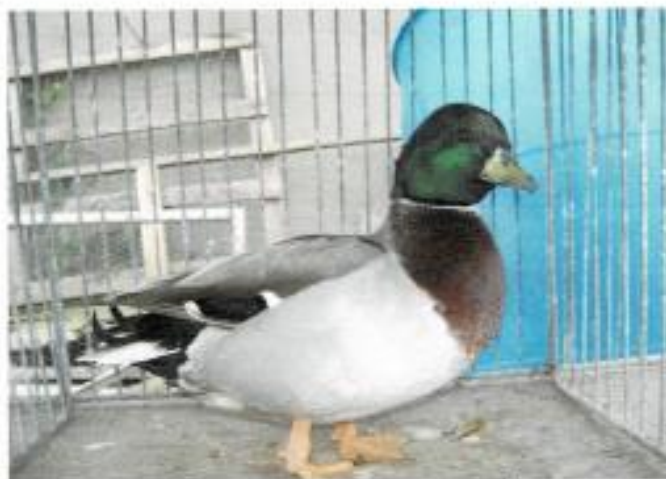
Barred Rock



Black Cochin



Golden Laced Wyandotte



Gray Call Duck



Rhode Island Red



Partridge Rock



Silver Laced Cochin



Silver Laced Wyandotte



White Call Duck



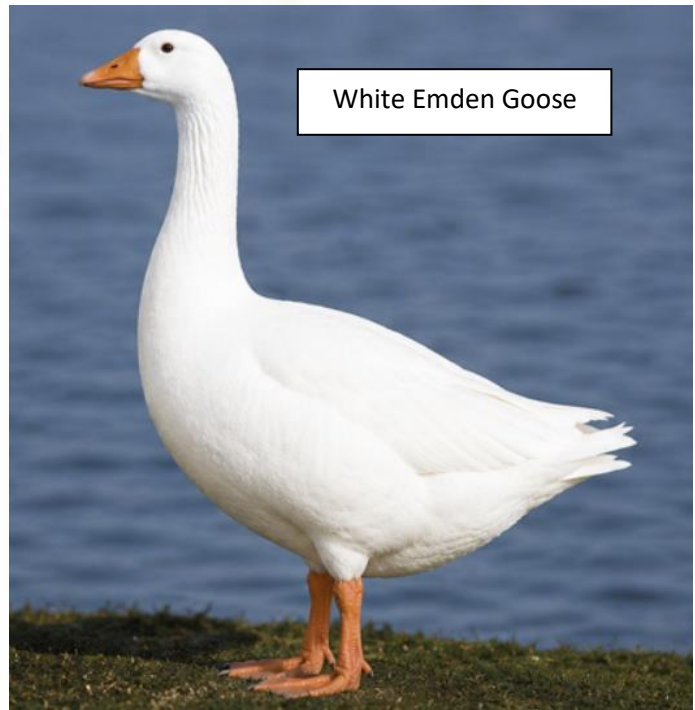
Silver Phoenix



Snowy Call



Pencil-necked Runner



White Emden Goose



Gray Mallard



American Buff



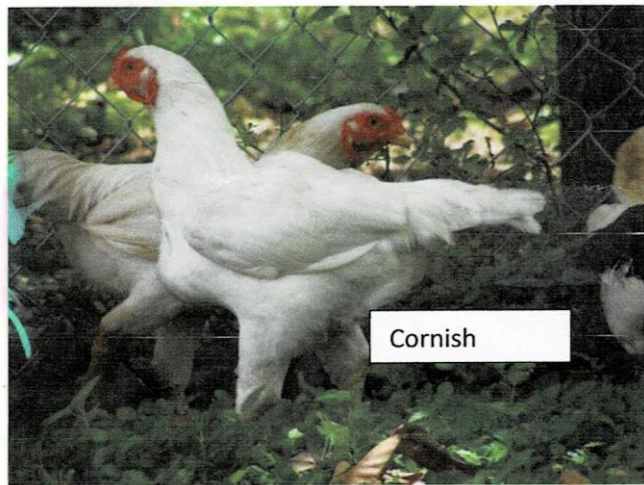
Bourbon Red



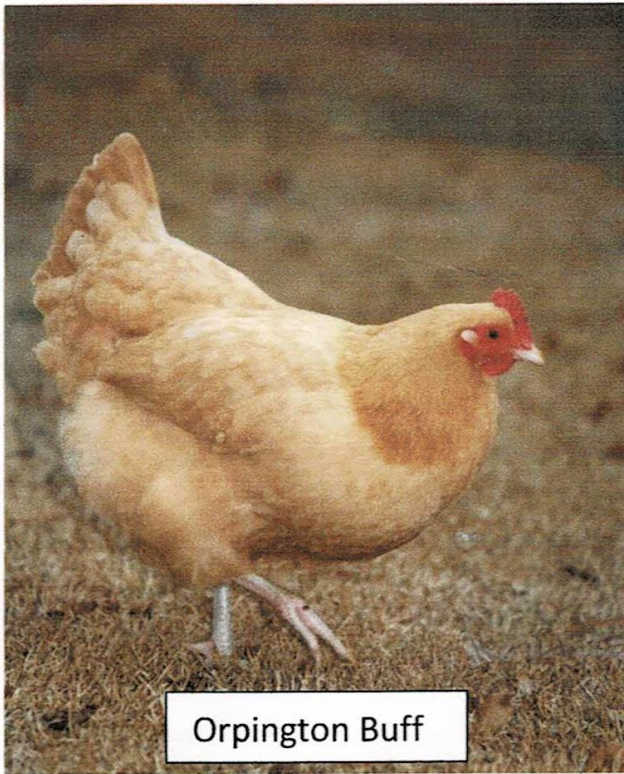
Bronze Turkey



Old English Game



Cornish



Orpington Buff



Silkie Bearded White

Sample Tie Breaker Questions:

Beginners-

1. How long does it take for an egg to hatch?
 - a. 21 days
2. At about what age do pullets start laying eggs?
 - a. Around 16-24 weeks
3. How old is a pullet?
 - a. Under 1 year
4. Do you need a roster for a hen to lay eggs?
 - a. NO
5. What is most important for poultry survival?
 - a. Water

Juniors-

6. What is a tom?
 - a. Male turkey
7. How many types of combs are there?
 - a. 7
8. What temp should most eggs be incubated?
 - a. 99 degrees F
9. Eggs are almost the perfect food what important nutrient are they missing?
 - a. Vitamin D
10. What is a Capon?
 - a. Castrated male chicken

Seniors-

11. What are the most common food ingredients in poultry diet?
 - a. Corn and Soybean meal
12. What will tell you what color the eggshell will be on hens?
 - a. Ear lobes
13. To keep hens on the peak of their laying ability how many hours of sun do they need?
 - a. 16 hr.
14. What are the major external parasites of poultry?
 - a. Lice and mites
15. What is the purpose of turning eggs in the incubator?
 - a. To keep the embryo from sticking to the membrane and dying

2025 Poultry Skillathon Juniors (Age 8-11)

Name _____ Age (As of Jan 1st) _____

4-H Club Name _____

Station	Points Available	Points Scored
Parts (1 bird-10 parts), 2pts	20	
Feed (7 feeds), 2pts	14	
Breeds (10 breeds), 2pts	20	
Medication Label (7 Parts), 2 pts	14	
Comb Identification (6 Parts), 2 pts	12	
Record Book (Bring to skillathon)	10	
Thank You Note (Done on site)	10	
Brooder Arrangement	5	
Total	105	

Sample Style Junior Tie Breaker Questions:

Please answer the following multiple choice/true/false questions.

1. What is an animal that is more than 1 year old and laying eggs?
 - a. Pullet
 - b. Hen
 - c. Rooster
 - d. Chick
2. True or False: A broiler is a meat bird that can be male or female.
 - a. True
 - b. False
3. How long does it take for a chicken to lay an egg?
 - a. 36 hours

- b. 12 hours
 - c. 48 hours
 - d. 24 hours
4. What do you call a group of chickens?
- a. Herd
 - b. Litter
 - c. Flock
 - d. None of the above
5. True or False: Chickens have teeth.
- a. True
 - b. False

2025 Poultry Skillathon Intermediate (Age 12-14)

Name _____ Age (As of Jan 1st) _____

4-H Club Name _____

Station	Points Available	Points Scored
Parts (2 birds-10 parts) 2pt	40	
Thank You Note (Done on site)	10	
Breeds (10 breeds) 2pts	20	
Medication Label (7 labels) 2pts	14	
Parts of Feather (6 parts) 2pts	12	
Record Book (Bring to skillathon)	10	
Feeds (7 feeds) 2pts	14	
Exterior Grading of Eggs-7 Eggs, 2pt	14	

2025 Poultry Skillathon Seniors (age 15 and Up)

Name _____ Age (as of Jan 1) _____

Club Name _____

Station	Points Available	Points Scored
Parts (2 birds-15 parts ea.) 2pts	60	
Breeds (10 breeds) 2pts	20	
Thank You Note (Done on Site)	10	
Digestive System & Questions-10 parts/5 Questions-2 pts	30	
Feeds (7 Feeds) 2pts	14	
Parts of Egg 11 parts, 2 pts	22	
Exterior Egg Grading-7 eggs, 2pts	14	
Poultry Diseases & Symptoms-5 Questions-2 pts	10	
Record Book (Bring to skillathon)	10	
Total	190	

4-H Record Book	Points Available	Points Scored
-----------------	------------------	---------------

Senior Sample Style Tie Breaker Multiple Choice Quiz

1. What is the average body temperature of a chicken?
 - a. 105 to 107 degrees
 - b. 110 to 115 degrees
 - c. 90 to 95 degrees
 - d. 100 to 105 degrees
2. What is the purpose of debeaking poultry?
 - a. To increase egg production
 - b. To prevent cannibalism and feather pecking
 - c. To improve meat quality
 - d. To enhance feather growth
3. What is the primary purpose of brooding in poultry production?
 - a. To increase egg production
 - b. To prevent diseases
 - c. To provide initial warmth and care to chicks
 - d. To improve meat quality
4. How to determine the sex of day-old chicks?
 - a. By examining their wings
 - b. By leg sexing
 - c. By checking the color of their eyes
 - d. By vent sexing or feather sexing
5. What is the scientific name for the domestic chick?
 - a. Gallus Gallus Domesticus
 - b. Meleagris gallopavo
 - c. Anas Platyrhnhos
 - d. Corturnix Japonica