

# POULTRY

## Purpose

The purpose of the contest is to stimulate learning activities relative to production, processing, marketing, and consumption of poultry products and to assist students in developing a sound perspective for utilizing the decision-making process.

## Objectives

Students who participate in the State Poultry Contest should develop skills and abilities in the following areas:

### I. Production and Breeding Birds

- A. To provide students with hands-on problem solving experiences.
- B. To develop student's ability to follow specific guidelines in making valid decisions.
- C. To develop basic skills necessary to identify and select egg or meat birds with superior production characteristics.

### II. Reasons - To develop the student's ability in the following categories:

- A. To make sound and logical organized decisions based on observations.
- B. To make accurate observations of poultry and determine the desirable traits.
- C. To develop the student's ability to orally defend and discuss their decisions.
- D. To develop skills in oral communication.

### III. Eggs

- A. To develop knowledge of the quality of eggs and to understand the economics as determined by USDA grading factors.
- B. To determine the quality of interior eggs.

### IV. Processing and Merchandising

#### A. Ready-to-Cook Broilers, Broiler Parts, and Turkeys

- 1. To become proficient in communicating the terminology of the industry and consumer.
- 2. To organize, discuss and defend orally the student's rationale of placing.
- 3. To demonstrate the ability to grade and place dressed poultry according to current USDA standards.

#### B. Identification of Parts

Acquaint students with various poultry parts utilized by consumers in the poultry industry including different methods of cutting individual parts. (Example: split breast, whole breast, boneless breast, skinless breast)

#### C. Grading of Ready-to-Cook Poultry Carcasses and Parts

Develop skills in the consumer grades of poultry.

#### D. Further-Processed Poultry Meat Products

Demonstrate skills in the evaluation of the exterior and interior qualities and consumer eye appeal of further processed and precooked breaded chicken patties, tenders, or nuggets

V. Management -To apply the basic economic scientific management skills for making sound decisions based on study material information and reference materials as outlined within resource lists.

### Crosswalk with Show Me Standards

Objectives – Students participating in the Career Development Event should be able to:		Show-Me Standards	
		Knowledge Standards (Content Areas)	Performance Standards (Goals)
1.	Provide hands-on problem solving experience.	CA.1, CA.3, CA.4, CA.5, CA.6 MA.1, MA.3 SC.3 HP.3, HP.6	1.5, 1.8, 1.10
2.	Develop student’s ability to follow specific guidelines in making valid decisions.		2.1, 2.2
3.	Develop basic skills necessary to identify and select egg or meat birds with superior production characteristics.		3.1, 3.5, 3.8
4.	Make sound and logical organized decisions based on observations.		4.1, 4.4, 4.8
5.	Develop knowledge of the quality of eggs and to understand the economics as determined by USDA grading factors.		
6.	To apply the basic economic scientific management skills for making sound decisions.		

Corresponding Secondary Agriculture Curriculum			
<b>Course and/or Curriculum:</b>	Agricultural Science I	<b>Unit(s):</b>	Introduction to Poultry Production, Introduction to Animal Products
	Advanced Livestock Production and Management		Unit II – Enterprises, Lesson 7 – Poultry Enterprises Unit III – Selection, Lesson 8 – Selecting Poultry Unit IV – Breeding, Lesson 7 – Breeding Poultry Unit V – Parturition, Lesson 5 – Incubation and Hatching of Poultry Unit VI – Animal Health, Lesson 9 – Health Problems in Poultry, Lesson 10 – Flock Health Management Unit VII – Facilities and Equipment, Lesson 6 – Poultry Facilities and Equipment Unit VIII – Animal Feeding, Lesson 2 – Feeding Livestock and Poultry Unit IX – Herd/Flock Management, Lesson 10 – Mgt Practices for Poultry Production

## Event Format

The Poultry CDE will consist of the following five (5) components.

1. Live Bird Evaluation and Reasons –
  - A. One placing class of four (4) past-production laying hens.
  - B. One placing class of four (4) broilers meat birds.
  - C. Oral reasons for one of the above live bird classes. Reasons may be for a placing class or for a keep-cull selection class.
  
2. Ready-To-Cook Poultry Product Evaluation –
  - A. Ten broiler and/or turkey carcasses and/or parts for USDA Quality Grading.
  - B. One placing class of four (4) ready-to-cook turkey carcasses or broiler carcasses.
  - C. Oral reasons on placing class above.
  
3. Egg Evaluation –
  - A. Evaluation of Interior Quality of 10 individual eggs based on USDA Quality Standards.
  - B. Evaluation of Exterior Quality of fifteen individual eggs based on USDA Quality Standards.
  - C. Written Factors of exterior quality eggs listed above.
  
4. Merchandising and Further Processing Evaluation –
  - A. Identification of ten (10) poultry carcass parts.
  - B. Evaluation of ten (10) Boneless Further-Processed poultry products.
  - C. Evaluation of ten (10) Bone-In Further-Processed poultry products.
  
5. Written Poultry Management Examination
  - A. Twenty-five multiple choice questions.
  - B. Five (5) management calculation problems.
  - C. **Refer to Section C of the Poultry Science Manual for National FFA CDE, 6<sup>th</sup> Edition.**

## Event Scoring

The contest activities will be scored as follows:

Events	Points
I. Live Bird Evaluation and Reasons -	
A. One placing class of four (4) past-production laying hens (Form 2)	50
B. One placing class of four (4) broiler meat birds (Form 2)	50
C. Oral reasons for one of the above live bird classes (Form 24)	50
II. Ready-to-Cook Poultry Product Evaluation -	
4. Broiler and/or turkey carcasses and/or parts (10) for quality grading (Form 9)	50
5. Class of four Ready-to-Cook Turkeys/ Broiler (Form 9)	50
6. Oral Reasons on Class #5 (Form 24)	50
III. Egg Evaluation	
7. Interior Quality of ten individual eggs	50
8. Exterior Quality of 15 individual eggs	50
9. Written Factors for exterior eggs (Form 13)	50
IV. Merchandising and Further Processing	
10. Identification of ten (10) poultry carcass parts (Form 12)	50
11. Evaluation of ten (10) Boneless Further-Processed poultry products.	50
12. Evaluation of ten (10) Bone-In Further-Processed poultry products.	50
V. Poultry Management	
12. Written test	100
<b>TOTAL</b>	<b>700</b>

1. **Tie scores among teams in all events should be broken using the high individual team member's score.** In case the scores are tied, the scores of the second high individual on each team should be used.

## Event Rules and Regulations

1. Contestants will report for instruction to the Division Superintendent at the time and place shown in the current year's "SCHEDULING OF JUDGING CONTESTS."
2. Contestants will not handle the dressed birds, parts, carton eggs, or the patties, tenders or nuggets. Shackles of dressed birds may be turned by contestants to show the entire carcass.
3. Ten (10) minutes will be allowed contestants for completing each class. A signal will be given at the end of 10 minutes for each class. Students will have 10 minutes after placing the class for preparation of oral reasons for that class. Students will have a maximum of two minutes to present each class of oral reasons.
4. Thirty (30) minutes will be allowed for the test and problems.
5. The varieties of live poultry will be selected from the white Leghorn breed or from commercial strains of Leghorn type (inbred cross) egg producing hens for the egg laying classes and from young cockerels or pullets of the meat-type strains for the broiler meat bird classes. (Broilers must be a white feathered commercial broiler that is four to ten weeks of age and weigh between four and eight pounds.)
6. Meat-type broiler birds are to remain in the cages while being judged and may be touched by the participants, but not removed from standing position.
7. Each bird will be individually identified.
8. Each participant will grade a class of ten ready-to-cook broiler and/or turkey carcasses and/or parts. Meat products must be derived from commercial size products and come from carcasses weighing between four and six pounds. (i.e. no Cornish game hens or turkey parts)  
Criteria for grading will be from USDA standards for broiler carcasses weighing two to six pounds and for turkey carcasses weighing six to sixteen pounds. USDA quality grades will be A, B, C and Loss.
9. There will be one class of 10 white or white-tint shell market eggs to be graded for interior quality. Classes will be graded in accordance with the latest revised edition in the United States Standards and Grades for Shell Eggs. USDA quality grades will be AA, A, B, or the egg classified as Not Gradable (NG).
10. Each of 15 exterior eggs will be evaluated for the present of defects and specific quality factors utilizing a check-list form for reporting.
11. There will be one class of 10 15 (white and non-white eggs may be used) market eggs to be graded for exterior quality. Classes will be graded in accordance with the latest revised edition in the United States Standards and Grades for Shell Eggs. USDA quality grades will be AA/A, B, or the egg classified as Non-Gradable (NG).
12. There will be one class of further processed poultry meat products which will be evaluated for the presence of defects and quality factors utilizing a check-list form for reporting.
13. There will be a written test consisting of 25 multiple-choice questions (25 x 3 points each) and 5 problems (5 x 5 points each) for a total score of 100 points. The examination questions will be developed from the four references listed.
14. The culling class of egg production hens or broiler breeders will consist of eight birds and the student is to select four to keep and four to cull.
15. Calculators may be used. In all events, only six-function, (nonprogrammable and non-graphing) models may be used. Therefore, the calculators are limited to the following keys: Plus (+); Minus (-); Multiplication (x); Division (/); Equals (=); Memory Clear/Recall (MRC); Memory Minus (M-); Memory Plus (M+); Plus / Minus (+/-);

Percentage (%); Square Root ( $\sqrt{\quad}$ ). See page 3, rule #8 of the General CDE Guidelines for an example.

16. Contestants will be allowed to bring steno-pads, but must be CLEAN or NOT WRITTEN ON prior to the start of the event.
17. Recommended that all products and birds should be new to the state contest and not have been used at a qualifying event.

### References

USDA Egg Grading Manual Agricultural Handbook No. 75.

USDA Poultry Grading Manual Agricultural Handbook No. 31. Order from Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402; (202) 783-3238.

**Poultry Science Manual for National FFA Career Development Events. (sixth edition) (IMS Catalog #0418-5) (or from the National FFA Core Catalog, product number PSM-06, online at [shop.ffa.org/new-poultry-science-manual-p41611.aspx](http://shop.ffa.org/new-poultry-science-manual-p41611.aspx)). All examination items will be derived from this reference.**

Poultry Production Unit for Agricultural Science I (Instructor and Student Reference), IML available at MCCE website: <http://www.missouricareereducation.org/home.php>

Advanced Animal Science Poultry curriculum, IML available at MCCE website: <http://www.missouricareereducation.org/home.php>

### Forms

See the following forms: FORM 9, FORM 10a, FORM 10b, FORM 13, FORM 14, FORM 12, FORM 2, and FORM 24. These forms are made available for training and practice contests. The State CDE will use a scantron form. Samples of this scantron can be found at: [http://dese.mo.gov/divcareered/ag\\_cde\\_guidelines.htm](http://dese.mo.gov/divcareered/ag_cde_guidelines.htm) .

**Form 9**

**Ready-To-Cook Poultry  
Grading Card**

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_

School: \_\_\_\_\_ School Number: \_\_\_\_\_

Bird/Part Number	Quality				Score
	A	B	C	NG	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Official's Total Score:					

Ready-To-Cook Poultry is scored based on the USDA quality grades A, B, C and Not Gradable. Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point. However, if the "Not Grade" line is crossed, all five points are deducted to obtain a score of zero points.

**Egg Grading Card  
Individual Shell Eggs - Interior Quality**

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_

School: \_\_\_\_\_ School Number: \_\_\_\_\_

Egg Number	Quality				Score
	AA	A	B	LOSS	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Official's Total Score:					

Egg Grading Card, Individual Shell Eggs - Interior Quality is scored based on the USDA quality grades AA, A, B, and Loss. Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. If the item is graded two quality grades below or above the correct grade, four points are deducted to obtain a score of one point. However, if the "Loss" line is crossed, all five points are deducted to obtain a score of zero points.

**Individual Shell Eggs - Exterior Quality  
Grading Scorecard**

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_

School: \_\_\_\_\_ School Number: \_\_\_\_\_

Egg Number	Quality			Score
	AA/A	B	NG	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
<b>Official's Total Score:</b>				

Egg Grading Card, Individual Shell Eggs - Exterior Quality is scored on the USDA quality grades AA/A, B, and eggs classified as non-gradable (NG). Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, two points will be deducted to obtain a score of three points. However, if the "NG" line is crossed, all five points are deducted to obtain a score of zero points.

**Egg Exterior Scorecard  
Written Factors**

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_

School: \_\_\_\_\_ School Number: \_\_\_\_\_

Directions: Mark (X) the space representing observed quality defects.

	<b>Class 9</b>														
	<b>Egg Number</b>														
<b>Defect</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
Checked															
Dented Checked															
Leaker															
Slight / Moderate Stain															
Prominent Stain															
Adhering Dirt / Foreign Materials															
Decidedly Misshapen															
Large Calcium Deposits															
Body Check															
Pronounced Ridges															
Pronounced Thin Spots															
No Defect															

**Judge's Score** \_\_\_\_\_

## Further-Processed Poultry Meat Scorecard

**Form 14**

Contestant Name \_\_\_\_\_ Number: \_\_\_\_\_

School: \_\_\_\_\_ School Number: \_\_\_\_\_

Directions: Mark (X) the space representing observed quality defects.

	<b>Class 10</b>									
	<b>Product Number</b>									
<b>Defect</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Coating Void										
Coating Color										
Inconsistent Shape										
Broken										
Inconsistent Size										
Clusters / Marriages										
Missed Cuts in Wings including Mixed Parts										
Broken Wings										
Feathers / Foreign Material										
No Defect										

Perfect Score is 50 points.

**Judge's Score** \_\_\_\_\_

## Identification of Parts Scorecard

**FORM 12**

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_  
 School: \_\_\_\_\_ School Number: \_\_\_\_\_

Directions: Mark (X) the space representing the part of the chicken that you consider correct for each of the 10 items.

PART NO.	1	2	3	4	5	6	7	8	9	10
Half										
Front half										
Rear half										
Whole breast with ribs										
Boneless, skinless whole breast with rib meat										
Whole breast										
Boneless, skinless whole breast										
Split breast with ribs										
Boneless, skinless split breast with rib meat										
Split breast										
Boneless, skinless split breast										
Breast quarter										
Breast quarter without wing										
Tenderloin										
Wishbone										
Leg quarter										
Leg										
Thigh with back portion										
Thigh										
Boneless, skinless thigh										
Drumstick										
Boneless, skinless drum										
Wing										
Drumette										
Wing portion										
Liver										
Gizzard										
Heart										
Neck										
Paws										

Perfect Score = 50 points (5 points for each correct answer)

**STANDARD FFA PLACING CARD**

		Placing	Check Placing
Contestant Number		1-2-3-4	A
		1-2-4-3	B
		1-3-2-4	C
Class Number		1-3-4-2	D
		1-4-2-3	E
		1-4-3-2	F
Class Name		2-1-3-4	G
		2-1-4-3	H
		2-3-1-4	I
School Name		2-3-4-1	J
		2-4-1-3	K
		2-4-3-1	L
Student Name		3-1-2-4	M
		3-1-4-2	N
		3-2-1-4	O
		3-2-4-1	P
		3-4-1-2	Q
		3-4-2-1	R
Placings Score	Reasons Score	4-1-2-3	S
		4-1-3-2	T
		4-2-1-3	U
		4-2-3-1	V
		4-3-1-2	W
		4-3-2-1	X

**Oral Reasons \***

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_

School \_\_\_\_\_ School Number: \_\_\_\_\_

**SCORING FACTORS:\*\***

- 1. Appearance and Delivery 12 points \_\_\_\_\_
- 2. Proper Use of Terms 10 points \_\_\_\_\_
- 3. Accuracy of Statements 10 points \_\_\_\_\_
- 4. Importance of Points Covered 18 points \_\_\_\_\_

Perfect Score = 50 points

Judges Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Score: \_\_\_\_\_

\*This card will be used for scoring all oral reason classes.

\*\*Note: Contestants are not penalized for the format used in presenting reasons, but an introductory statement on how the class was placed and a summary at the end is in order.