WASHINGTON
FFA ASSOCIATION

Poultry Evaluation Career Development Event Handbook

Revised 2022

Purpose & Objectives

Purpose

The National FFA Poultry Evaluation Career Development Event stimulates learning activities relative to production and management, processing, marketing and food safety and quality of poultry products.

Objectives

The National FFA Poultry Evaluation Career Development Event provides opportunities for the participant to:

- Make accurate observations and logical decisions.
- Discuss and justify decisions (orally and written).
- Communicate industry and product terminology.
- Identify USDA standards of product quality.
- Identify consumer acceptance criteria of products.
- Recognize economic importance of value-added products.
- Collaborate with others to analyze industry scenarios.
- Demonstrate the use of appropriate information technology used in the poultry industry.

Specifically, participants will:

- Evaluate and place live meat-type chickens and orally defend the selection.
- Evaluate and place live egg-type hens and orally defend the selection.
- Evaluate, grade and place ready-to-cook carcasses of chickens or turkeys and orally defend the placing.
- Evaluate and grade ready-to-cook carcasses and parts of chickens and turkeys.
- Evaluate and grade individual shell eggs for interior quality.
- Evaluate and grade individual shell eggs for exterior quality and indicate factors governing the grading.
- Evaluate pre-cooked or par-cooked further processed poultry meat products and indicate factors governing the evaluation.
- Identify poultry carcass parts.
- Complete a written examination on poultry production, management and science.
- Contribute to a team practicum and oral presentation related to poultry science.

Event Rules

If there are any questions or issues, the State FFA Advisor will make the final decision.

- Teams will consist of five members. Team ranking is determined by combining the scores of the top four team members.
- It is highly recommended that participants wear FFA Official Dress for this event.
- Participants attempting to use unauthorized materials will be disqualified. Any participant in possession of any electronic device not required by event rules is subject to disqualification.
- For 2023, this event will pilot using judging card scantron Poultry Form #478-7

Event Format

Participants will have up to 2 hours to complete the full contest. An appropriate amount of time, as determined by the event officials, will be provided for the exam. A warning signal will inform the participants when time expires for each class. Participants will have approximately one minute to move from class to class.

Equipment

Participants must provide:

Each participant must have:

- Two clean, sharpened No. 2 pencils
- Clean clipboard, if desired
- Blank paper for oral reasons
- Basic calculator

Team Activities

There are no team activity components in this event.

Individual Activities

WRITTEN EXAM

The written exam will consist of 25 questions worth 4 points each for a total of 100 points. The test will be written using three consecutive years of National FFA Poultry CDE exams starting with the national test from 2 years past the year of the contest *(ie. The 2023 test will draw from 2021, 2019, 2018.)*

PLACING CLASSES (50 POINTS PER CLASS)

LIVE POULTRY

Market Broiler Placing (50 points)

Each participant will place a class of four market broilers. Washington FFA will use Fryers. Each participant will be permitted to "handle" the birds, as long as the birds are inspected in a professional and humane manner. Participants may not remove the broilers from the holding unit.

Egg-type Hen Placing (Past Production) (50 points)

Each participant will place a class of four egg-type hens. The birds will be Single-Comb White Leghorns, or commercial strains of Leghorn-type (inbred cross). The birds may have trimmed beaks. Each participant will be permitted to "handle" the birds, as long as the birds are inspected in a professional and humane manner.

Oral Reasons (50 points)

Each participant may present oral reasons for either the placing class of market broilers or for the class of egg-type hens. The class for which participants should develop oral reasons for presentation will be clearly identified during the event. Participants will have ten minutes to prepare and two minutes to present their oral reasons. Reasons should include current USDA and poultry industry terminology and standards.

The oral reasons scorecard can be used a guideline for preparing (refer to the "Presenting Oral Reasons" section of the Poultry Science Manual for National FFA Career Development Events, current edition).

LIVE POULTRY SCORING

CRITERIA	Points
Market broilers placing	50
Egg-type hens placing	50
Oral reasons	50

READY-TO-COOK POULTRY

Carcass Grading (50 points)

Each participant will grade a class of ten ready-to-cook chicken and/or turkey carcasses and/or parts. Criteria for grading will be derived from USDA standards for chicken carcasses weighing two pounds to six pounds and for turkey carcasses weighing six to sixteen pounds or carcasses weighing greater than sixteen pounds. Four categoriesmay be used, including the USDA quality grades A, B, C and the category NG (nongradable). Participants may not touch any carcass or part; doing so will result in disqualification. Shackles will be used allowing the carcass to be rotated to show the entire carcass.

Scoring for parts and carcass grading:

	OFFICIAL GRADE			
Participant's Grade	A	B	C	NG
A	5	3	1	0
B	3	5	3	0
C	1	3	5	0
NG	0	0	0	5

As shown above, carcass grading is scored based on the USDA quality grades A, B, C and the category 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. If the item is graded two quality grades belowor above the correct grade, four points are deducted to obtain a score of one point. However, if the "NG" line is "crossed" (i.e., an incorrect judgment), all five points are deducted to obtain a score of zero points. (Adapted from information provided by Don Sheets, Retired, Kansas Board of Agriculture, Topeka, Kansas.)

Carcass Placing (50 Points)

Each participant will place a class of four ready-to-cook chicken or turkey carcasses. Criteria for placing will be derived from USDA standards relative poultry weight classes. Participants may not touch any carcass; doing so will result in disqualification. Shackles will be used allowing the carcass to be rotated to show the entire carcass.

Oral Reasons (50 Points)

Each participant may present oral reasons for this class as determined by event officials. Participants will have ten minutes to prepare and two minutes to present their reasons. Reasons should include current USDA and poultry industry terminology and standards.

READY-TO-COOK POULTRY SCORING

CRITERIA	Points
Carcass grading	50
Carcasses placing	50
Oral reasons	50

SHELL EGGS

INTERIOR GRADING (50 POINTS)

Each participant will grade a class of ten white (or white-tint) shell eggs. Criteria for grading will be derived from USDA standards for interior quality of market eggs. The USDA quality grades will be AA, A, B and Loss. Participants must candle the eggs to determine the appropriate USDA quality grade, but improper handling of eggs will result in disqualification.

Scoring for interior egg quality grading:

	OFFICIAL GRADE			
Participant's Grade	AA	A	B	Loss
AA	5	3	1	0
A	3	5	3	0
B	1	3	5	0
Loss	0	0	0	5

As shown above, interior egg quality grading is scored based on the USDA quality grades AA, A, B and Loss. In the case of Class 76, 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" (i.e., an incorrect judgment), all five points are deducted to obtain a score of zero points.

EXTERIOR GRADING (50 POINTS)

Each participant will grade a class of ten shell eggs (white, brown or other). Criteria for grading will be derived from USDA standards for exterior quality of market eggs. The USDA quality grades will be AA/A, B and NG (nongradable). Criteria for grading may include decisions related to the following quality factors: Soundness (unbroken, check, dented check or leaker); stains (slight/moderate stain or prominent stain); adhering dirt or foreign material; egg shape (approximately normal shape, unusual or decidedly misshapen); shell texture (large calcium deposits, body check or pronounced ridges); shell thickness (pronounced thin spots); no defect.

Each participant will determine written factors for the grading of the exterior chicken eggs. The written factors will relate to the criteria used for grading exterior quality of eggs.

Scoring for exterior egg quality grading:

	OFFICIAL GRADE		
Participant's Grade	AA/A	B	NG
AA/A	5	2	0
B	2	5	0
NG	0	0	5
Loss	0	0	0

As shown above exterior egg quality grading is scored based on the USDA quality grades AA/A, B and NG (nongradable). Each correct grade receives a score of five points. If the item is graded one quality grade below or above the correct grade, three point will be deducted to obtain a score of two points. However, if the "Loss" line is "crossed" (i.e., an incorrect judgment), all five points are deducted to obtain a score of zero points.

WRITTEN FACTORS CLASS (50 POINTS)

Written factors for exterior egg quality grading and has a value of 50 points per participant.

Exterior egg quality grading is evaluated for twelve different quality factors. Further processed poultry meat products are evaluated for seven different quality factors. Each item may be determined to have "no defect" or to have one or more defects.
For each correct match with the judge, zero points are deducted.
For each "defect" or "no defect" missed or added, two points are deducted.
No score will be less than zero.

SHELL EGGS SCORING

CLASS	Points
Interior grading	50
Exterior grading	50
Written factor for Class	50

FURTHER PROCESSED POULTRY

BONELESS FURTHER PROCESSED (50 POINTS)

Each participant will determine written quality factors for a class of ten boneless further processed poultry meat products (e.g., precooked, poultry meat patties, tenders, nuggets or other boneless products). Criteria for evaluation will include coating defects, color defects, consistency of shape/size, broken and/or incomplete products, cluster/marriages and evidence of foreign material. Participants may not touch any product; doing so will result in disqualification.

Boneless Further Processed Poultry Meat Products:

DEFECT	PRODUCT NUMBER									
	1	2	3	4	5	6	7	8	9	10
Coating Void										
Inconsistent Color										
Inconsistent Shape/Size										
Broken/Incomplete										
Cluster/Marriages										
Foreign Material										
No Defect										

BONE-IN FURTHER PROCESSED (50 POINTS)

Each participant will determine written quality factors for a class of ten bone-in further processed poultry meat products (e.g., precooked, bone-in wings or other bone-in poultry meat products). Criteria for evaluation will include coating defects if applicable, color defects, consistency of size, broken products, miscut products, and evidence of foreign material. Participants may not touch any product; doing so will result in disqualification.

CARCASS PARTS IDENTIFICATION (50 POINTS)

Each participant will identify ten poultry parts. Poultry parts to be identified will be randomly selected and consistent with those used in the chicken processing and merchandising industries. The participant may not touch any part; doing so will result in disqualification.

The identification class consisting of ten poultry carcass parts. The class has a value of 50 points per participant. Each correct answer receives a score of five points.

FURTHER PROCESSED POULTRY SCORING

CLASS	Points
Boneless Further Processed	50
Bone-In Further Processed	50
Carcass Parts Identification	50

Scoring

Activities	Individual Points	Team Points
Written Exam	100	400
Live Poultry	150	600
Ready-to-Cook Poultry	150	600
Shell Eggs	150	600
Further Processed Poultry	150	200
Maximum Points	**700**	**2800**

TIEBREAKERS

If ties occur, the following sections of the event will be used in order to determine award recipients:

INDIVIDUAL

1. Total score of placing classes
2. Individual written exam

TEAM

1. Highest individual score
2. Total written exam score (top four individual scores)
3. Total oral reasons (top four individual scores)

References

This list of references is not intended to be all-inclusive.

Other sources may be utilized, and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

- Available from Instructional Materials Service (IMS), Texas A&M University, 2588 TAMUS, College Station, TX 77843-2588 (Phone: 979-845-6601; FAX: 979-845-6608; ims@tamu.edu; *http://www-ims.tamu.edu/).*
- Poultry Grading Manual - Agriculture Handbook Number 31 (latest USDA edition) (IMS Catalog #0414)
- Egg-Grading Manual - Agriculture Handbook Number 75 (latest USDA edition) (IMS Catalog #0417)
- National FFA Core Catalog
- 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 on online at http:/shop.ffa.org/poultry- science-manual-p38844.aspx). All examination items will be derived from this reference.
- The Hormel Computing Slide is available through the National FFA Core Catalog, Item #HCSS, 888-332-2668or online at *http://shop.ffa.org*
- CDE Q & A – *FFA.org*
- One Less Thing
- Poultry Judging Handbook Lessons – *www.onelessthing.net*

Poultry
Form #478-7

Incorrect Marks Correct Mark

✓ ✗ ▬ ⊙ ⬬

Team Name

This sheet is for demonstration and practice only. You must use a real scan sheet for actual competition.

Team #

Code #

Last Name

First Name

Carcass / Part Grading

Carcass/ Part Number	Quality Grade A	B	C	NG*
1	Ⓐ	Ⓑ	Ⓒ	◯
2	Ⓐ	Ⓑ	Ⓒ	◯
3	Ⓐ	Ⓑ	Ⓒ	◯
4	Ⓐ	Ⓑ	Ⓒ	◯
5	Ⓐ	Ⓑ	Ⓒ	◯
6	Ⓐ	Ⓑ	Ⓒ	◯
7	Ⓐ	Ⓑ	Ⓒ	◯
8	Ⓐ	Ⓑ	Ⓒ	◯
9	Ⓐ	Ⓑ	Ⓒ	◯
10	Ⓐ	Ⓑ	Ⓒ	◯

*NG = Nongradable

Egg Interior Quality Grading

Egg Number	Quality Grade AA	A	B	Loss
1	AA	Ⓐ	Ⓑ	◯
2	AA	Ⓐ	Ⓑ	◯
3	AA	Ⓐ	Ⓑ	◯
4	AA	Ⓐ	Ⓑ	◯
5	AA	Ⓐ	Ⓑ	◯
6	AA	Ⓐ	Ⓑ	◯
7	AA	Ⓐ	Ⓑ	◯
8	AA	Ⓐ	Ⓑ	◯
9	AA	Ⓐ	Ⓑ	◯
10	AA	Ⓐ	Ⓑ	◯

Placing Classes

Mark one answer in each column!

		Broilers 1	Hens 2	RTC 3
1	1234	◯	◯	◯
2	1243	◯	◯	◯
3	1324	◯	◯	◯
4	1342	◯	◯	◯
5	1423	◯	◯	◯
6	1432	◯	◯	◯
7	2134	◯	◯	◯
8	2143	◯	◯	◯
9	2314	◯	◯	◯
10	2341	◯	◯	◯
11	2413	◯	◯	◯
12	2431	◯	◯	◯
13	3124	◯	◯	◯
14	3142	◯	◯	◯
15	3214	◯	◯	◯
16	3241	◯	◯	◯
17	3412	◯	◯	◯
18	3421	◯	◯	◯
19	4123	◯	◯	◯
20	4132	◯	◯	◯
21	4213	◯	◯	◯
22	4231	◯	◯	◯
23	4312	◯	◯	◯
24	4321	◯	◯	◯
		1	2	3

Reasons

1 2

Egg Exterior Quality Grading and Written Factors

Grade	Egg Number 1	2	3	4	5	6	7	8	9	10
1 AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A	AA/A
2 B	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ	Ⓑ
3 Nongradable	NG	NG	NG	NG	NG	NG	NG	NG	NG	NG
Defect	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1 Checked	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
2 Dented Checked	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
3 Leaker	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
4 Slight / Moderate Stain	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
5 Prominent Stain	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
6 Adhering Dirt / Foreign Material	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
7 Decidedly Misshapen	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
8 Large Calcium Deposits	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
9 Body Check	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
10 Pronounced Ridges	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
11 Pronounced Thin Spots	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
12 No Defect	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯
	1	2	3	4	5	6	7	8	9	10

One for each egg! You may mark as many as apply.

Mark all that apply.

Identification of Carcass Parts

Part	Part Number 1	2	3	4	5	6	7	8	9	10
1 Half	○	○	○	○	○	○	○	○	○	○
2 Front Half	○	○	○	○	○	○	○	○	○	○
3 Rear Half	○	○	○	○	○	○	○	○	○	○
4 Whole breast with ribs	○	○	○	○	○	○	○	○	○	○
5 Bnls., skinless whole breast with rib meat	○	○	○	○	○	○	○	○	○	○
6 Whole breast	○	○	○	○	○	○	○	○	○	○
7 Bnls., skinless whole breast	○	○	○	○	○	○	○	○	○	○
8 Split breast with ribs	○	○	○	○	○	○	○	○	○	○
9 Bnls., skinless split breast with rib meat	○	○	○	○	○	○	○	○	○	○
10 Split breast	○	○	○	○	○	○	○	○	○	○
11 Bnls., skinless split breast	○	○	○	○	○	○	○	○	○	○
12 Breast quarter	○	○	○	○	○	○	○	○	○	○
13 Breast quarter without wing	○	○	○	○	○	○	○	○	○	○
14 Tenderloin	○	○	○	○	○	○	○	○	○	○
15 Wishbone	○	○	○	○	○	○	○	○	○	○
16 Leg quarter	○	○	○	○	○	○	○	○	○	○
17 Leg	○	○	○	○	○	○	○	○	○	○
18 Thigh w/ back portion	○	○	○	○	○	○	○	○	○	○
19 Thigh	○	○	○	○	○	○	○	○	○	○
20 Bnls., skinless thigh	○	○	○	○	○	○	○	○	○	○
21 Drumstick	○	○	○	○	○	○	○	○	○	○
22 Bnls., skinless drum	○	○	○	○	○	○	○	○	○	○
23 Wing	○	○	○	○	○	○	○	○	○	○
24 Drumette	○	○	○	○	○	○	○	○	○	○
25 Wing portion	○	○	○	○	○	○	○	○	○	○
26 Liver	○	○	○	○	○	○	○	○	○	○
27 Gizzard	○	○	○	○	○	○	○	○	○	○
28 Heart	○	○	○	○	○	○	○	○	○	○
29 Neck	○	○	○	○	○	○	○	○	○	○
30 Paws	○	○	○	○	○	○	○	○	○	○
	1	2	3	4	5	6	7	8	9	10

Mark one answer in each column!

Exam

1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E
4	A	B	C	D	E
5	A	B	C	D	E
6	A	B	C	D	E
7	A	B	C	D	E
8	A	B	C	D	E
9	A	B	C	D	E
10	A	B	C	D	E
11	A	B	C	D	E
12	A	B	C	D	E
13	A	B	C	D	E
14	A	B	C	D	E
15	A	B	C	D	E
16	A	B	C	D	E
17	A	B	C	D	E
18	A	B	C	D	E
19	A	B	C	D	E
20	A	B	C	D	E
21	A	B	C	D	E
22	A	B	C	D	E
23	A	B	C	D	E
24	A	B	C	D	E
25	A	B	C	D	E
26	A	B	C	D	E
27	A	B	C	D	E
28	A	B	C	D	E
29	A	B	C	D	E
30	A	B	C	D	E

Boneless Further Processed Poultry Meat Products

Defect	Product Number 1	2	3	4	5	6	7	8	9	10
1 Coating Void	○	○	○	○	○	○	○	○	○	○
2 Inconsistent Color	○	○	○	○	○	○	○	○	○	○
3 Inconsistent Shape / Size	○	○	○	○	○	○	○	○	○	○
4 Broken / Incomplete	○	○	○	○	○	○	○	○	○	○
5 Cluster / Marriages	○	○	○	○	○	○	○	○	○	○
6 Foreign Material	○	○	○	○	○	○	○	○	○	○
7 No Defect	○	○	○	○	○	○	○	○	○	○
	1	2	3	4	5	6	7	8	9	10

Mark all that apply!

Bone-In Further Processed Poultry Meat Products

Defect	Product Number 1	2	3	4	5	6	7	8	9	10
1 Coating Void	○	○	○	○	○	○	○	○	○	○
2 Inconsistent Color	○	○	○	○	○	○	○	○	○	○
3 Inconsistent Size	○	○	○	○	○	○	○	○	○	○
4 Broken / Broken Bone	○	○	○	○	○	○	○	○	○	○
5 Miscut	○	○	○	○	○	○	○	○	○	○
6 Foreign Material	○	○	○	○	○	○	○	○	○	○
7 No Defect	○	○	○	○	○	○	○	○	○	○
	1	2	3	4	5	6	7	8	9	10

Mark all that apply!

AFNR Content Standards

Measurement Assessed	Where measured in event	Academic Content Standards Addressed
ABS.01. Performance Element: Apply management planning principles in AFNR businesses.		
ABS.01.01.01.b. Apply microeconomic principles to calculate values associated withdifferent inputs and outputs in AFNR businesses (e.g., price, point of equilibrium, opportunity costs, marginal costs, etc.).	Team activity	CCSS.ELA-Literacy.L.9-10.6 CCSS.ELA-LITERACY.L.11-12.6 CCSS.ELA-LITERACY.RST.9-10.4 CCSS.ELA-LITERACY.RST.11-12.4 CCSS.MATH.CONTENT.HSS.ID.C.7 CCSS.MATH.CONTENT.HSS.IC.B.6 Financial Investing: Benchmarks: Grade 12, Statement 9
ABS.01.02. Performance Indicator: Read, interpret, evaluate and write statements of purpose to guide business goals, objectives and resource allocation.		
ABS.01.02.02.a. Identify the meaning and importance of goals and objectives in AFNRbusiness enterprises.	Team activity	CCSS.ELA-LITERACY.W.9-10.2 CCSS.ELA-LITERACY.W.11-12.2 CCSS.ELA-LITERACY.W.9-10.9 CCSS.ELA-LITERACY.W.11-12.9 CCSS.ELA-LITERACY.RI.9-10.4 CCSS.ELA-LITERACY.RI.11-12.4
ABS.02.02. Performance Indicator: Assemble, interpret and analyze financial information and reports to monitor AFNR business performance and support decision-making (e.g., income statements, balance sheets, cash-flow analysis, inventory reports, break-even analysis, return on investment, taxes, etc.).		
ABS.02.02.02.b. Use accountinginformation to prepare financialreports associated with inventory in AFNR businesses (e.g., cost of goods sold, margins on goods, etc.).	Team activity	CCSS.ELA-LITERACY.W.9-10.9 CCSS.ELA-LITERACY.W.11-12.9 CCSS.ELA-LITERACY.RH.9-10.7 CCSS.ELA-LITERACY.RH.11-12.7 CCSS.MATH.CONTENT.HSS.ID.C.7 CCSS.MATH.CONTENT.HSS.IC.B.6 CCSS.MATH.CONTENT.HSN.Q.A.1 Savings: Benchmarks: Grade 12, Statements 3 Savings: Benchmarks: Grade 12, Statements 4 Savings: Benchmarks: Grade 12, Statements 6 Savings: Benchmarks: Grade 12, Statements 7 Financial Investing: Benchmarks: Grade 12, Statement 2
ABS.04.02. Performance Indicator: Develop production and operational plans for an AFNR business.		
ABS.04.02.01.c. Make recommendations to improveoperational plans for an AFNRbusiness based on best practices.	Team activity	AFNR Career Cluster – Agribusiness Systems Pathway, Statement 3CCSS.ELA-LITERACY.ELA-W.9-10.2 CCSS.ELA-LITERACY.W.11-12.2 CCSS.ELA-LITERACY.L.9-10.6 CCSS.ELA-LITERACY.L.11-12.6 CCSS.ELA-LITERACY.RST.9-10.4 CCSS.ELA-LITERACY.RST.11-12.4

ABS.04.02.02.b. Identify and assess alternative productionsystems for a specific agricultural product.	Team activity Exam	AFNR Career Cluster – Agribusiness Systems Pathway, Statement 3CCSS.ELA-LITERACY.ELA-W.9-10.2 CCSS.ELA-LITERACY.W.11-12.2 CCSS.ELA-LITERACY.L.9-10.6 CCSS.ELA-LITERACY.L.11-12.6 CCSS.ELA-LITERACY.RST.9-10.4 CCSS.ELA-LITERACY.RST.11-12.4
ABS.05.03. Performance Indicator: Assess marketing principles and develop marketing plans to accomplish AFNR business objectives.		
ABS.05.03.01.b. Assess alternative marketing strategiesas related to marketing principles for AFNR businesses (e.g. value-adding, branding, niche marketing, etc.).	Team activity	AFNR Career Cluster – Agribusiness Systems Pathway, Statement 4CCSS.ELA-LITERACY.L.9-10.6 CCSS.ELA-LITERACY.L.11-12.6 CCSS.ELA-LITERACY.RST.9-10.4 CCSS.ELA-LITERACY.RST.11-12.4 CCSS.ELA-LITERACY.W.9-10.2 CCSS.ELA-LITERACY.W.11-12.2 CCSS.ELA-LITERACY.RH.9-10.7 CCSS.ELA-LITERACY.RH.11-12.7 CCSS.ELA-LITERACY.SL.9-10.6 CCSS.ELA-LITERACY.SL.11-12.6 Buying Goods & Services: Benchmarks: Grade 12, Statements 1Buying Goods & Services: Benchmarks: Grade 12, Statements 3 Buying Goods & Services: Benchmarks: Grade 12, Statements 4 Buying Goods & Services: Benchmarks: Grade 12, Statements 7
CS.01.01. Performance Indicator: Examine issues and trends that impact AFNR systems on local, state, national and global levels.		
CS.01.01.01.c. Evaluate and explain AFNR issues and theirimpacts to audiences with limited AFNR knowledge.	Team activity	
CS.01.01.02.c. Evaluate emerging trends and the opportunities they may createwithin the AFNR systems.	Team activity	
CS.01.02. Performance Indicator: Examine technologies and analyze their impact on AFNR systems.		
CS.01.02.01.c. Solve problems in AFNR workplaces or scenariosusing technology.	Team activity Exam	
CS.01.02.02.b. Analyze howtechnology is used in AFNR systems to maximize productivity.	Team activity Exam	

CS.01.03. Performance Indicator: Identify public policies and their impact on AFNR systems.		
CS.01.03.01.c.Evaluate a public policy within AFNR systems and defend or challenge it.	Team activity	
CS.02.01. Performance Indicator: Research geographic and economic data related to AFNR systems.		
CS.02.01.02.c. Devise a strategyto solve a problem in an AFNR system using a set of economic data.	Team activity	
CS.02.02. Performance Indicator: Examine the components of the AFNR systems and their impact on the local, state, national andglobal society and economy.		
CS.02.02.01.c. Devise a strategyfor explaining components of AFNR systems to audiences withlimited knowledge.	Team activity	
CS.02.02.02.c. Evaluate how society traditions, customs orpolicies have resulted from practices with AFNR systems.	Team activity Exam	
CS.02.02.03.c. Evaluate how positive or negative changes inthe local, state, national or global economy impacts AFNRsystems.	Exam	
CS.05.02. Performance Indicator: Examine careers in each of the AFNR pathways.		
CS.05.02.01.a. Categorize careers in each of the AFNRpathways.	Exam	
CS.06.01. Performance Indicator: Explain foundational cycles and systems of AFNR.		
CS.06.01.02.b. Analyze AFNR systems and determine their impact on producing and processing food, fiber and fuel.	Exam	
AS.01.01. Performance Indicator: Evaluate the development and implications of animal origin, domestication and distribution onproduction practices and the environment.		
AS.01.01.01.c. Evaluate the implications of animal adaptations on production practices and the environment.	Exam	HS-LS4-3

AS.01.01.02.b. Describe the historical and scientific developments of different animal industries and summarize the products, services and careers associatedwith each.	Exam	HS-LS4-3
AS.01.02.01.c. Evaluate the effectiveness of different production methods and defendthe use of selected methods using data and evidence.	Team activity Exam	HS-LS4-3
AS.01.02. Performance Indicator: Assess and select animal production methods for use in animal systems based upon their effectiveness and impacts.		
AS.01.02.02.b. Calculate costs of marketing versus predictedincreases in sales.	Team activity Exam	AFNR Career Cluster, Statement 1 AFNR Career Cluster – Animal Systems Pathway, Statement 3 STEM Career Cluster, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 1Buying Goods and Services, Benchmarks: Grade 12, Statement 3
AS.01.02.03.b. Analyze and evaluate the accuracy and effectiveness of records used inan animal system business.	Team activity Exam	AFNR Career Cluster, Statement 1 AFNR Career Cluster – Animal Systems Pathway, Statement 3 STEM Career Cluster, Statement 1 Buying Goods and Services, Benchmarks: Grade 12, Statement 1Buying Goods and Services, Benchmarks: Grade 12, Statement 3
AS.01.03. Performance Indicator: Analyze and apply laws and sustainable practices to animal agriculture from a global perspective.		
AS.01.03.01.b. Analyze the structure of laws governing animal industries, internationaltrade and animal production policies.	Exam	AFNR Career Cluster, Statement 2 AFNR Career Cluster – Animal Systems Pathway, Statement 1 STEM Career Cluster, Statement 1, 4 CCSS.ELA-Literacy.W.9-10.9b CCSS.ELA-Literacy.W.11-12.9b CCSS.ELA-Literacy.RI.9-10.1 CCSS.ELA-Literacy.RI.11-12.1HS-ETS1-1
AS.01.03.02.b. Analyze the localand global impact of sustainableanimal agriculture practices on human and environmental systems.	Team activity Exam	AFNR Career Cluster, Statement 2 AFNR Career Cluster – Animal Systems Pathway, Statement 1 STEM Career Cluster, Statement 1, 4 CCSS.ELA-Literacy.W.9-10.9b CCSS.ELA-Literacy.W.11-12.9b CCSS.ELA-Literacy.RI.9-10.1 CCSS.ELA-Literacy.RI.11-12.1HS-ETS1-1

AS.02.01. Performance Indicator: Demonstrate management techniques that ensure animal welfare.		
AS.02.01.01.c. Implement andevaluate quality-assurance programs and procedures for animal production.	Team activity Exam Placing classes	HS-ETS1-2
AS.02.01.03.b. Analyze and document animal husbandrypractices and their impact onanimal welfare.	Exam	HS-ETS1-2
AS.02.02. Performance Indicator: Analyze procedures to ensure that animal products are safe for consumption.		
AS.02.02.02.c. Research and evaluate programs to assure thesafety of animal products for consumption.	Placing and grading classes	HS-ETS1-2
AS.03.01. Performance Indicator: Analyze the nutritional needs of animals.		
AS.03.01.01.c. Assess nutritionalneeds for an individual animal based on its growth stage and production system. – Exam	Exam	
AS.03.01.02.b. Correlate a species' nutritional needs tofeedstuffs that could meet those needs.	Exam	
AS.03.02 Performance Indicator: Analyze feed rations and assess if they meet the nutritional needs of animals.		
AS.03.02.01.c. Select appropriate feedstuffs for animals based on a variety of factors (e.g., economics, digestive system and nutritionalneeds, etc.).	Team activity Exam	
AS.03.02.02.c. Select and utilizeanimal feeds based on nutritional requirements, using rations for maximum nutrition and optimal economic production.	Team activity Exam	

AS.03.02.03.c. Make and defenddecisions regarding whether to use feed additives and growth promotants after researching and considering scientific evidence, production system needs and goals, and input fromindustry professionals.	Team activity Exam	
AS.03.03 Performance Indicator: Utilize industry tools to make animal nutrition decisions.		
AS.03.03.01.c. Select, evaluateand defend the use of specific tools or equipment used to perform animal nutrition tasks.	Exam	
AS.03.03.03.c. Research andrecommend technology improvements to provide proper nutrition to animals.	Team activity Exam	
AS.04.01. Performance Indicator: Evaluate animals for breeding readiness and soundness.		
AS.04.01.01.c. Select breeding animals based on characteristicsof the reproductive organs.	Placing classes - hens	
AS.04.01.02.c. Evaluate and select animals for reproductivereadiness.	Placing classes - hens	
AS.04.01.03.c. Treat or cullanimals with reproductive problems.	Team activity	
AS.04.02. Performance Indicator: Apply scientific principles to select and care for breeding animals.		
AS.04.02.01.c. Select and evaluate a breeding systembased on the principles of genetics.	Placing classesExam	CCSS.MATH.CONTENT.HSS.MD.A.3HS-LS3-2 HS-LS3-3
AS.04.02.02.c. Select and evaluate breeding animals anddetermine the probability of agiven trait in their offspring.	Placing classes	CCSS.MATH.CONTENT.HSS.MD.A.3HS-LS3-2 HS-LS3-3
AS.04.02.04.c. Create a plan to differentiate care of a species ofbreeding animals throughout their growth stages.	Team activity Exam	CCSS.MATH.CONTENT.HSS.MD.A.3HS-LS3-2 HS-LS3-3

AS.04.03 Performance Indicator: Apply scientific principles to breed animals.		
AS.04.03.01.c. Select animal breeding methods based on reproductive and economic efficiency.	Exam	
AS.04.03.02.c. Evaluate theimplementation and effectiveness of artificial insemination techniques.	Exam	
AS.04.03.04.c. Select and assessanimal performance based on quantitative breeding values forspecific characteristics.	Placing classes	
AS.05.01. Performance Indicator: Design animal housing, equipment and handling facilities for the major systems of animal production.		
AS.05.01.01.b. Critique designsfor an animal facility and prescribe alternative layouts and adjustments for the safe, sustainable and efficient use ofthe facility.	Exam	AFNR Career Cluster – Animal Systems Pathway, Statement 2 STEM Career Cluster, Statement 4 STEM Career Cluster, Statement 5
AS.05.01.02.c. Select, use and evaluate equipment, technologyand handling procedures to enhance sustainability and production efficiency.	Exam	AFNR Career Cluster – Animal Systems Pathway, Statement 2 STEM Career Cluster, Statement 4 STEM Career Cluster, Statement 5
AS.06.01. Performance Indicator: Classify animals according to taxonomic classification systems and use (e.g. agricultural, companion, etc.).		
AS.06.01.01.c. Assess taxonomiccharacteristics and classify animals according to the taxonomic classification system.	Placing classesExam	
AS.06.01.03.c. Apply knowledgeof classification terms to communicate with others aboutanimal systems in an effective and accurate manner.	Team activity Exam Placing classes	

AS.06.02. Performance Indicator: Apply principles of comparative anatomy and physiology to uses within various animal systems.		
AS.06.02.01.c. Correlate thefunctions of animal cell structures to animal growth,development, health and reproduction.	Exam	HS-LS1-2
AS.06.02.02.c. Apply the processes of meiosis and mitosis to solve animal growth,development, health and reproductive problems.	Exam	HS-LS1-2
AS.06.02.03.c. Apply knowledgeof anatomical and physiological characteristics of animals to make production and management decisions.	Team activity Placing classes	HS-LS1-2
AS.06.03. Performance Indicator: Select animals for specific purposes and maximum performance based on anatomy and physiology.		
AS.06.03.01.c. Evaluate and select animals to maximize performance based on anatomical and physiologicalcharacteristics that affect health, growth and reproduction.	Team activity Exam Placing classes	STEM Career Cluster, Statement 5
AS.06.03.02.c. Choose, implement and evaluate sustainable and efficient procedures (e.g., selection, housing, nutrition and management) to produce consistently high-quality animals that are well suited fortheir intended purposes.	Team activity Exam	STEM Career Cluster, Statement 5
AS.06.03.03.c. Evaluate and select animals to produce superior animal products basedon industry standards.	Team activity Placing and grading classes	STEM Career Cluster, Statement 5
AS.07.01. Performance Indicator: Design programs to prevent animal diseases, parasites and other disorders and ensure animalwelfare.		
AS.07.01.01.c. Select and usetools and technology to meetspecific animal health management goals.	Team activity Exam	CCSS.MATH.CONTENT.HSN.Q.A. 1 CCSS.MATH.CONTENT.HSN.Q.A. 2 CCSS.MATH.CONTENT.HSN.Q.A. 3

AS.07.01.02.c. Determine whenan animal health concern needsto be referred to an animal health professional.	Team activity Exam	CCSS.MATH.CONTENT.HSN.Q.A. 1 CCSS.MATH.CONTENT.HSN.Q.A. 2 CCSS.MATH.CONTENT.HSN.Q.A. 3
AS.07.01.03.b. Identify and describe common illnesses and disorders of animals based on symptoms and problems causedby wounds, diseases, parasites and physiological disorders.	Team activity Exam	CCSS.MATH.CONTENT.HSN.Q.A. 1 CCSS.MATH.CONTENT.HSN.Q.A. 2 CCSS.MATH.CONTENT.HSN.Q.A. 3
AS.07.01.04.c. Design and implement a health maintenance and a disease anddisorder prevention plan for animals in their natural and/or confined environments.	Team activity Exam	CCSS.MATH.CONTENT.HSN.Q.A. 1 CCSS.MATH.CONTENT.HSN.Q.A. 2 CCSS.MATH.CONTENT.HSN.Q.A. 3
AS.07.01.05.c. Identify and describe surgical and nonsurgical veterinary treatments and procedures to meet specific animal health careobjectives.	Exam	CCSS.MATH.CONTENT.HSN.Q.A. 1 CCSS.MATH.CONTENT.HSN.Q.A. 2 CCSS.MATH.CONTENT.HSN.Q.A. 3
AS.07.02. Performance Indicator: Analyze biosecurity measures utilized to protect the welfare of animals.		
AS.07.02.01.c. Design and evaluate a biosecurity plan for an animal production operation.	Team activity	
AS.07.02.02.c. Research and evaluate the effectiveness of zoonotic disease prevention methods and procedures to identify those that are best suited to ensure public safetyand animal welfare.	Team activity	
AS.08.01. Performance Indicator: Design and implement methods to reduce the effects of animal production on the environment.		
AS.08.01.01.b. Assess methods of reducing the effects of animalagriculture on the environment.	Team activity Exam	AFNR Career Cluster – Environmental Service Systems Pathway, Statement 1 HS-LS2- 6HS- LS2-7

AS.08.02. Performance Indicator: Evaluate the effects of environmental conditions on animals and create plans to ensure favorable environments for animals.		
AS. 08.02.01.c. Apply valid andreliable research evidence to predict the potential effects ofdifferent environmental conditions for an animal population.	Exam	HS.LS4-6
AS.08.02.02.c. Devise and improve plans to establish favorable environmental conditions for animal growthand performance based on avariety of factors (e.g., economic feasibility, environmental sustainability,impact on animals, etc.).	Exam	HS.LS4-6
CRP.04.01. Performance Indicator: Speak using strategies that ensure clarity, logic, purpose and professionalism in formal and informal settings.		
CRP.04.01.02.b. Apply strategies for speaking with clarity, logic, purpose and professionalism in a variety ofsituations in formal and informal settings.	Placing classesOral reasons Team activity	
CRP.04.02. Performance Indicator: Produce clear, reasoned and coherent written communication in formal and informal settings.		
CRP.04.02.01.c. Evaluate the effectiveness of different formsof written communication for achieving their intended purpose.	Team activity	
CRP.04.02.02.c. Compose clearand coherent written documents (e.g., agendas, audio-visuals, drafts, forms, etc.) for formal and informal settings.	Team activity	
CRP.04.03. Performance Indicator: Model active listening strategies when interacting with others in formal and informal settings.		
CRP.04.03.01.c. Evaluate personal effectiveness and devise a plan to improve activelistening skills.	Team activity	

CRP.04.03.02.c. Model activelistening strategies in formal and informal settings.	Team activity	
CRP.06.01. Performance Indicator: Synthesize information, knowledge and experience to generate original ideas and challenge assumptions in the workplace and community.		
CRP.06.01.02.c. Devise strategies (e.g., ask questions, brainstorm ideas, present facts and information etc.) to challenge common assumptionsin workplace and community situations.	Team activity	
CRP.07.01. Performance Indicator: Select and implement reliable research processes and methods to generate data for decision-making in the workplace and community.		
CRP.07.01.01.a. Identify and summarize reliable research processes and methods used togenerate data for decision-making.	Team activity	
CRP.07.02. Performance Indicator: Evaluate the validity of sources and data used when considering the adoption of new technologies, practices and ideas in the workplace and community.		
CRP.07.02.01.b. Assess datasources for reliability and validity.	Team activity	
CRP.07.02.02.b. Assimilate datato assist in making a decision about the adoption of a new technology, practice or idea by workplaces and community organizations.	Team activity	
CRP.12.01. Performance Indicator: Contribute to team-oriented projects and builds consensus to accomplish results using cultural global competence in the workplace and community.		
CRP.12.01.01.b. Formulate action plans to complete team-oriented projects in the workplace and community, including plans for personal contributions.	Team activity	
ESS.03.02. Performance Indicator: Apply soil science and hydrology principles to environmental service systems.		
ESS.03.02.04.b. Assess precautions taken to prevent orreduce contamination of groundwater supplies.	Exam	CCSS.ELA-LITERACY.RST.11-12.1 CCSS.ELA-LITERACY.RST.11-12.2 CCSS.ELA-LITERACY.RST.11-12.7 CCSS.ELA-LITERACY.WHST.9-10.7

		CCSS.ELA-LITERACY.WHST.11-12.7CCSS.MATH.CONTENT.HSN-Q.A.1 CCSS.MATH.CONTENT.HSN-Q.A.2 CCSS.MATH.CONTENT.HSN-Q.A.3 HS-ESS2-5 HS-ESS2-6
ESS.03.04. Performance Indicator: Apply microbiology principles to environmental service systems.		
ESS.03.04.03.a. Examine therole that microbes play in wastewater treatment.	Exam	CCSS.ELA-LITERACY.RST.11-12.1 CCSS.ELA-LITERACY.WHST.9-10.2 CCSS.ELA-LITERACY.WHST.11-12.2CCSS.ELA-LITERACY.WHST.9-10.5 CCSS.ELA-LITERACY.WHST.11-12.5CCSS.ELA-LITERACY.WHST.9-10.9 CCSS.ELA-LITERACY.WHST.11-12.9 CCSS.MATH.CONTENT.HSF.BF.A.1 HS-LS2-3 HS-LS3-2HS-ET1-2
ESS.04.01. Performance Indicator: Use pollution control measures to maintain a safe facility and environment.		
ESS.04.01.01.a. Identify and distinguish types of pollution and distinguish between pointsource and nonpoint source pollution.	Exam	HS-ETS1-2
ESS.04.02. Performance Indicator: Manage safe disposal of all categories of solid waste in environmental service systems.		
ESS.04.02.01.c. Develop a planfor solid waste disposal for a given situation that considers the environmental hazards, economic realities and social concerns associated with this task.	Exam	HS-ETS1-2
ESS.04.02.03.c. Evaluate the appropriateness of compostingmethods in different situations.	Exam	HS-ETS1-2
FPP.01.01. Performance Indicator: Analyze and manage operational and safety procedures in food products and processing facilities.		
FPP.01.01.01.b. Analyze and document attributes and procedures of current safety programs in food products andprocessing facilities.	Exam	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 AFNR Career Cluster, Statement 6 Manufacturing Career Cluster – Maintenance, Installation and RepairPathway Statement 2

		Manufacturing Career Cluster – Maintenance, Installation and RepairPathway Statement 4 Manufacturing Career Cluster – Production Pathway 2Manufacturing Career Cluster – Production Pathway 3
FPP.01.01.02.a. Research and categorize types of equipmentused in food products and processing systems.	Exam	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 AFNR Career Cluster, Statement 6 Manufacturing Career Cluster – Maintenance, Installation and RepairPathway Statement 2 Manufacturing Career Cluster – Maintenance, Installation and RepairPathway Statement 4 Manufacturing Career Cluster – Production Pathway 2Manufacturing Career Cluster – Production Pathway 3
FPP.01.02. Performance Indicator: Apply food safety and sanitation procedures in the handling and processing of food products to ensure food quality.		
FPP.01.02.01.c. Identify sources of contamination in food products and/or processing facilities and developways to eliminate contamination.	Placing class – further processed	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2
FPP.01.02.04.a. Describe the effects food-borne pathogenshave on food products and humans.	Exam	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2
FPP.01.03. Performance Indicator: Apply food safety procedures when storing food products to ensure food quality.		
FPP.01.03.01.a. Identify and summarize purposes of food storage procedures (e.g., firstin/first out, temperature regulation, monitoring, etc.).	Exam	
FPP.03.01. Performance Indicator: Implement selection, evaluation and inspection techniques to ensure safe and quality food products.		
FPP.03.01.01.c. Outline procedures to assign quality andyield grades to food products according to industry standards.	Placing – grading, further processed, exterior egg classes	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 Buying Goods and Services, Benchmarks: Grade 12, Statement 7
FPP.03.01.02.b. Assemble procedures to perform quality-control inspections of raw foodproducts for processing.	Placing and grading classes	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 Buying Goods and Services, Benchmarks: Grade 12, Statement 7

FPP.03.01.03.b. Examine and evaluate inspection and harvesting of animals using regulatory agency approved orindustry-approved techniques.	Placing and grading classes	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 Buying Goods and Services, Benchmarks: Grade 12, Statement 7
FPP.03.01.04.c. Evaluate and grade food products from different classifications of foodproducts.	Placing, grading, furtherprocessed, egg classes	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 1 AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 2 Buying Goods and Services, Benchmarks: Grade 12, Statement 7
FPP.03.02. Performance Indicator: Design and apply techniques of food processing, preservation, packaging and presentation fordistribution and consumption of food products.		
FPP.03.02.01.b. Compare weights and measurements ofproducts and perform conversions between units of measure.	Team activity	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 3
FPP.03.02.02.c. Evaluate food quality factors on foods prepared for different markets(e.g., shelf life, shrinkage, appearance, weight, etc.).	Placing, grading, furtherprocessed, egg classes	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 3
FPP.03.02.03.a. Identify methods of food preservationand give examples of foods preserved by each method.	Exam	AFNR Career Cluster – Food Products and Processing SystemsPathway, Statement 3
FPP.03.03. Performance Indicator: Create food distribution plans and procedures to ensure safe delivery of food products.		
FPP.03.03.03.c. Propose distribution plans for food products that meet specificmarket demands.	Team activity	AFNR Career Cluster, Statement 7 AFNR Career Cluster – Food Products and Processing Pathway, Statement 3 Manufacturing Career Cluster – Logistics and Inventory Control,Pathway 2 Manufacturing Career Cluster – Manufacturing Product Process Development Pathway, Statement 1 Manufacturing Career Cluster – Manufacturing Product Process Development Pathway, Statement 2 Transportation, Distribution and Logistics Career Cluster, Statement 3CCSS.ELA-Literacy.W.9-10.2 CCSS.ELA-Literacy.W.11-12.2HS-ETS1-2

FPP.04.01. Performance Indicator: Examine the scope of the food industry by evaluating local and global policies, trends andcustoms for food production.		
FPP.04.01.03.a. Compare andcontrast cultural differences regarding food products and processing practices.	Exam	AFNR Career Cluster, Statement 7 AFNR Career Cluster – Food Products and Processing Pathway, Statement 3 Manufacturing Career Cluster – Logistics and Inventory Control,Pathway 2 Manufacturing Career Cluster – Manufacturing Product Process Development Pathway, Statement 1 Manufacturing Career Cluster – Manufacturing Product Process Development Pathway, Statement 2 Transportation, Distribution and Logistics Career Cluster, Statement 3CCSS.ELA-Literacy.W.9-10.2 CCSS.ELA-Literacy.W.11-12.2HS-ETS1-2
FPP.04.02. Performance Indicator: Evaluate the significance and implications of changes and trends in the food products and processing industry in the local and global food systems.		
FPP.04.02.01.b. Analyze and document significant changes and trends in the food productsand processing industry.	Exam	Buying Goods and Services, Benchmarks: Grade 12, Statement 1
FPP.04.03. Performance Indicator: Identify and explain the purpose of industry organizations, groups and regulatory agencies that influence the local and global food systems.		
FPP.04.03.01.a. Examine and summarize the purposes of organizations that influence orregulate the food products andprocessing industry.	Exam	Transportation, Distribution and Logistics Career Cluster – Transportation Systems/Infrastructure Planning, Management andRegulation Pathway, Statement 4 Buying Goods and Services, Benchmarks: Grade 12, Statement 7
FPP.04.03.02.b. Assess the application of industry standards in the food productsand processing industry.	Exam	Transportation, Distribution and Logistics Career Cluster – Transportation Systems/Infrastructure Planning, Management andRegulation Pathway, Statement 4 Buying Goods and Services, Benchmarks: Grade 12, Statement 7