



TEKS CORRELATIONS & SUGGESTED PACING GUIDE

Agricultural Equipment Design & Fabrication



iCEV Agricultural Science Site

Meets 100% of TEKS

184 days of teaching material

Scope & Sequence	Lesson Title	TEKS	Days of Teaching
1	Personal & Occupational Health & Safety	1.D.i; 1.D.ii; 1.D.iii; 1.D.iv	11
2	Mathematics in Construction	N/A	7
3	Measurement in Construction	3.D.i	10
4	Project Management Skills	3.E.i	13
5	Computer Aided Design Techniques	3.F.i	5
6	Hand Tool ID & Terminology I	5.C.i; 5.C.ii	6
7	Hand Tool ID & Terminology II	5.C.i; 5.C.ii	6
8	Hand Tool ID & Terminology III	5.C.i; 5.C.ii	6
9	Portable Wood Power Tools - I: Safety, Operation & ID	5.C.iii; 5.C.iv	2
10	Portable Wood Power Tools - II: Safety, Operation & ID	5.C.iii; 5.C.iv	2
11	Large Wood Power Tools - I: Safety, Operation & ID	5.C.iii; 5.C.iv	3
12	Large Wood Power Tools - II: Safety, Operation & ID	5.C.iii; 5.C.iv	2
13	Large Metal Power Tools: Safety & Operation	5.C.iii; 5.C.iv	4
14	Gooseneck Stock Trailer Construction - I	3.A.i; 3.B.i; 3.B.ii; 3.C.i; 3.C.ii; 3.C.iii; 3.C.iv; 3.D.i; 3.D.ii; 3.E.i; 6.A.i; 6.B.i; 6.B.ii; 6.B.iii; 6.B.iv	2
15	Gooseneck Stock Trailer Construction - II	3.A.i; 3.B.i; 3.B.ii; 3.C.i; 3.C.ii; 3.C.iii; 3.C.iv; 3.D.i; 3.D.ii; 3.E.i; 6.A.i; 6.B.i; 6.B.ii; 6.B.iii; 6.B.iv	2
16	Gooseneck Stock Trailer Construction - III	3.A.i; 3.B.i; 3.B.ii; 3.C.i; 3.C.ii; 3.C.iii; 3.C.iv; 3.D.i; 3.D.ii; 3.E.i; 6.A.i; 6.B.i; 6.B.ii; 6.B.iii; 6.B.iv	3
17	Oxy-Fuel Cutting	5.A.i	6
18	Plasma Arc Cutting	5.A.ii	6
19	Shielded Metal Arc Welding: Preparation & Safety	5.B.i	7
20	Gas Metal Arc Welding: Equipment, Set-Up & Maintenance	5.B.i	5
21	Fencing Tools & Techniques	3.D.ii; 4.A.i; 4.A.ii; 4.B.i; 4.B.ii; 4.C.i	3
22	The World of Agriculture	1.B.i; 1.B.ii; 1.C.i; 1.C.ii; 1.C.iii	12
23	Career Cluster: Agriculture, Food & Natural Resources	1.A.i; 1.A.ii; 1.C.i; 1.C.ii; 1.C.iii	7
24	Power, Structural & Technical Systems	1.A.i; 1.B.i; 1.B.ii; 1.B.iii; 1.B.iv	2
25	Formulas for Career Success: Career Testing & Investigation	1.A.i	8
26	Internships 101: The Importance of Internships	1.A.i	2
27	Employability Skills	1.B.iii; 1.B.iv; 1.E.i; 1.E.ii	5
28	Workplace Issues	1.D.i; 1.D.ii; 1.D.iii; 1.D.iv	4
29	Citizenship Basics	1.F.i; 1.F.ii; 1.F.iii	9
30	Blue & Gold Basics: SAE Programs	2.A.i; 2.A.ii; 2.A.iii; 2.A.iv; 2.A.v; 2.B.i	5
31	Introduction to Record Keeping	2.B.i	3
32	Blue & Gold Basics: What is FFA?	2.C.i; 2.D.i; 2.D.ii	6
33	Blue & Gold Basics: FFA Officers & Meetings	2.C.i	8
34	Blue & Gold Basics: Career Development Events	2.C.i	2

Correlations to the Texas Essential Knowledge and Skills (TEKS): Student/Teacher Material

Subject	Chapter 130. Texas Essential Knowledge and Skills for Career & Technical Education
Subchapter	Subchapter A. Agriculture, Food, And Natural Resources
Course	§130.28. Agricultural Equipment Design and Fabrication (One Credit), Adopted 2015.
Publisher	CEV Multimedia, Ltd.
Program Title	iCEV Agricultural Science Site
Program ISBN	9.78161E+12
TEKS Coverage (%)	100.00%

(a) **General Requirements.** This course is recommended for students in Grades 11 and 12. Recommended prerequisite: Agricultural Mechanics and Metal Technologies. Students shall be awarded one credit for successful completion of this course.

(b) **Introduction.**

- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
- (2) The Agriculture, Food, and Natural Resources Career Cluster focuses on the production, processing, marketing, distribution, financing, and development of agricultural commodities and resources, including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.
- (3) In Agricultural Equipment Design and Fabrication, students will acquire knowledge and skills related to the design and fabrication of agricultural equipment. To prepare for careers in mechanized agriculture and technical systems, students must attain knowledge and skills related to agricultural equipment design and fabrication. To prepare for success, students reinforce, apply, and transfer their academic knowledge and technical skills in a variety of settings.
- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) **Knowledge and Skills.**

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) identify career development and entrepreneurship opportunities in the field of mechanized agriculture	(i) identify career development opportunities in the field of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Career Cluster: Agriculture, Food & Natural Resources	
			Student/Teacher	Activity	9781614592082	Project - Career Comparison; Project - Career Cube: Project - Career Interview; Project - Local Search: Project - The Career for Me	Career Cluster: Agriculture, Food & Natural Resources
			Student/Teacher	Narrative	9781614592082	Power, Structural & Technical Systems	
			Student/Teacher	Activity	9781614592082	Activity - Career Ranking	Animal Systems

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Narrative	9781614592082	Formulas for Career Success; Career Testing & Investigation; Internships 101: The Importance of Internships	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(A) identify career development and entrepreneurship opportunities in the field of mechanized agriculture	(ii) identify entrepreneurship opportunities in the field of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Career Cluster: Agriculture, Food & Natural Resources	
			Student/Teacher	Activity	9781614592082	Project - Entrepreneurial Adventures	Career Cluster: Agriculture, Food & Natural Resources
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) apply competencies related to resources, information, interpersonal skills, and systems of operation of mechanized agriculture	(i) apply competencies related to resources of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Power, Structural & Technical Systems	
			Student/Teacher	Narrative	9781614592082	The World of Agriculture	
			Student/Teacher	Activity	9781614592082	Activity - Career Opportunities; Activity - Career Opportunities Teacher Instruction Sheet	The World of Agriculture

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) apply competencies related to resources, information, interpersonal skills, and systems of operation of mechanized agriculture	(ii) apply competencies related to information of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Power, Structural & Technical Systems	
			Student/Teacher	Narrative	9781614592082	The World of Agriculture	
			Student/Teacher	Activity	9781614592082	Activity - Career Opportunities; Activity - Career Opportunities Teacher Instruction Sheet	The World of Agriculture
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) apply competencies related to resources, information, interpersonal skills, and systems of operation of mechanized agriculture	(iii) apply competencies related to interpersonal skills of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Power, Structural & Technical Systems	
			Student/Teacher	Narrative	9781614592082	Employability Skills	
			Student/Teacher	Activity	9781614592082	Activity - Skills Flashcards; Project - Personal Skills	Employability Skills
			Student/Teacher				
			Student/Teacher				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(B) apply competencies related to resources, information, interpersonal skills, and systems of operation of mechanized agriculture	(iv) apply competencies related to systems of operation of mechanized agriculture	Student/Teacher	Narrative	9781614592082	Power, Structural & Technical Systems	
			Student/Teacher	Narrative	9781614592082	Employability Skills	
			Student/Teacher	Activity	9781614592082	Activity - Skills Flashcards: Project - Personal Skills	Employability Skills
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) research licensing, certification, and credentialing requirements	(i) research licensing requirements	Student/Teacher	Narrative	9781614592082	Career Cluster: Agriculture, Food & Natural Resources	
			Student/Teacher	Activity	9781614592082	Project - The Career for Me	Career Cluster: Agriculture, Food & Natural Resources
			Student/Teacher	Narrative	9781614592082	The World of Agriculture	
			Student/Teacher		9781614592082	Activity - Career Opportunities: Activity - Career Opportunities Teacher Instruction Sheet	The World of Agriculture
			Student/Teacher	Activity			

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) research licensing, certification, and credentialing requirements	(ii) research certification requirements	Student/Teacher	Narrative	9781614592082	Career Cluster: Agriculture, Food & Natural Resources	
			Student/Teacher	Activity	9781614592082	Project - The Career for Me	Career Cluster: Agriculture, Food & Natural Resources
			Student/Teacher	Narrative	9781614592082	The World of Agriculture	
			Student/Teacher		9781614592082	Activity - Career Opportunities; Activity - Career Opportunities Teacher Instruction Sheet	The World of Agriculture
			Student/Teacher	Activity			
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(C) research licensing, certification, and credentialing requirements	(iii) research credentialing requirements	Student/Teacher	Narrative	9781614592082	Career Cluster: Agriculture, Food & Natural Resources	
			Student/Teacher	Activity	9781614592082	Project - The Career for Me	Career Cluster: Agriculture, Food & Natural Resources
			Student/Teacher	Narrative	9781614592082	The World of Agriculture	

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Activity	9781614592082	Activity - Career Opportunities; Activity - Career Opportunities Teacher Instruction Sheet	The World of Agriculture
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(i) demonstrate knowledge of personal health practices in the workplace	Student/Teacher	Narrative	9781614592082	Workplace Issues	
			Student/Teacher	Activity	9781614592082	Activity - Facts & Opinions in Occupational Safety Practices; Activity - Federal Laws for Safety; Project - Creating an Employee Handbook; Project - Determining Health Practices in the Workplace; Project - In Your Own Words OSHA in the Workplace; Project - Wellness Practices in the Workplace	Workplace Issues
			Student/Teacher	Narrative	9781614592082	Personal & Occupational Health & Safety	

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Activity	9781614592082	Activity - Hazard Solutions; Activity - Hazard Solutions Teacher Instruction Sheet; Activity - Personal Protective Equipment; Activity - Safety Inspection Checklist; Project - OSHA; Project - Public Service Announcement	Personal & Occupational Health & Safety
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(ii) demonstrate knowledge of personal safety practices in the workplace	Student/Teacher	Narrative	9781614592082	Workplace Issues	
			Student/Teacher	Activity	9781614592082	Activity - Facts & Opinions in Occupational Safety Practices; Activity - Federal Laws for Safety; Project - Creating an Employee Handbook; Project - Determining Health Practices in the Workplace; Project - In Your Own Words OSHA in the Workplace; Project - Wellness Practices in the Workplace	Workplace Issues

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Narrative	9781614592082	Personal & Occupational Health & Safety	
			Student/Teacher	Activity	9781614592082	Activity - Hazard Solutions; Activity - Hazard Solutions Teacher Instruction Sheet; Activity - Personal Protective Equipment; Activity - Safety Inspection Checklist; Project - OSHA; Project - Public Service Announcement	Personal & Occupational Health & Safety
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(iii) demonstrate knowledge of occupational health practices in the workplace	Student/Teacher	Narrative	9781614592082	Workplace Issues	

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Activity	9781614592082	Activity - Facts & Opinions in Occupational Safety Practices; Activity - Federal Laws for Safety; Project - Creating an Employee Handbook; Project - Determining Health Practices in the Workplace; Project - In Your Own Words OSHA in the Workplace; Project - Wellness Practices in the Workplace	Workplace Issues
			Student/Teacher	Narrative	9781614592082	Personal & Occupational Health & Safety	
			Student/Teacher	Activity	9781614592082	Activity - Hazard Solutions; Activity - Hazard Solutions Teacher Instruction Sheet; Activity - Personal Protective Equipment; Activity - Safety Inspection Checklist; Project - OSHA; Project - Public Service Announcement	Personal & Occupational Health & Safety
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(D) demonstrate knowledge of personal and occupational health and safety practices in the workplace	(iv) demonstrate knowledge of occupational safety practices in the workplace	Student/Teacher	Narrative	9781614592082	Workplace Issues	
			Student/Teacher	Activity	9781614592082	Activity - Facts & Opinions in Occupational Safety Practices; Activity - Federal Laws for Safety; Project - Creating an Employee Handbook; Project - Determining Health Practices in the Workplace; Project - In Your Own Words OSHA in the Workplace; Project - Wellness Practices in the Workplace	Workplace Issues
			Student/Teacher	Narrative	9781614592082	Personal & Occupational Health & Safety	
			Student/Teacher	Activity	9781614592082	Activity - Hazard Solutions; Activity - Hazard Solutions Teacher Instruction Sheet; Activity - Personal Protective Equipment; Activity - Safety Inspection Checklist; Project - OSHA; Project - Public Service Announcement	Personal & Occupational Health & Safety
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) identify employer expectations and appropriate work habits	(i) identify employer expectations	Student/Teacher	Narrative	9781614592082	Employability Skills	
			Student/Teacher	Activity	9781614592082	Project - Personal Skills; Activity - Skills Flashcards; Activity - Work Habits: Good vs Bad; Activity - Work Habits: Good vs Bad Answer Key	Employability Skills
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(E) identify employer expectations and appropriate work habits	(ii) identify appropriate work habits	Student/Teacher	Narrative	9781614592082	Employability Skills	
			Student/Teacher	Activity	9781614592082	Project - Personal Skills; Activity - Skills Flashcards; Activity - Work Habits: Good vs Bad; Activity - Work Habits: Good vs Bad Answer Key	Employability Skills
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) demonstrate characteristics of good citizenship, including advocacy, stewardship, and community leadership	(i) demonstrate characteristics of good citizenship, including advocacy	Student/Teacher	Narrative	9781614592082	Citizenship Basics	
			Student/Teacher	Activity	9781614592082	Activity - Citizenship: What's it to You?: Project - Serving the Community	Citizenship Basics
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) demonstrate characteristics of good citizenship, including advocacy, stewardship, and community leadership	(ii) demonstrate characteristics of good citizenship, including stewardship	Student/Teacher	Narrative	9781614592082	Citizenship Basics	
			Student/Teacher	Activity	9781614592082	Activity - Citizenship: What's it to You?: Project - Serving the Community	Citizenship Basics
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:	(F) demonstrate characteristics of good citizenship, including advocacy, stewardship, and community leadership	(iii) demonstrate characteristics of good citizenship, including community leadership	Student/Teacher	Narrative	9781614592082	Citizenship Basics	
			Student/Teacher	Activity	9781614592082	Activity - Citizenship: What's it to You?: Project - Serving the Community	Citizenship Basics
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(2) The student develops a supervised agriculture experience program. The student is expected to:	(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity	(i) plan a supervised agriculture experience program as an experiential learning activity	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Activity - Matching Experiences; Activity - Matching Experiences Answer Key; Activity - Selecting the Appropriate SAE; Activity - Selecting the Appropriate SAE Answer Key; Project - SAE Planning; Project - SAE Planning Contract; Student Handout - Factors for SAE Selection	Blue & Gold Basics: SAE Programs
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(2) The student develops a supervised agriculture experience program. The student is expected to:	(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity	(ii) propose a supervised agriculture experience program as an experiential learning activity	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Activity - Matching Experiences; Activity - Matching Experiences Answer Key: Activity - Selecting the Appropriate SAE; Activity - Selecting the Appropriate SAE Answer Key: Project - SAE Planning; Project - SAE Planning Contract: Student Handout - Factors for SAE Selection	Blue & Gold Basics: SAE Programs
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(2) The student develops a supervised agriculture experience program. The student is expected to:	(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity	(iii) conduct a supervised agriculture experience program as an experiential learning activity	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Activity - Matching Experiences; Activity - Matching Experiences Answer Key: Activity - Selecting the Appropriate SAE; Activity - Selecting the Appropriate SAE Answer Key: Project - SAE Planning; Project - SAE Planning Contract: Student Handout - Factors for SAE Selection	Blue & Gold Basics: SAE Programs
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(2) The student develops a supervised agriculture experience program. The student is expected to:	(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity	(iv) document a supervised agriculture experience program as an experiential learning activity	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Activity - Matching Experiences; Activity - Matching Experiences Answer Key: Activity - Selecting the Appropriate SAE; Activity - Selecting the Appropriate SAE Answer Key: Project - SAE Planning; Project - SAE Planning Contract: Student Handout - Factors for SAE Selection	Blue & Gold Basics: SAE Programs
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(2) The student develops a supervised agriculture experience program. The student is expected to:	(A) plan, propose, conduct, document, and evaluate a supervised agriculture experience program as an experiential learning activity	(v) evaluate a supervised agriculture experience program as an experiential learning activity	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Activity - Matching Experiences; Activity - Matching Experiences Answer Key: Activity - Selecting the Appropriate SAE; Activity - Selecting the Appropriate SAE Answer Key: Project - SAE Planning; Project - SAE Planning Contract; Student Handout - Factors for SAE Selection	Blue & Gold Basics: SAE Programs
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(2) The student develops a supervised agriculture experience program. The student is expected to:	(B) apply proper record-keeping skills as they relate to the supervised agriculture experience	(i) apply proper record-keeping skills as they relate to the supervised agriculture experience	Student/Teacher	Narrative	9781614592082	Introduction to Record Keeping	
			Student/Teacher	Activity	9781614592082	Project - Introduction to Record Keeping	Introduction to Record Keeping
			Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: SAE Programs	
			Student/Teacher	Activity	9781614592082	Project - SAE Planning; Project - SAE Planning Contract	Blue & Gold Basics: SAE Programs

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(2) The student develops a supervised agriculture experience program. The student is expected to:	(C) participate in youth leadership opportunities to create a well-rounded experience program	(i) participate in youth leadership opportunities to create a well-rounded experience program	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: What is FFA?	
			Student/Teacher	Activity	9781614592082	Student Handout - Program of Activities; Activity - Program of Activities; Project - FFA Group Lesson Plan	Blue & Gold Basics: What is FFA?
			Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: FFA Officers & Meetings	
			Student/Teacher	Activity	9781614592082	Activity - FFA Officer Duties; Activity - FFA Officer Duties Answer Key	Blue & Gold Basics: FFA Officers & Meetings
			Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: Career Development Events	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(2) The student develops a supervised agriculture experience program. The student is expected to:	(D) produce and participate in a local program of activities using a strategic planning process	(i) produce a local program of activities using a strategic planning process	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: What is FFA?	
			Student/Teacher	Activity	9781614592082	Student Handout - Program of Activities; Activity - Program of Activities; Project - FFA Group Lesson Plan	Blue & Gold Basics: What is FFA?
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(2) The student develops a supervised agriculture experience program. The student is expected to:	(D) produce and participate in a local program of activities using a strategic planning process	(ii) participate in a local program of activities using a strategic planning process	Student/Teacher	Narrative	9781614592082	Blue & Gold Basics: What is FFA?	
			Student/Teacher	Activity	9781614592082	Student Handout - Program of Activities; Activity - Program of Activities; Project - FFA Group Lesson Plan	Blue & Gold Basics: What is FFA?
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(A) develop project construction plans	(i) develop project construction plans	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Activity - Types of Stock Trailers; Project - Gooseneck Stock Trailer Construction - I	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(B) select appropriate construction and finish materials for different types of agricultural equipment	(i) select appropriate construction materials for different types of agricultural equipment	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(B) select appropriate construction and finish materials for different types of agricultural equipment	(ii) select appropriate finish materials for different types of agricultural equipment	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction III	Gooseneck Stock Trailer Construction - III
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(C) estimate materials and costs needed for construction with an emphasis on renewable and eco-friendly materials	(i) estimate materials needed for construction with an emphasis on renewable materials	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I; Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(C) estimate materials and costs needed for construction with an emphasis on renewable and eco-friendly materials	(ii) estimate costs needed for construction with an emphasis on renewable materials	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I; Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(C) estimate materials and costs needed for construction with an emphasis on renewable and eco-friendly materials	(iii) estimate materials needed for construction with an emphasis on ecofriendly materials	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I: Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(C) estimate materials and costs needed for construction with an emphasis on renewable and eco-friendly materials	(iv) estimate costs needed for construction with an emphasis on ecofriendly materials	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I: Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Renewable & Ecofriendly Materials	Gooseneck Stock Trailer Construction - II

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(D) construct one or more agricultural equipment projects using measuring and mechanical skills	(i) construct one or more agricultural equipment projects using measuring skills	Student/Teacher	Narrative	9781614592082	Measurement in Construction	
			Student/Teacher	Activity	9781614592082	Activity - Measuring: Activity - Measuring Teacher Instruction Sheet	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I; Project - Gooseneck Stock Trailer Construction I	Gooseneck Stock Trailer Construction - I; PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II; Project - Gooseneck Stock Trailer Construction II	Gooseneck Stock Trailer Construction - II; PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III; Project - Gooseneck Stock Trailer Construction III	Gooseneck Stock Trailer Construction - III; PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(D) construct one or more agricultural equipment projects using measuring and mechanical skills	(ii) construct one or more agricultural equipment projects using mechanical skills	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Project - Gooseneck Stock Trailer Construction I	
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II: Project - Gooseneck Stock Trailer Construction II	Gooseneck Stock Trailer Construction - I: PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III: Project - Gooseneck Stock Trailer Construction III	Gooseneck Stock Trailer Construction - II: PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques: Project - Building the Fence	Gooseneck Stock Trailer Construction - III: PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(E) integrate a logical order of operations into the construction of an agricultural equipment project	(i) integrate a logical order of operations into the construction of an agricultural equipment project	Student/Teacher	Narrative	9781614592082	Project Management Skills	
			Student/Teacher	Activity	9781614592082	Project - Project Phases & Organization	Project Management Skills
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I: Project - Gooseneck Stock Trailer Construction I	Gooseneck Stock Trailer Construction - I: PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II; Project - Gooseneck Stock Trailer Construction II	Gooseneck Stock Trailer Construction - II; PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III; Project - Gooseneck Stock Trailer Construction III	Gooseneck Stock Trailer Construction - III; PLEASE NOTE: Due to space limitations, the narrative and associated activity are listed on one line. Several lessons and corresponding activities satisfy this standards
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(3) The student demonstrates principles of design and fabrication related to agricultural machinery and equipment. The student is expected to:	(F) use computer-aided design software	(i) use computer-aided design software	Student/Teacher	Narrative	9781614592082	Computer Aided Design Techniques	
			Student/Teacher	Activity	9781614592082	Project - Computer Aided Design Techniques	Computer Aided Design Techniques
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(4) The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures. The student is expected to:	(A) select site and locate enclosures	(i) select site	Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques	
			Student/Teacher	Activity	9781614592082	Assessment I - Planning & Location; Assessment I - Planning & Location Answer Key; Activity - Fence Planning; Project - Building the Fence	Fencing Tools & Techniques
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(4) The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures. The student is expected to:	(A) select site and locate enclosures	(ii) locate enclosures	Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques	
			Student/Teacher	Activity	9781614592082	Assessment I - Planning & Location; Assessment I - Planning & Location Answer Key; Activity - Fence Planning; Project - Building the Fence	Fencing Tools & Techniques
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(4) The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures. The student is expected to:	(B) estimate materials and building costs	(i) estimate materials	Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques	
			Student/Teacher	Activity	9781614592082	Assessment I - Planning & Location; Assessment I - Planning & Location Answer Key; Assessment II - Fencing Materials; Assessment II - Fencing Materials Answer Key; Activity - Determining the Material; Activity - Fence Planning; Project - Building the Fence	Fencing Tools & Techniques
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(4) The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures. The student is expected to:	(B) estimate materials and building costs	(ii) estimate building costs	Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques	
			Student/Teacher	Activity	9781614592082	Assessment I - Planning & Location; Assessment I - Planning & Location Answer Key; Activity - Fence Planning; Project - Building the Fence	Fencing Tools & Techniques
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(4) The student plans, constructs, and maintains fences, corrals, and other agricultural enclosures. The student is expected to:	(C) define appropriate construction methods that are friendly to the environment	(i) define appropriate construction methods that are friendly to the environment	Student/Teacher	Narrative	9781614592082	Fencing Tools & Techniques	
			Student/Teacher	Activity	9781614592082	Assessment I - Planning & Location; Assessment I - Planning & Location Answer Key; Activity - Fence Planning; Project - Building the Fence	Fencing Tools & Techniques
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(A) operate oxy-fuel and plasma cutting equipment safely	(i) operate oxy-fuel cutting equipment safely	Student/Teacher	Narrative	9781614592082	Oxy-Fuel Cutting	
			Student/Teacher	Activity	9781614592082	Activity - Welding Practice	Oxy-Fuel Cutting
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(A) operate oxy-fuel and plasma cutting equipment safely	(ii) operate plasma cutting equipment safely	Student/Teacher	Narrative	9781614592082	Plasma Arc Cutting	
			Student/Teacher	Activity	9781614592082	Activity - Cutting Practice: Activity - Techniques and Tips for Cutting Metal	Plasma Arc Cutting
			Student/Teacher				
			Student/Teacher				
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(B) proficiently demonstrate safe electrical welding	(i) proficiently demonstrate safe electrical welding	Student/Teacher	Narrative	9781614592082	Shielded Metal Arc Welding: Preparation & Safety	
			Student/Teacher	Activity	9781614592082	Project - Inspection & Set-Up	Shielded Metal Arc Welding: Preparation & Safety
			Student/Teacher	Narrative	9781614592082	Gas Metal Arc Welding: Equipment, Set-Up & Maintenance	
			Student/Teacher	Activity	9781614592082	Activity - Gas Metal Arc Welding Set-Up	Gas Metal Arc Welding: Equipment, Set-Up & Maintenance
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(C) use hand and power tools safely in the construction and repair of agricultural equipment safely	(i) use hand tools safely in the construction of agricultural equipment	Student/Teacher	Narrative	9781614592082	Hand Tool ID & Terminology I; Hand Tool ID & Terminology II; Hand Tool ID & Terminology III	PLEASE NOTE: Due to space limitations, all narrative correlations are listed together. Corresponding activities are listed below with specific location listed to the right of each activity.
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology I
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology II
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology III
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(C) use hand and power tools safely in the construction and repair of agricultural equipment safely	(ii) use hand tools safely in the repair of agricultural equipment safely	Student/Teacher	Narrative	9781614592082	Hand Tool ID & Terminology I; Hand Tool ID & Terminology II; Hand Tool ID & Terminology III	PLEASE NOTE: Due to space limitations, all narrative correlations are listed together. Corresponding activities are listed below with specific location listed to the right of each activity.
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology I
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology II
			Student/Teacher	Activity	9781614592082	Project - Tool Presentation	Hand Tool ID & Terminology III
			Student/Teacher				
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(C) use hand and power tools safely in the construction and repair of agricultural equipment safely	(iii) use power tools safely in the construction of agricultural equipment	Student/Teacher	Narrative	9781614592082	Portable Wood Power Tools – I; Portable Wood Power Tools – II: Safety, Operation & ID; Large Wood Power Tools – I	PLEASE NOTE: Due to space limitations, all narrative correlations are listed together. Corresponding activities are listed below with specific location listed to the right of each activity.
			Student/Teacher	Activity	9781614592082	Activity - Tool Set-Up; Project - Wood Power Tool Use	Portable Wood Power Tools – I
			Student/Teacher	Activity	9781614592082	Activity - Drill Bits; Project - Design and Build	Portable Wood Power Tools – II: Safety, Operation & ID
			Student/Teacher	Activity	9781614592082	Activity - Band Saw Puzzle; Project - Large Wood Power Tool Use	Large Wood Power Tools - I: Safety, Operation & ID
			Student/Teacher	Activity	9781614592082	Project - Using the Tools	Large Metal Power Tools: Safety and Operation
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(5) The student demonstrates construction techniques related to design and fabrication of agricultural equipment. The student is expected to:	(C) use hand and power tools safely in the construction and repair of agricultural equipment safely	(iv) use power tools safely in the repair of agricultural equipment	Student/Teacher	Narrative	9781614592082	Portable Wood Power Tools – I; Portable Wood Power Tools – II: Safety, Operation & ID; Large Wood Power Tools – I	PLEASE NOTE: Due to space limitations, all narrative correlations are listed together. Corresponding activities are listed below with specific location listed to the right of each activity.
			Student/Teacher	Activity	9781614592082	Activity - Tool Set-Up; Project - Wood Power Tool Use	Portable Wood Power Tools – I
			Student/Teacher	Activity	9781614592082	Activity - Drill Bits; Project - Design and Build	Portable Wood Power Tools – II: Safety, Operation & ID
			Student/Teacher	Activity	9781614592082	Activity - Band Saw Puzzle; Project - Large Wood Power Tool Use	Large Wood Power Tools - I: Safety, Operation & ID
			Student/Teacher	Activity	9781614592082	Project - Using the Tools	Large Metal Power Tools: Safety and Operation
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(6) The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment. The student is expected to:	(A) incorporate industry standards developed by entities such as American National Standards Institute (ANSI), American Society of Agricultural Engineers (ASAE), or Occupational Safety and Health Administration (OSHA) into the construction of agricultural equipment	(i) incorporate industry standards developed by entities into the construction of agricultural equipment	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(6) The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment. The student is expected to:	(B) design and build equipment in compliance with state and federal laws enforced by agencies such as the U.S. Department of Transportation (DOT)	(i) design equipment in compliance with state laws enforced by agencies	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws: Project - DOT Rules in Your State	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
(6) The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment. The student is expected to:	(B) design and build equipment in compliance with state and federal laws enforced by agencies such as the U.S. Department of Transportation (DOT)	(ii) design equipment in compliance with federal laws enforced by agencies	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws: Project - DOT Rules in Your State	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
(6) The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment. The student is expected to:	(B) design and build equipment in compliance with state and federal laws enforced by agencies such as the U.S. Department of Transportation (DOT)	(iii) build equipment in compliance with state laws enforced by agencies	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws: Project - DOT Rules in Your State	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - II

Knowledge and Skills Statement	Student Expectation	Breakout	Item Type	Citation Type	Component ISBN	Page (s)	Specific Location
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				
			Teacher Only				
(6) The student demonstrates knowledge of laws and regulations related to the construction, design and fabrication of agricultural equipment. The student is expected to:	(B) design and build equipment in compliance with state and federal laws enforced by agencies such as the U.S. Department of Transportation (DOT)	(iv) build equipment in compliance with federal laws enforced by agencies	Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - I	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws: Project - DOT Rules in Your State	Gooseneck Stock Trailer Construction - I
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - II	
			Student/Teacher	Activity	9781614592082	Student Handout - Industry Standards & Compliance Laws	Gooseneck Stock Trailer Construction - II
			Student/Teacher	Narrative	9781614592082	Gooseneck Stock Trailer Construction - III	
			Teacher Only	Narrative			
			Teacher Only				
			Teacher Only				
			Teacher Only				