



Agriculture, Food and Natural Resources (AFNR) Skill Standards Checklist

Student Name	YA Student ID Number
YA Coordinator	YA Consortium
School District	High School Graduation Date
Certification Areas Completed: Required Skills - For EACH Pathway Check ✓ completed areas <input type="checkbox"/> Core Skills <input type="checkbox"/> Safety	Level One Requirements: <i>Students must complete ALL listed below</i> Check ✓ completed areas <input type="checkbox"/> Required Skills <input type="checkbox"/> Minimum of ONE Pathway Unit <input type="checkbox"/> Minimum of 2 semesters related instruction <input type="checkbox"/> Minimum of 450 work hours Level Two Requirements: <i>Students must complete all listed below</i> Check ✓ completed areas <input type="checkbox"/> Required Skills <input type="checkbox"/> Minimum of TWO Pathway Units <input type="checkbox"/> Minimum of 4 semesters related instruction <input type="checkbox"/> Minimum of 900 work hours
Animals Pathway	
<input type="checkbox"/> Animal Basics Unit- REQUIRED FIRST	
<input type="checkbox"/> Large Animal/Herd Unit	
<input type="checkbox"/> Small Animal/Vet Assistant Unit	
Plants Pathway	
<input type="checkbox"/> Plant Basics Unit- REQUIRED FIRST	
<input type="checkbox"/> Crops Unit	
<input type="checkbox"/> Greenhouse/Floral Unit	
<input type="checkbox"/> Landscaping Unit	
Environmental Systems Pathway	
<input type="checkbox"/> Basic Water Resources Unit- REQUIRED FIRST	
<input type="checkbox"/> Advanced Water Resources Unit	

Total Hours Employed	Company Name	Telephone Number
		()
		()

Required Skills

Required of ALL Agriculture, Food and Natural Resources YA Students

CORE SKILLS	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply academic knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Apply career knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Apply Agriculture, Food, and Natural Resources industry knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Communicate effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Act professionally	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Demonstrate customer service skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Cooperate with others in a team setting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Think critically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Exhibit regulatory and ethical responsibilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Use resources wisely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Use basic technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SAFETY	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Follow personal safety requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Maintain a safe work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Demonstrate professional role to be used in an emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rating Scale:

3 = Exceeds entry level criteria | Requires minimal supervision | Consistently displays this behavior

2 = Meets entry level criteria | Requires some supervision | Often displays this behavior

1 = Needs improvement | Requires much assistance & supervision | Rarely displays behavior

Additional Comments –

Environmental Systems Pathway

Basic Water Resources Unit – REQUIRED FIRST	Minimum rating of 2 for EACH Check Rating		
	1	2	3
1. Apply water industry knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treatment & Operations			
2. Read technical drawings & work orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Monitor operating conditions, meters, & gauges	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Collect operational data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Use operations software (SCADA, PLC, GIS/GPS, DBs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Adjust basic operating conditions based on readings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Clean & maintain facility, tanks, filter beds, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Treat &/or dispose of solids/sludge/scale	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lab			
9. Clean & maintain lab equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Collect & store samples	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Preserve chain of custody	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Weigh & measure accurately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Perform calculations & conversions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Conduct basic lab testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment & Quality			
15. Operate tools & equipment safely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Monitor pumps & equipment for correct operation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Environmental Systems Pathway

Advanced Water Resources Unit	Minimum rating of 2 for EACH Check Rating		
	1	2	3
Regulatory			
1. Assist with reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Assist to evaluate security & public health operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Assist with required inspections/audits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treatment & Operations			
4. Assist to prepare chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Assist to add chemicals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Perform start-up & shut-down of pumps & equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Inspect operational equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Assist to troubleshoot operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lab			
9. Prepare microscope slides	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Operate a microscope	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Identify microbes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Assist to analyze lab results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment & Quality			
13. Maintain schedules, communication, & documentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Perform preventive maintenance (PM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Calibrate equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Assist to troubleshoot & repair equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Assist to analyze operational data for productivity/trends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Assist to record, summarize & evaluate budget/usage/billing information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Participate in a system project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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