



Celebrating 100 Years of Career Readiness

2018-2019

Technical Skills Assessment Mechanics and Power Systems

Results by Standard

Assessment: Idaho Mechanics and Power Systems	% Correct
Number tested: 21	18-19
Program 1: CONTENT STANDARD 1.0: Occupational Safety and Health in Ag Mechanics	88.39%
Duty 1: Performance Standard 1.1: Safety Practices	88.39%
Standard 2: 1.1.2. Identify and differentiate between safe and unsafe work practices.	85.71%
Standard 3: 1.1.3. Describe the methods utilized to implement safe work practices.	95.24%
Standard 4: 1.1.4. Identify and explain the purpose of signals and symbols in agricultural safety.	95.24%
Standard 5: 1.1.5. Explain the importance and function of safety training.	90.48%
Standard 6: 1.1.6. Evaluate the importance of occupational safety and health in agriculture mechanics.	66.67%
Standard 7: 1.1.7. Identify and explain the role that various agencies play in regulating safety.	71.43%
Standard 8: 1.1.8. Identify and demonstrate the proper use of personal protection equipment (PPE).	97.62%
Standard 9: 1.1.9. Locate and demonstrate the proper uses of the first aid and emergency equipment.	95.24%
Standard 10: 1.1.10. Maintain a general safe working environment.	83.33%
Standard 11: 1.1.11. Demonstrate the proper disposal of hazardous waste.	95.24%
Standard 12: 1.1.12. Read and understand safety data sheets (SDS).	90.48%
Program 2: CONTENT STANDARD 2.0: TOOLS AND HARDWARE	65.65%
Duty 1: Performance Standard 2.1: Safe and Proper Use of Tools	63.49%
Standard 1: 2.1.1. Determine which hand tool, power tool and measuring and marking devices are most appropriate for a job.	74.60%
Standard 2: 2.1.2. Identify and safe use of hand and power tools utilized in agricultural mechanics.	64.29%
Standard 4: 2.1.4. Measure and apply metric to standard measurement conversions.	34.92%
Standard 5: 2.1.5. Inspect and maintain tools.	80.95%
Duty 2: Performance Standard 2.2: Hardware and Fasteners	78.57%
Standard 1: 2.2.1. Identify and select proper common hardware and fasteners.	78.57%
Program 3: CONTENT STANDARD 3.0: METAL TECHNOLOGY	62.80%
Duty 1: Performance Standard 3.1: Welding	68.25%
Standard 1: 3.1.1. Demonstrate proper safety practices working with metal technology.	66.67%

Standard 2: 3.1.2. Determine uses of metal.	59.52%
Standard 3: 3.1.3. Identify types of metal and the proper welding technique.	68.25%
Standard 5: 3.1.5. Properly select and use oxy-fuel equipment.	85.71%
Standard 6: 3.1.6. Properly select and use shielded metal arc welding equipment.	90.48%
Standard 7: 3.1.7. Properly select and use gas metal arc welding equipment.	28.57%
Standard 10: 3.1.10. Properly select welding consumables (i.e. wire, electrode, gas and filler rod).	71.43%
Duty 2: Performance Standard 3.2: Cold Metal Work	46.43%
Standard 2: 3.2.2. Properly cut threads with tap and die.	66.67%
Standard 3: 3.2.3. Join metal by riveting.	47.62%
Standard 4: 3.2.4. Properly thread steel pipe.	35.71%
Program 4: CONTENT STANDARD 4.0: POWER SYSTEMS	65.99%
Duty 1: Performance Standard 4.1: Engines Technology	63.95%
Standard 1: 4.1.1. Identify the operating principles of internal combustion engines.	45.24%
Standard 2: 4.1.2. Explain the function and operating principles of the fuel, lubrication, governor, and ignition systems.	65.87%
Standard 3: 4.1.3. Locate technical information in electronic and print form.	92.86%
Standard 4: 4.1.4. Troubleshoot and maintain engines.	66.67%
Duty 2: Performance Standard 4.2: Electric Motors	28.57%
Standard 1: 4.2.1. Select motors based on type of application.	28.57%
Duty 3: Performance Standard 4.3: Agricultural Machinery	73.33%
Standard 1: 4.3.1. Identify and perform basic equipment maintenance on agricultural machinery.	68.25%
Standard 2: 4.3.2. Use mathematics to solve equipment calibration problems.	85.71%
Standard 3: 4.3.3. Demonstrate converting common units of measure found in agriculture.	76.19%
Duty 4: Performance Standard 4.4: Hydraulics	95.24%
Standard 2: 4.4.2. Identify the applications of hydraulics in agriculture.	95.24%
Program 5: CONTENT STANDARD 5.0: ELECTRICITY	63.37%
Duty 1: Performance Standard 5.1: Basic Electrical Principles	63.37%
Standard 1: 5.1.1. Demonstrate proper safety practices when working with electricity.	100.00%
Standard 2: 5.1.2. Define basic electrical terminology; identify and explain the basic principles of electricity.	61.90%
Standard 3: 5.1.3. Recognize electrical code requirements for wiring.	64.29%
Standard 4: 5.1.4. Plan and install an electrical circuit.	54.76%
Standard 5: 5.1.5. Measure electrical circuits for voltage, current flow, resistance, and wattage.	80.95%
Standard 7: 5.1.7. Describe the relationship of volts, amps, and ohms in terms of Ohm's Law.	47.62%
Program 6: CONTENT STANDARD 6.0: MATHEMATICAL APPLICATIONS	54.76%
Duty 1: Performance Standard 6.1: Mathematical Applications in Agriculture Mechanics & Power Systems	54.76%
Standard 2: 6.1.2. Demonstrate converting common units of measure found in agriculture.	57.14%
Standard 3: 6.1.3. Explain the meaning of accuracy verses precision.	52.38%

Program 7: CONTENT STANDARD 7.0: INSULATION	47.62%
Duty 1: Performance Standard 7.1: Insulation	47.62%
Standard 1: 7.1.1. Explain the importance of insulation.	33.33%
Standard 2: 7.1.2. Explain the theory behind insulation.	59.52%
Standard 3: 7.1.3. Identify and select insulation materials.	38.10%
Program 8: CONTENT STANDARD 8.0: EMERGING TECHNOLOGIES	86.67%
Duty 1: Performance Standard 8.1: Emerging Technologies in Ag Systems	86.67%
Standard 1: 8.1.1. Identify uses of precision and emerging technology in agriculture.	78.57%
Standard 2: 8.1.2. Understand the potential applications of new technology in agriculture.	92.06%
Program 9: CONTENT STANDARD 9.0: CAREERS	61.90%
Duty 1: Performance Standard 9.1: Careers in Ag Mechanics	61.90%
Standard 1: 9.1.1. Research potential careers in ag mechanics.	85.71%
Standard 3: 9.1.3. Research additional industry certifications available.	38.10%
Program 10: CONTENT STANDARD 10.0: LEADERSHIP TRAINING THROUGH AGRICULTURAL EDUCATION	73.81%
Duty 1: Performance Standard 10.1: Effective Leadership and Leadership Training	71.43%
Standard 2: 10.1.2. Participate in a career development event at the local level or above.	61.90%
Standard 3: 10.1.3. Exhibit leadership skills by demonstrating proper parliamentary procedure.	76.19%
Standard 4: 10.1.4. Participate in a speech or presentation activity.	76.19%
Duty 2: Performance Standard 10.2: School and Community Awareness	80.95%
Standard 1: 10.2.1. Participate in a school improvement or community development project.	80.95%
Program 11: CONTENT STANDARD 11.0: SUPERVISED AGRICULTURAL EXPERIENCE	85.71%
Duty 1: Performance Standard 11.1: Maintain a Supervised Agricultural Experience	85.71%
Standard 1: 11.1.1. Accurately maintain SAE record books.	85.71%
Standard 2: 11.1.2. Investigate the proficiency award areas related to SAE program area.	100.00%
Standard 3: 11.1.3. Actively pursue necessary steps to receive higher degrees in FFA.	71.43%