

Name: _____

Agricultural Power I

Directions:

Evaluate the student by checking the appropriate number or letter to indicate the degree of competency. The rating for each task should reflect **employability readiness** rather than the grades given in class.

Rating Scale:

- 3 Mastered** – can work independently with no supervision
- 2 Requires Supervision** – can perform job completely with limited supervision
- 1 Not Mastered** – requires instruction and close supervision
- N No Exposure** – no experience or knowledge in this area

NOTE: All competencies involving safety require a Number 3 rating.

3	2	1	N	
				The student has mastered the related competencies of Agricultural Science I and II.

3	2	1	N	A. Explaining Principles of Operation	Notes:
				1. Explain the operating principles of a two-cycle engine	
				2. Explain the operating principles of a four-cycle engine	
				3. Identify safety procedures to follow when servicing & repairing a single cylinder engine	
				Other:	

3	2	1	N	B. Using Measuring Tools	Notes:
				1. Demonstrate the use of a micrometer	
				2. Demonstrate the use of a dial caliper	
				3. Demonstrate the use of a telescoping gauge	
				4. Demonstrate the use of a dial indicator	
				5. Demonstrate the use of a torque wrench	
				6. Demonstrate the use of a reject gauge (GO-NO GO gauge)	
				7. Demonstrate the use of a feeler gauge	
				Other:	

3	2	1	N	C. Using Shop Tools and Equipment	Notes:
				1. Demonstrate the use of shop hand tools	
				2. Demonstrate the use of shop power tools	
				3. Demonstrate the use of cleaning equipment	
				Other:	

3	2	1	N	D. Selecting Engine Parts and Fasteners	Notes:
				1. Identify parts of an engine	
				2. Select, install, or assemble parts	
				3. Select correct engine fasteners	
				Other:	

3	2	1	N	E. Using a Service Manual	Notes:
				1. Interpret & apply a service manual	
				2. Select oils, fuels, & lubricants	
				Other:	

3	2	1	N	F. Testing and Analyzing a Single Cylinder Engine System	Notes:
				1. Test & analyze a carburetion system	
				2. Test & analyze a compression system	
				3. Test & analyze an ignition system	
				4. Test & analyze a fuel injection system	
				5. Test & analyze an electrical system	
				6. Test & analyze a lubrication system	
				7. Test & analyze a governor system	
				Other:	

3	2	1	N	G. Servicing a Single Cylinder Engine	Notes:
				1. Clean, adjust, and/or repair a carburetor	
				2. Service & adjust an electrical system	
				3. Grind & adjust valves	
				4. Recondition or replace cylinders & pistons	
				5. Service & repair a lubrication system	
				6. Clean & service a cooling system	
				7. Clean & service an air intake & exhaust system	
				8. Service & repair a mechanical starting system	
				9. Prepare engine for winter storage	
				Other:	

3	2	1	N	H. Leadership and Personal Development for Advanced Students	Notes:
				1. Develop a resume and complete a job application	
				2. Develop a plan for finding a job	
				3. Describe how to apply and interview for a job	
				4. Describe the characteristics needed to develop desirable personal and social skills	
				5. Describe the importance and process of developing better human relationships	
				Unit: Explore a career area by investigating entry-level job opportunities at a local agricultural business and writing a résumé and letter of application for a position.	
				Other:	

3	2	1	N	D. Using the <i>Missouri Agricultural Record Book for Secondary Students</i>	Notes:
				1. Complete forms needed to open the Missouri Agricultural Record Book for Secondary Students	
				2. Complete a budget for the SAE program	
				3. Complete inventory and financial statement forms for the Missouri Agricultural Record Book for Secondary Students	
				4. Complete receipt and expenditure forms in the Missouri Agricultural Record Book for Secondary Students	
				5. Complete additional forms in the Missouri Agricultural Record Book for Secondary Students	
				Unit: Demonstrate the ability to use selected forms in the <i>Missouri Agricultural Record Book for Secondary Students</i> by using a list of sample entries to complete the applicable forms in the book.	
				Other:	