

Equipment and Technical Guide for: AS31 Agricultural Mechanics I

Category	Item	Quantity	Required?
equipment	1 ton chain hoist	1C	yes
equipment	1 ton hydraulic jack	1C	yes
equipment	1/2" drill, variable speed, reversible, portable, corded	4C	yes
tool	1/2" drill, variable speed, portable, cordless	12C	yes
equipment	10" bench grinder	1C	yes
tool	10" tilting arbor saw	1C	yes
equipment	10" to 14" radial arm saw	1C	yes
equipment	12" sliding compound miter saw	3C	yes
equipment	12" woodworking band saw	1C	yes
tool	2", 3", 4", 6", & 8" C-clamps	5C	yes
tool	2', 4', 6' and 8' bar clamp set	5C	yes
tool	3/8" drill, variable speed, portable, reversible, cordless	12C	yes
equipment	32-foot wooden/aluminum ladder	1C	yes
equipment	6" - 8" woodworking vise	5C	yes
equipment	6" bench grinder	1C	yes
equipment	6" machinist vise	4C	yes
equipment	6" or 8" jointer	1C	yes
equipment	6- or 8-foot wooden/aluminum ladder	1C	yes
equipment	Air compressor (with hoses and accessories)	1C	yes
equipment	Air filtration system for wood working and small engines	1C	yes
tool	Battery charger	1C	yes
equipment	Blacksmith anvil	1C	yes
tool	Bolt cutter	1C	yes
equipment	Briggs and Stratton tool set	5C	yes
equipment	Cement mixer	1C	yes
equipment	CNC plasma cutting table and system	1C	yes
equipment	Computer with the latest available software and hardware	1S	yes
tool	Cutter, pipe	1C	yes
equipment	Cylinder truck	2C	yes
equipment	Diesel trainer	1C	yes
equipment	Drill press	2C	yes
equipment	Drill press vise 6" opening	1C	yes
tool	Drill, bits (various sizes)	12C	yes
equipment	Dynamometer, small engine	1C	yes
equipment	Electric AC/DC arc welder	8C	yes
equipment	Engine pulling chain	1C	yes
equipment	Eyewash station	1C	yes
tool	Face shield	4C	yes
equipment	Flammable storage cabinet	2C	yes
equipment	Fuel injection diagnostic kit	1C	yes
equipment	Gas welding bench	2C	yes
equipment	Germicidal cabinet for safety glass storage	1C	yes
tool	Hand truck	1C	yes
equipment	Hinged pipe vise	1C	yes
equipment	Hydraulic system tester	1C	yes
equipment	Impact wrench with sockets and accessories	1C	yes
tool	Inside/outside micrometer	10C	yes
equipment	Jack stand	6C	yes
equipment	Laser printer, 1200x1200 dpi, 35 ppm, network capable	1C	yes
equipment	Grease gun	1C	yes
tool	Log chain	1C	yes
equipment	Measuring wheel	1C	yes

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equipment	Metal and wood lathe	1C	yes
equipment	Metal-cutting band saw	1C	yes
equipment	Meter type tester, to include: 1) timing light; 2) amps, volts, regulator, tester; 3) dwell tach tester; 4) meter ignition; 5) mobile floor stand	1C	yes
equipment	MIG welder	6C	yes
equipment	Miter saw and box	1C	yes
equipment	Mortar pan	1C	yes
equipment	Oil tank, (used for oil)	1C	yes
equipment	Oxyacetylene welder - including tanks, hoses, regulators, wrenches, blowpipes, cutters, tips, and two cylinder trucks	4C	yes
equipment	Paint gun, 1 quart capacity, 50' hose & coupling	1C	yes
equipment	Panel saw	1C	yes
equipment	Parts washer	1C	yes
equipment	Planer	1C	yes
equipment	Plasma air cutting system	1C	yes
equipment	Pneumatics trainer	1C	yes
equipment	Portable electric grinder	4C	yes
equipment	Portable electric nailer	1C	yes
equipment	portable electric plane	1C	yes
tool	Portable electric sabre saw	2C	yes
tool	Portable reciprocating saw	1C	yes
equipment	Portable sprayer	1C	yes
equipment	Portable, electric belt/disc/vibrator sander	4C	yes
equipment	Portable, electric circular saw	4C	yes
equipment	Post auger	1C	yes
tool	Post hole digger	2C	yes
equipment	Pressure washer	1C	yes
equipment	Ratchet-type pipe threader set	1C	yes
equipment	Refrigerator	1C	yes
equipment	Safety glasses (meeting OSHA requirements)	1S	yes
tool	Safety goggles	1:4S	yes
equipment	Sander, 6" belt, 12" disc finishing machine	4C	yes
equipment	Shop vacuum	4C	yes
equipment	small 2 and 4 cycle gasoline engine	10C	yes
equipment	Small engine stand	5C	yes
equipment	Small engine trainer	1C	yes
equipment	Stationary router	1C	yes
equipment	Stationary scroll saw	1C	yes
equipment	Tap and die set, metric	1C	yes
equipment	Tap and die set, N.F. & N.C. - set 1/4" to 1"	1C	yes
equipment	Technology tool center with locker	1C	yes
equipment	TIG welder	2C	yes
equipment	Transit level (tripod and leveling rod)	1C	yes
equipment	Voltage regulator	1C	yes
equipment	Welding table	10C	yes
tool	Wheelbarrow	1C	yes
equipment	Wire stretcher	2C	yes
equipment	Work bench	5C	yes

Category -

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- **equipment** - is a non-expendable, tangible item. It is usually more feasible to repair it rather than replace it with an entirely new unit. It has a unit cost of over \$100.
- **tool** - is an expendable, tangible item. It is usually more feasible to replace it with an entirely new unit rather than repair it. It has a unit cost of less than \$100.
- **curriculum** - is additional curriculum materials.
- **software** - is computer software that is required or can enhance the instruction.
- **training** - is coursework or other professional development for the teacher.
- **subscription** - is for curriculum or supplemental material for a specified period of time.
- **supplemental** - is instructional resources that provide more information about or extend the content of a subject.
- **licensure/certification** - is examinations, license and certification fees for the students.
- **other** - is additional instructional resources.

Quantity - is the number of items needed for the (C) CTE classroom/lab, for the (B) school building, for the (L) LEA, or the number needed based on the number of (S) students in the classroom/lab.

In some cases the number is based on the (W) workstations in the classroom/lab. A classroom may be divided into several kitchen workstations or hospital bed workstations. In these cases the number of items is what is needed to equip one workstation. The number of workstations is based on the anticipated number of students taking that course at one time.

Quantity Examples:

- 1S = one of these items for each student in the classroom/lab
- 1S, 1C = one of these items for each student in the classroom/lab and an additional one in the classroom for the teacher
- 1:4S = one item for every four students in the classroom/lab
- 1B = one of these items per school building.
- 1L = one of these items per LEA (school district).
- 2C = two of these items per CTE classroom/lab.
- 3W-kitchen = three of these items per kitchen workstation in the classroom/lab.

Required?

- **yes** = This is required to teach the course.
- **no** = This is not required to teach the course.