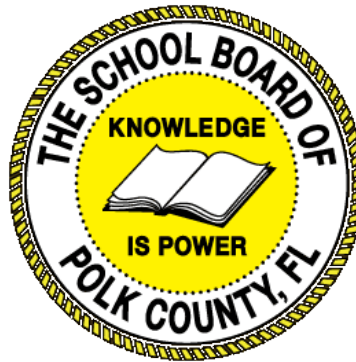


Individual Test Item Specifications

8005120- Technical Agriculture Operations 3

2015



The contents of this document were developed under a grant from the United States Department of Education. However, the content does not necessarily represent the policy of the United States Department of Education, and you should not assume endorsement by the federal government.

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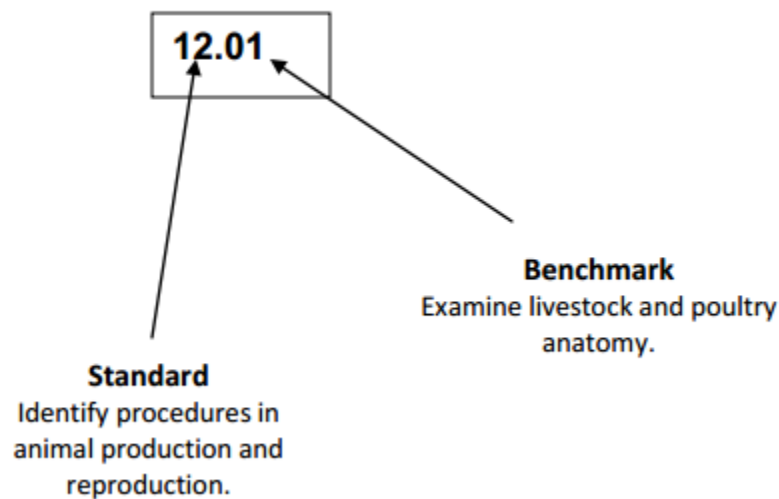
I. Guide to the Individual Benchmark Specifications

Content specific guidelines are given in the *Individual Benchmark Specifications* for each course. The *Specifications* contains specific information about the alignment of items with the Florida Standards. It identifies the manner in which each benchmark is assessed, provides content limits and stimulus attributes for each benchmark, and gives specific information about content, item types, and response attributes.

Benchmark Classification System

- Each Career and Technical Education course has its own set of course standards. The benchmarks are organized numerically, with two numbers separated by a decimal point. The first number is the standard number, and the second number is the benchmark number. You will see these numbers on the Item Specifications for each course.

An example, from Agritechnology 1:



The image above describes the components of a Career and Technical Standard and Benchmark classification system.

Each MAFS benchmark is labeled with a system of letters and numbers.

- The four letters in the *first position* of the label identify the **Subject**.
- The number(s) in the *second position* represents the **Grade Level**.
- The letter(s) in the *third position* represents the **Category**.
- The number in the fourth position shows the **Domain**.
- The number in the *fifth position* identifies the **Cluster**.
- The number in the last position identifies the specific **Benchmark**.



The image above describes the components of a Florida Standard benchmark classification system.

Definitions of Benchmark Specifications

The *Individual Benchmark Specifications* provides standard-specific guidance for assessment item development for the Florida Department of Education Career and Technical Education item banks. For each benchmark assessed, the following information is provided.

Reporting Category	is a grouping of related benchmarks that can be used to summarize and report achievement.
Standard	refers to the standard statement presented in the Florida Standards.
Benchmark	refers to the benchmark statement presented in the Florida Standards. In some cases, two or more related benchmarks are grouped together because the assessment of one benchmark addresses another benchmark.
Item Types	are used to assess the benchmark or group of benchmark.
Cognitive Complexity	ideal level at which item should be assessed.
Benchmark Clarifications	explain how achievement of the benchmark will be demonstrated by students. In other words, the clarification statements explain what the student will do when responding to questions.
Content Limits	define the range of content knowledge and that should be assessed in the items for the benchmark.
Stimulus Attributes	define the types of stimulus materials that should be used in the items, including the appropriate use of graphic materials and item context or content.
Response Attributes	define the characteristics of the answers that a student must choose or provide.
Content Focus	addresses the broad key terms and concepts associated with the examples found in the standards, benchmarks, or benchmark clarifications.
Sample Items	are provided for each type of question assessed. The correct answer for all sample items is provided.

II. Individual Benchmark Specifications

Standard	27.0 Demonstrate welding skills.
Benchmark	27.01 Demonstrate appropriate safety precautions and equipment.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L
Benchmark Clarification	The student will demonstrate appropriate safety precautions and equipment use with regards to welding.
Content Focus	Safety terms or concepts
Content Limits	The content should be limited to commonly used welding equipment or personal protective equipment.
Stimulus Attributes	The stimulus may include situation encountered while welding, proper use and condition of equipment, PPE, or identifying unsafe situations or practices.
Response Attributes	The response may address common materials used in welding. May address equipment used in welding. Recognize hazardous situations.
Sample Item	Of which material should welding gloves be constructed? A. leather B. nylon C. plastic D. rubber Answer: A

Standard	27.0 Demonstrate welding skills.
Benchmark	27.02 Select and use gas to complete a weld.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)= (SA)= (P)=X (ER)=X
Cognitive Complexity Level	M,H
Benchmark Clarification	The student will select and use gas to perform a weld.
Content Focus	Welding gases and/or gases used in the welding process
Content Limits	The content should be limited to SMAW (stick welding), GMAW (mig), TIG, and oxy-acetylene welding.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts or illustrations.
Response Attributes	The response may or may not reference manual, text or machine specifications. May address welding gases and their uses. Responses may include pictures, charts, models, graphs, and or diagrams.
Sample Item	To perform a gas weld on steel, which gas would be mixed with oxygen in a torch? A. acetylene B. argon C. propane D. stargon Answer: A

Standard	27.0 Demonstrate welding skills.
Benchmark	27.03 Select and use electric arc to complete a weld.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will select and use electric arc to perform a weld.
Content Focus	Electrodes, welding processes, types of metals, coatings on metals, environmental conditions, application of product, economy of selection
Content Limits	The content may include but not be limited to SMAW (stick welding), GMAW (mig), and TIG welding.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, graphs, types of equipment, gases, consumables, and other items associated with arc welding.
Response Attributes	The response may include selection of equipment, based on scenario, picture, chart or graph. The response may include selection or uses of consumables, welding processes, or machines
Sample Item	Which electrode is best suited for welding dirty or rusty steel? A. E6011 B. E6013 C. E7014 D. E7018 Answer: A

Standard	27.0 Demonstrate welding skills.
Benchmark	27.04 Select and use MIG to complete a weld.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L,M,H
Benchmark Clarification	The student will select and use electric arc to complete a weld.
Content Focus	Electrodes, welding processes, types of metals, coatings on metals, environmental conditions, application of product and the economy of selection
Content Limits	The content may include but not be limited to MIG (GMAW) process, wire size, and characteristics, gases, environmental conditions, metal types, applications, desired results, and economics of selection.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, graphs, types of equipment, gases, consumables, and other items associated with arc welding.
Response Attributes	The responses may include selection of equipment, based on scenario, picture, chart or graph; selection or uses of consumables, welding processes, or machines; fundamental knowledge of Mig welding machinery.
Sample Item	Which process would be most efficient when production-welding in an indoor environment on new steel? A. mig B. oxy/acetylene C. stick D. soldering Answer: A

Standard	28.0 Service and maintain small gasoline engines.
Benchmark	28.01 Demonstrate appropriate safety precautions and equipment.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=X
Cognitive Complexity Level	M,H
Benchmark Clarification	The student will demonstrate or identify safety precautions and equipment used in technical agricultural operations.
Content Focus	Terms related to safety equipment and precautions
Content Limits	The content should be limited to scenarios or events likely encountered in agriculture environment.
Stimulus Attributes	The stimulus may include graphs, images or charts; scenarios may include actual equipment; must be relevant to small gas engines.
Response Attributes	The responses may include the selection of equipment or safety precautions and/or identifying safety flaws and/or demonstration of safety equipment use.
Sample Item	When removing a lawn mower's blade, which precaution should be practiced to prevent accidental starting? A. drain the fuel tank B. remove blade belts C. unplug spark plug wire D. wear leather gloves Answer: D

Standard	28.0 Service and maintain small gasoline engines.
Benchmark	28.03 Identify major parts and describe the general operation of small gasoline engines (2- and 4-stroke cycle).
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will identify major parts and describe the general operation of small gas engines (2-cycle and 4-cycle).
Content Focus	Parts, functions, and general operations of 2 and 4 cycle gasoline engines
Content Limits	The content may include but not be limited to parts, functions and general operations of small 2 and 4 cycle gasoline engines; accessories used with these engines; fluids used in engine.
Stimulus Attributes	The stimulus may include graphs, images or charts; scenarios or actual equipment; may or may not include engines, engine cycles, parts or functions. The stimulus may or may not include operation parameters.
Response Attributes	The responses may include identification of parts, engine types, or functions; responses may be demonstrated using performance measures.
Sample Item	Which engine valve is open during the compression stroke in a 4-cycle engine? A. exhaust B. intake C. none D. reed Answer: C

Standard	28.0 Service and maintain small gasoline engines.
Benchmark	28.04 Troubleshoot and perform minor repairs on small gasoline engines.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L,M,H
Benchmark Clarification	The students will troubleshoot and perform repairs on small gas engines.
Content Focus	Minor repairs of and/or troubleshooting small gasoline engines
Content Limits	The content may include but not be limited to different types of small engines, repairs, or troubleshooting.
Stimulus Attributes	The stimulus may include charts, graphs, scenarios, actual equipment, pictures, or audio/video stimulus.
Response Attributes	The responses may include performance of troubleshooting/repairs; identification of engine parts, problems, acceptable tolerances; demonstration using performance measures; graphs, charts, pictures, or audio/visual selections.
Sample Item	Which is the proper procedure to follow when changing the crankcase oil in a 4-cycle engine? A. Drain oil from warm engine, filter oil and reuse oil. B. Drain oil from warm engine and replace with new oil. C. Drain the oil from a cold engine and replace with new oil. D. Add new oil to old oil until it reaches the "full" mark on the dipstick. Answer: B

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.01 Explain the scientific principles of hydraulic and transmission systems.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will explain the scientific principles of hydraulic and transmission systems.
Content Focus	Transmissions, brake systems, jacks, tractors, machine hydraulic systems
Content Limits	Items may include but are not limited to transmissions, jacks, brake systems, tractor or machine hydraulic systems. Pneumatic systems may also be included.
Stimulus Attributes	The stimulus may include pictures, graphs, illustrations, scenarios, or charts
Response Attributes	The response may include performance measures, identifying components, systems, or fundamental knowledge of hydraulic or transmission systems used in agricultural operations.
Sample Item	Which law supports the statement that pressure on a liquid in a container is transferred equally to all surfaces? A. Avogadro's law B. Newton's law C. Ohm's law D. Pascal's law Answer: D

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.02 Perform daily operator maintenance checks for equipment.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=
Cognitive Complexity Level	L
Benchmark Clarification	The student will perform daily operator maintenance checks for equipment.
Content Focus	Checks or maintenance on agricultural equipment that should occur daily (as specified in operator's manuals or as common practice)
Content Limits	The content may include but is not limited to agricultural machinery used in shops, fields, or other agricultural environments.
Stimulus Attributes	The stimulus may include scenarios, pictures, charts, or illustrations.
Response Attributes	The response may include performance measures, identifying routine daily checks or maintenance procedures. The response may include pictures, graphs, illustrations and charts. The response may include tools used in procedures or checks or terminology asso
Sample Item	Which procedure should be performed daily on a riding lawn mower? A. Clean the engine's oil filter. B. Sharpen the mower's blade. C. Check the crankcase oil level. D. Check the engine's compression. Answer: C

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.03 Determine the preventive-maintenance procedures, using the equipment's operator manual.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will determine preventive-maintenance procedures while using the equipment's operator manual.
Content Focus	Terms used in owners' manuals of agricultural equipment
Content Limits	The content may include but not be limited to the preventative maintenance procedures listed in equipment used in agriculture such as shop tools, power tools, hand tools, engine or hydraulic powered equipment.
Stimulus Attributes	The stimulus may include scenario, pictures, charts, illustrations or actual equipment or manuals.
Response Attributes	The response may include performing preventive maintenance and/or using the operator's manual; identifying maintenance procedures; recommendations for procedures based on observations or information from manuals, charts, illustrations, pictures scenarios.
Sample Item	Margaret must determine how long to warm-up her tractor's engine prior to performing hard work with it. Her owner's manual provides a chart. Which amount of time would be an appropriate warm-up period for Margaret's tractor if the air temperature is 65°F? A. 10 minutes B. 10-20 minutes C. 20-30 minutes D. more than 30 minutes Answer: A

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.04 Perform scheduled preventive-maintenance procedures.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will perform scheduled preventive-maintenance procedures.
Content Focus	Concepts or terms used in the owner's or service manuals of agricultural equipment
Content Limits	The content may include but is not limited to maintenance procedures of agricultural tools, implements, or systems.
Stimulus Attributes	The stimulus may include scenarios, charts, actual situations, or graphs.
Response Attributes	The responses may include performance of procedures, selection of tasks, descriptions of procedures, identification of procedures, and or demonstration of fundamental knowledge of preventive maintenance procedures.
Sample Item	Tire pressure should be checked daily. Joe's tractor has front tires that are sized 9.5-20. Which pressure level would be appropriate for Joe's front tires? A. 26 psi B. 29 psi C. 40 psi D. 46 psi Answer: C

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.05 Interpret and perform operator's troubleshooting procedures as described in the manual.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=X
Cognitive Complexity Level	M,H
Benchmark Clarification	The student will use manual to assist in performing troubleshooting.
Content Focus	Procedures as described in a manual for agricultural equipment
Content Limits	Including but not limited to records and/or maintenance and services of agricultural related equipment such as engine powered equipment, motor powered equipment, hydraulic equipment, non-power equipment or hand tools. Maintenance, checks and services may
Stimulus Attributes	The stimulus may include pictures, graphs, scenarios, diagrams, charts or models relevant to troubleshooting procedures of agricultural equipment.
Response Attributes	The response may include performing troubleshooting and/or using the operator's manual; identifying troubleshooting procedures; recommendations for procedures based on observations or information from manuals.
Sample Item	The engine on Dave's tractor has been difficult to start recently. Which section of his owner's manual should he read to help him identify the cause? A. Maintenance B. Periodic Service C. Safe Operation D. Troubleshooting Answer: D

Standard	29.0 Perform preventive maintenance, checks, and services for agricultural equipment.
Benchmark	29.06 Keep records of equipment maintenance and services.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will keep records of equipment maintenance and services.
Content Focus	Electrical, engine driven, hydraulic, PTO, or other agricultural equipment of which records are kept
Content Limits	The content may include but is not limited to powered equipment or components of the equipment(engine, electric, hydraulic, PTO) used in agriculture.
Stimulus Attributes	The stimulus may include scenarios, charts, diagrams, illustrations actual situations, or graphs.
Response Attributes	The responses may be demonstrated using performance measures; responses may include fundamental knowledge of manuals; pictures, diagrams, and graphs; descriptions or identification of record keeping procedures.
Sample Item	Which would not need to be recorded in the service log of an excavator when its crankcase oil is changed? A. ambient air temperature B. date of service C. engine hours D. type of oil Answer: A

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.01 Demonstrate appropriate safety precautions and equipment.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will demonstrate appropriate safety precautions and equipment use.
Content Focus	Products, chemicals, environmental or water quality parameters; safety equipment associated with irrigation (use, repair, installation, or modification)
Content Limits	The content may include but is not limited to precautions and/or equipment associated with drip, flood, overhead, or other irrigation types; including environmental, chemical, or mechanical facets.
Stimulus Attributes	The stimulus may include scenarios, charts, graphs, pictures or illustrations.
Response Attributes	The responses may be demonstrated using performance measures; may include fundamental knowledge of safety and precautions with regards to irrigation systems or associated equipment, tools, environment, or situations; may include pictures, diagrams, and gr
Sample Item	Which item used in irrigation systems would pose a high fire or explosion danger for an installer working near a greenhouse heater? A. backflow preventer B. PVC pipe cleaner C. soldering flux D. Teflon tape Answer: B

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.02 Identify the basic components of irrigation systems
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will recognize basic irrigation components used in systems.
Content Focus	Components commonly used in irrigation systems
Content Limits	The content may include but is not limited to systems constructed of copper, steel, PVC, polyethylene tube or other irrigation materials used in residential, commercial or agricultural applications.
Stimulus Attributes	The stimulus may include scenarios, illustrations, pictures, actual components, charts or graphs.
Response Attributes	The responses may be demonstrated using performance measures. The responses may include identifying components of irrigation systems and/or their purposes and/or applications.
Sample Item	Which irrigation head or sprinkler type would be most effective for overhead irrigation used for cold protection in orchards or groves? A. drip emitter B. impulse sprinkler C. mister D. oscillating sprinkler Answer: C

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.03 Differentiate various types of irrigation systems.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	M,H
Benchmark Clarification	The student will differentiate various types of irrigation systems.
Content Focus	Different types of irrigation and materials used for irrigation in commercial, residential, or agricultural applications
Content Limits	The content may include but is not limited to flood, drip, micro, overhead, center-pivot or other irrigation types and/or components of these systems. May include intended uses and applications.
Stimulus Attributes	The stimulus may include a scenario, picture, chart, graph, illustration or diagram.
Response Attributes	The response may be demonstrated using performance measures, may include fundamental knowledge of irrigation types/systems, and/or identifying various types of irrigation systems and/or their components or applications.
Sample Item	Which material would be the least expensive to purchase and install in order to transport water from a main underground supply line to drip emitters in a citrus grove? A. copper tubing B. galvanized pipe C. polyethylene pipe D. PVC pipe Answer: C

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.05 Perform minor repair on an irrigation system.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=X
Cognitive Complexity Level	L,M,H
Benchmark Clarification	The student will perform irrigation repairs.
Content Focus	Including but not limited to components commonly used in irrigation systems
Content Limits	The content may include but is not limited to irrigation types and components used in residential, commercial or agricultural irrigation systems.
Stimulus Attributes	The stimulus may include scenario, graphs, charts, illustrations, pictures, diagrams, and/or models.
Response Attributes	The responses may be demonstrated using performance measures; may include identifying components of irrigations systems, what repairs are needed, and/or making assessments of system's ability to function properly; may include recognizing/identifying prope
Sample Item	Nigel must replace a broken impulse sprinkler head that has 1" male pipe threads. What should he apply to the threads to prevent a leak at the junction of the sprinkler head and the riser pipe's female fitting? A. flux B. PVC glue C. silicon D. Teflon tape Answer: D

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.06 Identify irrigation based on volume and pressure.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M,H
Benchmark Clarification	The student will identify irrigation based on volume and pressure.
Content Focus	Irrigation system and/components used in commercial, residential or agricultural application
Content Limits	The content may include but is not limited to irrigation identification based on pressure and/or volume. May or may not include components of the various systems commonly used.
Stimulus Attributes	The stimulus may include illustrations, scenarios, charts, graphs, pictures or diagrams.
Response Attributes	Responses may be demonstrated using performance measures. Responses may include identifying irrigation type/components based on volume and/or pressure used or needed.
Sample Item	Which irrigation type is best suited for low pressure applications? A. center pivot B. drip system C. impulse sprinkler system D. terrace system Answer: B

Standard	30.0 Design and maintain an irrigation system.
Benchmark	30.07 Calculate water consumption for an irrigation system.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	M,H
Benchmark Clarification	The student will calculate water consumption for an irrigation system.
Content Focus	Irrigation systems and/components used in commercial, residential, or agricultural applications; devices used to assist in calculation of water use
Content Limits	The content may include but is not limited to overhead, drip, center pivot, flood, ditch, or micro irrigation systems used in various agricultural, commercial, or residential applications.
Stimulus Attributes	The stimulus may include scenarios, graphs, charts, diagrams, pictures, or models.
Response Attributes	The responses may be demonstrated using performance measures; fundamental knowledge of water consumption and/or irrigation systems; identify method of calculating water consumption and/or terminology associated with water consumption.
Sample Item	A particular hay crop requires 1/4" of supplemental water per week How much water will need to be added per acre each week? A. 2,700 gallons B. 6,750 gallons c. 13,500 gallons d. 27,000 gallons Answer: B

Standard	31.0 Discuss the role of refrigeration in agriculture.
Benchmark	31.02 Describe the primary components of a refrigeration system.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)= (ER)=X
Cognitive Complexity Level	L,M
Benchmark Clarification	The student will describe primary refrigeration components.
Content Focus	Common components to refrigeration systems including gases used
Content Limits	The content may include but is not limited to gases used in refrigeration systems and/or components of refrigeration systems.
Stimulus Attributes	The stimulus may include scenarios, illustrations, pictures, charts or models.
Response Attributes	The responses may include identifying/selecting the component of the system; selecting/identifying the gas or gases in the system; identifying or selecting the missing components or gases needed for a functioning refrigeration system.
Sample Item	What flows from a refrigeration system's compressor to its condenser? A. high pressure gas B. high pressure liquid C. low pressure gas D. low pressure liquid Answer: A

Standard	32.0 Demonstrate knowledge of new and emerging technologies in agriculture.
Benchmark	32.02 Discuss developing energy sources.
Item Types (MC)-Multiple Choice (SA)-Short Answer (P)-Performance (ER)-Extended Response	(MC)=X (SA)= (P)=X (ER)=
Cognitive Complexity Level	L,M,H
Benchmark Clarification	The student will discuss developing energy sources.
Content Focus	Developing energy sources and components
Content Limits	The content may include but is not limited to solar, wind, hydrogen, natural gas, hydroelectric, tidal, or other emerging sources of energy.
Stimulus Attributes	The stimulus may include pictures, graphs, scenarios, diagrams, charts or models relevant developing energy sources.
Response Attributes	The responses may be demonstrated using performance measures; identifying developing energy sources or components of developing energy sources; comparing/contrasting developing energy sources.
Sample Item	What is often found in abundance when drilling in oil-rich areas? A. acetylene B. hydrogen C. natural gas D. plutonium Answer: C