Individual Test Item Specifications

8722020- Building Trades & Construction Design Technology 2

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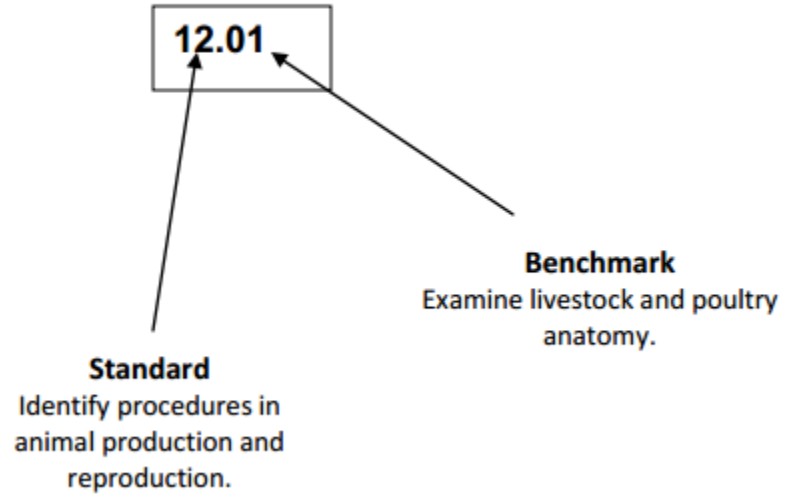
I. Guide to the Individual Benchmark Specifications

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.

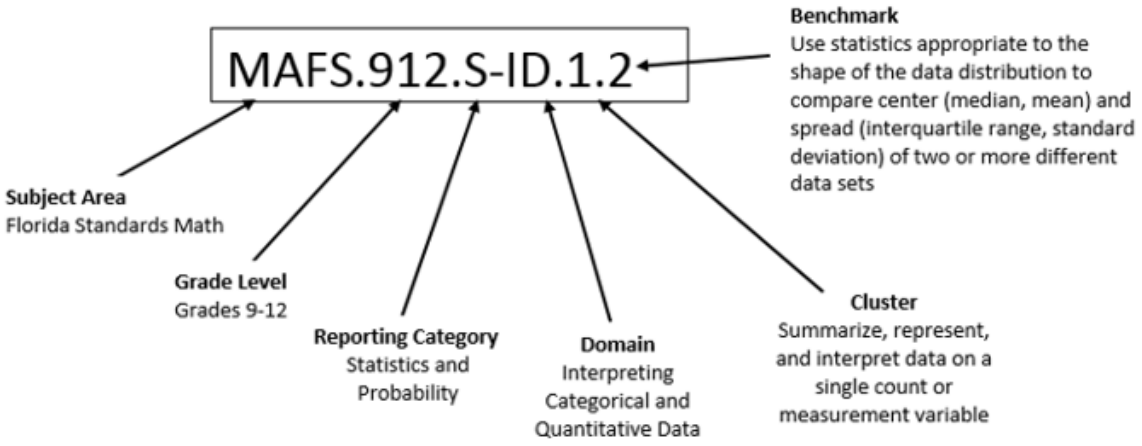
An example, from Agritechnology 1:



The image above describes the components of a Career and Technical Education 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 and 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	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.01 Discuss the carpentry trade.
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 demonstrate knowledge, make observations or discuss the carpentry trade.
Content Focus	Carpentry trade, framer, roofer, floor system, wall systems, roof systems, layout, journeyman, bearing wall, peak, stick frame, trim
Content Limits	The content limits will include, but not be limited to, components of discussing the carpentry trade.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which trade will frame walls on a traditional construction project? A. carpenter B. mason C. plumber D. roofer Answer: A

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.02 Identify and use building materials, fasteners and adhesives.
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 demonstrate knowledge, make observations or identify and use building materials, fasteners and adhesives.
Content Focus	Building materials, adhesives, fasteners, uses of materials, uses of adhesives, uses of fasteners, wood, steel, iron, industrial adhesives, glue, plywood, floor coverings, types of ceiling tiles, cement finishes and coatings, hard boards, pipes, limestone, marble, granite, finished woods, mastic, wood glues, epoxy, various building material types, nails, screws, lags, types of various fasteners, types of various adhesives
Content Limits	The content limits will include, but not be limited to, components of identifying and using building materials, fasteners and adhesives.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Identify the product used to secure rebar to a concrete footing? A. epoxy B. glue C. nail D. screw Answer: A

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.03 Use and maintain hand and power tools.
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 demonstrate knowledge, make observations or use and maintain hand and power tools.
Content Focus	Hammers, axe, screwdrivers, wrenches, power saws, utility knife, sanders, miter saw, compound miter, hand saws, power drill, pipe wrench, jig saw, scroll saw, band saw, circular saw, tool variety and maintenance.
Content Limits	The content limits will include, but not be limited to, components of using and maintaining hand and power tools.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	When maintaining hand tools, what is the reason that you keep your tools protected from moisture? A. avoid corrosion B. damage protection C. storage D. theft Answer: A

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.04 Read and interpret approved plans and specifications for residential and commercial drawings.
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 demonstrate knowledge, make observations or read and interpret approved plans and specifications for residential and commercial drawings.
Content Focus	Plans and specifications, residential drawings, commercial drawings, approved plans, specs, elevations, blueprints, perimeter, diagrams, modes, floor plan, architectural plans, foundation plans, plumbing plan, electrical plan, civil plans
Content Limits	The content limits will include, but not be limited to, components of reading and interpreting approved plans and specifications for residential and commercial drawings.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	An approved set of structural drawings will have what information on the front page to prove that they have been reviewed by an engineer? A. contractor signature B. stamp and seal C. title approval D. verification of address Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.05 Apply distance measurement and elevation leveling techniques.
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 demonstrate knowledge, make observations or apply distance measurement and elevation leveling techniques.
Content Focus	Sea level, angles, altitude, elevations, scale, survey, layout, GPS, distance, measurement, perimeter, square, apply distance
Content Limits	The content limits will include, but not be limited to, components of applying distance measurement and elevation leveling techniques.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	What equipment would a surveyor use to provide an elevation for a construction project? A. laser B. spirit level C. transit D. water level Answer: C

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.06 Survey and develop site layout.
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 demonstrate knowledge, make observations or survey and develop site layout.
Content Focus	Tools for layout, prism, check rod, sea level, angles, altitude, elevations, scale, survey, layout, GPS, distance, measurement, perimeter, square, apply distance, chain, tape measure
Content Limits	The content limits will include, but not be limited to, components of surveying and developing site layout.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The professional that is responsible for developing site layout is know as which type of engineer? A. civil B. electrical C. mechanical D. structural Answer: A

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.07 Construct and strip concrete forms, handle and place concrete, reinforcing materials and finish concrete.
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 demonstrate knowledge, make observations or construct and strip concrete forms, handle and place concrete, reinforcing materials and finish concrete.
Content Focus	Concrete forms, strip forms, handle forms, place concrete, reinforce concrete, finish concrete, materials used, beams, composite materials,
Content Limits	The content limits will include, but not be limited to, components of constructing and stripping concrete forms, handle and place concrete, reinforcing materials and finish concrete.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The reinforcing material placed in concrete forms to add structural integrity to the formed wall is known as what? A. drywall B. metal stud C. rebar D. tapcon Answer: C

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.08 Calculate construct and install floor, wall, ceiling and roof framing.
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 demonstrate knowledge, make observations or calculate, construct and install floor, wall, ceiling and roof framing.
Content Focus	Install floor, install wall, install ceiling, install roof, framing, calculate, calculate floor, calculate wall, calculate ceiling, calculate roof, joist, studs, drywall, paneling, truss, rafter, sheathing, shingle, roof tiles, framing
Content Limits	The content limits will include, but not be limited to, components of calculating, constructing, and installing floor, wall, ceiling and roof framing.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Calculate the amount of 2'x2' ceiling tiles needed to complete installation of an area that is 400 square feet? A. 10 tiles B. 100 tiles C. 200 tiles D. 400 tiles Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.09 Calculate, construct, and install basic stair layout.
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 demonstrate knowledge, make observations or calculate, construct, and install basic stair layout.
Content Focus	Calculate stairs, layout stairs, rise, run, basic stair layout, square, level, incline, decline, type of stairs, stair materials, rough stair install, finish stair install
Content Limits	The content limits will include, but not be limited to, components of calculating, constructing, and installing basic stair layout.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The portion of a basic stair system where a person steps when going up or down a set of steps is called what? A. rafter B. railing C. rise D. run Answer: D

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.10 Understand building science of thermal and moisture protection.
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 demonstrate knowledge, make observations or understand building science of thermal and moisture protection.
Content Focus	Building science, thermal protection, moisture protection, water proof, insulation, A/C, evaporation, ventilation, damp proofing, oxygen, rmax, foil, dry in structure
Content Limits	The content limits will include, but not be limited to, components of understanding building science of thermal and moisture protection.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The moisture protection that is applied under shingles and above the sheathing is identified as what? A. drywall B. felt underlayment C. plastic D. Tyvek Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.11 Calculate, construct, and install roofing applications.
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 demonstrate knowledge, make observations or calculate, construct, and install roofing applications.
Content Focus	Roofing applications, calculate roofing, truss, sheathing, shingles, roof tiles, roofing felt, roofing tar, tar paper, felt underlayment, gable, hip, mansard, shed style, beams, rafters, layout, valley, pitch
Content Limits	The content limits will include, but not be limited to, components of calculating, constructing, and installing roofing applications.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	When you are constructing the highest portion of a roof application, you would be building what? A. gable B. hip C. peak D. valley Answer: C

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.12 Install windows and interior /exterior doors and door hardware.
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 demonstrate knowledge, make observations or install windows and interior /exterior doors and door hardware.
Content Focus	Windows, doors, exterior doors, interior doors, closet doors, calculate door install, double pane, single pane, thermal windows, glazed window, entry door, quality, vinyl, hinges, cranks, knobs, handles, locks, door and window hardware, waterproofing
Content Limits	The content limits will include, but not be limited to, components of installing windows and interior /exterior doors and door hardware.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The hardware that allows a door to pivot is called what? A. crank B. doorstop C. hinge D. knob Answer: C

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.13 Calculate, construct and install exterior finishing.
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 demonstrate knowledge, make observations or calculate, construct and install exterior finishing.
Content Focus	Calculate interior finishes, calculate exterior finishes, exterior finish types, install exterior finishes, paint, spray texture, vinyl, vinyl siding, aluminum siding, concrete siding, planks, log, wood, cedar siding, natural siding, stucco, synthetic stucco, texture, types of stucco, waterproofing,
Content Limits	The content limits will include, but not be limited to, components of calculating, constructing and installing exterior finishing.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	A cementitious material installed on the exterior of a structure is known as what? A. cement mix B. stucco C. tile D. Voltrex Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.14 Construct drywall installation and finishing techniques.
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 demonstrate knowledge, make observations or construct drywall installation and finishing techniques.
Content Focus	Drywall installation, finishing techniques, texture and finish, spray texture, orange peel, knock down, skip coat, plaster, sponge, trowel, bead, tape, mud, drywall mud, application process
Content Limits	The content limits will include, but not be limited to, components of constructing drywall installation and finishing techniques.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	A typical application of drywall takes place where? A. exterior walls B. interior walls C. roof D. slab Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.15 Design cabinet installations and fabrications.
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 demonstrate knowledge, make observations or design cabinet installations and fabrications.
Content Focus	Cabinet design, cabinet install, cabinet fabrication, cabinet layout, types of finishes, real wood, synthetic wood, hinges, knobs, lazy Susan, drawers, pantry, rollers, faces, boxes, uppers, lowers, cabinet colors and varieties
Content Limits	The content limits will include, but not be limited to, components of designing cabinet installations and fabrications.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	When installing a cabinet box on an inside corner, what is the name of a platform that will spin 360 degrees? A. lazy Stacey B. lazy Susan C. corner Caty D. corner Carl Answer: B

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.16 Calculate and install window, door, floor and ceiling trim.
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 demonstrate knowledge, make observations or calculate and install window, door, floor and ceiling trim.
Content Focus	Moldings, trim, calculate and install trim, window trim, door trim, floor trim, ceiling trim, miter saw, compound cuts, coping saw, trim nails, glue, types of trim, calculate trim, trim hardware and accessories, tray ceiling, crown molding, brick molding, inside corner, outside corner, radius corner,
Content Limits	The content limits will include, but not be limited to, components of calculating and installing window, door, floor and ceiling trim.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which type of trim is installed where the wall meets the ceiling? A. ceiling decor B. ceiling molding C. crown molding D. queen molding Answer: C

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.17 Calculate and construct cold-formed steel framing.
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 demonstrate knowledge, make observations or calculate and construct cold-formed steel framing.
Content Focus	Calculate cold form steel, framing, framing techniques, metal studs, metal trusses, metal cuts, carborandime, methods of install, difference from wood, advantages of cold form steel, disadvantages of cold form steel
Content Limits	The content limits will include, but not be limited to, components of calculating and constructing cold-formed steel framing.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Calculate how many metal studs you would need for a wall 80' long with metal studs being placed at 2' on center. A. 40 studs B. 80 studs C. 160 studs D. 320 studs Answer: A

Standard	10.0 Demonstrate rough and finish carpentry skills.
Benchmark	10.18 Design and layout suspended ceilings.
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 demonstrate knowledge, make observations or design and layout suspended ceilings.
Content Focus	Design suspended ceilings, layout suspended ceilings, uses of suspended ceilings, types of suspended ceilings, hardware, aluminum, install methods, tools needed for install, measure, cut ceiling tiles, types of ceiling tile material
Content Limits	The content limits will include, but not be limited to, components of designing and laying out suspended ceilings.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The finished product that is installed using a suspended ceiling is referred to as? A. ceiling tiles B. ceiling drywall C. ceiling paneling D. ceiling trusses Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.01 Describe and discuss orientations to the masonry trade.
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 demonstrate knowledge, make observations or describe and discuss orientations to the masonry trade.
Content Focus	Masonry trade, mason, brick layer, trowel, orientations to masonry trade, brick, block, string line, masonry union, geographical areas, types of masonry construction, laborer, apprentice, journeyman, familiar with masonry terms
Content Limits	The content limits will include, but not be limited to, components of describing and discussing orientations to the masonry trade.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	The trade term for a concrete block is referred to as a CMU. What does the acronym CMU stand for? A. Cement Masonry Unit B. Codes Masons Use C. Concrete Masonry Unit D. Construction Material Unit Answer: C

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.02 Identify and select masonry tools and equipment.
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 demonstrate knowledge, make observations or identify and select masonry tools and equipment.
Content Focus	Select masonry tools, identify masonry tools, masonry equipment, mixer, hoe, wheelbarrow, shovel, hammer, bucket, mud boards, scaffolding, boards, planks, trowel, striker, jointer, sponge, rake, margin trowel, tuck point, line dog, line block, twig, speed lead, laborer, hood carrier, brick tongs, fork lift, pallet,
Content Limits	The content limits will include, but not be limited to, components of identifying and selecting masonry tools and equipment.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which of the following tools is used to finish a masonry joint on concrete blockwork so that it is aesthetically pleasing? A. chisel B. file C. sled D. steel brush Answer: C

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.03 Use, maintain and store masonry hand tools, power tools and equipment safely and in proper working order.
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 demonstrate knowledge, make observations or use, maintain and store masonry hand tools, power tools and equipment safely and in proper working order.
Content Focus	Maintain masonry tools, store masonry tools, masonry hand tools, proper working order, winterize, select masonry tools, identify masonry tools, masonry equipment, mixer, hoe, wheelbarrow, shovel, hammer, bucket, mud boards, scaffolding, boards, planks, trowel, striker, jointer, sponge, rake, margin trowel, tuck point, line dog, line block, twig, speed lead, laborer, hood carrier, brick tongs, fork lift, pallet, proper care of each
Content Limits	The content limits will include, but not be limited to, components of using, maintaining and storing masonry hand tools, power tools and equipment safely and in proper working order.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	In order to properly maintain your masonry saw, what must you do to it on a daily basis in order to increase the longevity of the machine? A. clean air filter B. oil it C. sharpen blades D. wash it Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.04 Read and interpret measurements, drawings and specifications for masonry building projects.
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 demonstrate knowledge, make observations or read and interpret measurements, drawings and specifications for masonry building projects.
Content Focus	Interpret measurements, read measurements, read drawings, read specifications, block work layout, masonry building projects, masonry specifications, drawings and measurements
Content Limits	The content limits will include, but not be limited to, components of reading and interpreting measurements, drawings and specifications for masonry building projects.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	How long is a standard CMU block? A. 8" B. 12" C. 16" D. 20" Answer: C

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.05 Demonstrate safe and proper procedures for set up / tear down and maintaining masonry work sites and projects.
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 demonstrate knowledge, make observations or demonstrate safe and proper procedures for set up / tear down and maintaining masonry work sites and projects.
Content Focus	Set up masonry project, tear down masonry site, masonry project, safe procedures, maintenance,
Content Limits	The content limits will include, but not be limited to, components of demonstrating safe and proper procedures for setting up / tearing down and maintaining masonry work sites and projects.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	To protect newly installed masonry walls during times of inclement weather, what must be done to maintain a safe masonry project? A. brace walls B. cover walls C. shore walls D. temper walls Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.06 Utilize the tools and equipment used for mixing mortar.
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 demonstrate knowledge, make observations or utilize the tools and equipment used for mixing mortar.
Content Focus	Mixing tools, mixing equipment, mix, mortar, wheelbarrow, pan, shovel, mortar mixer, hoe, hammer
Content Limits	The content limits will include, but not be limited to, components of utilizing the tools and equipment used for mixing mortar.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	When mixing small amounts of mortar in a bucket, what is attached to a drill to assist with proper mixing? A. drill bit B. paddle C. wand D. wisp Answer: B

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.07 Analyze the factors that affect the consistency of mortar.
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 demonstrate knowledge, make observations or analyze the factors that affect the consistency of mortar.
Content Focus	Consistency, mortar, factors, sand, water, mixing time, set time, hydration, dehydration, mortar type
Content Limits	The content limits will include, but not be limited to, components of analyzing the factors that affect the consistency of mortar.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which ingredient of mortar affects the consistency as it applies to strength? A. cement B. lime C. sand D. water Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.08 Determine masonry ratios, their strengths and applications of mortar mixtures M, S, N, O and K.
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 demonstrate knowledge, make observations or determine masonry ratios, their strengths and applications of mortar mixtures M, S, N, O and K.
Content Focus	Type N, Type M, Type O, Type S, Type K, mortar, mortar ratio, application, strength,
Content Limits	The content limits will include, but not be limited to, components of determining masonry ratios, their strengths and applications of mortar mixtures M, S, N, O and K.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Identify which type of mortar is recommended for using in a stucco application? A. Type K B. Type O C. Type N D. Type S Answer: D

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.09 Mix various types of mortar, considering application and pounds per square inch (PSI) strength.
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 demonstrate knowledge, make observations or mix various types of mortar, considering application and pounds per square inch (PSI) strength.
Content Focus	Type N, Type M, Type O, Type S, Type K, mortar, mortar ratio, application, strength, PSI, pounds per square inch
Content Limits	The content limits will include, but not be limited to, components of mixing various types of mortar, considering application and pounds per square inch (PSI) strength.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Choose which of the following is not a type of mortar? A. Type K B. Type O C. Type S D. Type T Answer: D

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.10 Layout square corners using the 3-4-5 (or Pythagorean Theorem) and building instrument methods for masonry projects.
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 demonstrate knowledge, make observations or layout square corners using the 3-4-5 (or Pythagorean Theorem) and building instrument methods for masonry projects.
Content Focus	Pythagorean Theorem, square, corners, layout, masonry blockwork measurements, methods
Content Limits	The content limits will include, but not be limited to, components of laying out square corners using the 3-4-5 (or Pythagorean Theorem) and building instrument methods for masonry projects.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	In order to properly square a building using the Pythagorean theorem, what would be the diagonal dimension between a 3' measurement one direction and 4' dimension the other direction? A. 5' B. 7' C. 12' D. 25' Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.11 Layout and install dry bonds for masonry block corner leads projects.
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 demonstrate knowledge, make observations or layout and install dry bonds for masonry block corner leads projects.
Content Focus	Corner leads, dry bonds, lead poles, layout, masonry block corner, measuring alternative, positioning, starting corners, first course, no mortar, visual check, # of units, pattern bond, CMU
Content Limits	The content limits will include, but not be limited to, components of laying out and installing dry bonds for masonry block corner leads projects.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	What is the purpose of laying a dry bond? A. construct a lead B. determine color C. determine height D. determine layout Answer: D

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.12 Layout and build corner leads for masonry block projects.
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 demonstrate knowledge, make observations or layout and build corner leads for masonry block projects.
Content Focus	Corner leads, dry bonds, lead poles, layout, masonry block corner measuring alternative, positioning, starting corners, first course, no mortar, visual check, # of units, pattern bond, CMU
Content Limits	The content limits will include, but not be limited to, components of laying out and building corner leads for masonry block projects.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	What must be installed by a mason prior to building the main wall structure of a building? A. corner leads B. course C. door opening D. window opening Answer: A

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.13 Identify and describe various masonry units and installation techniques.
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 demonstrate knowledge, make observations or identify and describe various masonry units and installation techniques.
Content Focus	Brick, block, masonry unit, half block, split faced block, whole block, finished block, bond pattern, structural bond, English, Flemish, American, Dutch, sailor, soldier, closure
Content Limits	The content limits will include, but not be limited to, components of identifying and describing various masonry units and installation techniques.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which is not a masonry unit? A. brick B. block C. stone D. tile Answer: D

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.14 Implement the methods of putting up the line.
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 demonstrate knowledge, make observations or implement the methods of putting up the line.
Content Focus	Install line, methods, line poles, corner poles, laying to the line, line blocks, line dogs, stretchers, trig or twig, nail
Content Limits	The content limits will include, but not be limited to, components of implementing the methods of putting up the line.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which item is used to hold the string line straight while laying brick or block? A. brick B. chuck C. trowel D. twig Answer: D

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.15 Utilize pointing tools to strike mortar joints.
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 demonstrate knowledge, make observations or utilize pointing tools to strike mortar joints.
Content Focus	Mortar joints, strike, pointing, patching, clean excess mortar, joiner, sled, burrs, tuck-pointing, damp joint, trowel, slick
Content Limits	The content limits will include, but not be limited to, components of utilizing pointing tools to strike mortar joints.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which tool would be used to properly strike a mortar joint on a concrete block wall? A. brush B. jointer C. rake D. sponge Answer: B

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.16 Identify and use the various types of trowels.
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 demonstrate knowledge, make observations or identify and use the various types of trowels.
Content Focus	Trowel, mason trowel, margin trowel, tuck pointer, brick trowel, point and patch trowel, striker, sled
Content Limits	The content limits will include, but not be limited to, components of identifying and using the various types of trowels.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which trowel is best used to fit in tight places when pointing and patching a structure? A. drywall trowel B. finish trowel C. margin trowel D. mason trowel Answer: C

Standard	11.0 Demonstrate masonry skills.
Benchmark	11.17 Mix and apply stucco to a project.
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 demonstrate knowledge, make observations or mix and apply stucco to a project.
Content Focus	Stucco, mix, application methods, mixer, trowel, bucket, paddle bit, brush, skip coat, spray Tec, sand finish, pebble finish
Content Limits	The content limits will include, but not be limited to, components of mixing and applying stucco to a project.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Synthetic stucco is referred to as which of the following? A. Stowe B. Stucd C. Synstuc D. Synths Answer: A

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.01 Identify, describe and use various painting tools and equipment.
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 demonstrate knowledge, make observations or identify, describe and use various painting tools and equipment.
Content Focus	Painting tools, brushes, painting equipment, sprayer, roller, knaps, paint roller, handle, extension handle, spray paint, latex, sanding
Content Limits	The content limits will include, but not be limited to, components of identifying, describing and using various painting tools and equipment.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	What process takes place after a painter sprays a coat of paint on to ensure proper coverage? A. back rolling B. brushing C. cutting in D. sponging Answer: A

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.02 Erect an extension ladder and a scaffold.
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 demonstrate knowledge, make observations or erect an extension ladder and a scaffold.
Content Focus	Extension ladder, scaffold, safety procedures, kick plate, handrails, scaffold boards, scaffold braces, walk planks, mud sills, OSHA
Content Limits	The content limits will include, but not be limited to, components of erecting an extension ladder and a scaffold.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which type of ladder is best used to reach very high walls? A. extension ladder B. single section ladder C. stair ladder D. step ladder Answer: A

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.03 Prepare surfaces for application of finishes.
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 demonstrate knowledge, make observations or prepare surfaces for application of finishes.
Content Focus	Pressure wash, dust, broom, clean, prepare surface, dry, prime, base coat, brush, sander, point and patch
Content Limits	The content limits will include, but not be limited to, components of preparing surfaces for application of finishes.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	In regards to masonry walls, what must be done to the surface of the CMU to ensure that the finish paint will cover properly? A. brush B. paint C. prime D. wash Answer: C

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.04 Identify and describe various painting and application techniques.
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 demonstrate knowledge, make observations or identify and describe various painting and application techniques.
Content Focus	Brush, various techniques, application techniques, roller, sprayer, sponge, back roll, splatter
Content Limits	The content limits will include, but not be limited to, components of identifying and describing various painting and application techniques.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	When applying very high quantities of paint in a short period of time, what technique is preferred? A. paintbrush B. roller C. sponge D. sprayer Answer: D

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.05 Apply finishes to a project including primers, paints, stains varnishes, wall coverings and textures.
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 demonstrate knowledge, make observations or apply finishes to a project including primers, paints, stains varnishes, wall coverings and textures.
Content Focus	Finishes, primers, paints, stains, washes, glosses, flats, interior, exterior, wall coverings, textures, wall paper, stucco, vinyl, natural, colors, brush, various techniques, application techniques, roller, sprayer, sponge, back roll, splatter
Content Limits	The content limits will include, but not be limited to, components of applying finishes to a project including primers, paints, stains varnishes, wall coverings and textures.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	What provides a clear coat that adds shine to the surface it is applied to? A. epoxy B. paint C. primer D. varnish Answer: D

Standard	12.0 Demonstrate painting and decorating skills.
Benchmark	12.06 Use appropriate techniques and materials for clean-up.
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 demonstrate knowledge, make observations or use appropriate techniques and materials for clean-up.
Content Focus	Materials, techniques, soap and water, turpentine, acids, thinners, acetone, washout, pressure water, covering, pointing, catch basins, bucket, scrubbing, rub and press
Content Limits	The content limits will include, but not be limited to, components of using appropriate techniques and materials for clean-up.
Stimulus Attributes	Question stem, vocab, video, graphs, diagrams, pictures, performance task, selection, demonstrations and oral explanations via media clips.
Response Attributes	The response may include terms, phrases, sentences, images, diagrams, or charts. Student created written responses or computer generated responses may be used.
Sample Item	Which type of acid is used to clean finished brick upon completion of the installation process? A. hydrochloric B. muriatic C. nitric D. sulfuric Answer: B