Teacher Preparation Guide
For Use with the
Career Essentials: Assessments

Discover, Develop and Validate Students’ Knowledge and Skill

CABINETMAKING ASSESSMENT
Introduction to the Career Essentials: Assessments

The Career Essentials: Assessments can help both students and teachers discover students’ occupational strengths. By implementing the Career Essentials: Assessments, students and teachers can collaboratively develop a life-long learning plan to validate and enhance students’ skills and knowledge. Assessment data results are beneficial for students, teachers and administrators in validating student learning, and improving programs and their accountability.

This teacher preparation guide is a tool developed for instructors to help students capitalize on their unique strengths, which can improve individual student performance and provide a clear way forward for student success.

The Career Essentials: Assessments Teacher Preparation Guide provides an easy-to-follow road map to implement the Career Essentials: Assessments. The guide is not meant to be curriculum nor should it replace that which already exists. It provides specific information regarding the Career Essentials: Assessments so teachers can identify existing curriculum areas that may need additional emphasis.

The guide ultimately helps teachers provide students with learning opportunities. Its goal is for students to become comfortable and successful with the Career Essentials: Assessments.

Inside the guide, teachers will find:

• Major content areas of the assessment
• A blueprint of the assessment competency areas
• A checklist of the various competency areas within the assessment
• Access to a trade- or technical-specific online 10-question demo assessment
• Resources used for the assessment development
• Access to an employability skills based, online 10-question practice assessment to help students navigate the assessment system
# Table of Contents

What are Career Essentials: Assessments? ........................................................................................................ 4

Using the Career Essentials: Assessments ........................................................................................................ 4

Preparing Students for the Career Essentials: Assessments ............................................................................. 5

Workplace-Ready Skills ....................................................................................................................................... 6

Assessment Competency Areas .......................................................................................................................... 7

Academic Core and Critical Skill Areas ............................................................................................................... 7

Connections to National Standards .................................................................................................................... 7

Student Tools: Access Directions for the Trade- or Technical Specific Online 10-Item Demo .......... 8

Student Tools: Test-Taking Reminders ............................................................................................................... 8

Student Testing Tips ............................................................................................................................................. 8

Student Tools: Cabinetmaking Blueprint and Competency Area Knowledge Checksheets ........... 9

Summary and Quick Glance Testing Reminders ............................................................................................... 9

Cabinetmaking Blueprint ................................................................................................................................... 10

Knowledge Checksheets ................................................................................................................................... 15

Helpful Tips and Reminders for Students ....................................................................................................... 26

Sample Assessment Questions .......................................................................................................................... 27

Resources ............................................................................................................................................................ 30
What are Career Essentials: Assessments?
Career Essentials: Assessments are online assessments that evaluate technical and employability skills and knowledge. They are the way ahead for the next generation of our American workforce, and they help candidates validate their technical skills and knowledge to potential employers. They also help local instructors demonstrate the value of their programs, while supporting local industries with a pool of potential employees that has been tested by a system they can trust.

Each assessment was developed by a panel of industry, high school and college/postsecondary subject matter experts (SMEs) using national technical standards. Career Essentials: Assessments were created by industry to ensure relevance to entry-level skills, meet Perkins IV accountability requirements and provide certificates to students who achieve industry-defined scores. They ensure your students are workforce ready.

Career Essentials: Assessments incorporate photographs, videos, animations and illustrations to ensure clarity for each technical question. Drag-and-drop and multiple-choice questions appeal to visual and kinesthetic learners and test content knowledge rather than test-taking abilities. Even simple multiple-choice questions are brought to life through pictures and animations.

Assessments are available in more than 40 trade, industrial and technical areas. A rigorous and educationally sound process captures critical competencies, standards and criteria as defined by industry.

Academic core and critical skill areas also exist in each assessment. State-level academic curriculum specialists identified connections to national academic standards.

Each one-hour assessment includes 50 questions. Under the supervision of a proctor, the integrity of each test is ensured by offering multiple unique versions of the assessment, which measure the same core and critical competencies. Even within the same version, questions and answers are displayed in varying orders to prevent test takers from copying others. The Career Essentials: Assessments are designed to be user-friendly and intuitive for students.

Using the Career Essentials: Assessments
Every classroom is unique. You can use the Career Essentials: Assessments in a way that best suits your program and students. The following directions are SkillsUSA’s suggested and preferred method to implement the assessments so that your students gain the most from the results.

The most important step in the Career Essentials: Assessments process is to select the correct assessment for your students. You are key to the selection process. Without your involvement, the wrong assessment may be selected. Assessment titles do not provide enough information for proper selection. Review the various assessment categories that best correspond to your program.

Next, look at each of the assessment titles within the category and the corresponding blueprint. The blueprint will tell you which competencies and subjects are addressed in the assessment.

Cross-walk the various blueprints with your classroom curriculum. The assessment blueprint will show what’s emphasized and how competencies are weighed. Please remember the Career Essentials: Assessments are based on national industry standards, so the assessment may not perfectly align with the existing curriculum. Content may need to be added or emphasized to better prepare students for the Career Essentials: Assessments.
Once you have selected the assessment that best fits your program, administer that Career Essentials: Assessments at the beginning of your students’ final program year. This could be considered a pre-test.

Assessment results are available as soon as your student completes the assessment. The report provides you with a gap analysis to identify your students’ learning needs according to each competency area within the assessment. Dynamic reports compare your students’ performance to the current state and national averages. Reports also enable you to track a student’s progress on an individual basis. The assessment pre-testing results provide you with a benchmark for your students and identify student learning gaps. This data may help you adjust your own curriculum and identify areas that may need more or less emphasis. The data can be shared with students so everyone can focus on learning areas that need improvement during the school year.

Then, at the end of the school year or program semester, administer your specific Career Essentials: Assessments a second time as a post-test.

Use post-test data to improve or adjust curriculum once again for your next program year. This way, curriculum adjustments are made using the student testing data rather than arbitrarily making adjustments.

This pre- and post-test process is a “win-win” situation for the teacher and especially the student! To ensure a quality process, SkillsUSA is ready to help at any time.

Preparing Students for the Career Essentials: Assessments
Provide each student with a copy of their trade- or technical-specific Career Essentials: Assessments Blueprint. Do this at the beginning of your course. Review and discuss the blueprint with your class, providing insight on the assessment weighting and what is emphasized.

Have students discuss how they can assist each other to prepare for the assessment.

Place the Career Essentials: Assessments Blueprint on the classroom wall. The blueprint will help students focus on the appropriate course content areas that align with the assessment. It will also help everyone to be aware of the program’s goals and expectations.

The Career Essentials: Assessments at a Glance

- Select the correct assessment title. Do not have someone select the assessment for you, as there may be several titles that may relate to your program
- Review the assessment blueprint that best aligns with your existing curriculum
- Identify gaps in your curriculum, and use additional resources to enhance or align the curriculum
- Share the assessment blueprint with the students so everyone is aware of the expectation
- Have your students take the assessment at the beginning of their final program year as a pre-test
- Use pre-test data to identify learning gaps or strengths of individual students or the class
- Remediate the students using the data analysis from pre-test to enhance, emphasize and adjust learning objectives
- Have your students take the assessment a second time (as a post-test) at the end of the program year to determine learning gains/gaps
- Use post-test data to improve or adjust curriculum for your next program year
Administer the Career Essentials: Assessments as a pre-test to identify student gaps. If possible, pre-test your students at the beginning of their final program year to identify learning gaps both individually and as a class. The data will provide an excellent “road map” to prepare students to take the assessment again (post-test) at the end of the program. Using the data, tailor the instruction to better prepare your students.

Use the Career Essentials: Assessments competency areas checksheets included in this guide to encourage class discussion and help students identify strengths and weaknesses.

Use the pre-test data to ascertain problematic learning areas. Have students identify discussion topics based on the various competency areas and their pre-test data results. Exercises, demonstrations and even questions can be developed by the students using their textbooks or other resources listed in this guide.

Assign homework that aligns to the assessment blueprint. Focus on a competency area within the assessment. Using the checksheets in this guide, have students develop questions and potential answers using the resources identified when developing the assessment. Use the questions for class discussion or “quiz bowl” activities.

Have students take the Career Essentials: Assessments or technical-specific online 10-question demo assessment. This could be a homework assignment or done in class 30 days prior to taking the assessment the second time (as a post-test). This not only will provide students with specific sample questions and potential answers, but it will also allow students to experience the online system again and become more familiar with the types of questions they may encounter when taking the actual assessment.

Following the demo assessment, discuss the experience students had. What question(s) did they not understand? Did they have difficulty navigating the online system? This experience will help students be more comfortable and confident when taking the final assessment.

Discuss as a class or individually with students which question(s) were difficult. Facilitate a discussion to glean more information regarding why certain answers were wrong. Offer techniques students can use to better determine correct answers.

**Workplace-Ready Skills**

Through the Career Essentials: Assessments, you have the option for your students to take an Employability Assessment. This Career Essentials: Assessments tests a student's workplace-ready skills such as communication, teamwork, time management and more. It can be used for any student in any occupational area as a practice test or a separate assessment.

If you use the Employability Assessment as a practice test have students take it in class. Not only can the Employability Assessment help students become familiar with the navigational tools of the assessment system, but it can also measure and make your students aware of another important skill set. It may also help them become comfortable in the testing environment.

See the Career Essentials: Assessments website for more information: [www.careeressentials.org/assessments](http://www.careeressentials.org/assessments)

The Employability Assessment is *not* intended to familiarize students with the cabinetmaking assessment content.

**Please note:** For all Career Essentials: Assessments to be valid, instructors cannot be present in the room where their students will be taking the test. A proctor is required. Proctors can be other instructors, a school administrator or school counselor.
Assessment Competency Areas
Career Essentials: Assessments Cabinetmaking Assessment covers 10 major technical competency areas (unit areas). In the online assessment, these 10 competencies are tested with 50 interactive, multiple-choice items. Each competency area has a different number of items. The chart lists the major technical competency areas and the percentage of the assessment in each one.

Technical Competency Areas for Cabinetmaking

<table>
<thead>
<tr>
<th>Competency</th>
<th>Percentage of Area Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apply wood veneers and plastic laminates</td>
<td>8%</td>
</tr>
<tr>
<td>Assemble, fasten and install components</td>
<td>18%</td>
</tr>
<tr>
<td>Cut and shape components</td>
<td>12%</td>
</tr>
<tr>
<td>Design and layout</td>
<td>4%</td>
</tr>
<tr>
<td>Finish surfaces</td>
<td>6%</td>
</tr>
<tr>
<td>Transport and install cabinets</td>
<td>8%</td>
</tr>
<tr>
<td>Demonstrate employability skills</td>
<td>4%</td>
</tr>
<tr>
<td>Practice power tool and electrical safety</td>
<td>8%</td>
</tr>
<tr>
<td>Use measurement skills</td>
<td>4%</td>
</tr>
<tr>
<td>Identify commonly used tools, materials, and methods</td>
<td>12%</td>
</tr>
</tbody>
</table>

Math Skills
- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- Simplify numerical expressions
- Solve practical problems involving percentages
- Measure angles
- Find surface area and perimeter of two-dimensional objects
- Apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures
- Construct three-dimensional models
- Apply Pythagorean Theorem
- Solve practical problems involving complementary, supplementary and congruent angles
- Use measures of interior and exterior angles of polygons to solve problems
- Find arc length and the area of a sector

Science Skills
None Identified

Language Arts Skills
- Provide information in conversations and in group discussions
- Provide information in oral presentations
- Demonstrate use of nonverbal communication skills, such as eye contact, posture and gestures using interviewing techniques to gain information

Connections to National Standards
State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards
- Numbers and operations
- Algebra
- Geometry
- Measurement
- Data analysis and probability
- Problem solving
- Communication
• Connections
• Representation


Science Standards
None Identified

Source: McREL compendium of national science standards. To view and search the compendium, visit: www2.mcrel.org/compendium

Language Arts Standards
• Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
• Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
• Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and non-print texts
• Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
• Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.readwritethink.org/standards/index.html.

Access Directions for the Trade- or Technical-Specific Online 10-Item Demo Assessment
Have your students copy and paste this link www.careeressentials.org/assessments/demo-our-assessments into their browser. The sample programmatic questions will give you and your students an idea of the types of questions on the assessment and how the questions are generally written.

Student Tools:
Test-Taking Reminders
Encourage your students to have good study habits. Below are basic reminders to better prepare students for life-long learning and workplace success. You may want to have this discussion at the beginning of the year to encourage students to incorporate these strategies.
• Develop a regular study schedule
• Identify a specific location to study
• Always take notes while studying in class or on your own
• Take short breaks during your study session
• Perform “mini-testing” to make sure you understand and comprehend the program concepts
• Join small study groups to help focus on the program content
• If you need special assistance in testing, tell your teacher or counselor so they can make accommodations.

Student Testing Tips
The most important tip for your students is to be prepared mentally and physically for the testing session. Make sure to tell them to get plenty of rest and eat healthy. Suggest they wear comfortable and appropriate clothing to the testing session. If they are able to bring items to the testing session, such as a non-programmable calculator, make sure they have the items ready the night before. Have students check our website at www.careeressentials.org/wp-content/uploads/2017/07/Permitted-Testing-Tools-Aids.pdf for permitted tools or job aids that can be used during testing. The more organized they are before the testing period, the more relaxed
they will be during the actual testing session.

Encourage your students to be relaxed and positive. If they begin to panic during the testing, suggest they take some deep breaths to relax and think positive thoughts.

Do not rush through the questions. Instruct your students to read the question and potential answers thoroughly. Tell them to make sure they know exactly what the question is asking before answering. Let them know that if they are unsure, they can mark the question and return to it.

Use process of elimination. If your students are not sure of the correct answer, tell them to study the potential answers and eliminate the ones that they know are not correct.

If all else fails, tell students to guess. After they have exhausted all options, tell them to take their best guess at the correct answer. If they have studied the content area, they may intuitively know the correct answer. The Career Essentials: Assessmentssystem does not penalize students for guessing and they may guess correctly!

**Student Tools:**

**Cabinetmaking Blueprint and Competency Area Knowledge Checksheets**
The next section provides the assessment blueprint and detailed topics within each competency area covered within the cabinetmaking assessment. Photocopy and share the following blueprints and checksheets with your students so they can better prepare for each of the competency areas within the cabinetmaking assessment.

**Summary and Quick Glance Testing Reminders**
The Career Essentials: Assessments process is designed for program and curriculum improvement. This is a continuous improvement process to better meet the educational needs of your students by strategically using data results.

Advanced planning and preparation is a key component in implementing this process. Below we have attempted to summarize the steps in the suggested Career Essentials: Assessments implementation pre- and post-test process.

- Identify the correct assessment for your program
- Share the selected assessment blueprint with your students, parents, advisory board members and others. Place the blueprint on the classroom wall
- Pre-test your students at the beginning of their final programmatic year
- Use the data results to identify “learning gaps”
- Share the pre-test data with the student(s)
- Tailor learning experiences to meet student needs and supplement current curriculum
- Develop homework assignments around the competency knowledge checksheets located in this guide
- Have students take the demo 10-question practice test 30 days prior to the post-test
- For students that need more time in the actual testing environment, use the Employability Assessment to review navigational tools and to make students more comfortable in the testing lab
- Finally, review the blueprint and knowledge checksheets in totality before taking the post-test to ensure students are aware of the expectation

Using the above steps, you and your students should see improvement in the post-test assessment score report and a percentage of knowledge gained.
Cabinetmaking Blueprint

This Blueprint contains the subject matter content of this Career Essentials Assessment.

Note: To fully prepare for the Cabinetmaking SkillsUSA Championships contest, refer to the current year’s SkillsUSA Championships Technical Standard, now included with your SkillsUSA Professional Membership. If you need help in accessing this benefit, contact the SkillsUSA Membership Office at 1-800-355-8422.

Standards and Competencies
Competencies are weighted throughout the assessment. The percent shown is the weight of the competency. There are 50 questions per assessment.

Apply wood veneers and plastic laminates
- Apply adhesives, edge banding and wood edges
- Apply laminate to core
- Cut plastic to size
- Fit plastic laminate joints
- Trim edges

Assemble, fasten and install components
- Apply clamping devices
- Assemble drawers, panel door and joint
- Assemble ends, back, bracing and face frame
- Attach molding/trim
- Fasten parts with nails, screws and staples
- Fasten top to casework
- Glue boards edge to edge
- Install catches, doors, drawer rail and guides, hinges, pulls and knobs, shelves and track and slide for sliding doors as per plans.
- Reinforce joints with block/dowel
- Prepare cabinets for shipping
- Sand by hand
- Putty nails holes and voids
- Trim edges
- Apply edge banding
- Fit wood plugs
Cut and shape components

- Cut butt joint, counter top, dado/rabbet joint, doors, doweled joint, and drawer guides and runners (rails).
- Cut drawer front, sides, back and bottom
- Cut ends, back and interior bracing
- Cut face frame, miter joints, molding trim, mortise and tenon joints, frames and panels, shelving, spline joints and tongue and groove joints
- Cut out for sink
- Edge (shape) counter top
- Plane stock to the correct thickness
- Square solid stock
- Demonstrate how to mark face, sides, and edges of material trued
- Cut glass to fit cabinet mounting requirement
- Assemble door jamb and trim
- Fit and apply trim to casework

Design and lay out

- Determine materials from a blueprint
- Draw detailed plans
- Estimate labor and material cost
- Sketch shop plans
- Draw basic problems in shop geometry
- Develop cutting list from engineered drawing
- Plan and select hardware for use on project

Finish surfaces

- Apply lacquers, paints, stains, varnishes/polyurethanes and wood filler to nail or screw holes
- Clean surfaces
- Remove excess glue
- Sand surfaces
- Swell dents
- Identify finishing equipment
- Identify different finishing materials
- Apply wax
- Apply linseed oil
- Apply wood filler
- Apply sealer or wash coat
- Polish surfaces
- Swell dents
- Apply top coat
- Apply stain
- Apply grain filler or glaze
Transport and install cabinets
- Fasten cabinet to wall
- Trim cabinets
- Prepare cabinets for transporting
- Identify methods of installing architectural woodwork
- Fasten furring and nailers to walls
- Install pre-assembled base and tall cabinets
- Install and adjust doors and drawers
- Install glass and mirrors in casework
- Assemble counter tops
- Locate and measure space for cabinet installation

Demonstrate employability skills
- Follow instructions provided by supervisor
- Demonstrate customer service skills
- Use effective verbal and written communication skills
- Prepare a typewritten resume

Practice power tool and electrical safety
- Inspect and properly use power tools
- Inspect and properly use equipment
- Recognize proper OSHA related safety standards
- Set-up, adjust, and operate radial arm saw to cut stock
- Fabricate joints with mechanical fasteners
- Set-up, adjust, and operate circular, table, variety saw to cut stock
- Set-up, adjust, and operate planer to plane stock
- Set-up, adjust, and operate boring machine to bore stock
- Set-up, adjust, and operate jointer to joint stock

Use measurement skills
- Use ruler, tape measure, and framing square to measure components.
- Calculate amount of needed materials given a materials list and/or sketch.
- Calculate board footage
- Read scales (imperial, metric, board measure)
- Measure stock to length, width, and thickness

Identify commonly used tools, materials, and methods
- Identify commonly used tools and their accessories.
- Describe the system for fastener sizing.
- Compare relative strength of joining methods.
- Identify joining methods.
- Describe the nature and properties of wood
- Identify the parts and uses of layout and measuring hand tools
- Identify the parts and uses of edge cutting hand tools
- Identify the parts and uses of edge cutting power tools
- Identify the parts and uses of sanding hand tools
- Identify the parts and uses of sanding power tools
- Identify the parts and uses of sawing hand tools
- Identify the parts and uses of sawing power tools
- Identify the parts and uses of drilling and boring hand tools
∞ Identify the parts and uses of drilling and boring power tools
∞ Draw and label the parts of a tree and explain how it grows
∞ Identify the methods of cutting lumber
∞ Demonstrate understanding of the methods of drying lumber
∞ Identify lumber by NHLA grade
∞ Name the different kinds of panel products
∞ Name the common panel cores
∞ Identify methods of slicing veneers
∞ Describe the type of matching for individual veneer pieces
∞ Describe the type of matching for veneered panel faces
∞ Identify the parts and uses of edge banding machines
∞ Describe adhesives and their common uses for woodwork joinery
∞ Identify equipment used for gluing
∞ List types of abrasives
∞ Identify abrasive grits sizes and results from use

Committee Identified Academic Skills
The SkillsUSA national technical committee has identified that the following academic skills are embedded in the cabinetmaking training program and assessment:

Math Skills
∞ Use fractions to solve practical problems
∞ Use proportions and ratios to solve practical problems
∞ Simplify numerical expressions
∞ Solve practical problems involving percentages
∞ Measure angles
∞ Find surface area and perimeter of two-dimensional objects
∞ Apply transformations (rotate or turn, reflect or flip, translate or slide, and dilate or scale) to geometric figures
∞ Construct three-dimensional models
∞ Apply Pythagorean Theorem
∞ Solve practical problems involving complementary, supplementary and congruent angles
∞ Use measures of interior and exterior angles of polygons to solve problems
∞ Find arc length and the area of a sector

Science Skills
None Identified

Language Arts Skills
∞ Provide information in conversations and in group discussions
∞ Provide information in oral presentations
∞ Demonstrate use of nonverbal communication skills, such as eye contact, posture and gestures using interviewing techniques to gain information

Connections to National Standards
State-level academic curriculum specialists identified the following connections to national academic standards.
Math Standards
∞ Numbers and operations ∞ Measurement ∞ Communication
∞ Algebra ∞ Data analysis and probability ∞ Connections
∞ Geometry ∞ Problem solving ∞ Representation


Science Standards
None Identified

Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks/.

Language Arts Standards
∞ Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
∞ Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
∞ Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language and genre to create, critique and discuss print and non-print texts
∞ Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
∞ Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.readwritethink.org/standards/index.html.
Competency Area 1: Apply wood veneers and plastic laminates

Knowledge Check

How well do you know how to:

1. Apply adhesives, edge banding and wood edges?
   - Very Well: ❑
   - Somewhat Well: ❑
   - Not Well: ❑

2. Apply laminate to core?
   - Very Well: ❑
   - Somewhat Well: ❑
   - Not Well: ❑

3. Cut plastic to size?
   - Very Well: ❑
   - Somewhat Well: ❑
   - Not Well: ❑

4. Fit plastic laminate joints?
   - Very Well: ❑
   - Somewhat Well: ❑
   - Not Well: ❑

5. Trim edges?
   - Very Well: ❑
   - Somewhat Well: ❑
   - Not Well: ❑

Areas I Need To Review:
## Competency Area 2: Assemble, fasten and install components

### Knowledge Check

<table>
<thead>
<tr>
<th>How well do you know how to:</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apply clamping devices?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Assemble drawers, panel door and joint?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Assemble, back, bracing and face frame?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Attach molding/trim?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fasten parts with nails, screws and staples?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Fasten top to casework?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Glue boards edge to edge?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Install catches, doors, drawer rail and guides, hinges, pulls and knobs, shelves and track and sliding doors as per plans?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Reinforce joints with block/dowel?</td>
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<td></td>
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<tr>
<td>10. Prepare cabinets for shipping?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>11. Sand by hand?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Putty nail holes and voids?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Trim edges?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Apply edge banding?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>15. Fit wood plugs?</td>
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</tr>
</tbody>
</table>
Competency Area 3: Cut and shape components

Knowledge Check

How well do you know how to: 

<table>
<thead>
<tr>
<th></th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cut butt joint, counter top, dado/rabbet joint, doors, doweled joint, and drawer guides and runners (rails)?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>2. Cut drawer front, sides, back and bottom?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>3. Cut ends, back and interior bracing?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>4. Cut face frame, miter joints, molding trim, mortise and tendon joints, frames and panels, shelving, spine joints and tongue and groove joints?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>5. Cut out for sink?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>6. Edge (shape) counter top?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>7. Plane stock to the correct thickness?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>8. Square solid stock?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>9. Demonstrate how to mark face, sides and edges of material trued?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>10. Cut glass to fit cabinet mounting requirement?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>11. Assemble door jamb and trim?</td>
<td>☐</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>12. Fit and apply trim to casework?</td>
<td>☐</td>
<td>☐</td>
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</tbody>
</table>

Areas I Need To Review:
Competency Area 4: Design and lay out

Knowledge Check

<table>
<thead>
<tr>
<th>How well do you know how to:</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Determine materials from a blueprint?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Draw detailed plans?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. Estimate labor and material cost?</td>
<td></td>
<td></td>
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<tr>
<td>4. Sketch shop plans?</td>
<td></td>
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<tr>
<td>5. Draw basic problems in shop geometry?</td>
<td></td>
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</tr>
<tr>
<td>6. Develop cutting list from engineered drawing?</td>
<td></td>
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</tr>
<tr>
<td>7. Plan and select hardware for use on project?</td>
<td></td>
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</tr>
</tbody>
</table>

Areas I Need To Review:
# Competency Area 5: Finish surfaces

## Knowledge Check

**How well do you know how to:**

<table>
<thead>
<tr>
<th></th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Apply lacquers, paints, stains, varnishes/polyurethanes and wood filler to nail or screw holes?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Clean surfaces?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Remove excess glue?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Sand surfaces?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>5. Swell dents?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>6. Identify finishing equipment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>7. Apply wax?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>8. Apply linseed oil?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Apply wood filler?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>10. Apply sealer or wash coat?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>11. Polish surfaces?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>12. Swell dents?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>13. Apply top coat?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>14. Apply stain?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>15. Apply grain filler or glaze?</td>
<td>☐</td>
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</tr>
</tbody>
</table>

Areas I Need To Review:
**Competency Area 6: Transport and install cabinets**

**Knowledge Check**

<table>
<thead>
<tr>
<th>How well do you know how to?</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fasten cabinet to wall?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Trim cabinets?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Prepare cabinets for transporting?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Identify methods of installing architectural woodwork?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fasten furring and nailers to walls?</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Install pre-assembled base and tall cabinets?</td>
<td></td>
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<tr>
<td>7. Install and adjust doors and drawers?</td>
<td></td>
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<tr>
<td>8. Install glass and mirrors in casework?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Assemble counter tops?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Locate and measure space for cabinet installation?</td>
<td></td>
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</tr>
</tbody>
</table>

Areas I Need To Review:
**Competency Area 7: Demonstrate employability skills**

**Knowledge Check**

<table>
<thead>
<tr>
<th>How well do you know how to:</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Follow instructions provided by supervisor?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2. Demonstrate customer service skills?</td>
<td>[ ]</td>
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<tr>
<td>3. Use effective verbal and written communication skills?</td>
<td>[ ]</td>
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</tr>
<tr>
<td>4. Prepare a typewritten résumé?</td>
<td>[ ]</td>
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</tr>
</tbody>
</table>

Areas I Need To Review:
**Competency Area 8: Practice power tool and electrical safety**

**Knowledge Check**

<table>
<thead>
<tr>
<th>How well do you know how to:</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inspect and properly use power tools?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>2. Inspect and properly use equipment?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>3. Recognize proper OSHA related safety standards?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>4. Set-up, adjust, and operate radial arm saw to cut stock?</td>
<td>☐</td>
<td>☐</td>
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</tr>
<tr>
<td>5. Fabricate joints with mechanical fasteners?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>6. Set-up, adjust, and operate circular, table, variety saw to cut stock?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>7. Set-up, adjust and operate planer to plane stock?</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td>8. Set-up, adjust, and operate boring machine to bore stock?</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>9. Set-up, adjust, and operate jointer to joint stock?</td>
<td>☐</td>
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</tr>
</tbody>
</table>

Areas I Need To Review:
Review Dates:

Competency Area 9: Use measurement skills

Knowledge Check

How well do you know how to:

1. Use ruler, tape measure, and framing square to measure components?  □   □   □

2. Calculate amount of needed materials given a materials list and/or sketch?  □   □   □

3. Calculate board footage?  □   □   □

4. Read scales (imperial, metric, board measure)?  □   □   □

5. Measure stock to length, width, and thickness?  □   □   □

Areas I Need To Review:
Competency Area 10: Identify commonly used tools, materials, and methods

**Knowledge Check**

<table>
<thead>
<tr>
<th>How well do you know how to:</th>
<th>Very Well</th>
<th>Somewhat Well</th>
<th>Not Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify commonly used tools and their accessories?</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Describe the system for fastener sizing?</td>
<td></td>
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<tr>
<td>3. Compare relative strength of joining methods?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Identify joining methods?</td>
<td></td>
<td></td>
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<tr>
<td>5. Describe the nature and properties of wood?</td>
<td></td>
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<tr>
<td>6. Identify the parts and uses of layout and measuring hand tools?</td>
<td></td>
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<tr>
<td>7. Identify the parts and uses of edge cutting power tools?</td>
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<tr>
<td>8. Identify the parts and uses of sanding hand tools?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Identify the parts and uses of sanding power tools?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Identify the parts and uses of sawing hand tools?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Identify the parts and uses of sawing power tools?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Identify the parts and uses of drilling and boring hand tools?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Identify the parts and uses of drilling and boring power tools?</td>
<td></td>
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</tr>
<tr>
<td>14. Draw and label the parts of a tree and explain how it grows?</td>
<td></td>
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</tbody>
</table>
Competency Area 10: Identify commonly used tools, materials, and methods
(continued)

Knowledge Check

How well do you know how to:
15. Identify the methods of cutting lumber?

16. Demonstrate understanding of the methods of drying lumber?

17. Identify lumber by NHLA grade?

18. Name the different kinds of panel products?

19. Name the common panel cores?

20. Identify methods of slicing veneers?

21. Describe the type of matching for individual veneer pieces?

22. Describe the type of matching for veneered panel faces?

23. Identify the parts and uses of edge banding machines?

24. Describe adhesives and their common uses for woodwork joinery?

25. Identify equipment used for gluing?

26. List types of abrasives?

27. Identify abrasive grit sizes and results from use?

Areas I Need To Review:
Access Directions to the Trade- or Technical-Specific Online 10-question Demo Assessment
Access the Web link www.careeressentials.org/assessments/demo-our-assessments with your browser. The sample programmatic questions will help give you an idea of the types of questions on the assessment and how they are generally written.

Test-Taking Reminders
Implementing good study habits is essential for any test or class. Below are basic reminders to better prepare you for life-long learning and workplace success. Incorporate these strategies into your everyday habits.

• Develop a regular study schedule
• Identify a specific location to study
• Always take notes while studying in class or on your own
• Take short breaks during your study session
• Perform “mini-testing” to make sure you understand and comprehend the program concepts
• Join small study groups to help focus on the program content
• If you need special assistance in testing, tell your teacher or counselor so he or she can make accommodations

Student Testing Tips
The most important tip for you is to be prepared mentally and physically for the testing session. Make sure to get plenty of rest and eat healthy. Wear comfortable and appropriate clothing to the testing session. Find out if you can bring items to the testing session, such as a non-programmable calculator, and make sure you have the items ready the night before. Check the website at www.careeressentials.org/wp-content/uploads/2017/07/Permitted-Testing-Tools-Aids.pdf for permitted tools or job aids that can be used during testing. The more organized you are before the testing period, the more relaxed you will be during the actual testing session.

Be relaxed and positive. If you begin to panic during the testing, take some deep breaths to relax, and think positive thoughts.

Do not rush through the questions. Read the question and potential answers thoroughly. Make sure you know exactly what the question is asking before answering. If you are unsure, note the question and return to it. Use process of elimination. If you are not sure of the correct answer, study the potential answers and eliminate the ones that you know are not correct.

If all else fails – guess. After you have exhausted all options, take your best guess at the correct answer. If you have studied the content area, you may intuitively know the correct answer. The Career Essentials: Assessments does not penalize you for guessing, and you may guess correctly!
Cabinetmaking Demo Test Questions

Question 1
When crosscutting on the tablesaw, using the fence, it is UNSAFE to "cut past a square." This means that the workpiece dimension parallel to the fence must be:

Choose one answer.

A) equal to or greater than the distance from the fence to the blade.
B) less than the distance from the fence to the blade.
C) the square of the distance from the fence to the blade.
D) square to the miter gauge grooves.

Correct Answer: A

Question 2
Which of the following tools is NOT used to remove dents from a wood surface?

Choose one answer.

A) Rag
B) Iron
C) Putty knife
D) Water

Correct Answer: C
Question 3
When applying edgebanding to the edge of a panel, which system would be the MOST EFFICIENT?

Choose one answer.

A) Automatic edgebander and roll edgebanding stock
B) Iron on pre-glued edgeband
C) Contact adhesive and roll edgebanding stock
D) Peel and stick edgebanding

Correct Answer: A

Question 4
Which of the following methods would be the LEAST desirable for attaching a top to a base cabinet?

Choose one answer.

A) Glue, face nail and putty nail holes
B) Recessed figure 8 fitting screwed into place
C) Corner blocks and screws from below
D) Dado, glue and blind staple

Correct Answer: A

Question 5
Allowing finish to cure before shipping will prevent:

Choose one answer.

A) doors opening properly.
B) protective covering from sticking to the finish.
C) flashing of the stain material.
D) orange peel.

Correct Answer: B
Question 6
The second face on rough sawn lumber is machined flat by a:

Choose one answer.

A) planer

B) table saw

C) joiner

D) band saw

Correct Answer: A

9/13/14
Additional Resources
Below are resources that will be helpful in preparing for the Assessments which were created based on industry standards nationwide. Use the Career Essentials: Assessments Blueprint as a guideline for competencies tested. Use the resources below to find curriculum or additional study guides for industry standards.

Cabinetmaking Resources:
www.careeressentials.org/assessments/assess-ment-resources