SkillsUSA

Career Essentials: *Assessments*

Career Essentials: Assessments

Teacher Preparation Guide For Use with the Career Essentials: Assessments

Discover, Develop and Validate Students' Knowledge and Skill

CARPENTRY 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

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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.

For complete information regarding the Career Essentials: Assessments and to see all assessment areas, please visit the website at:
www.careeressentials.org/assessments

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: Assessmentstrade- 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 take an Employability Assessment. This 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: Assessmentswebsite for more information: *www.careeressentials.org/assessments*

The Employability Assessment is *not* intended to familiarize students with the carpentry 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 Carpentry Assessment covers 12 major technical competency areas (unit areas). In the online assessment, these 12 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 Carpentry

Competency	Percentage of Area Assessment
Safety	14%
Using and Maintaining Hand Tools	10%
Using and Maintaining Power Tools	10%
Read and Interpret Plans and Elevations from Blueprints	8%
Understanding Material Handling	6%
Understand Concrete, Reinforcing Materials and Forms	6%
Identify and Understand Floor, Wall, and Ceiling Systems	16%
Understand Roof Framing	8%
Understand Exterior Finishes	4%
Understand Drywall Installation	4%
Understand Stair Systems	8%
Understand the Installation of Windows and Doors	6%

Academic Core and Critical Skill Areas
Academic core and critical skill areas also exist in each assessment. The SkillsUSA national technical committee identified that the following academic skills are embedded in the carpentry training program and assessment:

Math Skills
- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- 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
- Make comparisons, predictions and inferences using graphs and charts
- Find slope of a line
- Solve practical problems involving complementary, supplementary and congruent angles
- Solve problems involving symmetry and transformation

Science Skills
- Use knowledge of work, force, mechanical advantage, efficiency and power
- Use knowledge of simple machines, compound machines, powered vehicles, rockets and restraining devices
- 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
- Demonstrate comprehension of a variety of informational texts
- Use text structures to aid comprehension
- Identify words and phrases that signal an author's organizational pattern to aid comprehension
- Understand source, viewpoint, and purpose of texts

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

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

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: www.nctm.org/standards/content.aspx?id=16909

Science Standards
- Understands the structure and function of cells and organisms
- Understands relationships among organisms and their physical environment
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry

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 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

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

Student Tools:
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.

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. Other questions may have clues to the correct answer.

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:
Carpentry Blueprint and
Competency Area Knowledge Checksheets
The next section provides the assessment blueprint and detailed topics within each competency area covered within the carpentry 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 carpentry 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.

SkillsUSA | Career Essentials: *Assessments*

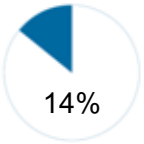
Carpentry Blueprint

This Blueprint contains the subject matter content of this Career Essentials Assessment.
Note: To fully prepare for the Carpentry 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.

Safety



- Identify common causes of construction accidents.
- Explain the role of OSHA and the 10-hour certification.
- Explain fall protection, ladder, stair, and scaffold procedures and requirements.
- Recognize hazard recognition and risk assessment techniques.
- Identify struck-by hazards and demonstrate safe working procedures and requirements.
- Identify caught-in-between hazards and demonstrate safe working procedures and requirements.
- Define safe work procedures to use around electrical hazards.
- Demonstrate the use and care of appropriate personal protective equipment (PPE).
- Explain the importance of hazard communications (HazCom) and Material Safety Data Sheets (MSDSs).
- Identify other construction hazards on your job site, including hazardous material exposures, environmental elements, welding and cutting hazards, confined spaces, and fires.

Using and maintaining hand tools

- Recognize and identify some of the basic hand tools and their proper uses in the construction trade.
- Visually inspect hand tools to determine if they are safe to use.
- Safety use hand tools.
- Utilize measurement devices.

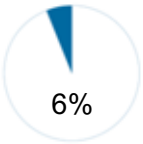
Using and maintaining power tools

- Identify power tools commonly used in the construction trades.
- Use power tools safely.
- Explain how to maintain power tools properly.

Read and interpret plans and elevations from blueprints

- Recognize and identify basic construction drawing terms, components, and symbols.
- Relate information on construction drawings to actual locations on the print.
- Recognize different classifications of construction drawings.
- Interpret and use drawing dimensions.

Understanding material handling



- ∞ Use proper materials-handling techniques.
- ∞ Choose appropriate materials-handling equipment for the task.
- ∞ Recognize hazards and follow safety procedures required for materials handling.

Understand concrete, reinforcing materials, and forms

- ∞ Identify the properties and composition of cement and concrete.
- ∞ Perform volume estimates for concrete.
- ∞ Identify types of concrete reinforcement materials.
- ∞ Identify various types of footings and forms.
- ∞ Erect, plumb, and brace a simple concrete form with reinforcement.

Identify and understand floor, wall, and ceiling systems

Understand floor systems.

- ∞ Read and interpret drawings and specifications to determine floor system requirements.
- ∞ Identify floor and sill framing and support members.
- ∞ List and recognize different types of floor joists.
- ∞ List and recognize different types of bridging.
- ∞ List and recognize different types of flooring materials.
- ∞ Match selected fasteners used in floor framing to their correct uses.
- ∞ Estimate the amount of material needed to frame a floor assembly.
- ∞ Demonstrate the ability to lay out and construct a floor assembly.
- ∞ Demonstrate the ability to install bridging.
- ∞ Demonstrate the ability to install a subfloor using butt-joint and tongue and groove installation techniques.

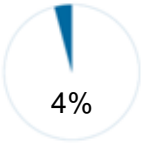
Understand wall and ceiling systems.

- ∞ Identify the components of a wall and ceiling layout.
- ∞ Describe the procedure for laying out, assembling, erecting, and bracing an exterior wall.
- ∞ Identify the common materials and methods used for installing sheathing on walls.
- ∞ Identify tools used in the construction of cold formed steel framing.
- ∞ Describe the correct procedure for laying out, cutting and installing ceiling joists.

Understand roof framing

- ∞ Understand the terms associated with roof framing.
- ∞ Identify the roof framing members used in gable and hip roofs.
- ∞ Identify the methods used to calculate the length of the rafter.
- ∞ Identify the various types of trusses used in roof framing.
- ∞ Demonstrate the usage of a rafter framing square and speed square in laying out a roof.
- ∞ Identify various types of sheathing used in roof construction.
- ∞ Identify the parts of a common rafter.
- ∞ Frame a roof opening.
- ∞ Erect a gable roof using trusses.
- ∞ Estimate the materials used in framing and sheathing a roof.

Understand exterior finishes



- ∞ Describe the purpose of wall insulation and flashing.
- ∞ Describe the types and styles of siding.
- ∞ Describe the types and styles of veneer finishes.

Understand drywall installation

- ∞ Identify the different types of drywall and their uses.
- ∞ Measure, cut and install gypsum board.
- ∞ Select fasteners for drywall installation.
- ∞ Estimate square footage for materials needed in drywall installation.

Understand stair systems

- ∞ Identify the types of stairs.
- ∞ Identify the various stair parts, including railing.
- ∞ Calculate rise and run for stair stringers.
- ∞ Layout and cut stringers, risers, and treads.
- ∞ Identify the types of material used in stair construction.

Understand the installation of windows and doors

- ∞ Identify the styles of doors and windows.
- ∞ Identify the parts of a window and door.
- ∞ Install a pre-hung door.
- ∞ Install a pre-hung window.
- ∞ Identify the hardware needed for door installation.
- ∞ Identify various types of flashings.

Demonstrate professional development skills in a simulated customer service or employment situation. Examples may include:

- ∞ Job interview
- ∞ Customer service scenario
- ∞ Communications
- ∞ Decision making, problem solving and/or critical thinking

Committee Identified Academic Skills

The SkillsUSA national technical committee has identified that the following academic skills are embedded in the carpentry training program and assessment:

Math Skills
- Use fractions to solve practical problems
- Use proportions and ratios to solve practical problems
- 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
- Make comparisons, predictions and inferences using graphs and charts
- Find slope of a line
- Solve practical problems involving complementary, supplementary and congruent angles
- Solve problems involving symmetry and transformation

Science Skills
- Use knowledge of work, force, mechanical advantage, efficiency and power
- Use knowledge of simple machines, compound machines, powered vehicles, rockets and restraining devices

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
- Demonstrate comprehension of a variety of informational texts
- Use text structures to aid comprehension
- Identify words and phrases that signal an author's organizational pattern to aid comprehension
- Understand source, viewpoint, and purpose of texts

Connections to National Standards

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

Math Standards
- Numbers and operations
- Geometry
- Measurement
- Data analysis and probability
- Problem Solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. To view high school standards, visit: http://www.nctm.org/standards/content.aspx?id=16909**.**

Science Standards
- Understands the structure and function of cells and organisms
- Understands relationships among organisms and their physical environment
- Understands the sources and properties of energy
- Understands forces and motion
- Understands the nature of scientific inquiry

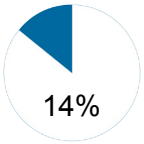
Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks/.

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 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

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

Review Dates:



Competency Area 1: Safety

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify the common causes of construction accidents?	❒	❒	❒
2. Explain the role of OSHA and the 10-Hour Certification?	❒	❒	❒
3. Explain fall protection and safety requirements?	❒	❒	❒
4. Recognize the hazards and risk assessment techniques?	❒	❒	❒
5. Demonstrate safe working procedures and requirements?	❒	❒	❒
6. Recognize safe work procedures to use around electrical hazards?	❒	❒	❒
7. Use and the care of appropriate personal protective equipment (PPE)?	❒	❒	❒
8. Explain the importance of hazard communications (HazCom) and Material Safety Data Sheets (MSDSs)?	❒	❒	❒
9. Identify other construction hazards on your job site, including hazardous material exposures, environmental elments, welding and cutting hazards, confined spaces and fires?	❒	❒	❒

Areas I Need To Review:

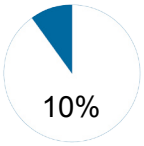
Review Dates

Competency Area 2: Using and Maintaining Hand Tools

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Recognize and identify the basic hand tools and their proper uses in the construction trade?	❒	❒	❒
2. Visually inspect hand tools to determine if they are safe to use?	❒	❒	❒
3. Identify safe use of hand tools?	❒	❒	❒
4. Use measurement devices?	❒	❒	❒

Areas I Need To Review:



Review Dates:

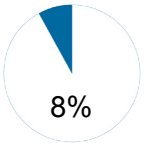
Competency Area 3: Using and Maintaining Power Tools

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify power tools commonly used in the construction trades?	❒	❒	❒
2. Use power tools safely?	❒	❒	❒
3. Explain how to maintain power tools properly?	❒	❒	❒

Areas I Need To Review:

Review Dates:

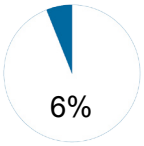


Competency Area 4: Read and Interpret Plans and Elevations from Blueprints

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Recognize and identify basic construction drawing terms, components and symbols?	❒	❒	❒
2. Relate information on construction drawings to actual locations on the print?	❒	❒	❒
3. Recognize different classifications of construction drawings?	❒	❒	❒
4. Interpret and use drawing dimensions?	❒	❒	❒

Areas I Need To Review:



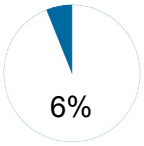
Review Dates:

Competency Area 5: Understanding Material Handling

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Use proper materials-handling techniques?	❒	❒	❒
2. Choose appropriate materials-handling equipment for the task?	❒	❒	❒
3. Recognize hazards and follow safety procedures required for materials handling?	❒	❒	❒

Areas I Need To Review:



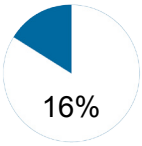
Review Dates:

Competency Area 6: Understand Concrete, Reinforcing Materials and Forms

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify the properties and composition of cement and concrete?	❒	❒	❒
2. Perform volume estimates for concrete?	❒	❒	❒
3. Identify types of concrete reinforcement materials?	❒	❒	❒
4. Identify various types of footings and forms?	❒	❒	❒
5. Erect, plumb, and brace a simple concrete form with reinforcement?	❒	❒	❒

Areas I Need To Review:



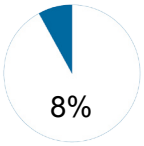
Review Dates:

Competency Area 7: Identify and Understand Floor, Wall and Ceiling Systems

Knowledge Check

Floor Systems How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Read and interpret drawings and specifications to determine floor system requirements?	❒	❒	❒
2. Identify floor and sill framing and support members?	❒	❒	❒
3. List and recognize different types of floor joists?	❒	❒	❒
4. List and recognize different types of bridging?	❒	❒	❒
5. List and recognize different types of flooring materials?	❒	❒	❒
6. Match selected fasteners used in floor framing to their correct uses?	❒	❒	❒
7. Estimate the amount of material needed to frame a floor assembly?	❒	❒	❒
8. Demonstrate the ability to lay out and construct a floor assembly?	❒	❒	❒
9. Demonstrate the ability to install bridging?	❒	❒	❒
10. Demonstrate the ability to install a subfloor using tongue-and-groove and butt-joint installation techniques?	❒	❒	❒
Wall and Ceiling Systems How well do you know how to:			
1. Identify the components of a wall and ceiling layout?	❒	❒	❒
2. Describe the procedure for laying out, assembling, erecting and bracing an exterior wall?	❒	❒	❒
3. Identify the common materials and methods used for installing sheathing on walls?	❒	❒	❒
4. Identify tools used in the construction of cold formed steel framing?	❒	❒	❒
5. Describe the correct procedure for laying out, cutting and installing ceiling joists?	❒	❒	❒

Areas I Need To Review:



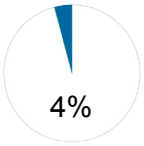
Review Dates:

Competency Area 8: Understand Roof Framing

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify and apply the terms associated with roof framing?	❒	❒	❒
2. Identify the roof framing members used in gable and hip roofs?	❒	❒	❒
3. Identify the methods used to calculate the length of the rafter?	❒	❒	❒
4. Demonstrate the usage of a rafter framing square and speed square in laying out a roof?	❒	❒	❒
5. Identify various types of sheathing used in roof construction?	❒	❒	❒
6. Identify the parts of common rafter?	❒	❒	❒
7. Frame a roof opening?	❒	❒	❒
8. Erect a gable roof using trusses?	❒	❒	❒
9. Estimate the materials used in framing and sheathing a roof?	❒	❒	❒

Areas I Need To Review:



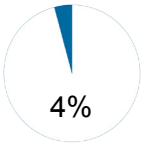
Review Dates:

Competency Area 9: Understand Exterior Finishes

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Describe the purpose of wall insulation and flashing?	❒	❒	❒
2. Describe the types and styles of siding?	❒	❒	❒
3. Describe the types and styles of veneer finishes?	❒	❒	❒

Areas I Need To Review:



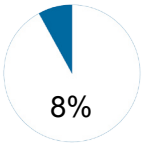
Review Dates:

Competency Area 10: Understand Drywall Installation

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify the different types of drywall and their uses?	❒	❒	❒
2. Measure, cut and install gypsum board?	❒	❒	❒
3. Select fasteners for drywall installation?	❒	❒	❒
4. Estimate square footage for materials needed in drywall installation?	❒	❒	❒

Areas I Need To Review:



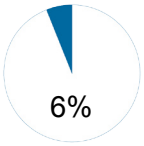
Review Dates:

Competency Area 11: Understand Stair Systems

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify the types of stairs?	❒	❒	❒
2. Identify the various stair parts, including railing?	❒	❒	❒
3. Calculate rise and run for stair stringers?	❒	❒	❒
4. Lay out and cut stringers, risers and treads?	❒	❒	❒
5. Identify the types of material used in stair construction?	❒	❒	❒

Areas I Need To Review:



Review Dates:

Competency Area 12: Understand the Installation of Windows and Doors

Knowledge Check

How well do you know how to:	Very Well	Somewhat Well	Not Well
1. Identify the styles of doors and windows?	❒	❒	❒
2. Identify the parts of a window and door?	❒	❒	❒
3. Install a pre-hung door?	❒	❒	❒
4. Install a pre-hung window?	❒	❒	❒
5. Identify the hardware needed for door installation?	❒	❒	❒
6. Identify various types of flashings?	❒	❒	❒

Areas I Need To Review:

Helpful Tips and Reminders for Students

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.

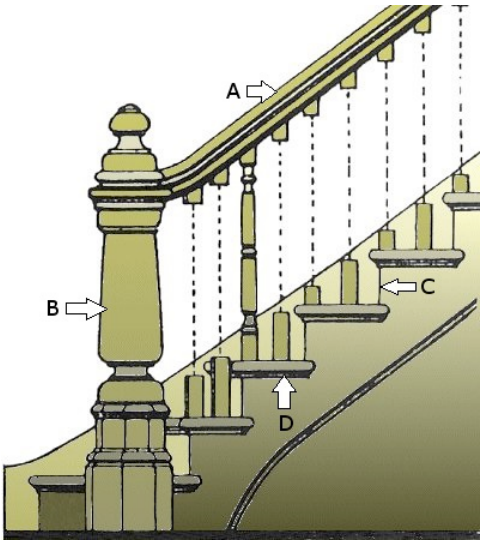
Do not rush through the questions. Read the question and potential answers thoroughly. Make sure you know exactly what the question is asking before answering. If you are unsure, note the question and return to it. Other questions may have clues to the correct answer. Use process of elimination. If you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

Sample Assessment Questions

Carpentry Sample Questions
The following questions are examples of the types of questions you may see within the assessment. The questions could be in the form of a video clip, drop and drag, sequential or a typical multiple choice. At the bottom of each question there is a comment about the section or portion of the Blueprint that it came from.

Question 1
Identify the riser in the image shown.
A
B
C*
D

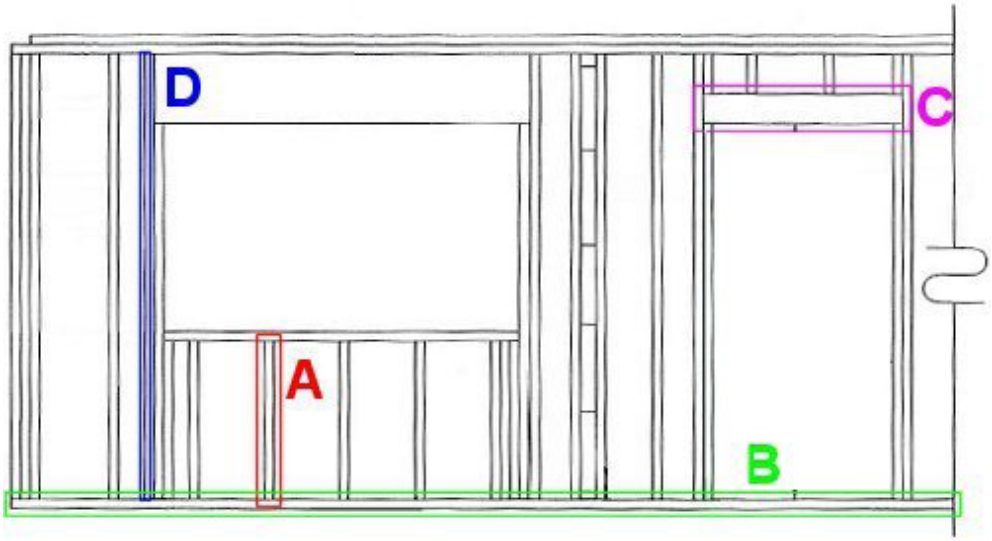


Mapped skill standards
Carpentry - Career Essentials: Assessments Blueprint Understand stair systems. Identify the various stair parts, including railing.

Question 2
What phrase would BEST describe the mission of OSHA?
Choose one answer.
- Protect the health of Americans while at their jobs*
- Provide services for families of workers who have been killed while working
- Provide legal representation for injured workers
- Underwrite health insurance benefits for American workers

Mapped skill standards
Carpentry - Career Essentials: Assessments Blueprint Safety Explain the role of OSHA and the 10-hour certification.

Question 3
Identify the soleplate by marking it on the picture.
(answer: B)



Mapped skill standards
Carpentry - Career Essentials: Assessments Blueprint Identify and understand floor, wall, and ceiling systems. Understand wall and ceiling systems. Identify the components of a wall and ceiling layout.

Question 4
What is the minimum amount of overlap for spacing a ceiling joist?

Choose one answer.
- 6
- 8
- 12*
- 16

Carpentry - Career Essentials: Assessments Blueprint Identify and understand floor, wall, and ceiling systems. Understand wall and ceiling systems. Describe the correct procedure for laying out, cutting

and installing ceiling joists.

Question 5

Place the following steps in the correct sequence for a typical exterior finish installation.

1. House wrap
2. Trim
3. Flashing
4. Siding

Mapped skill standards

Carpentry - Career Essentials: Assessments Blueprint > 9 Understand exterior finishes. Describe the purpose of wall insulation and flashing.

Question 6

Place the following steps in the correct sequence that describes a TYPICAL procedure for installing a prehung door.

1. Make sure the rough opening is the correct size.
2. Put the door in, and mark the inside of the threshold.
3. Center the door in the opening.
4. Ensure the sill is level and the hinge jam is plumb.

Mapped skill standards

Carpentry - Career Essentials: Assessments Blueprint Understand the installation of windows and doors. Install a pre-hung door.

Resources

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: AssessmentsBlueprint as a guideline for competencies tested. Use the resources below to find curriculum or additional study guides for industry standards.

Carpentry Resources:
National and State Building Codes Books