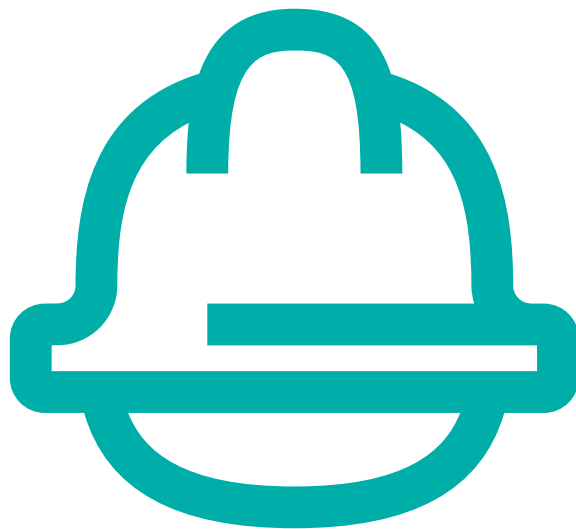




Carpentry

General Assessment Information

Blueprint Contents

General Assessment Information	Sample Written Items
Written Assessment Information	Performance Assessment Information
Specific Competencies Covered in the Test	Sample Performance Job

Test Type: The Carpentry assessment is included in NOCTI's Teacher assessment battery. Teacher assessments measure an individual's technical knowledge and skills in a proctored proficiency examination format. These assessments are used in a large number of states as part of the teacher licensing and/or certification process, assessing competency in all aspects of a particular industry. NOCTI Teacher tests typically offer both a written and performance component that must be administered at a NOCTI-approved Area Test Center. Teacher assessments can be delivered in an online or paper/pencil format.

Revision Team: The assessment content is based on input from subject matter experts representing the following states: Massachusetts, New Jersey, New York, Pennsylvania, Tennessee, and Texas.



46.0201 - Carpentry



Career Cluster -
Architecture and
Construction



47-2031.01 - Construction Carpenters

Written Assessment

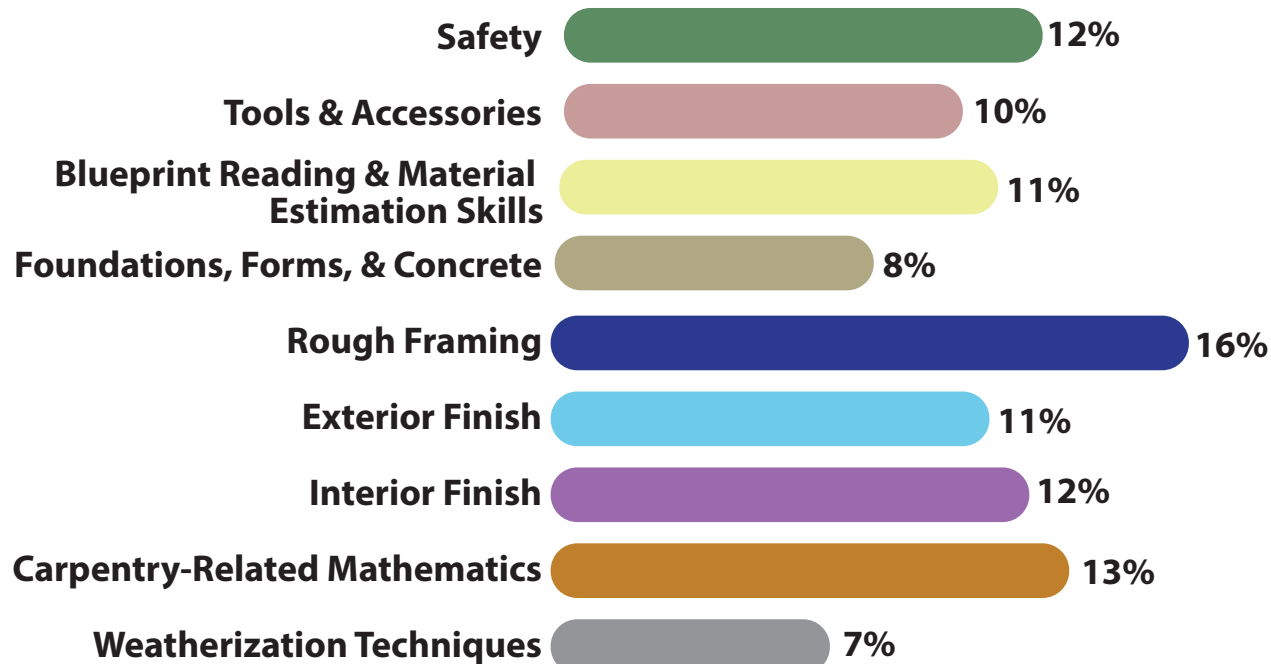
NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 2 hours and 30 minutes

Number of Questions: 148

Number of Sessions: This assessment may be administered in one, two, or three sessions.

Areas Covered



Specific Standards and Competencies Included in this Assessment

Safety

- Display comprehension of workplace/job-site safety procedures (OSHA)
- Demonstrate knowledge of safe material handling practices
- Demonstrate knowledge of safe power tool usage
- Demonstrate understanding of proper usage of PPE

Tools and Accessories

- Demonstrate knowledge of hardware and fasteners
- Display comprehension of safe hand and power tool usage
- Display understanding of measuring tools

Blueprint Reading and Material Estimation Skills

- Demonstrate scale interpretation and application
- Demonstrate knowledge of various types of blueprints
- Calculate material quantities
- Demonstrate understanding of building codes and their application

Foundations, Forms, and Concrete

- Demonstrate understanding of concrete characteristics
- Demonstrate knowledge of concrete safety
- Demonstrate understanding of lay out foundation and site work skills



(Continued on the following page)

Specific Standards and Competencies (continued)

Rough Framing

- Identify floor systems
- Identify wall systems
- Identify roof systems
- Demonstrate understanding of lumber
- Identify types of door and window openings
- Identify and utilize rough framing hardware
- Demonstrate knowledge of stairs
- Apply the order of operations

Exterior Finish

- Identify types of windows
- Identify characteristics of exterior finish hardware
- Identify roofing components
- Identify characteristics of exterior doors
- Identify types of siding

Interior Finish

- Demonstrate understanding of installing and finishing interior walls and ceilings
- Display understanding of installing interior doors
- Display knowledge of installing standing and running trim
- Demonstrate understanding of installing cabinets and associated hardware
- Display understanding of installing flooring (e.g., hardwood, laminate, tile)
- Identify characteristics of stair trim and handrails

(Continued on the following page)

Specific Standards and Competencies (continued)

Carpentry-Related Mathematics

- Perform basic geometry calculations
- Calculate area, volume, linear feet
- Convert decimals to fractions

Weatherization Techniques

- Demonstrate knowledge of exterior weather barriers
- Demonstrate knowledge of air sealing and proper insulation
- Demonstrate understanding of water management

Sample Questions

Ground Fault Circuit Interrupters (GFCIs) must be used on a job site for all receptacles that are part of a temporary wiring system, such as

- A. extension cords
- B. recess lights
- C. outlets
- D. receptacles

Which part of a blueprint provides information about the materials and thickness used in wall construction?

- A. floor plan
- B. section view
- C. schedule
- D. legend

Select Structural No. 1 is the commercial grade of lumber used to build beams and

- A. stringers
- B. frames
- C. sashes
- D. trimmers

When finishing drywall/sheetrock, _____ is/are installed in the outside corners.

- A. joint tape
- B. compound
- C. corner beads
- D. trim

How many cubic feet are in a cube that is 5 feet by 5 feet by 5 feet?

- A. 50 cubic feet
- B. 100 cubic feet
- C. 125 cubic feet
- D. 200 cubic feet

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 2 hours and 45 minutes

Number of Jobs: 7

Areas Covered:

9% Tool and Material Identification

Participant will accurately identify a variety of tools and materials, including saws, bits, saw blades, wrenches, nails, fasteners, lumber, finishing, layout, and marking tools.

13% Square Layout

Participant will use the appropriate equipment and techniques to lay out and chalk a square.

12% Establish a Starting Course for Vinyl Siding Using a Builder's Level

Participant will properly set up and use a builder's level to establish a level chalk line for the starting course of vinyl siding on a wall.

17% Blueprint Reading and Exterior Sole Plate Layout

Participant will lay out a sole plate according to instructions and include all necessary markings

19% Rafter Layout

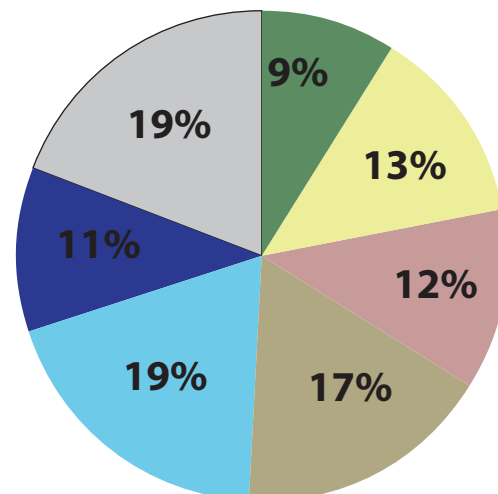
Participant will lay out one common rafter using provided plans and materials showing all necessary corrections and adjustments.

11% Stairway Stringer

Participant will layout a 3-tread stringer according to instructions and record correct number of risers, treads, and measurements.

19% Interior Frame

Participant will install an interior frame in a given opening using appropriate procedures, tools, and equipment.



Sample Job

Square Layout

Maximum Time: 20 minutes

Participant Activity: The participant will chalk out a 12-foot by 12-foot square using blue chalk and placing blocks at the corners, as shown in the drawing provided.