



## Entry Level Assessment Blueprint

# Wood Technology Foundations



**Test Code: 1093 / Version: 01**

## **Specific Competencies and Skills Tested in this Assessment:**

### **Safety**

- Demonstrate knowledge of proper use, storage, and disposal of hazardous materials following OSHA's proper safety practices for a woodworking facility
- Demonstrate knowledge of workplace safety procedures
- Demonstrate knowledge of personal protective equipment (PPE) used in wood technology
- Describe safety practices of the table saw and miter saw
- Demonstrate knowledge of safe use and storage of basic hand tools
- Demonstrate knowledge of safe use and storage of portable power tools

### **Machines and Tools**

- Identify proper use and maintenance of measuring, layout, and marking tools (e.g., tape measure, combination square, sliding T bevel)
- Identify proper use and function of portable power tools (e.g., drill, planers, routers)
- Identify proper use and function of fastening tools (e.g., Phillip head screwdriver, cat's paw)
- Identify proper use and function of hand tools (e.g., crosscut saw, coping saw)
- Identify proper use and function of the table and miter saws

### **Design, Measurement, and Layout**

- Describe and identify fractional measurements from a basic plan and assembly drawings
- Describe rough drawings and sketches
- Explain a cut list or bill of material from a basic plan and assembly drawing
- Demonstrate understanding of how to measure accurately to a sixteenth of an inch
- Identify the difference between both nominal and actual dimensions
- Demonstrate understanding of how to estimate material quantities in both board feet and linear feet
- Consider the natural characteristics of grain, knots, and checks when laying out a board

## ***Specific Competencies and Skills continued:***

### **Materials**

- Identify characteristics and applications of coniferous softwoods (e.g., pine, cedar)
- Identify characteristics and applications of deciduous hardwoods (e.g., oak, maple, poplar)
- Identify characteristics and applications of engineered lumber (e.g., plywood)

### **Material Processing**

- Identify the proper cutting process based on grain direction
- Identify how grain direction affects a material's strength
- Understanding kerf and its application to cutting and layout operations



### **Jointery**

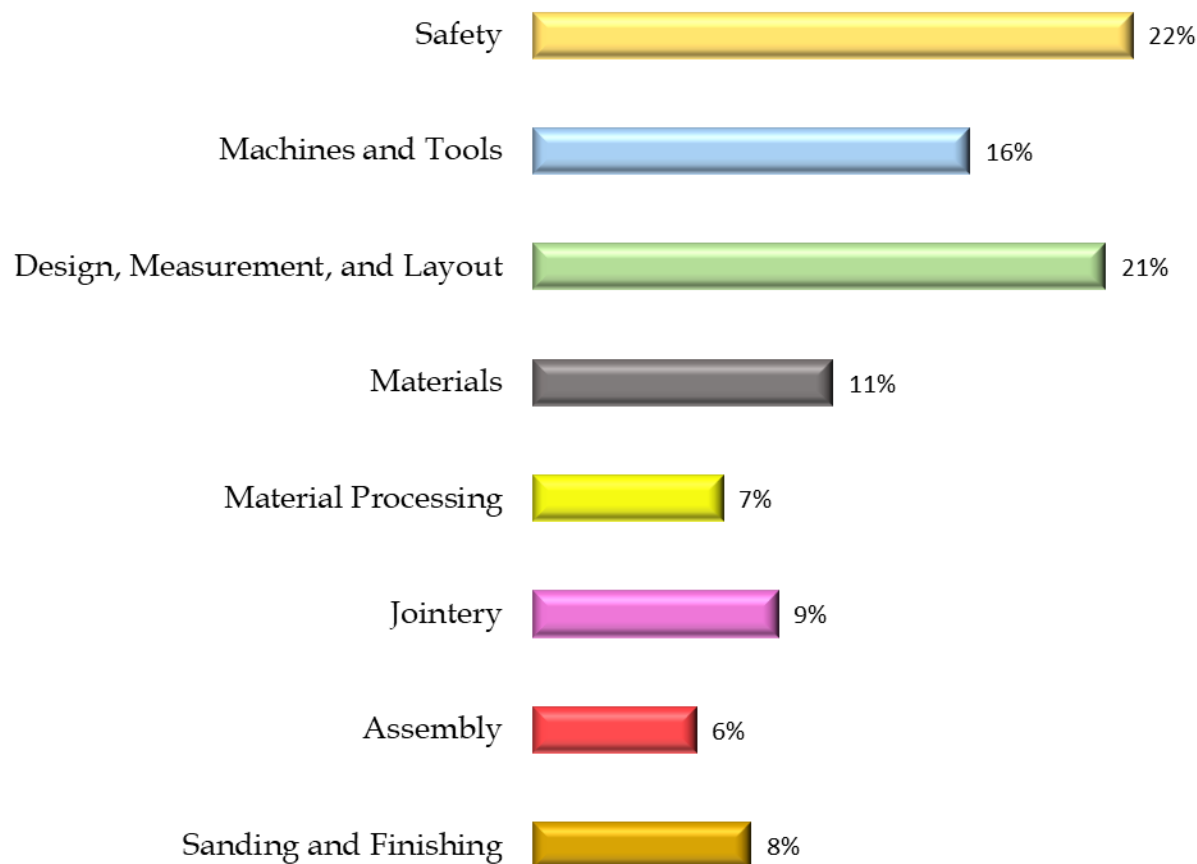
- Identify the types of joints (e.g., butt, miter, dado, dovetail)
- Prepare stock for use

### **Assembly**

- Identify and describe the purpose and use of woodworking fasteners (e.g., flat head, screws, putty sticks)
- Identify and describe the purpose of clamping devices (e.g., bar clamp, spring clamp)

### **Sanding and Finishing**

- Describe the sanding grit numbering grading system
- Identify various wood finishes for interior and exterior (e.g., latex, spray-on, oil-based)

**Written Assessment:****Administration Time:** 2 hours**Number of Questions:** 87**Areas Covered:**

## Sample Questions:

Determine the size of a drill by its

- A. ampere rating
- B. horsepower
- C. weight
- D. chuck capacity

In what order should the dimensions of stock in a material bill be listed?

- A. length, width, and thickness
- B. width, length, and thickness
- C. thickness, width, and length
- D. width, thickness, and length

One of the hardest wood species that is often used for heavy-use items, such as dressers and kitchen cabinets, is

- A. cedar
- B. pine
- C. poplar
- D. maple

After cabinets are installed, nail holes on the trim are filled with

- A. white glue
- B. putty stick
- C. sawdust and glue
- D. wood plugs

On a random orbit sander, a disc with a grit number of 220 is

- A. used for rough sanding
- B. rougher than an 80-grit disc
- C. smoother than a 400-grit disc
- D. used for finish sanding