



2022-2023

Technical Skills Assessment

Cabinetmaking and Bench Carpentry

Results by Standard

Legend (%)		
0-50%	51-75%	76-100%

Assessment: Cabinetmaking and Bench Carpentry	% Correct	% Correct	% Correct
Number tested: 46	20-21	21-22	22-23
CONTENT STANDARD 1.0: LAB ORGANIZATION AND SAFETY SKILLS	87.25%	77.09%	81.87%
Performance Standard 1.1: General Safety	87.25%	77.09%	81.87%
1.1.1. Describe general shop safety rules, procedures and housekeeping duties.	84.72%	76.32%	71.43%
1.1.2. Demonstrate knowledge of OSHA/EPA and their role in workplace safety.	91.67%	80.70%	85.71%
1.1.3. Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities (i.e., personal protection equipment - PPE).	98.61%	80.70%	93.88%
1.1.4. Utilize safe procedures for handling of tools and equipment.	55.56%	47.37%	47.96%
1.1.5. Operate lab equipment according to safety guidelines.	81.94%	67.54%	76.53%
1.1.7. Utilize proper ventilation procedures for working within the lab/shop area.	93.06%	81.58%	91.84%
1.1.12. Secure hair and jewelry for lab/shop activities.	97.22%	90.35%	89.80%
1.1.14. Follow verbal instructions to complete work assignments.	97.22%	88.60%	94.90%
1.1.15. Follow written instructions to complete work assignments.	87.50%	82.46%	86.73%
CONTENT STANDARD 2.0: MANUAL AND POWER TOOLS	73.75%	68.16%	69.59%
Performance Standard 2.1: Hand Tools	75.69%	69.52%	72.45%
2.1.1 Identify hand tools and their appropriate usage.	66.67%	60.23%	59.18%
2.1.2 Demonstrate the proper techniques when using hand tools.	73.15%	69.01%	76.19%
2.1.3 Demonstrate safe handling and use of appropriate tools.	93.06%	84.21%	86.73%
Performance Standard 2.2: Power Tools and Equipment	72.45%	67.25%	67.69%
2.2.1. Identify power tools and their appropriate usage.	77.78%	74.27%	72.11%
2.2.2. Identify equipment and their appropriate usage.	76.85%	66.08%	70.75%
2.2.3. Demonstrate the proper techniques when using power tools and equipment.	63.89%	64.33%	61.22%
2.2.4. Demonstrate safe handling and use of appropriate power tools and	71.30%	64.33%	66.67%
CONTENT STANDARD 3.0: FUNDAMENTAL DESIGN	74.56%	70.64%	76.48%
Performance Standard 3.2: Print Reading Techniques	62.50%	61.84%	73.98%
3.2.1. Interpret basic elements of a working drawing (e.g., annotation, dimensions, line types, etc.).	62.50%	61.84%	73.98%

Assessment: Cabinetmaking and Bench Carpentry	% Correct	% Correct	% Correct
Number tested: 46	20-21	21-22	22-23
Performance Standard 3.3: Measures and Scaling Techniques	88.33%	77.89%	82.04%
3.3.1. Identify industry standard units of measure (e.g., standard, decimal, metric, etc.).	100.00%	82.46%	87.76%
3.3.2 Define industry standard measurement terms (e.g., linear, square ft., tolerance, squareness, concentricity, perpendicular, parallel, etc.).	73.61%	64.91%	66.33%
3.3.4. Measure to the nearest 1/16th inch with a tape measure.	97.22%	88.60%	94.90%
Performance Standard 3.4: Freehand Technical Sketching Techniques	62.22%	62.11%	70.20%
3.4.1. Identify industry standard units of measure (e.g., standard, decimal, metric, etc.).	70.83%	71.05%	77.55%
3.4.3. Demonstrate proper use of precision measuring tools (e.g., micrometer, dial indicator, caliper, etc.).	56.48%	56.14%	65.31%
Performance Standard 3.6: Mathematical Concepts	85.42%	82.02%	85.71%
3.6.3. Add, subtract, multiply and divide fractions, decimals, and whole numbers.	84.26%	81.29%	83.67%
3.6.5. Determine the cost of materials needed for a furniture/cabinetmaking project.	88.89%	84.21%	91.84%
Performance Standard 3.7: Layout Principles and Practices	72.22%	66.67%	53.06%
3.7.5. Layout parts using measurement practices.	72.22%	66.67%	53.06%
CONTENT STANDARD 5.0: MANUFACTURING PROCESSES	58.33%	55.14%	59.62%
Performance Standard 5.2: Milling Operations	47.84%	50.29%	52.83%
5.2.2. Select the proper milling tools for specific operations (e.g., table saw, drill press, joiner, lathe, band saw, jigsaw, routers, etc.)	72.22%	69.30%	67.35%
5.2.3. Demonstrate the steps to square a board.	37.04%	39.77%	43.54%
5.2.4. Demonstrate cutting and handling techniques used for lumber and sheet goods.	31.94%	49.12%	46.94%
5.2.6. Demonstrate safety operating procedures, (e.g. feather boards, holders, and power feeders).	55.56%	48.25%	58.16%
Performance Standard 5.4: Joinery Techniques	46.30%	44.44%	49.66%
5.4.2. Determine the appropriate joinery applications.	41.67%	40.35%	44.90%
5.4.5. Construct various joints (i.e., dado, miter, rabbet, butt).	48.61%	46.49%	52.04%
Performance Standard 5.5: Sanding	69.44%	67.32%	75.00%
5.5.1. Identify terms used with sanding processes and techniques (e.g., grit, belt, disc, hand, etc.)	81.94%	71.93%	79.59%
5.5.2. Properly prepare a surface for a treatment or finish.	73.61%	71.93%	75.51%
5.5.4. Select the proper tool and abrasive for shaping and smoothing materials.	37.50%	44.74%	61.22%
5.5.5. Select the proper grit sizes and sequences for shaping and smoothing operations.	84.72%	80.70%	83.67%
Performance Standard 5.6: Assembly	56.77%	49.67%	53.95%
5.6.1. Identify terms used with assembly procedures (e.g., dry fitting, clamping, gluing, etc.)	49.07%	45.03%	50.34%
5.6.2. Select the proper assembly tools for specific operations (e.g., c clamps, bar clamps, pipe clamps, etc.)	63.89%	50.88%	59.86%
5.6.3. Demonstrate assembly and clamping procedures.	66.67%	59.65%	63.27%
5.6.4. Demonstrate common case construction techniques (e.g., face frame, frameless, etc.)	52.78%	47.95%	55.78%

Assessment: Cabinetmaking and Bench Carpentry	% Correct	% Correct	% Correct
Number tested: 46	20-21	21-22	22-23
5.6.7. Construct a project that includes a drawer and a door.	51.39%	47.37%	48.98%
5.6.8. Use specific quality control criteria to check the accuracy and squareness of a project.	58.33%	49.71%	46.94%
Performance Standard 5.7: Finishing	70.83%	63.16%	58.16%
5.7.5. Utilize the proper health and safety procedures when working with finishes.	70.83%	63.16%	58.16%
Performance Standard 5.8: Installation	68.75%	67.54%	75.00%
5.8.8. Adjust doors and drawers.	45.83%	53.51%	58.16%
5.8.9. Clean work site.	91.67%	81.58%	91.84%
CONTENT STANDARD 6.0: CABINETRY AND MILLWORK INDUSTRY	83.33%	78.07%	74.49%
Performance Standard 6.1: Career Exploration	83.33%	78.07%	74.49%
6.1.3. Create an employment application and resume.	83.33%	78.07%	74.49%