

**Benchmarks – Indicators -- Mapping  
Woods I**

1. **Explain the purposes for studying the Woodworking industry. (VI, VII) (August) CE, GE**
  - A. Discuss the commercial importance of wood.. (wt)
  - B. Explain how wood is harvested and processed.. (wt)
  - C. Describe the different classifications for wood and wood material. (wt)
  - D. Understand and apply the problem-solving process. (wt)
  - E. Describe several woodworking careers. (wt)
  - F. Discuss ways in which to find and keep a job. (wt)
  
2. **Explain the purpose of following good safety practices. (I, II, VI) (August) CS, HOTS, LS**
  - A. Tell why safety is really an attitude. (wt)
  - B. Discuss common woodshop hazards and how to prevent problems. (wt)
  - C. Describe different types of personal safety gear and tell their purpose. (wt)
  - D. Tell how to set up a safe workshop. (wt)
  - E. Discuss the use of first aid for common workshop injuries. (wt)
  
3. **Explain and demonstrate various grades of wood. (VI) (August/September) CS, LS**
  - A. Explain how lumber is graded. (ws, wt)
  - B. Explain and identify various softwoods. (ws, wt, pt)
  - C. Explain and identify various fine hardwoods. (ws, wt, pt)
  - D. Explain and identify various exotic hardwoods. (ws, wt, pt)
  - E. Explain and identify various veneers. (ws, wt, pt)
  - F. Explain and identify various plywoods and sheet goods. (ws, wt, pt)
  - G. Explain and identify various trim moldings. (ws, wt, pt)
  
4. **Explain and demonstrate good designing and planning. (III, V, VI) (September) CS, HOTS, LS**
  - A. List the three keys to good design. (wt)
  - B. Describe at least three basic principles of design. (wt)
  - C. Name the views shown in a three-view working drawing. (wt)
  - D. Correctly read drawings in order to lay out materials. (wt, pt)
  - E. Make a bill of materials. (wt, pt)
  - F. Use a formula for calculating board feet to figure lumber needs. (wt, pt)
  - G. Complete a lumber order sheet. (ws, wt, pt)
  - H. List the main steps in designing, planning, and completing a woodworking project. (wt, pt)

**Infused Areas**

**CE = career education**  
**GE = global education**  
**CS = communication skills**  
**HOTS = higher order thinking skills**  
**MCGF = multicultural gender fair**  
**LS = learning skills**  
**TI = technology integration**

**Assessments**

**ws = worksheet**  
**wt = written test**  
**to = teacher observation**  
**pt = performance test**

## Woods I (continued)

5. **Demonstrate accurate measuring practices. (I, II, III, IV, V, VI)** (September) **CS, HOTS, LS**
- A. Accurately read measurements on a customary rule. **(wt, pt)**
  - B. Accurately read measurements on a tape measure. **(wt, pt)**
  - C. Correctly identify various measuring and marking tools. **(ws, wt, pt)**
  - D. Select and use the correct measuring tool for a specific measuring task. **(wt, pt)**
6. **Explain and demonstrate proper sawing. (I, II, III, VI)** (September/October) **CS, LS**
- A. Name the basic types of cuts made with saws. **(ws, wt)**
  - B. Identify the basic types of saws. **(ws, wt)**
  - C. List and demonstrate safety precautions when operating saws. **(ws, wt, pt)**
  - D. Properly use the correct type of saw for a specific cutting task. **(ws, wt, pt)**
7. **Explain and demonstrate proper nailing. (I, II, III, VI)** (October) **CS, LS**
- A. Identify different types of nails. **(wt)**
  - B. Identify the various types of hammers. **(ws, wt, pt)**
  - C. Demonstrate the proper grip and use of a hammer. **(wt, pt)**
  - D. Demonstrate the correct technique for driving nails into wood with a hammer. **(pt)**
  - E. Describe the technique of toe nailing. **(wt, pt)**
  - F. Demonstrate the safe and efficient use of a pneumatic nail gun. **(ws, wt, pt)**
8. **Explain and demonstrate proper drilling. (I, II, III, V, VI)** (October) **CS, LS**
- A. Identify various types of drills and bits. **(ws, wt, pt)**
  - B. Drill holes with portable power tools as well as the drill press. **(pt)**
  - C. Describe the qualities needed in a power drill for woodworking. **(wt)**
  - D. Identify several accessories available for power drills and explain how they are used in woodworking. **(wt)**
9. **Explain and demonstrate proper planing, chiseling, and sanding. (I, II, III, IV, V, VI)** (October) **CS, LS**
- A. Plane the surface of a piece of stock using proper planing techniques. **(pt, to)**
  - B. Use a chisel correctly, observing all safety rules. **(pt, to)**
  - C. Sand the surface of a piece of stock, using proper sanding procedures. **(pt, to)**
  - D. Operate a portable belt sander, using proper sanding techniques. **(pt, to)**
  - E. Operate the disc sander, using proper techniques. **(pt, to)**

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**10. Explain and demonstrate proper staining, finishing, and painting. (I, II, III, IV, V, VI)**  
(October/November) **CS, LS**

- A. Explain and identify various types of stains. **(ws, wt)**
- B. Explain and demonstrate applying stain. **(ws, wt, pt)**
- C. Explain the various types of finishes. **(ws, wt)**
- D. Explain and demonstrate applying finish with a sprayer. **(ws, wt, pt)**
- E. Explain and demonstrate proper equipment clean up of sprayer. **(ws, wt, pt)**
- F. Explain and identify various painting tools. **(ws, wt)**

**11. Explain using the various types of fasteners. (I, VI) (November) CS, LS**

- A. Discuss tips and guidelines to be followed when working with screwdrivers and screws. **(wt)**
- B. Explain how a clearance hole should be drilled. **(wt)**
- C. Describe the process for countersinking for flathead screws. **(wt)**
- D. Demonstrate how to drive a wood screw. **(pt)**

**12. Explain and demonstrate gluing and clamping. (I, III, VI) (November) CS, LS**

- A. Select the correct adhesive for specific gluing jobs. **(wt, pt)**
- B. Select appropriate clamps for holding glued parts. **(wt, pt)**
- C. Correctly glue up and clamp an edge joint. **(pt)**

**13. Demonstrate the construction of a footstool utilizing information learned. (I, II, III, IV, V, VI) (November/December) CS, LS, HOTS**

- A. Produce a working drawing of the footstool. **(pt)**
- B. Produce a bill of materials of the footstool. **(pt)**
- C. Produce a lumber order for the footstool. **(pt)**
- D. Produce a steps of procedure for building the footstool. **(pt)**
- E. Construct the footstool using the techniques learned. **(pt)**

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**Resources:** text books, worksheets, tests, wood tools, wood equipment, wood, fasteners, clamps,