



Woodwork

Scouts BSA · Trades

Name

Started

Completed

Woodwork teaches you to plan, measure, cut, and build with wood. You will learn to care for tools, make useful things, and design your own project. There's a lot of pride in using something you built yourself.

Requirements

Every official requirement, in plain language. Check the official wording when you sign off (scouting.org/merit-badges/woodwork/). Tips and examples are ideas, not extra requirements.

1 Safety and first aid

Tips for this section: Learn the hazards of woodworking tools, and earn your Totin' Chip before starting.

- ☐ **1a** Explain to your counselor the likely hazards of woodworking and how to anticipate, prevent, reduce, and respond to them, plus the precautions for using your tools safely

- ☐ **1b** Show you know first aid for woodworking injuries (splinters, scratches, cuts, severe bleeding, shock); explain how to protect your eyes and hearing, and why and when to wear a dust mask

- ☐ **1c** Earn the Totin' Chip

2 Wood and lumber

Tips for this section: Collect six wood samples from a lumberyard or scrap pile and label each one.

Example for this section: Explain how a tree becomes lumber: felling, hauling to a sawmill, sawing into boards, and drying in a kiln or air. Then label six samples, like pine, oak, maple, cedar, poplar, and walnut, with where each comes from and what it's good for.

- ☐ **2a** Describe how trees are grown, harvested, and milled for timber, and how lumber is sized, graded, cured, and seasoned

- ☐ **2b** Collect and label blocks of 6 kinds of wood used in woodworking, and describe each one's main qualities and best uses

3 Tool care

Tips for this section: Ask an experienced woodworker to show you how to sharpen and care for your tools.

- ☐ **3a** Show the right way to use, care for, and store every tool and piece of equipment you have or use at home or at school

- ☐ **3b** Correctly sharpen the cutting edges of 2 different tools

- ☐ **4** Make something useful from wood with a saw, plane, hammer, brace, and bit, cutting the parts from lumber you squared and measured using working drawings

Tip: Make something simple like a box or birdhouse using hand tools, with an adult nearby.

Example: Build a simple toolbox or birdhouse from working drawings, using a saw, a plane, a hammer, and a brace and bit. Square and measure your lumber, mark every cut first, clamp the wood, and check each joint for square as you go.

- ☐ **5** Design and build your own project: make working drawings, list the materials you need, then build it while tracking your time and the cost of materials

Tip: Sketch your design, gather materials, and build step by step.

Example: Sketch a design for something you need, like a small bookshelf or a camp box. Write a cut list and materials list, estimate cost, then build it step by step and note what you'd change next time.

6 More woodworking projects: Choose 2 of 5

Tips for this section: Choose two projects that challenge you a bit more, like one with rounded edges or a box with a hinged lid.

Example for this section: Two options could be a project with a joint you haven't tried, like a dowel or miter joint, and a small box with a lid set on inset hinges. Make working drawings first, then build each one.

- ☐ **6a** Make working drawings for a project with beveled or rounded edges, then build it

- ☐ **6b** Make working drawings for a project with curved or incised cuts, then build it

- ☐ **6c** Make working drawings for a project with miter, dowel, or mortise-and-tenon joints, then build it

- ☐ **6d** Build a cabinet, box, or other piece with a door or lid attached with inset hinges

- ☐ **6e** Help make wooden toys for children, or help with a woodworking service project for a charity that your counselor approves

- ☐ **7** Talk with a cabinetmaker or finish carpenter about training, apprenticeships, career opportunities, working conditions, hours, pay, and unions for woodworkers in your area

Tip: Ask a cabinetmaker or carpenter about their work and how they learned their trade.

Example: Before talking with a cabinetmaker or finish carpenter, write down questions about how they learned the trade, what tools they use most, and what makes a job go well. Have a parent with you and take notes.