



Essential tools

If I had to guess, I'd say that I own about 350 woodworking tools collected over 27 years. Some work better than others, but at one time or another, I've used them all. In a given week, I probably use three dozen tools. For the novice woodworker, the tool selection in stores and catalogs can seem baffling, confusing and confounding.

Imagine this: You decide to take up woodworking, and this weekend, you are going with checkbook in hand to the woodworking store to buy some tools. Your budget is limited, and you will only be able to buy a half dozen items. Which ones will they be?

First of all, congratulations. Woodworking is a most satisfying pastime, so varied and multi-faceted you will never complete the twin processes you have undertaken: acquiring tools and learning how to use them. You have begun a lifetime pursuit.

Every journey begins with a first step that determines both your direction and the

experiences you will have along the way. Likewise, the tools you bring home are going to influence your approach to woodworking for a long time. You want to choose carefully. If I had to start over and acquire new tools—what fun!—here's what I'd get first.

Smooth plane: This is the most versatile of all woodworking planes, if not all woodworking tools. With a smooth plane—most models are 9³/₄ in. long and are referred to as a No. 4—you can flatten boards. You can thickness and surface wood. You can use it to shape some parts, and it will create some decorative features such as chamfers. Used in conjunction with a simple, shop-built device called a shooting board, a smooth plane will joint edges and square ends. As you progress in woodworking, you will find that one plane is not enough. I have at least two dozen under my workbench of various sizes and configurations.

But before you can use your plane, you have to learn to sharpen

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Rules of Thumb (continued)

it. Sharpening is a gateway through which many woodworkers never pass. In failing to do so, they diminish the pleasure and satisfaction they could receive from their woodworking. They sacrifice efficiency because they cannot quickly do many simple jobs, such as picking up a handplane and trimming a final $\frac{1}{64}$ in. from a board. A woodworker who doesn't have a sharp plane is forced to perform an operation like this in complicated and time-consuming ways.

Sharpening is not hard to learn, and it has the added benefit of developing an understanding of what a sharp edge is and how it cuts. Learn how—there are as many methods as there are planes—and you're on your way to working wood. Trying to be a woodworker without knowing how to sharpen tools is like trying to be a sailor without knowing about the wind; it's almost impossible.

Tablesaw: Like the handplane, a tablesaw is a very versatile tool. It performs the obvious tasks of cutting wood to width and length. However, it will also cut some simple joints like miters and rabbets. By using common attachments you can acquire later, like a dado head and a tenoning jig, you can do much more.

larger. My point is that with familiarity, when a measurement is wrong, you will know it intuitively. It will nag at you and demand that you check it again, thus avoiding measurement mistakes.

Mortise gauge: This simple device lays out mortises and tenons and a variety of other joints used in woodworking. Learning to lay out joints reinforces an understanding of how they work. You develop a sense of what joints work best in certain applications and why.

The fine layout lines made by a mortise gauge bring you close to the wood in two ways: You get close to the wood to see your work, and you get close to the wood as a material. Wood has characteristics—grain, texture, color, hardness, strength—you need to understand if you are going to do fine work.

Set of chisels: These tools will help shape the mating parts of many woodworking joints and help fit them tightly. Chisels are made in lots of sizes, but to start off, I'd recommend buying chisels in the following sizes: $\frac{1}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in. and 1 in. Like the plane, chisels require you to learn to sharpen before you can use them. However, unlike the plane, the chisel gives you a

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Buying and using a tablesaw will help you to resolve the hand-tool vs. power-tool dilemma that, unfortunately, divides woodworking into two camps. You do need both. By using your tablesaw, you will discover that the greatest value of machines is their ability to do repetitious labor. But they are more awkward and clumsy than hand tools when trying to do finish work. You'll find that you work most efficiently when you combine hand tools like the plane with a machine like the tablesaw to quickly produce the parts in your cutting list.

Ruler: It almost goes without saying that woodworking requires measuring. I suggest you begin with a 2-ft. metal ruler. Although you might eventually want a folding wooden rule or a tape measure—you may already own both—a metal ruler is more versatile. Besides measuring, it can be used as a straightedge when laying out work, and that same edge can check boards for flatness and straightness.

Many woodworking mistakes result from incorrect measurements. Learn to recognize by eye increments such as $\frac{1}{8}$ in., $\frac{1}{4}$ in., $\frac{1}{2}$ in. and a full inch. The same thing holds true for longer increments such as 6 in. and a foot. Twice in a recent Windsor-chair class I taught, students drilling $\frac{3}{8}$ -in. holes—the bits are marked with a 6 for $\frac{9}{16}$ in.—used the $\frac{9}{16}$ -in. bit because they were looking at the 9 upside down. If they had been familiar with basic increments by eye, they would not have made that mistake. Obviously, $\frac{9}{16}$ in. is smaller than $\frac{1}{2}$ in., and $\frac{9}{16}$ in. is

close-up, unobstructed view of the wood that's being cut. Chisels are unique in the way they involve you with the wood.

Dovetail saw: You will eventually own many types of saws. But beginning with this particular saw will affect your woodworking path. Its purpose is cutting joints, not just dovetails. Using it will not only help you develop an understanding of joinery but also give you a feel for sawing. And after a while, the way you use tools will become automatic. Larger handsaws require more muscle to use, and this overwhelms the tactile feedback. And when you use a power tool, you are as removed from the wood as an astronaut is from the atmosphere. You can concentrate better using a dovetail saw as you work slowly in a controlled manner, making short, easy strokes. With practice and observation, you'll learn all about wood and woodworking: cherry sounds different from pine when it's cut, maple smells different from oak, smooth cedar feels very different from smooth mahogany.

