



Exploring 4-H at Home



Science and
Technology

Pillar: Science & Technology

Project: Woodworking

Activity: Safety Tips
Birdhouse Building Plans



CANADA
4-H Saskatchewan

Woodworking

Activity
Guide

Woodworking Basic Safety Tips

Woodworking is a specialized skill you can learn in 4-H. We've had members whose 4-H 'careers' were only in the Woodworking Project— their final senior project was building a garage!

Here are some basic safety tips for Woodworking—see how far you can get in this awesome project!

1. Preparing your Workspace

Whether you are in a big shop or using your mom's crafting table in the basement, you'll need to clear an area big enough for your supplies and tools. Clear and clean your work space, and set it up in advance so tools and supplies will be relatively easy to reach, but not in your way.

As well, you will need to clear the area of any hazards, or potentially dangerous items that can hurt you. For example, if your project requires that you walk back and forth to and from an area, maybe move the broom lying right in your path!

2. Wear your Safety Goggles/Glasses

It is very important to wear protective eyewear while woodworking. Sand, sawdust, paint, chemicals and more can get in your eyes and cause all sorts of problems! Plastic safety glasses (with side guards is a plus!) are recommended.

3. Using a Hammer

A hammer is an old, OLD tool. But that being said, be careful of using an old hammer—make sure your hammer is in decent shape—no split / damaged handle, or wobbly / loose head. Also, be sure to pick the right weight hammer for not only your size, but also what you are going to be hammering. Be wary that the hammer might have a claw at the end of it for prying nails—this can be sharp. When you're bringing your hammer back to strike, take care not to hit yourself!

4. Screwdriver Tips

Screwdrivers, like all tools, have to be treated with respect. When using a screwdriver, keep the tip and handle clean and free of dirt and gunk. Carry your screwdriver like you would a pair of scissors—with the pointy end down or better yet, in a toolbox! Never hold the wood piece you are working on in your hand—always lay it on a workbench or hold it in a vice so it won't move at all.



5. Drill



A power drill is basically an automatic screwdriver—you press a button and it will screw in a screw quickly and with little fuss. However, because it is technically a “power tool”, there are certain safety suggestions you should follow.

A responsible adult should be present when you are using a drill. Secure your work piece so it doesn’t slide around. When possible, tap a small hole where you want the screw to go (called a ‘pilot hole’) so it’s easier to drive in the screw.

Before using the drill make sure the drill bit is secure, the cord is long enough (you might need an extension cord), and you can properly grasp it. You will need to apply proper pressure to the drill when driving the screw in—make sure you are stable and are not going to fall off something if you push too hard on the drill.

Baggy clothing, loose sleeves, jewelry and hair can be a hazard when you are operating a power drill. As always, wear your safety goggles.

6. Sanding Block

A sanding block is a tool that holds sand paper in place so you can sand easily, without sandpaper flopping around everywhere! When using a sanding block, have an adult help you load the sandpaper, just to make sure it’s not going to slide out on you. Be sure to wear your safety goggles for this one too—you don’t want to feel like you’ve just been at the beach with an eyeful of sand!

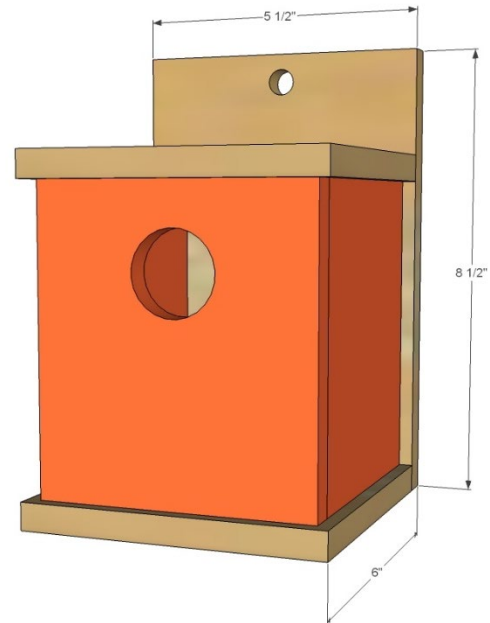
7. Sawing

If your woodworking item demands that you “saw” something, even if you are using your great grandpa’s old handsaw or your dad’s new table saw—we recommend you do this activity with an adult who knows what they’re doing!

Birdhouse Plans

Supplies:

- Hammer
- Nails
- Pencil
- Measuring tape
- Wood glue (optional)
- Wood pieces
 - 2 – 5 ½" x 5 ½" (top and bottom)
 - 2 – 5 ½" x 4 ¾" (sides)
 - 1 – 5 ½" x 5" (front)
 - 1 – 5 ½" x 8 ½" (back)
- Drill
- Paint (optional)
- Needle nose pliers



Instructions:

1. Measure and mark out your pieces of wood. Ask a parent or leader to cut the pieces for you
 - a. You could also buy the pieces precut from a lumber store. Give them the measurements and they can cut it for you.
2. Drill a hole in the piece of wood which will be the front of the birdhouse. It should be about 2-3 inches in diameter.
3. Attach the sides to the front piece, using the wood glue. Then use nails, spacing them evenly. Hold your nails with the pliers do ensure you do not hammer your fingers!
4. Attach the top and bottom to the sides and front, using the wood glue and nails.
5. Attach the back to the sides, top and bottom.
6. Drill a hole in the back for hanging the birdhouse.
7. Paint the birdhouse. Let dry and then hang it outside for the birds to enjoy.