



WOODWORKING UNIT III

WELCOME

Welcome to the 4-H Woodworking III Project! Please read through this guide carefully, as it contains information and suggestions that are important for your project. **4-H leaders can obtain a Leader Project Guide and other resources from the PEI 4-H Office.** Hopefully you, as a member, will “Learn to do by Doing” through hands-on activities that will encourage learning and enjoyment. If you have any questions, contact your District 4-H Officer or your 4-H project leader.

4-H YEAR COMPLETION

You complete a project by:

- completing the project Achievement Day requirements
- completing a communication project
- completing a community project
- completing an agriculture awareness project
- taking part in Achievement Day

You must complete all of the listed aspects in order to show at Fairs and Exhibitions.



ACHIEVEMENT DAY REQUIREMENTS

Book Rack	50
2 Items of Choice	<u>50</u>
	100 Marks

EXHIBITION REQUIREMENT

Book Rack

Because of the time and effort you will put into your woodwork articles, especially the exhibition item, consider using wood other than plywood. Pine or other woods will give you a better looking finished product.



Ages for 4-H members as of January 1st of the 4-H year:

Junior: 9-11 years
 Intermediate: 12-14 years
 Senior: 15-21 years

Check out the PEI 4-H Web Site

www.pei4h.pe.ca

HELPFUL RESOURCES!

www.woodworking.org
www.woodmagazine.com
www.woodworkersworkshop.com
www.woodprojects.com
www.woodworking.about.com
www.woodworkingtips.com



A variety of books

Country Projects for Woodworkers

Scroll Saw Patterns for the Country Home

Nest Boxes

Shelves, Closets, and Cabinets

Painted Country Woodcrafts

Stanley Early American Designs - Series B

Projects for Woodworkers

Stanley Early American Designs - Series D

are available at the PEI 4-H Office which can be

borrowed for a two week loan period. To book

these, call 368-4833 or drop by the PEI 4-H Office at 40 Enman

Crescent, Charlottetown.



BE A GOOD SPORT!

In the spirit of "learn to do by doing", all those involved in 4-H are encouraged to practice good sportsmanship, use common sense at all 4-H activities and the work in any 4-H project should be the member's own work.



Learn To Do By Doing

JUDGES WILL BE LOOKING FOR...

General Appearance:

Is the item eye appealing?

Are there major blemishes or unplanned markings?

Is the item accurately assembled?

Are all pieces lined up straight and positioned as they are supposed to be?

Cuts:

Are the cuts clean and straight?

Are there burrs left on the item?

Are there burn marks from a dull saw blade?

Joins/Fastening:

Are all joins neatly done and properly fastened?

Was the glue applied neatly?

Are nails flush? Screws counter-sunk?

Finish:

Was the sanding done with the grain?

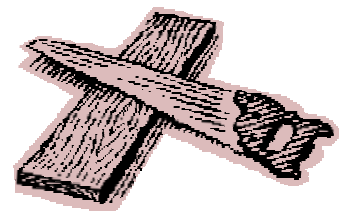
Was the stain/varnish applied with the grain?

Are there any runs in the varnish/stain?

Is the finish dry or tacky?

GET THE MOST FROM WOODWORKING

- Make safety your #1 concern, for both yourself and others in the workshop.
- Be willing to learn.
- Show proper respect for tools, both for safety and to keep the tools in good shape.
- Find someone who can be a "home helper".
- Have fun as you learn.



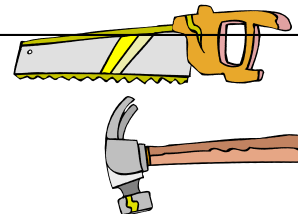
THINK SAFETY!

- Tie long hair back, so it will not catch in anything.
- Do not wear loose, baggy clothing.
- Always wear safety goggles.
- Use the proper tool for the job.
- Have a first aid kit and emergency numbers on hand.
- Ask for experienced help, if needed.
- Never hold a sharp tool in a manner that it can slip and cut you or somebody else. The scratch awl, screwdriver, auger bit, and wood chisel are examples of sharp tools.
- Before using a hammer, check it to see if the head is secure. If it isn't, have it repaired before using.
- Be sure every electric tool you use such as a jig saw, electric drill and sander is properly grounded to protect you from electrical shock. This can be done by connecting the tools to the power source with a cable or cord that has three conductors. The third wire, which is green, and attaches to the third blade of the attachment plus safely grounds the tool.



Expert Tips

- Dampening a surface you have just sanded will raise the remaining imperfections and, when sanded a second time, will give you a smoother finish.
- Sandpaper often becomes clogged, but can be easily cleaned with a fine bristle shoe brush.
- When filling nail holes, stain the project first, then apply the filler to avoid any residue blemishes or untreated wood.
- No project is finished just right until the final finish is put on. Yes you can take a great deal of time on a project, but if it doesn't have a paint or stained finished on it, it will still just look like a piece of wood.
- Prior to staining, be sure to pre-treat the wood with a pre-treat product and wipe clean. The next step is to apply the stain and give it time to dry. From here sand with 240 grit paper and apply the first coat of polyurethane. Allow 24 hours for this coat to dry. With the same piece of 240 grit sandpaper, lightly sand. Repeat the process until you have three coats on the product. Only 12 hours are required between second and third coats for drying. Sand the final coat once again very lightly and finish with a paste wax.



Get the Most from Your Shop Supplies

- Spreading wood glue? Try not to use your fingers, as this can put dirt into the glue and weaken the joint. Use a scrap of wood or paint brush.
- Trying to get a smooth sanding job using the electric sander? Mark the entire board with a pencil, when you sand you will be able to see where was not done.
- Wood splitting on the ends when nailing? Make the end of the nail blunt, so the wood fibres will be pushed rather than split.

Wood Stains

- Stain gives wood a darker appearance.
- Stain should be applied in the same direction as the wood grain.
- When wiping off excess stain—wipe in the same direction as the wood grain.
- If your first coat of stain doesn't provide you with a dark enough result you may need to reapply.

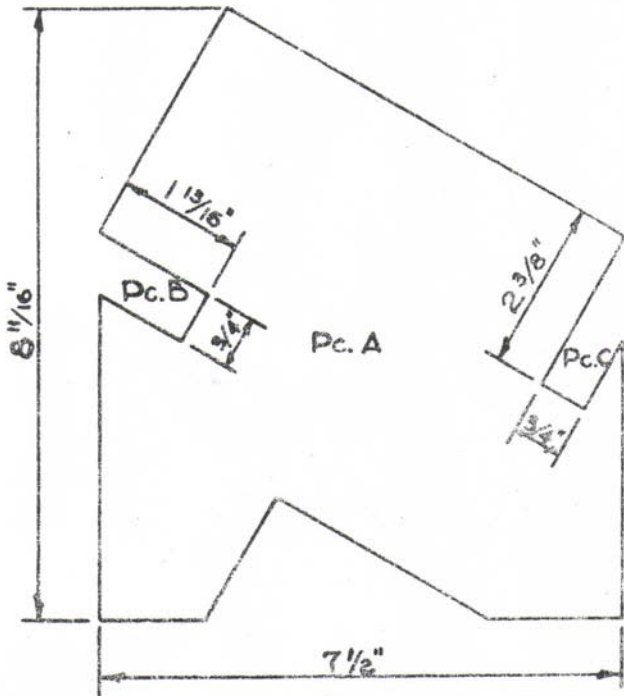
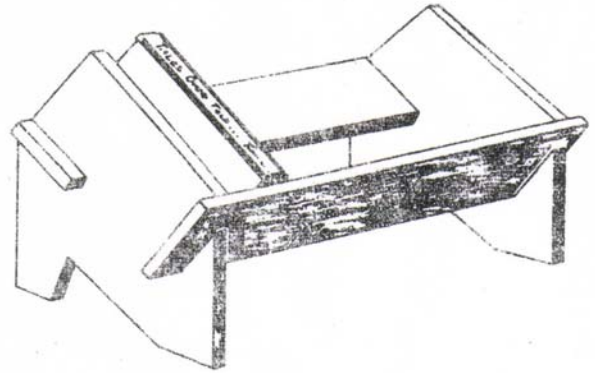
ITEMS OF CHOICE

Your other Achievement Day Requirements are two items of your choice valued at 25 marks each. Your leader's Leader Project Manual contains some ideas but you are free to choose whatever you wish. Your items at Achievement Day will be judged on general appearance, joins, sawing, fastening, and finishing.

BOOK RACK

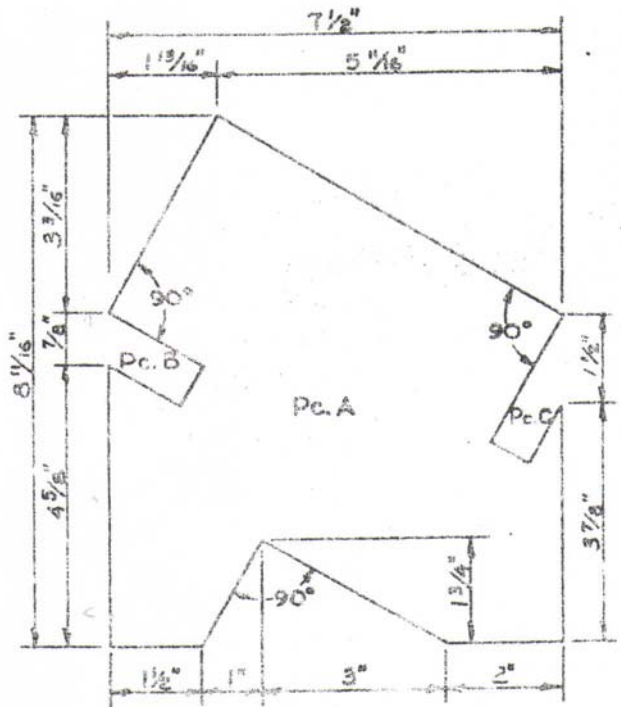
Materials

1 pc. 1" x 8" x 18" (actual dimensions about $\frac{3}{4}$ " x $7\frac{1}{2}$ " x 18") or $\frac{3}{4}$ " plywood for ends
 1 pc. 1" x 4" x 36" (actual dimensions about $\frac{3}{4}$ " x $3\frac{5}{8}$ " x 36") or $\frac{3}{4}$ " plywood for strips



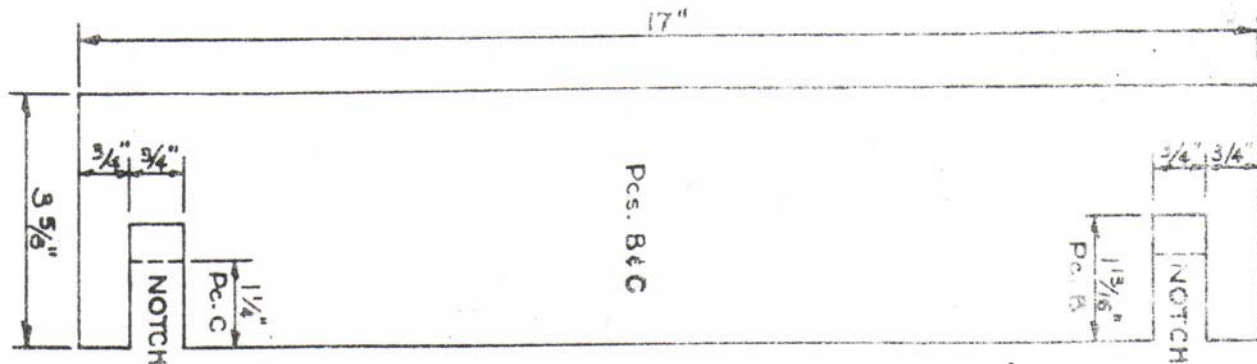
Finish

Apply wood seal or finish as recommended by your leader.



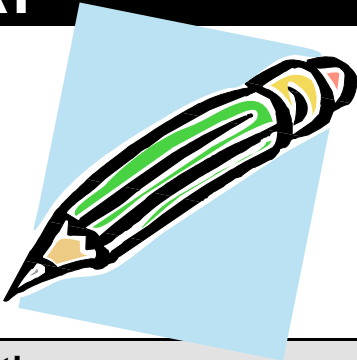
In Construction

Note the notches in piece C are $\frac{1}{4}$ " deep and $1\frac{13}{16}$ " on B. You may desire a wood screw near each end of piece C to hold the top snug against piece A.



PROJECT MEETINGS DIARY

Most projects will require at least six to eight project meetings to complete the project.



Meeting Date	Location	Time	At this meeting, we...

Community and Agriculture Awareness Projects

COMMUNITY PROJECT

Each year you are encouraged to provide a service to your community as a 4-H member. This introduces you to the responsibilities of citizenship. You must participate in your club's plan for a community project and you should have a role to play. Describe your involvement with your club's community project this year.



Our Community Project was _____

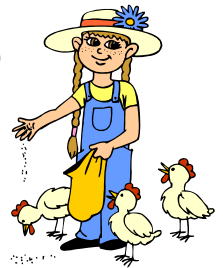
I helped by _____

It was beneficial because _____

I learned _____

AGRICULTURE AWARENESS PROJECT

Agriculture is one of PEI's main industries. You are expected to participate with your club to complete a project (or provide a service) which helps your club or others become aware of the importance of agriculture in our lives. As in the community project, you should actively participate.



Our Agricultural Awareness Project was _____

I helped by _____

It was beneficial because _____

I learned _____