



4-H WOODWORKING PROJECT



Woodworking's usefulness can be applied to many areas of life through learning how to safely use tools to build with wood. The woodworking project teaches the full scope of constructing a wood piece from design to completion.

- Learn how to use tools correctly and safely
- Design your project, including all steps from start to finish
- Develop a materials list
- Select wood suited for your project
- Use of hand and power tools to cut, shape, join and sand your wood
- Learn techniques, including turning, joinery, and finishing

Starting Out *Beginner*

- Tool use; Hand tools, miter box cuts with a hand saw, drill press and scroll saw
- Wood is milled from specific parts of trees
- Use tree limbs and sticks to build a miniature tree house with glue guns
- Simple butt joinery project such as a tool box – joinery technique – glue and screws
- Scroll saw projects such as an ornament

Learning More *Intermediate*

- Identify safety hazards in tool use
- Tool use; planer, scroll saw, band saw, drill press, circular saw for rip cuts and cross cuts, and plate joiner, router
- Soft and hard woods and how that effects cutting, shaping, and sanding
- Scroll saw puzzle projects
- Finish techniques include sanding in progressive steps, simple 3 coat finishes

Exploring Depth *Advanced*

- Tool use; dovetail jigs, lathe and turning tools, power miter saws
- Encourage member's own design, draw it out, dimensions, materials list, cut list, step-by-step
- Explore turning, joinery, and finishing techniques such as parting, dovetailing, finger joints, dyeing, and sealing
- Adding detail – keyed joints, hand carving, marquetry

The activities above are ideas to inspire further project development. This is not a complete list.

4-H THRIVE

Help Youth:

Light Their Spark

A spark is something youth are passionate about; it really fires them up and gives them joy and energy. Help youth find how this project excites them.

Flex Their Brain

The brain grows stronger when we try new things and master new skills. Encourage youth effort and persistence to help them reach higher levels of success.

Reach Their Goals

Help youth use the GPS system to achieve their goals.

Goal Selection: Choose one meaningful, realistic and demanding goal.

Pursue Strategies: Create a step-by-step plan to make daily choices that support your goal.

Shift Gears: Change strategies if you're having difficulties reaching your goal. Seek help from others. What are youth going to do when things get in their way?

Reflect

Ask project members how they can use their passion for this project to be more confident, competent and caring. Discuss ways they can use their skills to make a contribution in the community, improve their character or establish connections.



Expand Your Experiences!

Science, Technology, Engineering, and Mathematics

- Take a wood planer apart and put it back together to see how it is engineered
- Using a variable speed lathe, turn a piece of wood with a turning tool using different speeds from slow to fast and see how it effects the look of the wood
- Examine different grades of sand paper under a magnifying glass to explore differences

Healthy Living

- Build a balance board and keep it in your living room to help strengthen your legs and maintain good balance
- Think out the whole process of construction and calculating dimensions which involves the body and mind

Citizenship

- Build bird feeders to put around your local senior housing
- Build large raised vegetable planters for your school's lunch program
- Volunteer to build with Habitat for Humanity
- Set up a fair booth to demonstrate scroll saw techniques

Leadership

- Be a Junior or Teen Leader for the Woodworking project
- Lead a "Build It" day for your club members – choose something fun for everyone to build and incorporate teaching shop safety in to the day
- Lead a committee to build wood A-frame signs to advertise your club's events

Resources

Fine Wood Working
[Finewoodworking.com](http://finewoodworking.com)

Inside Woodworking
www.insidewoodworking.com

Museum of Woodworking Tools
<http://www.antiquetools.com/>

WoodNet
<http://www.woodnet.net/>

Woodworking Safety

4-H Clover Safety Notes for using tools and equipment
safety.ucanr.org/4-H_Resources/Clover_Safe_Notes_by_Project_Area/

Fine Wood Working Safety
<http://www.finewoodworking.com/pages/woodworking-safety.asp>

The UC 4-H Youth Development Program does not endorse, warrant, or otherwise take responsibility for the contents of unofficial sites.



Connections & Events	Curriculum	4-H Record Book
<p>Presentation Days – Share what you've learned with others through a presentation.</p> <p>Field Days – At these events, 4-H members may participate in a variety of contests related to their project area.</p> <p>Contact your county 4-H office to determine additional opportunities available, such as a field day.</p>	<ul style="list-style-type: none"> • National 4-H Curriculum at 4hmall.org – Woodworking Curriculum is good for beginners <ul style="list-style-type: none"> • Making the cut • Nailing it together • Measuring Up • Finishing Up • Helper's Guide • 4-H Wood Science from OSU extension.oregonstate.edu/catalog/4h/4-h442la.pdf 	<p>4-H Record Books give members an opportunity to record events and reflect on their experiences. For each project, members document their experiences, learning and development.</p> <p>4-H Record Books also teach members record management skills and encourage them to set goals and develop a plan to meet those goals.</p> <p>To access the 4-H Record Book online, visit http://ucanr.edu/orb/</p>

University of California Agriculture and Natural Resources

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