



Woodworking



The Kansas 4-H Woodworking project helps youth build skills that prepare them for life, careers, and leadership while creating real wood projects they can be proud of. From making simple toys and household items to building furniture and advanced designs, members learn to measure, cut, shape, and assemble wood safely and accurately. Beginners explore basic tools and safety, intermediate members select lumber and make precise cuts, and advanced youth use powered equipment and modern technologies. Along the way, participants strengthen problem-solving, teamwork, and responsibility while exploring careers in construction, manufacturing, engineering, and design, developing the confidence and skills needed to be Beyond Ready for the future.

Beyond Ready

Ready to Lead

Youth involved in 4-H are **two times more likely to have the goal of becoming a leader**. Through real-world experiences and the guidance of caring mentors, they develop the confidence, communication, and decision-making skills needed to lead in today's changing world.

Ready to Serve

Youth who participate in 4-H are **three times more likely to engage in community service**. Service learning provides them with purpose and connection at a time when **more than 53% of Gen Z report feeling lonely**. Through 4-H, youth are empowered to serve with compassion and make a meaningful impact.

Ready to Build

With nearly **10 million unfilled jobs and 77% of employers seeking real-world skills**, 4-H helps youth build what matters. Through hands-on projects and career exploration, youth gain adaptability, problem-solving, and workforce readiness.

Ready to Conquer

While 52% of young people feel like they're failing at life goals, 4-H youth rise with resilience. Backed by research and supported by caring adults, they learn to overcome challenges, set goals, and take charge of their future with confidence.

Building a Ready Generation in a World of Change!

Starting Out

Beginner:

- Build confidence, safety, and basic tool skills:
- Identify common woodworking tools, including PPE (Personal Protective Equipment).
- Measure, mark, square, and cut boards to the correct size.
- Use hammers, nails, screws, and clamps to assemble simple projects.
- Develop responsibility, focus, and hand-eye coordination through hands-on work.

Learning More

Intermediate:

- Strengthen skills, accuracy, and problem-solving:
- Measure and mark angles accurately using a square and protractor.
- Cut boards using hand saws and beginner power tools.
- Create basic joints.
- Use a hand planer to smooth and shape lumber.
- Practice teamwork, goal setting, and quality control.

Expanding Horizons

Advanced:

- Advance technical skills, leadership, and career readiness.
- Safely use advanced tools.
- Build strong joints.
- Experiment with adhesives, finishes, and chemical wood strippers.
- Plan, design, and build advanced woodworking projects.
- Troubleshoot mistakes, improve designs through testing and revision.
- Build a woodworking project portfolio.

Woodworking Project

Expand Your Experiences!

Healthy Living:

- Practice shop safety and proper use of tools and protective equipment.
- Learn how good posture and body position prevent injuries while working.
- Build items that support healthy living (step stool, planter box, or sports equipment rack).

Science and Agriculture:

- Learn how trees grow and how wood becomes lumber.
- Compare different types of wood.
- Evaluate how moisture, temperature, and finishes affect wood.

Community Vitality:

- Build items for schools, parks, libraries, or community spaces (birdhouses, benches, or little free libraries for public areas).
- Repair or refurbish wood items for community members.
- Collaborate with local carpenters, builders, or organizations on a service project.

Communication and the Arts:

- Design and decorate woodworking projects using paint, stain, carving, or engraving.
- Create a display board showing the design process from start to finish.
- Take photos or videos documenting the building process.

Career Exploration:

- Job shadow a carpenter, cabinet maker, woodshop technician.
- Visit a construction site.
- Interview a professional woodworker, carpenter, or construction manager.
- Visit a technical college or trade school.
- Create a real/conceptual woodworking product or service business; participate in a YEC (Youth Entrepreneurship Challenge) competition.
- Explore cybersecurity jobs in construction and engineering careers.

Contact Information

Kansas 4-H
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Resources & Events:

Attend events and take advantage of opportunities to expand your project learning and help enhance your communication skills.

- Club Day Presentation
- Kansas 4-H Discovery Days
- Summer Day Camps
- Project Workshops
- County and State Fair
- Career Exploration Tours

Curriculum & Resources:

- Contact your local Extension office.
- National Curriculum
- [Level 1 - Measuring Up](#)
- [Level 2 – Making the Cut](#)
- [Level 3 – Nailing it Together](#)
- [Level 4 – Finishing Up](#)
- [Woodworking Helper's Guide](#)
- [Woodworkers Guild of America](#)
- [Kansas Clover Classroom Challenges](#)

4-H Record Keeping:

Learning to keep accurate records is a life skill.

- [Setting 4-H Project Goals \(4H1100\)](#)
- [Kansas 4-H Record Keeping](#)
- Keep a project journal with plans, measurements, sketches, materials used, costs, and where supplies were purchased.
- Take photos of projects from start to finish.

Project Exhibit Ideas:

Items to build:

- An article for farm or shop use
- A piece of furniture for household or lawn use
- Other woodwork articles (bird feeders, knife racks, breadboards, doorstops, etc.)
- A toy, game, or activity item made from wood
- Display of a variety of identifying wood samples
- Display board of different wood finishes

