



COLORADO STATE UNIVERSITY
EXTENSION

Woodworking

Project units 1-4 are designed for members 8-18 years old.



Unit 1 - Measuring Up

Inspiring youth to:

- Learn how to organize your shop
- Learn how to identify woodworking tools
- Practice woodworking safety
- Learn how to measure and mark boards, use a square, a hand drill and a hand saw
- Identify different types of nails and screws
- Make a sandpaper block
- Construct a butt joint and use a hammer safely

Unit 2 - Making the Cut

Inspiring youth to:

- Learn how to select wood based on grain
- Recognize the difference between plywood and fiberboard
- Learn how to develop a plan
- Learn how to use a combination square and make a miter cut
- Learn how to make a curved cut
- Learn how to use a sander
- Learn how to identify types of woodworking tools and much more!

Unit 3 - Nailing it Together

Inspiring youth to:

- Learn how to stay current with technology
- Learn how to use a T-bevel, powered circular saw, and radial arm saw
- Learn about hinges, hasps, and flush plates
- Learn the difference between clamps
- Learn how to use various types of wood stains and much more!

Unit 4 - Finishing Up

Inspiring youth to:

- Design a woodworking shop
- Use a router, jointer, portable planer and scraper
- Learn about dovetail joints
- Learn how to use bleaches, strippers, and adhesives
- Learn how to build a wood vehicle, hockey board, step stool or chair and much more!

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Woodworking

Project Tips:

- Complete the woodworking e-record and secure in a sturdy binder/notebook.
- Unit 1 has very specific restrictions on the tools used in building an article to display. This is done for reasons of safety and to provide a fair comparison among projects.
- An exhibit which shows evidence of not following these restrictions will not be ranked.
- The internet has many options to find dimensional plans.



Judging Criteria:

- Straightness, accuracy and smoothness of saw cuts
- Level of difficulty and precision of joints
- Skill employed in the use of nails, screws, gluing and other hardware
- Item free of tool or sandpaper marks
- Appropriate finish evenly applied
- Article attractiveness and quality of exhibit
- Correct proportions and proper wood for the intended use
- Accuracy in measurements, ability to follow instructions, quality of workmanship



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Resources:

- Exhibit & Judging Requirements
- Record Books
- Manual Information

Located at: Colorado4h.org

Woodworking Industry Careers



Regulation & Inspection

Work with manufacturers, government, retail, research, and more to ensure safe products and structures



Fabrication & Repair

Create and design products as well as repair and rebuild



Research

Test out products, designs, and methods; Work with consumer safety and support



Timber Growth & Harvest

Grow and harvest of different wood products for consumer and industrial use



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Degrees/Certifications:

Construction Technology
Education
Forestry
Horticulture
Tourism/Business
CAD Technician/Design
Mechanical Engineer
Research



Arborist

Provide support and work with different businesses for tree growth and conservation



Supervision & Management

Provide oversight of projects, builds, and staff to complete work



Retail

Provide sales of products at different retail levels to support the woodworking industry



Advocacy/Political Appointments

Opportunity to influence policy, safety protocols and standards for the industry