

WOODWORKING

RULES

- A. The name and county of each exhibitor should appear separately on the back of each board, poster or article and on the front cover of the notebooks so owner of the exhibit may be identified if the entry tag is separated from the exhibit.
- B. Requirements: All articles exhibited must include a plan (with drawings or sketch or blueprints) stating dimensions and other critical instructions a builder would need to know how to build the project and 4-Her's name and county. Plans may include narrative instructions in addition to the dimension drawings and include any alternations to the original plan. Part of the score depends on how well the project matches the plans. If the plans are modified, the changes from the original need to be noted on the plans. All plans used for making the article must be securely attached and protected by a clear plastic cover.
- C. If the project (i.e. picnic tables, wishing wells, swings, chairs, bridges, doghouses, etc.) is designed to be used outside it will be displayed outside.
- D. All outside projects MUST have supporting information placed in a protective bag to prevent damage from weather events such as rain and be ATTACHED to projects with string, zip ties, etc.

4-H'ers must be in Unit 3 or Unit 4 for the exhibit to be considered for State Fair.

WOODWORKING UNIT 1 – MEASURING UP

County Project Only – Not eligible for State Fair competition.

- H911011** **Article Made with Hand Tools:** Select from Unit I or use comparable plans from other sources.
H911012 **Other Woodworking:** All Levels

WOODWORKING UNIT 2 – MAKING THE CUT

County Project Only – Not eligible for State Fair competition.

- H911013** **Article as Shown in Unit II:** Or comparable items using power hand tools, electric jig saw, power drill, and/or oscillating sander.
H911014 **Article Using Large Power Tools:** This is to include cabinet construction and/or advanced skills.

WOODWORKING UNIT 3 – NAILING IT TOGETHER

- *H911001** **Wood Working Article** – (SF91) - Item should be made using either joints, hinges, dowels, or a dado joining made using skills learned in the Nailing It Together manual. Item is required to be appropriately finished. Examples include: bookcase, coffee table or end table.
- *H911003** **Recycled Woodworking Display** – (SF95) - Article made from recycled, reclaimed, or composite wood. Article must be appropriately finished **and/or sealed** and utilize one or more woodworking techniques from page 2 of the Unit 3 manual. Exhibit must include the woodworking plan and a minimum one-page report of how the engineering design process was used to develop the woodworking plan.
- Engineering Design Process*
1. State the problem (Why did you need this item?)
 2. Generate possible solutions (How have others solved the problem? What other alternatives of designs were considered?)
 3. Select a solution (How does your solution compare on the basis of cost, availability and functionality?)
 4. Build the item (What was your woodworking plan, and what processes did you use to build your item?)
 5. Reason for article finish (What type of finish, how did you finish or why you chose this finish?)
 6. Evaluate (How does your item solve the original need?)
 7. Present results (How would you do this better next time?)

- *H911004** **Composite Wood Project** – (SF96) - 60% of the project must be wood and 40% made from other materials such as metal, rubber, resin, etc. All plans and plan alternations must be attached to the article. Protect plans with a cover. If project is designed to be outside, it is required to have appropriate outdoor finish because project may be displayed outside.
- *H911005** **Outdoor Wood Project made with Treated Wood** – (SF97) - Treated wood projects DO NOT have to have a finished coating. All plans and plan alternations must be attached to the article. Protect plans with a cover. If project is designed to be outside. **Examples include: picnic tables, planters, outdoor furniture, etc.**
- *H911006** **Wood Projects created on a Turning Lathe** – Article is the object created from spinning wood on a turning lathe. Article must be appropriately finished and/or sealed. Exhibit must include plans detailing design and process of completion, any changes made to the design, details of finishing techniques, and other relevant information about the article. Must include a description of tools used.

WOODWORKING UNIT 4 – FINISHING UP

- *H911007** **Woodworking Article** – (SF91) - Item made using skills learned in the Finishing It Up Project. Examples include: dovetailing, making a pen using lathe, overlays, using a router, etc. Item is required to be appropriately finished.
- *H911008** **Recycled Woodworking Display** – (SF91) - Article made from recycled, reclaimed, or composite wood. Article must be appropriately finished **and/or sealed** and utilize one or more woodworking techniques from page 2 of the Unit 3 manual. Exhibit must include the woodworking plan and a minimum one-page report of how the engineering design process was used to develop the woodworking plan.

Engineering Design Process

1. State the problem (Why did you need this item?)
2. Generate possible solutions (How have others solved the problem? What other alternatives of designs were considered?)
3. Select a solution (How does your solution compare on the basis of cost, availability and functionality?)
4. Reason for article finish (What type of finish, how did you finish or why you chose this finish?)
5. Build the item (What was your woodworking plan, and what processes did you use to build your item?)
6. Evaluate (How does your item solve the original need?)
7. Present results (How would you do this better next time?)

Resources:

- Woodworking Wonders 1 - Develop skills such as measuring, squaring, and cutting a board, driving nails, and using clamps and screws; Build a picture frame, a letter holder, a box, or an airplane:
- Woodworking Wonders 2 - Measure, cut, sand, drill, and use advanced hand and power tools; Apply paint and use bolts and staples; Build a sawhorse, birdhouse, toolbox, or a stool:
- Woodworking Wonders 3 - Practice measuring angles, cutting dado and rabbet joints; Use a circular saw, a table saw, and a radial arm saw; Sand and stain wood:
- Woodworking Wonders 4: