

- H920002 **Position Welds (Scoresheet SF281)** -a display showing three beads welded in the vertical down, horizontal and overhead positions.
- H920003 **Welding Art (Scoresheet SF283)**
Any art created using tack welds to hold the metal pieces together (examples include horseshoe projects). Type of welder, welder settings, all plans, plan alternations, and a bill for material 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.
- H920004 **Welding Article (Scoresheet SF281)**
Any shop article where welding is used in the construction. 60% of the item must be completed by 4-Her and notes regarding laser welding or machine welding must be included. Type of welder, welder settings, all plans, plan alternations, and a bill for material 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.

PREMIUMS: Purple, \$6.00; Blue, \$5.00; Red, \$4.00; and White, \$3.00

- H920005 **Welding Furniture (Scoresheet SF282)**
Any furniture with 75% welding is used in the construction. 60% of the item must be completed by 4-Her and notes regarding laser welding or machine welding must be included. Type of welder, welder settings, all plans, plan alternations, and a bill for material 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.

PREMIUMS: Purple: \$4.00; Blue: \$3.00; Red: \$2.00; White, \$1.00

- H920006 **Plasma Cutter/Welder Design (Scoresheet SF279)** – Plasma cutters/welders allowed for detailed design(s) to butt cut into metal. 4-H members will create a notebook describing the design process to create the “artwork” to butt cut into the metal. In the notebook include:
- A photo (front and back) of the finished project.
 - Instructions on how the design was created (include software used), this allows for replication of the project.
 - Lessons learned or improvements to the project.
 - Steps to finish the project.

PREMIUMS: Purple: \$5.00; Blue: \$4.00; Red: \$3.00; White, \$2.00

- H920007 **Composite Weld Project (Scoresheet SF280)**
60% of the project must be welded and 40% made from other materials such as wood, rubber, etc. Type of welder, welder settings, all plans, plan alternations, and a bill for material must be attached to the article. Protect plans with a cover. If project is designed to be outside, it is required to have an appropriate outdoor finish because project may be displayed outside.

STEM WOODWORKING

In this category 4-H’ers have the opportunity to create exhibits about varying levels of woodworking. In addition, participants can also create informational exhibits about their woodworking projects. Through involvement STEM Woodworking, 4-H’ers will be better educated about the topic and better their woodworking skills.

RULES:

1. 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.
2. **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.
3. 4-H'ers must be in Unit 3 or Unit 4 for the exhibit to be considered for State Fair. All projects must have appropriate finish.
 4. 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 at the State Fair.
 5. All outside projects MUST have entry tag and 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.

All static exhibits must have received a purple ribbon at the county fair to advance to the State Fair. Scoresheets and additional resources can be found at <http://go.unl.edu/ne4hwoodworking>.

A 4-H member may exhibit two (2) items (can be in the same class number) in one Woodworking Level at County Fair.

PREMIUMS: Purple, \$4.00; Blue, \$3.00; Red, \$2.00; and White, \$1.00 (**Denotes NOT State Fair Eligible)

WOODWORKING, MEASURING UP-UNIT 1

****H911901 Woodworking Article (Scoresheet SF91)**

Item made using skills learned in the Measuring Up project. Examples include recipe holder, stilts or other skill level appropriate item.

PREMIUMS: Purple, \$5.00; Blue, \$4.00; Red, \$3.00; and White, \$2.00

WOODWORKING, MAKING THE CUT-UNIT 2

****H911902 Woodworking Article (Scoresheet SF91)**

Item made using skills learned in the Making the Cut project. Examples include birdhouse; foot stool; napkin or letter holder.

PREMIUMS: Purple, \$6.00; Blue, \$5.00; Red, \$4.00; and White, \$3.00

WOODWORKING, NAILING IT TOGETHER-UNIT 3

H911001 Woodworking Article (Scoresheet 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 (Scoresheet 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. General possible solutions (How have others solved the problem? What other alternatives or 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 (Scoresheet SF284)**
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 (Scoresheet 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.
- H991006 **Wood Projects created on a Turning Lathe (Scoresheet SF)**
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, FINISHING UP-UNIT 4

PREMIUMS: Purple, \$6.00; Blue, \$5.00; Red, \$4.00; and White, \$3.00

- H911007 **Woodworking Article (Scoresheet SF91)**
Item made using skills learned in the Finishing 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 (Scoresheet 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 4 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. General possible solutions (How have others solved the problem? What other alternatives or 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?)
 - 8.

CLOVER KIDS

Clover Kids are youth that are ages 5, 6, or 7 as of January 1 of the current year. The program is designed to provide 5- to 7-year-olds with a variety of educational and recreational experiences in a non-competitive environment. Clover Kids provide an excellent opportunity for youth to achieve his/her highest potential because early life experiences affect future development. The primary goal is to promote the child's stages of development – intellectually, physically, socially, and emotionally.

- Develop Self-Esteem
- Decision-Making Skills (making positive choices)
- Comprehensive Skills (learning how to learn, positive attitudes toward learning)
- Mastering Physical Skills (enjoying constructive and creative play)
- Social-Interaction Skills (getting along with others)
- Diversity Skills (acceptance of others; exploring family and community relationships)