



Criteria for Judging Projects Made from Wood

I. Skills (Total points 75)

A. Quality of Workmanship

1. Cutting

- a. Pieces of proper lengths
- b. Accurate cuts, either squared or beveled
- c. Uniform and smooth saw cuts (some roughness may be appropriate in rustic designs)
- d. Free of chipping, dents, and uncut fibers
- e. On a woodcarving where the knife cuts remain as an element of texture, the cuts should be clean and uniform as an indication of knife control.

2. Assembly

- a. Joints fit snugly
- b. Joints assembled with even edges or uniform overlap
- c. Wood free of clamp marks
- d. Fasteners properly used

Nails

- Use common or box nails where strength is more important than appearance.
- Use brads, finishing, or casting nails where appearance is important.
- Nail heads should be flush with the surface of the wood unless set below the surface $\frac{1}{16}$ " to $\frac{1}{8}$ " and filled. The filler should match the wood if a clear finish is used.
- Wood should be free of hammer marks and splits caused by nails.

Screws

- Should be flush with the surface or countersunk enough to plug the hole

- Rim of the bevel or ovalhead screw flush with surface
- Screwdriver slot should be in good condition.
- Wood should be free of screwdriver marks.

Adhesives or glue

- Resorcinol glue should be used for exterior purposes.
- Casein or plastic resin glue should be used for wood turnings.
- Wood surfacing should be delayed several days after gluing to prevent glue line depressions.
- Wood should be free of glue stains.
- Dowels used in end grain to side grain butt joints

B. Surface Preparation and Finish

1. Free of pencil marks, scratches, and dents (unless of rustic design)
2. Furniture-like items free of planer marks and cross grain sanding marks
3. Finish should be dry, smooth and uniform and free of dust specks, brush bristles, runs and sags.

C. Difficulty of Construction (number of skills and operations involved)

1. A well made, complex item should rank higher than a well made, simple item.
2. A perfectly made, small and simple item should rank higher than a poorly made, complex article.

II. General Characteristics (Total Points 25)

A. Attractive and Well-proportioned

B. Can Adequately Serve the Purpose for Which Item is Intended

C. Proper Selection of Wood According to Use. For example:

1. Exterior grade plywood used for areas subject to wetting
2. Heartwood of decay resistant lumber or treated lumber used for lawn and garden furniture

Appendix I Judging Score Card

		Identification of Article			
I. Skills (Total 75 points)					
A. Quality of Workmanship—cutting, assembly, etc.	(30)				
B. Surface Preparation and Finish	(25)				
C. Difficulty of Construction and Level of Skills Involved	(20)				
II. General Characteristics (Total 25 points)					
A. Attractive and Well-proportioned	(10)				
B. Utility Value	(10)				
C. Selection of Woods and Materials	(5)				



Appendix II Nail-driving Activity

Objectives

- To develop eye hand coordination
- To gain the skill of driving nails safely, accurately and efficiently into wood

Equipment and Supplies

- Safety goggles for each participant
- A hammer for each participant or team, depending on how the contest is conducted
- Pieces of dimension lumber, such as a 2×4 or 2×6
- Nails shorter than the thickness of the lumber
- Nail driving blocks
- A watch with a second hand (optional)

Leader Responsibilities

The leader sets the rules:

- Sets the amount of time for the activity
- Determines if the activity will be competitive or noncompetitive
- Decides if the activity will be individual or a team effort

Organizes the activity:

- Selects teams and team captains, if necessary
- Distributes goggles, nails, hammers, and driving blocks
- Starts and times the event
- Scores the event

Scoring

For individual learning or self competition, have each individual record his time and try to improve it the next time. For group or team competition, the team with the highest combined score wins. (Time minus 30 seconds for each bent nail and 10 seconds for each hammer mark.)

Hints

This activity can be used to put action into a discussion meeting. It can generate enthusiasm and create interest. You can modify this activity by having both a piece of hardwood and a piece of softwood and both heavy- and thin-shanked nails. A requirement could be that one thin shank and one thick shank be driven in both the hardwood and the softwood. Teen leaders or older teen members may be of assistance to the leader. Get them to help whenever needed.



Appendix III

Wood Products, Tools, and Fasteners Identification Activity

Objectives

- To identify common types of hardwoods and softwoods used in your area
- To identify different types and kinds of fasteners (nails, screws, glues, etc.)
- To identify various kinds of woodworking tools
- To help 4-H'ers feel satisfaction and accomplishment in wood science activities

Equipment and Supplies

- Samples of hardwood and softwood
- Samples of different kinds of fasteners in different sizes
- Samples of woodworking tools

Leader Responsibilities

- Plan the activity and set the rules
- Assemble the wood samples, fasteners, and tools
- Score the event

Scoring

Scores depend upon the rules of the game. Consider the members' ability to identify samples of wood, tools, nails, etc.

Note

Identification of wood products, tools, and fasteners can be done in various ways. Use your creativity to plan an event keeping in mind the objectives of the activity.



Appendix IV

Hand Sawing Efficiency Activity

Objectives

- To use sawing equipment properly and safely
- To gain skills in sawing techniques
- To provide recognition for the 4-H member

Equipment and Supplies

- Square
- Carpenter's tape or rule
- Coping saw and several blades
- Crosscut saw
- Marking pencils
- Sawhorse or workbench of proper height
- Lumber

Leader Responsibilities

(See responsibilities under Nail-driving Activity, previous page.)

Scoring

(See scorecard on page 13 for an idea.) When developing your scorecard, consider accuracy, safety, and care of tools.

Note

Praise or a pat on the back can give recognition for a job well done.



Appendix V Measuring Activity

Objectives

- To learn to read various measuring tools properly
- To understand standard sizes of wood materials
- To develop skills in measuring lumber accurately

Equipment and Supplies

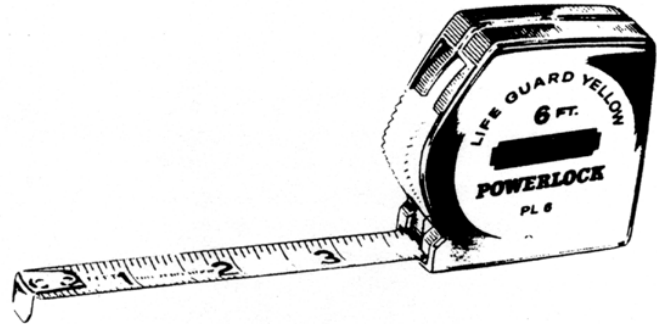
- Carpenter's tapes
- Utility squares
- T square
- Pieces of dimension lumber of different sizes (find pieces and label them according to size)
- Pieces of plywood and particleboard

Leader Responsibilities

- Prepare a list of pieces to be measured to specification. Have members demonstrate their skills in measuring.
- Arrange a task of determining the amount of lumber necessary to build a specific item, such as a dog house, etc.

Scoring

- Methods of scoring will depend on the rules of the activity.





Appendix VI **Wood Finishing Activity**

Objectives

- To use good finishing techniques and application of a suitable finish
- To develop skills in finishing wood
- To refine skills in the use of wood finishing tools, abrasives, fillers, etc.

Equipment and Supplies

- Several grades of wood sanding paper
- Steel wool
- One or more types of rasps
- Several types of suitable finish
- Different species and kinds of wood
- Applicators and cleaners

Leader Responsibilities

- Secure a box of scrap lumber samples of hardwoods and softwoods, all unfinished. (Members will select a piece of wood, select a finish and the supplies and equipment needed to complete the finish. In a given time allotment, the 4-H'er will complete a small area for showing.)
- Evaluate the finished product. Consider safety and care of tools. Also consider suitability of the finish selected, especially as it affects function or use of the item.

