



2021-2022 4-H WOOD SCIENCE JUDGING CONTEST

In this contest, 4-H members will learn a variety of wood science topics including equipment, safe practices, skills, and workmanship. In addition, decision making skills and the ability to clearly express one's self are lifelong attributes that have a positive impact on mastery. 4-H judging contests helps members develop these skills. Judging involves making a decision and then telling why you made it. Through judging, youth learn to appreciate standards, observe carefully, and develop reasoning ability.

There are two divisions for this contest: Junior and Senior.

Junior participants must be between the ages of 8-12 in 4-H age. Individuals 13 and older must complete the senior contest. If a junior chooses to participate in both divisions, they must complete the senior level contest first. The top ten senior participants from each county are eligible to participate in the state contest. Should ten seniors not be available, juniors may be asked to participate in the state event.

RESOURCES:

- Woodworking Wonders 4-H Project Series. Levels 1-4
- https://www.oshatraining.com/cmsdocuments/OSHA_Training_Toolbox_Talk_ Working_Safely_With_Table_Saws.pdf

JUNIOR JUDGING CONTEST

- 1. Be able to Identify the 13 tools listed. (Level 1, pg. 8).
- 2. Be able to identify three safety practices that can be followed when using the tools identified in item #1 above. (Level 1, pgs. 10-11).
- 3. Be able to identify the parts of a hammer (Level 1, pg. 17) and the parts of a screwdriver (Level 2, pg. 18).
- 4. Be prepared to demonstrate the following skills:
 - a. Countersink a nail (Level 1, pg. 18).

- b. Measure a piece of wood using the provided measuring tool (Level 1, pg. 14 and 16).
- c. Properly remove a nail from a piece of wood (Level 1, pg. 18)
- 5. Rank a class of 4 finished or unfinished items considering workmanship, appearance, suitability, and quality of the finish.

SENIOR JUDGING CONTEST

- 1. Given the list of tools found in Levels 1-4, be able to identify each tool and provide one safety practice for each. Youth should be prepared to indicate why this safety practice is important to follow.
- 2. After reading scenarios provided, be able to respond to questions presented as to what you feel would be the best safety practice to follow when working with table saws and cutting wood. (Note: Refer to link in resource area)
- 3. Be familiar with the terms in the glossary of Levels 1-4.
- 4. Be able to provide a brief description of the proper use and function for the following tools:
 - a. Chisel
 - b. Combination Square
 - c. Miter Box
 - d. T-Bevel
 - e. Table Saw
 - f. Router
 - g. Portable Electric Drill
 - h. Brace and Bit
- 5. Be prepared to demonstrate the following skills:
 - a. Screw two pieces of wood together (Level 2, pgs. 18 and 19).
 - b. Demonstrate the use of a rasp and clamp to smooth the edge of a piece of wood (Level 1, pg. 21).
 - c. Demonstrate how to use a T-bevel and protractor to mark an angle cut on a piece of wood (Level 2, pgs. 22-23).

- d. Demonstrate how to use a miter box (Level 2, pg. 22).
- e. Demonstrate how to use a chisel (Level 4, pg. 20).
- 6. Rank one class of 4 finished or unfinished items considering workmanship, appearance, suitability, and quality of finish. Provide written reasons for your placings.