



Welding

Description:

The 4-H welding project provides youth with educational information about welding and how it can be used to construct items.

Decatur County Expectations

THIS IS A COUNTY ONLY PROJECT. Project manuals will need to be presented at the time of judging. Green books can be utilized to hold record sheets and project manuals. Poster information can be found below and on the Poster Diagram Page.

Exhibit Guidelines

Youth may exhibit one project they are capable of researching/building and be prepared to answer a few questions from the judge regarding this project at the time of judging.

The project must have been designed and built within the current 4-H calendar year. Youth are required to learn about and wear all appropriate welding safety gear at all times. Youth must be able to name and display all safety practices and procedures.

Youth will learn to operate appropriate welding equipment. They will learn to cut with an Acetylene torch and/or plasma cutter, learn different welding beads and joints, learn about mig and stick welders, learn about saw, ironworker, and drill press. Youth will continue to practice each year and improve skill and knowledge. Youth will learn basic welding techniques along with opportunities to learn project layout techniques.

In order to show an actual built exhibit, a member must be in Grades 9-12. Must complete Grade 8 prior or with first exhibit in Grades 9-12. All 4-H members must complete Beginning Welding Poster Requirement prior to showing an exhibit.

Younger youth will complete a poster (22x28), slideshow (must bring your own device AND a copy in a folder/binder/plastic report cover to leave as exhibit), pamphlet (3 copies), or notebook/binder for their project.

Exhibit Class Guidelines:

Beginner (grades 3-7)

Youth will select a different topic each year from the following:

1. Careers in welding.
2. Types of welders with advantages and disadvantages and cost.
3. Collection of welding safety equipment for display.
4. Colleges, technical schools, and/or training programs offering welding programs.

5. Collection of drawings/pre-made plans, ideas, and notes of potential projects in a binder.

Intermediate (grade 8)

Beginning Welding Poster (22 x 28) displayed horizontally. The poster should be titled "Beginning Welding" and needs to include the following:

1. Welding equipment that you work with.
2. Safety equipment (helmet, gloves, safety glasses/goggles).
3. Five (5) welding rods of different sizes and types.
4. Label each rod as to size, heat range, metal type and metal thickness (gage).

Advanced (grades 9-12)

Must complete Grade 8 prior or with first exhibit in Grades 9-12. Youth must have a safety contract or a written statement from their Ag teacher before proceeding through the Grades 9-12 requirements. Youth will continue to practice safety in the shop and around equipment. Youth will improve skills by practicing with available equipment. The practical planned project exhibit is as follows:

1. List of supplies used.
2. Drawing and design plans on paper.
3. Approximate cost.
4. Actual project.

The following will be the judging criteria:

1. Quality of welds.
2. Appropriateness of weld.
3. Quality of joints made (if any).
4. Appropriateness of joints selected to use (if any).
5. Usefulness of item made.
6. Overall appearance and neatness.

Remember: Make or repair any items worthy of your time and effort. Be proud of what you exhibit!