

4-H WELDING

County Only Project

Requirements:

Must be in grade 6 or above to participate. Any welding process and mode of transfer is allowed but must be noted on the Information/Craft Card.

Grades 6 & 7 Beginner

Complete and exhibit one of the following:

- a. 6" T fillet
- b. 6" Lap Joint
- c. 6" Butt Joint

Welds will be judged on weld consistency in weld size and length and lack of imperfections (undercut, underfill, etc.) See attached drawings for specifics.

Grades 8 & 9 Intermediate

Complete and exhibit one of the following:

- a. a sample weld using a flat position pipe to flat.
- b. a joint listed above using overhead welds.
- c. a small project using overhead welds

Welds will be judged on weld consistency in weld size and length and lack of imperfections (undercut, underfill, etc.) See attached drawings for specifics.

Must supply a simple drawing with the correct weld symbol called out for the weld used.

Grades 10 & 11 Advanced

Complete and exhibit one of the following:

- a. A pipe to pipe weld in position. (looking for a hot pass, multiple filler passes, and a weaved cap)
- b. a joint listed above using vertical welds correct for the welding process.
- c. a small project using out of position welds.

Welds will be judged on weld consistency in weld size and length and lack of imperfections (undercut, underfill, etc.) See attached drawings for specifics.

Must supply a simple drawing with the correct weld symbol called out for the weld used.

Grade 12 Senior

Member **may** choose to make their project using any or multiple welding processes.

Accompanying this **shall** be a paper explaining the use of different gases, different alloys and different wires. Also, must have a simple drawing and call out 3 different types of welds used.

***All projects must be accompanied by the provided welding/craft card.**

Welding Information/Craft Card

Name _____ County _____ Grade _____

Division: **Beginner** **Intermediate** **Advanced** **Senior**

Process(s) used (Circle): GMAW (MIG) GTAW (TIG) SMAW (Stick) FCAW (Flux Core)

Other:

Electrode number:

Electrode diameter:

Amperage or dial setting:

Polarity setting:

Safety equipment used:

Joint Type if applicable: