

## 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: