# Metalworking Record

All Units



# 2023-2024

Project:	Name:	
Unit Number and/or Title:	4-H Club:	
Year in this Project: (include current year)	County:	
Age Group (check one):  ☐ Junior (8-10) ☐ Intermediate (11-13) ☐ Senior (14-18)		
Birthdate: (mm/dd/yy)		
<b>4-H Age</b> : (As of December 31, 2023)		
Project and exhibit guidelines for each properties available on the web at Co	-	ate Fair Exhibit
I declare that the information in this book completed to the best of my knowledge.	is correct, and all 4-H r	equirements have been
Member's Signature		date
Leader's Signature		date
Parent/Guardian Signature		date

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## **Project Goals**

(To be completed at the first meeting or at the beginning of the 4-H year.)

Identifying goals and how you are going to reach those goals is important to help you become more skilled and knowledgeable about your project. Personal goals are statements that indicate what you want to achieve or improve upon. You might begin by asking yourself, "What do I want to accomplish this year by taking this project?" Answering that question will help you identify your annual personal goal(s). Once you decide on a goal, then you need to plan a "To Do" list. You might think of this "To Do" list as those things you can learn or do to help you reach that specific goal. \*Remember to use complete sentences.

In the space provided below, **Junior members must record at least one project goal. Intermediates – at least two goals, and Seniors – at least three goals.** For each goal listed, members must record at least three "To Do" items that would help them to accomplish that goal. If you have more than three goals, insert additional copies of this page as needed.

For example, a Junior member taking a woodworking project might write: Goal 1: Learn to sand and finish a wood piece.

"To Do" list: 1) Learn to operate and maintain block sander. 2) Observe a knowledgeable woodworker in action. 3) Visit a furniture factory to see how sanding and finishing is done. 4) Tell my parents that I want to do my own work in preparing my project for exhibit.

Goal 1:
"To Do" list to reach the goal:
Goal 2:
"To Do" list to reach the goal:
10 Do list to reach the goal.
Goal 3:
"To Do" list to reach the goal:



# How I Participate in 4-H!

Categories of Participation	Total This Year	Description/Project Title
What 4-H projects are you taking this year?		
What activities helped you learn the skills for this		
project? (project meetings, workshops, classes, contests, etc.)		
What leadership		
development		
experiences did you		
participate in?		
(club/district/state/officer,		
committee chair, LDC, CLC,		
YouthFest, State Conference, Jr./Teen		
leader, pledge leader, etc.)		

4-H	Date	Hours	Activity/Title	Location
Citizenship/ Community Service				
Demonstrations/		N/A		
Presentations/		N/A		
Speeches		N/A		

# Project Expense and Income/Value

Expenses: **Juniors only**, figure the cost of the specific materials used for your final exhibit item. You can add a more specific name. **Intermediates/Seniors**, list items **purchased** this year for your project, such as tools, materials, consumables, etc. (More pages can be added if needed.)

Item	Project Expenses		
	\$		
	\$		
	\$		
	\$		
	\$		
	\$		
	\$		
	\$		
TOTALS	\$		
Income or Value: Intermediates/Seniors Only 1. Record the value of your exhibit item by comparing it to a similar item you could buy. 2. Record the amount of money you received for any items you sold as Income.			
Item	Income or Value		

Item	Income or Value
	\$
	6
	Ψ
	\$
TOTALS	\$

## Return on Investment

#### **Intermediate and Senior Members**

Every day we make decisions about where to spend our time and money and what activities we want to continue. Ask yourself: How did I benefit from this project? What knowledge and skills did I gain from the project? Did I enjoy it? Was it worth the expense? Could I spend money more wisely the next time? Is it worth doing again? Do I want to learn more?

- 1. What knowledge and skills did you learn that you can use again?
- 2. How could you use your new skills to save money or to make money?
- 3. If you made a product to sell, how would you decide a price for your product?

# **4-H Metalworking Information**

### **TOOLS USED in Metalworking**

IMPORTANT: Always use proper personal protective equipment (PPE) when using tools including: safety glasses, gloves, welding helmet, long sleeve shirt, long pants, closed toe shoes and hearing protection. Be aware of your work surroundings and any flammable or hazardous materials.

## **Items Made in This Unit**

Items Made	Soul	rce of Plar	s for	Shape of Metal Used	Name of Joints	Welding Process Used	Tools Used
	Own	Manual	Other		Used		Oseu
Example:  Horseshoe Coat Rack	Х			Horseshoes	Butt	SMAW	Cut off saw, grinder, tape measure, chipping hammer
					_	_	

## **PROJECT DESIGN and MATERIAL LIST**

Below, make a drawing or attach a copy of the plans used for the project exhibited. The drawing or plan

must: be one dimensional, show three (3) views (the front, one side materials used and materials' weight. If altering an existing plan, specifications with reasons for the changes. Additional pages of the changes is a support of the changes.	le and the top), have a list of describe any changes in the plan e plans or drawings can be attached.
Materials List	<u>Materials Weight</u>

### **How Did You Do?**

Look back at the goals you listed on page two at the beginning of the year. How did you do? Did you meet the goals that you set for yourself on page two? List your goals below. Using a scale from 5 to 1, rate how you feel you did on each goal. Also, give a short explanation of why you think you deserve the rating you gave yourself. If you created more than three goals, insert additional copies of this page. \*Remember to use complete sentences.

#### "How Did You Do?" Rating Scale

	How Did Tou Do:				IOu	<b>D</b> 0 :	Rating Ocale		
Extremely Satisfied 5	Somew	/hat \$	Satisf	ied	Neut 3	tral	Somewhat Dissatisfied 2	Extremely Dissatisfied 1	
Goal 1:									
Rate how you did (Ci	rcle):	5	4	3	2	1			
Explanation:									
Goal 2:									
Rate how you did (Ci	rcle):	5	4	3	2	1			
Explanation:									
Goal 3:									
Rate how you did (Ci	rcle):	5	4	3	2	1			
Explanation:									

# Photographs from your 4-H Project

A minimum of twelve (12) pictures with a <u>descriptive caption for each is required</u>. Additional photos can be added. Pictures must be project-specific.

- Four (4) photos of the prep work (cutting, torching, bending, fitting, drilling, etc.)
- Four (4) photos of welds on the project (individual welds)
- Four (4) photos of finished project (front view, side view, top view, best overall view)
- Pictures must be a minimum of 3 inches by 5 inches in size.

#### **SAMPLE PICTURE SIZE**

3 inches x 5 inches

**Minimum** 

## 4-H Story

#### Length and Format Guidelines

You can type or hand-write your story. If you hand-write the story, use pencil or ink on lined white notebook paper.

If a computer is used to write the story, use plain white paper with no smaller than 12-point font.

Leave wide enough margins so the story can be read if inserted into a report cover.

Limit your story to a maximum of two (2) pages.

Story can be single or double-spaced as long as it does not exceed two pages.

Younger members may want to double-space their story so you can see what you are writing.

Be sure to use proper grammar and sentence structure.

Edit your story when finished. Check your spelling.

Have someone else read your story.

The following questions may help you in composing a story specifically related to your project:

Why did you choose this project?

What goals did you set and which ones did you reach?

What are your 4-H goals for next year?

What would you do differently if you were to try it again?

What skills have you learned in the program?

Have your projects grown in size and scope?

Were any adults or other 4-H members especially helpful to you? How?

Has 4-H helped you become a better leader and citizen?

What has being a 4-H member meant to you?