

Metalworking Record

All Units



2025-2026

Project:	Name:
Unit Number and/or Title:	4-H Club:
Year in this Project: (include current year)	County:
Age Group (check one): <input type="checkbox"/> Junior (8-10) <input type="checkbox"/> Intermediate (11-13) <input type="checkbox"/> Senior (14-18)	
Birthdate: (mm/dd/yy)	
4-H Age: (As of December 31 of this 4-H year)	

Project and exhibit guidelines for each project are listed in the State Fair Exhibit Requirements available on the web at Colorado4h.org.

I declare that the information in this book is correct, and all 4-H requirements have been completed to the best of my knowledge.

Member's Signature	date
Leader's Signature	date
Parent/Guardian Signature	date

Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating. To simplify technical terminology, trade names or products and equipment occasionally will be used. No endorsement of product names is intended nor is criticism implied of products not mentioned.

Colorado State University Extension is an equal opportunity provider. Colorado State University does not discriminate on the basis of disability and is committed to providing reasonable accommodations. CSU's Office of Engagement and Extension ensures meaningful access and equal opportunities to participate to individuals whose first language is not English. <https://col.st/OWMJA>

Colorado State University Extension es un proveedor que ofrece igualdad de oportunidades. Colorado State University no discrimina por motivos de discapacidad y se compromete a proporcionar adaptaciones razonables. Office of Engagement and Extension de CSU garantiza acceso significativo e igualdad de oportunidades para participar a las personas quienes su primer idioma no es el inglés. <https://col.st/OWMJA>

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:
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/Presentations/Speeches		N/A		
		N/A		
		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
	\$
	\$
	\$
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	Source of Plans for Items Made			Shape of Metal Used	Name of Joints Used	Welding Process Used	Tools Used
	Own	Manual	Other				
<i>Example:</i> <i>Horseshoe Coat Rack</i>	<i>X</i>			<i>Horseshoes</i>	<i>Butt</i>	<i>SMAW</i>	<i>Cut off saw, grinder, tape measure, chipping hammer</i>

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 and the top), have a list of materials used and materials' weight. If altering an existing plan, describe any changes in the plan specifications with reasons for the changes.** Additional pages of the plans or drawings can be attached.

<u>Materials List</u>	<u>Materials Weight</u>

Goal Evaluation - 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

Extremely Satisfied	Somewhat Satisfied	Neutral	Somewhat Dissatisfied	Extremely Dissatisfied
5	4	3	2	1

Goal 1:
Rate how you did (Circle): 5 4 3 2 1
Explanation:

Goal 2:
Rate how you did (Circle): 5 4 3 2 1
Explanation:

Goal 3:
Rate how you did (Circle): 5 4 3 2 1
Explanation:

Photographs from your 4-H Project

A minimum of twelve (12) pictures with a descriptive caption for each is required. 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 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?