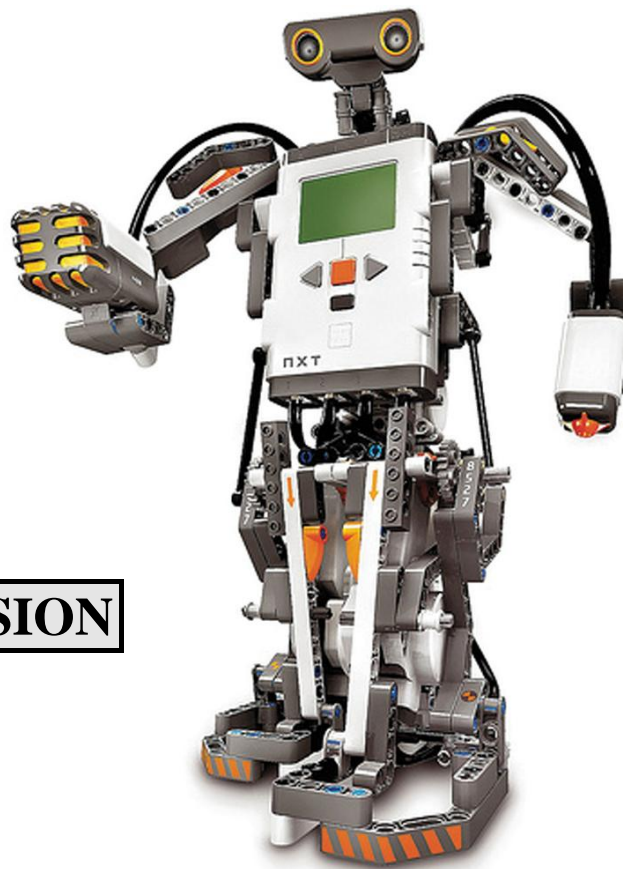




# My 4-H Robotics Project Record Book



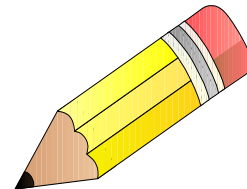
**TRIAL VERSION**

*For use by New Jersey 4-H Robotics project members*

Member Name: \_\_\_\_\_ Grade: \_\_\_\_\_

Club Name: \_\_\_\_\_

4-H Year: \_\_\_\_\_ Years in Project: \_\_\_\_\_



## End-of-Year Signatures

At the end of the 4-H year, when your record book is complete, your club leader will ask to see this record book.

By signing below, I am stating that I am familiar with this work and, to the best of my knowledge; the information included in this record book is complete.

<b>Title</b>	<b>Signature</b>	<b>Date</b>
<b>4-H Member</b>		
<b>Parent/Guardian</b>		
<b>4-H Club Leader</b>		
<b>County 4-H Agent</b>		

**Adapted by:**

Somerset County Robotics Clubs

**Based on:**

My 4-H Record Book by Keith Diem

*February 3, 2012*

©

Visit the NJ 4-H Website [www.nj4h.rutgers.edu](http://www.nj4h.rutgers.edu)

# Introduction

This project record book has been created especially for members enrolled in the 4-H Robotics project. Keeping a record book is an important part of the project. It will help you set goals for the project year, record your accomplishments and help guide your efforts to keep important records on your Robotics Project.

## What is a 4-H project?

A project is a subject or topic that you learn about in 4-H. More important, a project is something you do, which results from knowledge and skills you learned in the project. In this case, your project is Robotics. You learn about your project from attending club meetings and educational workshops, and working with adult leaders and other 4-H members. You can also learn from field trips and camps, by participating in shows and competitions, as well as through your family and self-study.

## Why complete a record book?

A record book is not meant to be a chore. Instead, it is a way for you to learn. Here are some important reasons why 4-H expects you to complete a 4-H record book for your project.

## Keeping a 4-H record book will help you...

- Learn how to organize yourself
- Learn how to set reasonable goals for yourself
- Appreciate what you've learned this year from the goals you reached
- Recognize what things you learned in your 4-H project
- Explain what you've learned
- Keep track of costs of your project
- Gather information needed to apply for awards and scholarships
- Complete applications and resumes for jobs and college
- Meet requirements to participate in some county, state, or national 4-H events

## Member in good standing requirements

In general, all 4-H members are expected to meet the following standards each year. These are the minimum requirements. Your club may have additional requirements.

- Attend at least 70 percent of regular club meetings and/or activities.
- Complete a 4-H project doing one's own work with minimal assistance from parents or others.
- Give a club or county 4-H public presentation.
- Complete this project record book and necessary supplements.

## Guidelines for the 4-H Robotics Project Record Book

You start your record book at the beginning of the 4-H year and keep all your expenses and receipts during the year. It is important to keep your record book up-to-date monthly. Keep your book neat and complete.

Start your year by setting at least three goals for the year. These goals may include "Robotics Knowledge and Skills" or "Personal Development Activities." To expand your horizons, each year in the project, try to accomplish new skills, or skills you did not accomplish in previous year(s).

It is recommended that you save your record books from previous years. That way, you can easily compare your progress and achievements throughout the years. It will also help you when you apply for awards, jobs, college, etc.

## How this record book is organized

Besides this introduction, this record book is organized into these main sections:

- Starting Out—My goals for the 4-H year /Taking inventory
- Along the Way—Keeping track of what I do
- Looking Back— What I learned this year
- Thinking Ahead—My goals for next year
- Appendix— (including project goals and project supplement sheets,)

# Starting Out

## My goals for the 4-H year

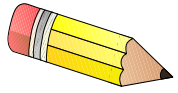
The beginning of the 4-H year is a good time to begin thinking about what you'd like to do or learn in 4-H during the upcoming months. List some of your goals for the year and what plan you have to accomplish your goals. Talk to your leader and parents to decide what goals are realistic to try and possible to finish this year.

During each year in the 4-H Robotics project, members should choose a minimum of three goals to pursue. Choices are listed in the Appendix. Write your choices below. Don't be afraid to challenge yourself! Of course, you may aim to reach more goals. For now, write your goals below and your plan for reaching each goal. If the items on the list have all been accomplished, develop some of your own. You may also choose special ones not listed. Be sure to get the needed signatures on the next page.

<b>My goals for this year</b>	<b>What I need to do to reach this goal</b>
<i>Example: I will learn how to give a public presentation.</i>	<i>Attend county public presentation workshop. Have my leader and parents help me pick a topic that will be good for me. Practice my presentation. Give the presentation at a club meeting.</i>

## Signatures for goal setting

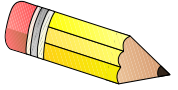
I will work toward the above goals I have set for myself for the upcoming 4-H year to the best of my ability:



\_\_\_\_\_ (Member signature)

\_\_\_\_\_ (Date)

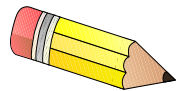
I will support my son's/daughter's goals for the upcoming 4-H year:



\_\_\_\_\_ (Parent signature)

\_\_\_\_\_ (Date)

I will help support this member's goals for the upcoming 4-H year:



\_\_\_\_\_ (4-H Leader signature)

\_\_\_\_\_ (Date)

## Taking Inventory

As you start the 4-H year is also a time to take an inventory of what you have for your project. For the **Robotics** project, you will need to list all the kits and equipment.

Type of Kit/Equipment	Value
<i>Example: Mindstorm NXT 2.0</i>	\$300.00

# Along the Way

## Keeping track of what I do

For this section, it is best to write down what you have done shortly after completing it so you won't forget important events and activities. This section includes the following parts:

- What I did in this project this year
- Other 4-H activities and events I participated in
- Project finances
- Other clubs and projects

## What I did in this project this year

Most meetings involve challenges for which your robot must be custom built and programmed. Fill out a project sheet for each challenge which you would like to highlight for this year. You may draw a picture or attach photographs to illustrate your robot design. Don't forget to include these types of 4-H events and activities you might have done this year:

- Events participated in
- Leadership roles - such as offices held, committees led
- Shows & competitions Special meetings & clinics
- Community service
- Public Speaking
- Field trips
- County 4-H Fair
- Awards or recognition earned

Name of event/activity	Date & Location	What I did	Level (Club, County, State, National)	Award or Recognition Earned?
<i>Example: State 4-H Robotics Show</i>	<i>1/1/2000 Clinton, NJ</i>	<i>Competed in a Robot Battle</i>	<i>State</i>	<i>Excellent</i>

(Add other pages if necessary)

# 4-H Robotics Project Sheet

Date: \_\_\_\_\_ Name: \_\_\_\_\_

Problem/Objective: \_\_\_\_\_

\_\_\_\_\_

Sensors used: \_\_\_\_\_

Group project

Individual project

# of Servo motors: \_\_\_\_\_ Special parts: \_\_\_\_\_

How you solved the problem: \_\_\_\_\_

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Robot picture:



# 4-H Robotics Project Sheet

Date: \_\_\_\_\_ Name: \_\_\_\_\_

Problem/Objective: \_\_\_\_\_

\_\_\_\_\_

Sensors used: \_\_\_\_\_

Group project

Individual project

# of Servo motors: \_\_\_\_\_ Special parts: \_\_\_\_\_

How you solved the problem: \_\_\_\_\_

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Robot picture:





# 4-H Robotics Project Sheet

Date: \_\_\_\_\_ Name: \_\_\_\_\_

Problem/Objective: \_\_\_\_\_

\_\_\_\_\_

Sensors used: \_\_\_\_\_

Group project

Individual project

# of Servo motors: \_\_\_\_\_ Special parts: \_\_\_\_\_

How you solved the problem: \_\_\_\_\_

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Robot picture:



# 4-H Robotics Project Sheet

Date: \_\_\_\_\_ Name: \_\_\_\_\_

Problem/Objective: \_\_\_\_\_

\_\_\_\_\_

Sensors used: \_\_\_\_\_

Group project

Individual project

# of Servo motors: \_\_\_\_\_ Special parts: \_\_\_\_\_

How you solved the problem: \_\_\_\_\_

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Robot picture:



# 44-H Robotics Project Sheet

Date: \_\_\_\_\_ Name: \_\_\_\_\_

Problem/Objective: \_\_\_\_\_

\_\_\_\_\_

Sensors used: \_\_\_\_\_

Group project

Individual project

# of Servo motors: \_\_\_\_\_ Special parts: \_\_\_\_\_

How you solved the problem: \_\_\_\_\_

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Robot picture:



## Project Finances



It is likely that you spent money on your 4-H project this year. This section will help you add up what it cost to complete your project.

### *(E) Expenses*

This section is where you can keep track of what you purchased and what it cost to use. Feel free to add more copies of these pages if necessary.

Expenses are divided into two categories (E 1, 2):

- Lego Robotics/Mindstorm Kits
- Miscellaneous costs such as transportation, show fees, etc.

### **(E1) Kit expenses**

Date	Description of expense (include quantities)	Cost (\$)
<i>1/1/2012</i>	<i>Example: Mindstorm NXT 2.0</i>	<i>\$300.00</i>
<b>Total</b> (Add up all expenses from above and put number in box at right)		

**(E2) Other Expenses (such as shows and transportation)**

<b>Date</b>	<b>Description of expense</b>	<b>Cost (\$)</b>
1/6/2012	<i>Example: Sate Robotics Entry Fee</i>	\$4.00
<b>Total</b> (Add up all expenses from above and put number in box at right)		

**(I) Income**

List any income received from your project this year. For instance: sales of any project-related items or cash prizes from contests or exhibition. It is quite likely your project had no income. If so, enter "None" under description and "0" under "Total Income."

<b>Date</b>	<b>Description of income (include quantities)</b>	<b>Income (\$)</b>
1/6/2012	<i>Example: Sold extra powercord</i>	\$15.00
<b>Total Income</b> (Add up all income from above and put number in box at right)		



### Total Project Cost or Profit

If your project earned more than it cost, then your project made a profit. In other words, if your income minus your expenses is a positive (+) number, your project "made" money.

If income minus expenses is a negative (-) number, you spent more on your project than you earned from it. This amount is the total cost of your project. But don't worry if your project did not make a profit! Although a business aims to earn a profit, a 4-H project is meant for learning. The important point to learn is that most activities have costs. Therefore, you must be careful to spend money wisely.

Total Expenses	
Total Kit Expenses (E1)	\$
Total Miscellaneous Expenses (E2)	\$
<b>Total Expenses</b> (Add up all expenses and put number in box at right)	\$

Total Project Cost or Profit	
Total Income	\$
Total Expenses (from above)	\$
<b>Total Project Cost or Profit</b> (Subtract total expenses from total income)	\$

### Other clubs and projects

List any other clubs and projects you participated in during the past year.

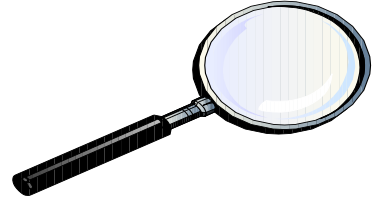
Club name	Project(s)

# Looking Back

## What I learned this year

This section is to be completed at the end of the 4-H year. It is meant to help you look back on all that you learned during the past year. This section includes the following parts:

- My goals completed
- A summary of knowledge and skills I gained
- The three most important things I learned
- Telling my story



## My goals completed

Look back on the goals you set for yourself at the beginning of the year. How well did you meet those goals? Use the space below to tell how well you did in reaching your goals. If you added new goals during the year, also included them below.

<b>My goals for this year</b>	<b>How well did each goal get met?</b>
<i>Example: I will learn how to give a public presentation.</i>	<i>I attended county public presentation workshop. I had to change my topic three times. I should have practiced my presentation more before I gave it at the club meeting. I will start planning and practicing earlier next year!</i>

## Knowledge and Skills I Gained

There are many things to learn in 4-H. Check each item below that you learned or improved in 4-H during the past year.

*I learned or improved my ability to...*

### **HEAD** (*Independence*)

- try something new
- set goals for myself
- plan a project
- keep myself organized
- keep track of finances
- keep records of my work
- gain knowledge of my project
- get more information about something
- I am interested in
- use resources wisely
- participate in a business meeting
- run a business meeting
- make wise choices and decisions
- solve problems
- learn from my mistakes
- understand that it's ok to change my mind if
- I need to
- pay attention to instructions

### **HEART** (*Belonging*)

- speak confidently in front of a group
- give a public presentation
- share my feelings or point of view
- make myself understood without bullying or being loud
- listen to other people
- respect someone else's feelings
- resolve differences of opinion
- appreciate my cultural heritage
- accept people who are different from me
- get along with other kids
- make others feel welcome
- stand up for others
- make new friends
- appreciate the importance of friendships in my life

**My grade in school:** \_\_\_\_\_

**Number of years in 4-H** \_\_\_\_\_

### **HANDS** (*Generosity*)

- work with others
- work within a group
- work within a committee
- work with adults
- get past differences to reach a goal
- help others succeed
- make something with my hands
- explore a career interest
- follow directions
- lead others
- find ways to make a positive contribution to society
- understand the importance of community service
- see that my efforts can make a difference
- take the initiative to start something on my own

### **HEALTH** (*Mastery*)

- understand my strengths and weaknesses
- finish something I started
- be proud of my accomplishments
- accept change
- see that my character can effect a situation
- take responsibility for my own words and actions
- deal with winning and losing gracefully
- be careful and practice safety
- appreciate the importance of good health
- stay healthy
- feel good about myself

**Other:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Revised 2011



## The three most important things I learned

Even if you learned a lot of different things in 4-H, think of what was the most important for you. Then, list the three most important things you learned in this project during the past year in the boxes below.

The three most important things I learned in this project during the past year were . . .
1.
2.
3.

## Telling my story

Keeping in mind the knowledge and skills you said you learned from the items you checked above, write a story that explains what you gained this past year in 4-H. Use specific examples that are unique to you whenever possible. Feel free to relate what you learned in 4-H to school, family, or other activities in your life. Use extra pages if needed. Attach photos or clippings on additional pages of this book if it helps tell your story better. Don't forget to label them with captions if you do.

4-H is proud of what 4-H members learn and sometimes likes to use excerpts (parts) of stories 4-H'ers write in 4-H publicity. If you do not want your information shared, please let us know by checking the boxes below:

- Do not use my story for any 4-H publicity.
- If you use my story, do not credit my name.



# My 4-H Story

(Continue 4-H story on next page.)

# Thinking Ahead



## My goals for next year

Now is a good time to begin thinking about what you'd like to do or learn in 4-H next year. List some of your goals for next year and what plan you have to accomplish your goals.

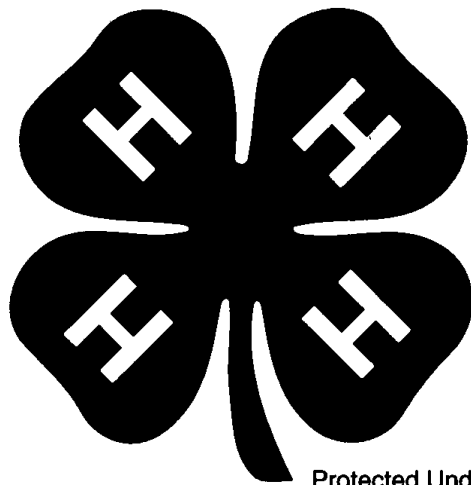
My goal for next year	What I need to do to reach this goal

*Feel free to attach additional pages to this record book if needed.*

# The 4-H Pledge

I PLEDGE . . .

. . . my HEAD to clearer thinking,  
. . . my HEART to greater loyalty,  
. . . my HANDS to larger service,  
. . . and my HEALTH to better living,  
for my club, my community,  
my country, and my world.



Protected Under  
18 U.S.C. 707

## 4-H Motto

“To Make the Best, Better”

## 4-H Slogan

“Learning by Doing”

# 4-H Record Book Trial Version Evaluation for 4-H Club Members

After using this trial version of the 4-H project record book for a year, please tell us what you think of it. Fill out this form and give it to the club leader or mail it to the address on the reverse. You can also fill it out online at [www.nj4h.rutgers.edu/pubs](http://www.nj4h.rutgers.edu/pubs). (There is a specific evaluation form for 4-H Club leaders to use.) Thank you for your help!

Record Book Title: My 4-H Robotics Project Record Book

County: \_\_\_\_\_ Years in Project: \_\_\_\_\_ Grade: \_\_\_\_\_

Today's Date: \_\_\_\_\_

1. Was it easy to understand and fill out? (Circle One) Yes No

Comment: \_\_\_\_\_

2. Was it organized in a sensible way? (Circle One) Yes No

Comment: \_\_\_\_\_

3. Did it help you to learn to set reasonable goals for yourself? (Circle One) Yes No

Comment: \_\_\_\_\_

4. Did it help you learn how to organize yourself? (Circle One) Yes No

Comment: \_\_\_\_\_

5. Did it help you to keep track of the cost of your project?? (Circle One) Yes No

Comment: \_\_\_\_\_

6. Did it help you to explain what you learned in your 4-H project?? (Circle One) Yes No

Comment: \_\_\_\_\_

7. Did it help you appreciate what you've learned this year, based on the goals you reached? (Circle One) Yes No

Comment: \_\_\_\_\_

8. Did it help you gather information that might be needed to apply for awards and scholarships or to complete applications for jobs or college? (Circle One) Yes No

Comment: \_\_\_\_\_

9. Overall how would you rate this record book? (Circle One)

Poor Fair Good Very Good Excellent

10. **On the reverse**, please share any other comments or ideas you have to improve the final version of this record book.

10a. What was most useful about this record book?

10b. Here are my comments or ideas to improve the final version of this record book:

My Name (optional) \_\_\_\_\_

Mail your completed form to:

Somerset County 4-H  
310 Milltown Road  
Bridgewater, NJ 08807