

2023

Waupaca County 4-H Project & Literature Guide

Including:

Guidelines for Enrollment (UPDATED) (page 3)

The Wisconsin 4-H Movement (page 4)

Project Listing/Descriptions (page 5)

(Please note the grade levels for eligibility in projects like Cloverbuds, Exploring, beef, and shooting sports.)

Literature Order Form (page 16)

*For step by step directions to enroll in 4-H online (<https://v2.4honline.com>) go to this document:
[https://fyi.extension.wisc.edu/4h-ext/files/2020/09/4HOnline.v2.Family.Enrollment.Guide .pdf](https://fyi.extension.wisc.edu/4h-ext/files/2020/09/4HOnline.v2.Family.Enrollment.Guide.pdf)*

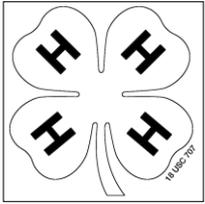


Extension

UNIVERSITY OF WISCONSIN-MADISON



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2023 Waupaca County 4-H Enrollment Guide

This is your guide . . . A 4-H project is an area that you want to learn more about during the year. There are projects on just about any topic you would like to study and explore, from art to woodworking, from computers to rabbits, from clothing to small engines.

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at <https://4h.extension.wisc.edu/opportunities/projects/> . On these pages, you'll find descriptions for statewide projects, Internet resources and links of interest, state specialist contacts, and other suggested 4-H resources.

And remember, you'll learn more than "subject matter" as you complete your projects. You'll learn many life skills that you'll use every day of your life, such as, understanding yourself, communicating better, solving problems, making decisions, and working with others. Good luck in your project selections. Have a great 4-H year!

How to Select 4-H Projects

4-H members . . . First, make a list of the things you like to do or want to learn more about. Talk over your list with your parents, leaders and friends. They may recognize some special things you are good at that you don't even realize you do well.

Then compare your list with the projects described in this guide. Ask yourself if you have the equipment, money and time to do the projects that sound interesting.

It will be helpful to review the project list and descriptions in this guide prior to logging into the computer so you know which projects you are most interested in. When you're ready to sign up for projects and enroll in 4-H go to the 4-H online enrollment system.

The levels of literature are generally suggested for grades 3-5 (level 1), 6-8 (level 2), 9 and above (level 3).

If this is your first year in 4-H, it is suggested you concentrate on doing only a few projects well.

4-H leaders . . . (Remember that any adults wishing to enroll as 4-H leaders need to complete a leader orientation and background check. Sessions will be held throughout the year.) When enrolling, be sure you use the "leader" category for each project you sign up for.

4-H Online Enrollment

The State of Wisconsin 4-H Youth Development Program has an online enrollment system called 4HOnline (<https://v2.4honline.com/>). In order to enroll in Wisconsin 4HOnline, you will need a device, internet access, a valid e-mail address and a web browser.



GUIDELINES FOR ENROLLMENT

Thank you for choosing to re-enroll or enroll for the first time in Waupaca County 4-H. We are looking forward to a great year! You will need to go to 4HOnline (see cover for web links) to enroll in 4-H and use the last page of this booklet to order any literature you may want. If you have any questions you can ask your club Organizational Leader or call the Extension Waupaca County office at (715) 258-6230.

1. **Check Information:** If reenrolling, please check all information on your online family profile and individual records. If information is incorrect, or incomplete, please correct it for the new year.
2. **Reenrollment Deadline:** The deadline for reenrollment is November 15 (*earlier deadline set by clubs*). Reenrollments entered after November 15 will not be eligible to show in the current Junior Waupaca County Fair. A **reenrollment** is a youth enrolling who was a member any previous year.
3. **New Member Enrollment Deadline:** New members may join 4-H at any time; however, February 1 is the last date new members may enroll and still be eligible to exhibit at the Junior Fair. A **new enrollment** is a youth who is enrolling not having been a member any previous year.
4. **Ability to change projects** - NEW this enrollment year – members are able to change projects they enroll in until February 1, 2023 if a project area is forgotten or they want to add or delete after the November 15 re-enrollment deadline. After February 1, no project areas can be added or changed.
5. **County member dues of \$6.00** and the **Leader assessment fee of \$2.00** are due to your club organizational leader at the time of enrollment. Enrollments in 4-H online may not be approved until dues are paid to your club. If families have difficulty paying the enrollment dues or leader assessment; a written request can be made to the 4-H Leaders Board from the family or the General Leader for scholarship money. The name of the 4-H member or family does not have to be given, just a simple explanation and what is being requested.
6. **Cloverbuds:** Youth in Kindergarten, 1st and 2nd grade enroll in 4-H as Cloverbuds. Cloverbud activities (including fair exhibits) are non-competitive. For safety reasons, cloverbuds may not work with an animal as part of their project work.
7. **1st year (new members) in 3rd and 4th grade** need to take the project called Exploring and can enroll in 2 additional project areas (*not beef for 3rd graders*)
8. **Re-enrolling 3rd graders** need to take Exploring and can enroll in any project areas with it (*not beef*)
9. **Re-enrolling 4th graders** can take any projects for which their grade/age allows
10. **Number of projects:** It is suggested that 2nd year project members take no more than 3 projects, 3rd year project members take no more than 4 projects, 4th year project members take no more than 5 projects, 5th year project members take no more than 6 projects.
11. **Graduation:** The policy for 4-H graduation is that members may choose to graduate from 4-H the same year you graduate from high school or you may stay in 4-H one full year following high school graduation.
12. **Literature orders:** The last page of this book is a literature order form. The *literature names and codes* are listed after each project description. Families can order their own literature, but do not have to. If you are ordering literature, fill out and mail the order form, with payment, to Jenny Heise by **November 30**. Some clubs have literature libraries and you can borrow a book. **See the last page for details about Digital Download books (labeled as DD).**

NOTE: When selecting projects in the 4HOnline enrollment program, you will not automatically receive literature. Literature must be ordered using the last page of this guide for clubs and/or families.

#wi4hmovement



The Wisconsin 4-H MOVEMENT

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.

In Wisconsin 4-H we value:

 Being Yourself Find and share your authentic sparks and interests;	 Belonging Together Recognize, understand, respect, and appreciate each other;
 Building Connections Grow positive relationships with peers and adults;	 Discovering Skills Develop skills through hands-on learning to help you succeed and thrive;
 Exploring New Opportunities Open the door to new experiences, projects and places;	 Giving Back to Your Community Make meaningful contributions through community service and leadership.

BELONGING **MASTERY** **INDEPENDENCE** **GENEROSITY**

To Make The
Best Better.



UW-MADISON EXTENSION



YOUTH LEADERSHIP

YOUTH LEADERSHIP

What you can do in this project (grades 3 and above):

- Assess your leadership skills, strengths, weaknesses
- Set goals and resolve conflict
- Contribute to a group project/event
- Explore how leaders are different
- Practice teamwork
- Build trust in a group
- Write vision and mission statements

Resources:

4H375, *Leadership Road Trip: Where Are You Going?* \$8.95

Youth Leadership Leader Resources:

07903, *Leadership Mentor Guide for Grades K-5(2003)* \$5.75

07904, *Leadership Mentor Guide for Grades 6-12 (2003)* \$5.75



YOUNGER MEMBERS

CLOVERBUDS – Kindergarten to grade 2

What you can do in this project:

- Learn about your 4-H club or group
- Begin developing different skills, e.g., working with others
- Explore your community
- Learn about 4-H activities and events
- Begin learning about specific 4-H project areas

Resource: *Wisconsin 4-H Cloverbud Learning Activities*

4H710GPM, *The Big Book of 4-H Cloverbud Activities*

Essential Elements for Cloverbud Programs Cloverbud Leader Guide

EXPLORING – Grades 3-4

What you can do in this project:

- Learn about the 4-H program
- Sample a variety of projects offered in 4-H
- Learn about yourself and others

Resource: 08171, *Exploring the Treasures of 4-H (2005)* \$5.75

Waupaca County Exploring Folder (provided at no Charge to every Explorer)

Exploring Leader Resources:

08172, *Exploring Treasures of 4-H Helper's Guide (2005)* \$10.00

Waupaca County 4-H Exploring Leader Activities Packet \$1.75



SERVICE LEARNING & CITIZENSHIP

CITIZENSHIP

What you can do in this project, geared towards grades 4 & up:

- Discover and discuss public issues
- Plan a project to change or improve your community

Resource: 08153, *Citizenship Adventure Kit (2005)* \$7.95

08154, *Citizenship Guide's Handbook (2005)* \$5.75

INTERNATIONAL

What you can do in this project (grades 3 and above):

- Explore the world around you through maps
- Make your family tree by talking with relatives
- Explore where your ancestors came from

LATINO CULTURAL ARTS

What you can do in this project (grades 3 and above):

- Understand the Latino culture by exploring traditional art
- Make Latino instruments, jewelry, weavings, murals, etc.
- Celebrate Latino holidays, sample foods and tell stories

Resource:

08180DD, *QueRico! La Cultura Bilingual Helper's Guide* \$3.99

SERVICE LEARNING

What you can do in this project, geared towards grades 5 and up

- Learn to give back to your community
- Identify community needs
- Plan and implement your own service project
- Conduct an evaluation of your project

Resources:

Level 1: 08182, *Agents of Change + CD (2006)* \$5.75

Level 2: 08183, *Raise Your Voice + CD (2006)* \$5.75

Leader: 08184, *Service Learning Helper's Guide (2006)* \$5.75



SELF-DETERMINED

SELF-DETERMINED

What you can do in this project for grades 3 and above:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan
- Some examples could include: collections, geocaching, juggling, and more

Resource: 4H272, *Designing Your Own Project* \$.65



ANIMAL SCIENCES

<https://4h.extension.wisc.edu/opportunities/projects/>

BEEF

What you can do in this project (grades 4 and above):

- Identify various beef breeds and parts of an animal
- Halter-break and show a calf
- Learn about feed ingredients, behavior and parasites
- Learn beef carcass composition and retail meat cuts
- Learn about careers, health, reproduction, etc.
- Discover how to market your animal and by-products

Resources:

Level 1: 08143, *Bite Into Beef (2005)* \$5.75

Level 2: 08144, *Here's the Beef (2005)* \$5.75

Level 3: 08145, *Leading the Charge (2005)* \$5.75

Leader: 08146, *Beef Helper's Guide (2005)* \$5.75

117R, *Beef Resource Handbook (2003)* \$18.50

CATS

What you can do in this project (grades 3 and up):

- Identify cat breeds and select a cat
- Name the parts of a cat
- Handle and groom a cat
- Learn about feeding and emergency care
- Detect signs of illness and health issues
- Learn showmanship and cat behavior
- Explore community laws and animal welfare

Resources:

Level 1: 08148, *Purr-fect Pals (2005)* \$5.75
Level 2: 08149, *Climbing Up! (2005)* \$5.75
Level 3: 08150, *Leaping Forward (2005)* \$5.75
Leader: 08151, *Cat Helper's Guide (2005)* \$5.75

DAIRY

What you can do in this project (grades 3 and above):

- Study and identify parts of the dairy cow and breeds
- Learn how to select quality dairy calves
- Assemble tools needed for packing a show box
- Learn about housing and hay quality
- Learn about milking and food safety
- Explore ways to keep an animal healthy
- Practice pregnancy detection and delivery of a calf
- Explore various dairy industry careers

Resources: Level 1: 08161, *Cowabunga (2005)* \$5.75
CANADA1, *Showmanship...Leading to Win (2003)* \$4.50
Level 2: 08162, *Mooving Ahead (2005)* \$5.75
CANADA2, *Preparing to Lead (2003)* \$4.50
Level 3: 08163, *Rising to the Top (2005)* \$5.75
Leader: 08164, *Dairy Helper's Guide (2005)* \$5.75

DOGS

What you can do in this project (grades 3 and up):

- Learn basic skills for dog care and training
- Discover different dog breeds
- Study and identify dog body parts
- Learn how to keep a dog healthy and groomed
- Learn showmanship and training techniques
- Learn about show-ring ethics
- Investigate responsible breeding
- Explore careers related to dogs

Resources:

Level 1: 08166, *Wiggles and Wags (2005)* \$5.75
4H436, *The Basics of Training Your Dog (2000)* FREE
Level 2: 08167, *Canine Connection (2005)* \$5.75
4H439, *Dog Obedience – Novice & Beyond* FREE
Level 3: 08168, *Leading the Pack (2005)* \$5.75
4H437, *A Guide to Showmanship* \$1.05
Leader: 08169, *Dog Helper's Guide (2005)* \$5.75
4H458, *4-H Dog Judging Guidelines (2000)* FREE

DAIRY GOAT

What you can do in this project (grades 3 and up):

- Select, manage, fit and show goats
- Learn responsible goat ownership
- Learn to keep your goat healthy
- Feed your goat for maximum production

- Prepare for kidding
- Learn about genetics, diseases and breeding
- Understand bio-security and prevention measures

Resources:

Level 1: 08352, *Getting Your Goat (2006)* \$5.75
Level 2: 08353, *Stepping Out (2006)* \$5.75
Level 3: 08354, *Showing the Way (2006)* \$5.75
Leader: 08355, *Dairy Goat Helper's Guide* \$5.75

MEAT GOAT

What you can do in this project (grades 3 and up):

- Identify meat goat breeds and parts
- Learn to select a good animal
- Feed and care for a meat goat
- Develop a budget for a meat goat project
- Recognize meat goat diseases
- Understand reproduction cycle and keep records
- Understand bio-security and quality assurance
- Formulate rations & evaluate goat pastures

Resource: Level 1 - 07909, *Just Browsing (2006)* \$5.75
Level 2: 07910, *Get Growing with Meat Goats (2006)* \$5.75
Level 3: 07911, *Meating the Future (2006)* \$5.75
Leader: 07912, *Meat Goat Helper's Guide (2006)* \$5.75

HORSE

What you can do in this project (grades 3 & above):

- Learn horse behavior and terms
- Study breeds and identify body parts
- Practice horse safety and horse selection
- Practice horsemanship and judging
- Learn about tack, feeding and diseases
- Learn about fencing, pasturing and housing
- Explore horse-related careers
- Learn English and Western style bridles
- Practice proper show ethics

Resources:

CO200 *Horses & Horsemanship* \$6.50
CO201 *Horse Science* \$6.50
Level 1: 01518Y, *Giddy Up & Go (2015)* \$6.95
Level 2: 01519Y, *Head, Heart & Hooves (2015)* \$6.95
Level 3: 01520Y, *Stable Relationships (2015)* \$6.95
Level 4: 01521Y, *Riding the Range (2015)* \$6.95
Level 5: 01522Y, *Jumping to New Heights (2015)* \$6.95
4H 181, *Draft Horse* \$7.50
Leader: 01523F, *Horse Helper's Guide (2015)* \$6.95

HORSELESS HORSE

What you can do in this project:

- You do *not* need a horse in this project
- Explore horse behavior, terms and breeds
- Identify body parts
- Learn about safety and equipment
- Learn selection, training and showing
- Practice trail riding skills
- Understand horse diseases and prevention
- Explore horse-related careers

Resource: *Levels 1-3 of horse books listed above.*

CLOTHES HORSE

What you can do in this project:

- Learn how to make riding apparel and equipment
- Develop sewing and creative skills

Resources:

4H374, *Additional Patterns for Clothes Horse* \$1.50

4H389, *Horse & Riding Attire* \$1.60

4H360, *4-H Clothes Horse Activity Guide* \$1.25

PETS

What you can do in this project (grades 3 & above):

- Explore your favorite pet or select a pet
- Learn to provide a safe environment
- Explore animal digestion and feeding
- Determine the animal's sex and proper health
- Understand how genetics work
- Explore animal welfare issues

Resources:

Level 1: 06359, *Pet Pals (2001)* \$5.75

Level 2: 06360, *Scurrying Ahead (2001)* \$5.75

Level 3: 06361, *Scaling the Heights (2001)* \$5.75

Leader: 06362, *Pet Helper's Guide (2001)* \$5.75

POULTRY

What you can do in this project (grades 3 & above):

- Identify poultry breeds and learn parts of the bird
- Learn parts and functions of the egg
- Learn how to select and handle poultry
- Prevent poultry diseases
- Discover how chicks imprint
- Manage a laying flock
- Handle poultry products safely
- Process a chicken

Resources:

Level 1: 06363, *Scratching the Surface (2001)* \$5.75

CIR878, *From Egg to Chick* FREE

Level 2: 06364, *Testing Your Wings (2001)* \$5.75

A2880, *Chicken Breeds & Varieties* \$1.55

Level 3: 06365, *Flocking Together (2001)* \$5.75

Leader: 06366, *Poultry Helper's Guide (2001)* \$5.75

POULTRY WATERFOWL

What you can do in this project (grades 3 and above):

- Learn about waterfowl breeds and parts
- Handle waterfowl properly
- Incubate and exhibit waterfowl

Resources: A3311, *Raising Waterfowl* FREE

POULTRY TURKEYS

What you can do in this project (grades 3 and above):

- Prepare a brooding area
- Raise range turkeys
- Identify diseases

Resources: NCR060, *Small Turkey Flock Management* \$2.00

POULTRY BANTAMS

What you can do in this project (grades 3 and above):

- Discover bantam breeds and breed characteristics

- Learn how to get started raising bantams

- Select and mate bantams

- Incubate and rear their young

Resources: NCR209, *Bantams* \$1.60

POULTRY PIGEONS

What you can do in this project (grades 3 and above):

- Learn about buying, banding and feeding
- Understand about proper housing and behavior

- Learn about grooming and exhibiting

Resource: 4H135, *Pigeons* FREE

RABBITS

What you can do in this project (grades 3 & above):

- Learn about selecting and handling rabbits

- Identify rabbit breeds and body parts

- Explore health issues and feeding

- Learn to tattoo

- Learn about breeding and genetics

- Design a rabbitry; Market rabbits

- Learn about disease prevention and rabbit registration

Resources:

Level 1: 08080, *What's Hoppening? (2004)* \$5.75

Level 2: 08081, *Making Tracks (2004)* \$5.75

Level 3: 08082, *All Ears (2004)* \$5.75

Leader: 08083, *Rabbit Helper's Guide (2004)* \$5.75

SHEEP

What you can do in this project (grades 3 & above):

- Identify sheep breeds and body parts

- Identify uses of wool and other by-products

- Fit and show sheep

- Learn to identify sheep parasites

- Diagnose sheep diseases and use medications safely

- Explore careers

- Market sheep products and teach others

Resources:

Level 1: 06367, *Lambs, Rams and You* \$5.75

Level 2: 06368, *Shear Delight* \$5.75

Level 3: 06369, *Leading the Flock* \$5.75

Leader: 06370, *Sheep Helper's Guide* \$5.75

194R, *Sheep Resource Handbook (2003)* \$27.50

SWINE

What you can do in this project (grades 3 & above):

- Identify swine breeds, feeds and animal parts

- Practice judging market hogs

- Identify pork meat cuts

- Practice fitting and showing a hog

- Assemble tack and pack a show box

- Learn to make breeding and culling decisions

- Design a preventative herd health plan

Resources:

Level 1: 08065, *The Incredible Pig (2004)* \$5.75

Level 2: 08066, *Putting the Oink in the Pig (2004)* \$5.75

Level 3: 08067, *Going Whole Hog (2004)* \$5.75

Leader: 08068, *Swine Helper's Guide (2004)* \$5.50

134R, *Swine Resource Handbook (2003)* \$19.50

VETERINARY SCIENCE

What you can do in this project (grades 3 and above):

- Learn different breeds of animals
- Interpret animal behavior
- Identify feed nutrients
- Describe animal life stages and systems
- Create health records for your animal
- Consider ethics and animal welfare
- Understand diseases that spread from animals to humans
- Learn about diversity of veterinary careers

Resources:

Level 1: 08048, *From Airedales to Zebras* (2004) \$5.75
4H131, *The Normal Animal* FREE

08744DD, *Animal Behavior* (2014) \$7.99

Level 2: 08049, *All Systems Go* (2004) \$5.75

08745DD, *Animal Vital Signs* (2014) \$7.99

Level 3: 08050, *On the Cutting Edge* (2004) \$5.75

08746DD, *Disease Transmission* (2014) \$7.99

Level 4: 08748DD, *Principles of Bio-Security* (2014) \$7.99

Level 5: 08749DD, *Advanced Concepts in Animal Care*
(2014) \$7.99

Leader: 08051, *Veterinary Science Helper's Guide* (2004) \$5.75
4H323, *The Normal Animal - Leader's Guide* FREE



COMMUNICATION ARTS

<https://4h.extension.wisc.edu/opportunities/projects/arts-communication/>

COMMUNICATIONS

What you can do in this project (grades 3 and above):

- Strengthen your personal communication skills
- Present oral reasons, plan and present speeches
- Practice making good first impressions
- Explore communication careers
- Write résumés and interview for a job

Resources:

Level 1: 08644DD, *Communications: Module 1* (7.99)

Level 2: 08645DD, *Communications: Module 2* (7.99)

Level 3: 08646DD, *Communications: Module 3* (7.99)

COMM04, *Voices From the Past* (2000) FREE

COMM05, *It's All in the Family* (2000) FREE

COMM07, *Communication Activities for 4-H Clubs* (2000) FREE

CREATIVE WRITING

What you can do in this project (grades 3 and above):

- Explore language and creative expression
- Stimulate your creativity and self-expression
- Enrich your joy of book reading

Resources:

COMM01, *Creative Wordworking* (2000) FREE

SPEAKING

What you can do in this project (grades 3 and above):

- Plan, practice and present an effective speech
- Gain confidence in public speaking

Resources:

COMM02, *4-H Public Speakers Handbook* (2000) FREE

COMM06, *4-H Public Speaking Opportunities* (2000) FREE



PERFORMING ARTS

<https://4h.extension.wisc.edu/opportunities/projects/arts-communication/>

CLOWNING

What you can do in this project (grades 3 and above):

- Discover the history of clowning
- Develop your own character
- Design your own makeup, costume and props

Resource: 4H265, *Enter the Clowns* FREE

MUSIC

What you can do in this project (grades 3 and above):

- Gain a greater appreciation for music
- Listen, perform and compose various types of music
- Teach others and make instruments

Resource: 4H620MP, *Youth and 4-H Music Project Guide*

THEATRE ARTS

What you can do in this project (grades 3 and above):

- Study acting, sound, movement, voice and speech
- Try pantomime, clowning and improvisation
- Explore types of puppets and puppet characters
- Plan and Present a Puppet Show
- Study costumes, makeup, stage sets, props and sound
- Learn stage management

Resources:

08448Y, *Theatre Arts Journal* (2013) \$4.95

Level 1: 08445, *Theatre Arts Beginner* (2013) \$6.95

Level 2: 08446, *Theatre Arts Intermediate* (2013) \$6.95

Level 3: 08447, *Theatre Arts Advanced* (2013) \$6.95



VISUAL ARTS

ART

What you can do in this project (grades 3 and above):

- Learn art through cutting, pasting and drawing
- Explore sculpting and constructing with fibers
- Paint and print using different materials
- Explore art techniques, culture and history of art
- Learn artistic challenges in drawing, fiber arts and sculpting
- Develop graphic design techniques

Resources:

8140, *Advanced Visual Arts: Sketchbook Crossroads* \$7.50

8141, *Advanced Visual Arts: Portfolio Pathways* \$7.50

When members enroll in Art they are encouraged to learn about and are eligible to enter items in the Waupaca County Fair in any of the areas in the box on the next page and more.

STENCIL PAINTING

Resource: *Waupaca Stencil Painting Literature* \$.50

BLOCK PRINTING

Resource: 4H156, *Block Printing Member Guide* FREE

CIR008, *Block Printing Leader Guide* FREE

METAL ENAMELING

Resource: 4H158, *Metal Enameling Members Guide* FREE

CIR009, *Metal Enameling Leader Guide* FREE

MACRAMÉ

Waupaca County Macramé for Beginners \$.65

Waupaca County Create with Macramé \$1.30

BASKETRY – no 4-H literature available

TIE-DYING – no 4-H literature available

CREATIVE/CROSS STITCHERY– no 4-H literature

CERAMICS-*Waupaca County Ceramics Literature* \$.80

FOLK ARTS

DRAWING & PAINTING

What you can do in this project (grades 3 and above):

- Learn to draw with pencil, chalk, crayon, etc.
- Learn to blend and shade
- Make surface rubbings
- Paint with watercolor, oil and acrylics

Resource: 4H169, *Drawing & Painting* FREE

PHOTOGRAPHY

What you can do in this project (grades 3 and above):

- Explore the camera and learn to use it properly
- Learn the basics of lighting and composition
- Learn about camera adjustments
- Take silhouettes, candid, action shots and others
- Learn about wide-angle and telephoto lenses
- Experiment with special effect photos

Resources:

Level 1: 01902Y, *Photography Basics* (2019) \$9.95

Level 2: 01903Y, *Next Level Photography* (2019) \$9.95

Level 3: 01904Y, *Mastering Photography* (2019) \$9.95

VIDEOGRAPHY

What you can do in this project:

- Learn storytelling, editing and lighting
- Learn to plan a project with the use of sound and titles
- Show and review your production

Resource: IS401, *Action! Making Videos & Movies* FREE

FAMILY, HOME & HEALTH



<https://4h.extension.wisc.edu/opportunities/projects/family-home-health/>

CHILD DEVELOPMENT

What you can do in this project (grades 3 and above):

- Learn about the development of babies and toddlers
- Learn how to make toys safe for small children
- Learn how to take care of yourself and others
- Check for safety hazards
- Explore how to be an effective parent
- Make babysitting and first-aid kits
- Check out child development careers

CLOTHING

What you can do in this project (grades 3 and above):

- Identify sewing tools and machine parts
- Thread a sewing machine and identify fabrics
- Select and purchase a pattern
- Sort clothes for laundry and remove stains
- Identify types of fabric constructions
- Sew different buttonholes and seam finishes
- Use pressing tools and thread a serger
- Use specialized sewing tools or equipment

Resources:

Level 1: 08060, *Under Construction* (2004) \$5.75

Level 2: 08061, *Fashion Forward* (2004) \$5.75

Level 3: 08062, *Refine Design* (2004) \$5.75

Leader: 08063, *Sewing Helper's Guide* (2004) \$5.75

CROCHETING

What you can do in this project:

- Learn to select and purchase yarn, thread and equipment
- Explore crocheting and finishing techniques
- Understand care instructions for crocheted items

Resource: CC1403, *Crochet Made Easy* (2001) \$4.90

The following foods and nutrition project listings also have the opportunity to explore cake decorating and food preservation.

FOODS & NUTRITION

What you can do in this project (grades 3 and above):

- Learn what is good to eat and how to fix simple foods
- Explore why calcium is important to our bodies
- Understand TV commercial messages about food
- Learn to change recipes
- Reduce fat content in recipes
- Discover how to store fruit and vegetables
- Learn to evaluate nutrition information and fad diets
- Learn how to cook different cuts of meat
- Learn to divide large-quantity packages for family use
- Learn to divide recipes and make substitutions
- Plan menus on a budget

Resource: 01512Y, *Cooking 101* (2015) \$10.50

Waupaca County Recipe Book (levels 1-4) \$2.00

01513Y, *Cooking 201* (2015) \$10.50

01514Y, *Cooking 301* (2015) \$10.50

01515Y, *Cooking 401* (2015) \$10.50

01516F, *Cooking Curriculum Helper's Guide* (2015) \$6.50

FOOD PRESERVATION RESOURCES

B0430, *Canning Fruits Safely* \$3.00

B1159, *Canning Vegetables Safely* \$2.00

- B2909, *Making Jams, Jellies & Fruit Preserves* \$5.00
- B3278, *Freezing Fruits & Vegetables* \$2.75
- B2267, *Homemade Pickles & Relishes* \$4.10
- B2605, *Tomatoes Tart & Tasty* \$3.00
- B3345, *Canning Meat, Wild Game, Poultry & Fish* \$5.00
- B3570, *Canning Salsa Safely* \$2.50

HOME ENVIRONMENT

What you can do in this project (grades 3 and above):

- Make small decorative items for the home
- Explore the world of home interior design
- Learn to handle home tasks and entertain guests
- Refinish wood furnishings and make other home items
- Learn scale, balance and proportion in home design
- Learn about purchasing furnishings for the home
- Restore or make a heritage item

Resources:

4H425, *Exploring Your Home* \$1.65

4H465, *In My Home* \$1.80

HEALTH

What you can do in this project (grades 3 and above):

- Practice first-aid skills to treat basic injuries
- Learn how to respond to someone who is choking
- Assemble a first-aid kit
- Explore hygiene, nutrition and physical activities
- Design your own fitness plan
- Track your plan and review your progress
- Interview individuals in the health and fitness fields

Resources:

Level 1: 08174, *First Aid in Action* (2005) \$5.75

08380, *Health Rocks! Beginning* \$1.75

Level 2: 08175, *Staying Healthy* (2005) \$5.75

08381, *Health Rocks! Intermediate* \$1.75

Level 3: 08176, *Keeping Fit* (2005) \$5.75

INTERGENERATIONAL PROGRAMS

What you can do in this project:

- Learn to understand older people better
- Let them share their stories and experiences
- Explore what happens as you grow older

Resource: NCR591, *Walk in My Shoes Member Guide* \$7.55

NCR548, *Walk in My Shoes Leader Guide* \$7.55

KNITTING

What you can do in this project (grades 3 and above):

- Discover what to consider when buying yarn or tools
- Learn knitting and finishing techniques
- Learn how to care for your knitted items

Resource: CC1402, *Knitting Made Easy* (2001) \$6.00



CONSUMER, FINANCIAL, AND CAREER EDUCATION

CONSUMER SAVVY

What you can do in this project (grades 3 & above):

- Know the difference between wants and needs
- Write a savings and spending plan

- See how peer pressure can influence your purchases
- Understand the risks of shopping on the Internet
- Define consumer responsibilities and ethics
- Understand the costs of owning a vehicle

Resources:

Level 1: 08030DD, *The Consumer in Me* (2004) \$3.99

Level 2: 08031DD, *Consumer Wise* (2004) \$3.99

Level 3: 08032DD, *Consumer Roadmap* (2004) \$3.99

Leader Resource: 08033DD, *Consumer Savvy Helper* (2004) \$4.00

ENTREPRENEURSHIP

What you can do in this project geared to grades 7 and above:

- Practice the skills needed to be an entrepreneur
- Explore businesses, products, marketing and pricing
- Create a business plan and start your own business

Resource: 08035DD, *Entrepreneurship: Be the E* (2006) \$3.99

Leader: 08036, *Entrepreneurship Helper's Guide* \$5.75

PERSONAL FINANCE

What you can do in this project aimed at grades 6-12:

- Learn money management skills
- Learn about wants and needs, values and goal setting
- Explore ways to use and save money
- Learn the benefits and drawbacks of credit

Resource: 07710DD, *Money FUNdamentals* (2007) \$3.99

07711DD, *Money Moves* (2007) \$3.99

Leader: 07712, *Financial Helper's Guide* (2007) \$2.70

WORKFORCE READINESS

What you can do in this project (geared towards grades 9-12):

- Explore what it takes to get your first job
- Discover how to assess job possibilities in the community
- Recognize your learning styles and personal qualities

Resource: 08562, *Build Your Future Youth Notebook* \$10.95

Leader: 08562, *Build Your Future Facilitator's Guide* \$13.95



MECHANICAL SCIENCES

<https://4h.extension.wisc.edu/opportunities/projects/stem/>

BICYCLING ENGR & TECH

What you can do in this project

- Learn the essentials for getting started safely
- Explore the basics toward lifelong cycling
- Learn safety, road rules and planning for a pleasant ride
- Practice bike maintenance

Level 1: 08334, *Bicycling for Fun* (2006) \$5.75

Level 2: 08335, *Wheels in Motion* (2006) \$5.75

Leader: 08336, *Bicycle Helper's Guide* (2006) \$5.75

08399, *Bicycle Fix It! (DVD)* (2001) \$10.00

COMPUTERS

What you can do in this project (grades 3 and above):

- Learn about hardware, software and components
- Learn the various programs and their features
- Build and repair a computer
- Install operating systems

- Discover how to create and manage networks
- Explore security issues and troubleshooting

Resources:

Level 1: 08346, *Newbie Know How (2008)* \$1.95

Level 2: 08347, *Inside the Box (2008)* \$1.95

Level 3: 08348, *Peer to Peer (2008)* \$1.04

Leader: 08349, *Teens Teaching Tech (2008)* \$1.20

ELECTRICITY

What you can do in this project (grades 3 and above):

- Understand how to use electricity
- Identify electrical materials, wire a simple circuit
- Build a compass, flashlight, switch and electric motor
- Learn to read circuit diagrams
- Build a circuit and measure voltages
- Communicate in Morse code
- Develop a basic electrical tool and supply kit
- Understand the symbols on wires and cables
- Locate your home wiring system
- Identify electrical and electronic parts and devices
- Learn how to solder and prepare parts for assembly
- Assemble a circuit using a transistor

Resource: 06848, *Magic of Electricity (2003)* \$5.75

06849, *Investigating Electricity (2003)* \$5.75

06850, *Wired for Power (2003)* \$5.75

06851, *Entering Electronics (2003)* \$5.75

Leader: 06852, *Electricity Helper's Guide (2003)* \$5.75

SCALE MODELS

What you can do in this project (grades 3 and above):

- Assemble and create scale models of trains, cars, etc.
- Learn how to obtain materials you need in construction
- Learn to display your model and judge it
- Scale models include Lego's, K'NEX, wood, original Models, kits, and more

SMALL ENGINES

What you can do in this project (grades 3 and above):

- Learn the basics of small engines
- Explore external & internal engine parts and tools
- Learn about engine sizes and safety issues
- Explore different jobs related to small engines
- Tear down and rebuild an engine
- Learn to use diagnostic tools
- Research rules and regulations in using small engines

Resources:

Level 1: 08186, *Crank It Up! (2005)* \$5.75

Level 2: 08187, *Warm It Up! (2005)* \$5.75

Level 3: 08188, *Tune It Up! (2005)* \$5.75

Leader: 08189, *Small Engines Helper's Guide (2005)* \$5.75

TRACTORS

What you can do in this project:

- Learn and identify parts of the tractor
- Understand the basics of tractor maintenance
- Learn about different fuels and engine cooling systems
- Research different safety features and learn safety rules

Grades: 3-4 (little or no experience) Resource:

4H961, *Starting Up: Getting to Know Your Tractor (2006)* \$5.50

- Practice farm and tractor safety
- Understand the mechanics of engines
- Identify accessory equipment

Grades: 5-6 (little or no experience) Resource:

4H962, *Tractor Operations: Gearing Up for Safety (2006)* \$5.50

- Learn types of oil systems and fuel safety
- Learn how to hook on a PTO unit
- Learn tractor and machinery maintenance

Grades: 7-9 (some prior experience)

Resource: 4H963, *Moving Out: Learning About Your Tractor & Farm Machinery (2006)* \$5.50

- Focus on safety and maintenance
- Identify and work with operational systems

Grades: 10-12 (some prior experience)

Resource: 4H964, *Learning More: Learning About Agricultural Tractors & Equipment (2006)* \$5.50

WOODWORKING

What you can do in this project (grades 3 and above):

- Learn safety practices when working with wood and tools
- Identify types of nails and wood
- Compare different types of hinges
- Use a hand plane and build a laminated cutting board
- Compare different grades of plywood
- Use a table saw, router, powered circular saw and sander
- Learn to make more difficult joints
- Create inlays and overlays

Resources:

Level 1: 06875, *Measuring Up (2003)* \$5.75

Level 2: 06876, *Making the Cut (2003)* \$5.75

Level 3: 06877, *Nailing It Together (2003)* \$5.75

Level 4: 06878, *Finishing Up (2003)* \$5.75

Leader: 06879, *Woodworking Helper's Guide (2003)* \$5.75



NATURAL RESOURCES & ENVIRONMENTAL EDUCATION

<https://4h.extension.wisc.edu/opportunities/projects/outdoor-education/>

ADVENTURES

What you can do in this project (grades 3 and above):

- Investigate camping equipment and clothing
- Build a campfire and cook a meal
- Practice tying knots and first aid
- Learn to use a map and compass

Resource: 4H444, *Introduction to Adventures* \$4.65

Leader: 4H443, *4-H Adventure Project* \$1.90

ADVENTURES BICYCLING ENVIRON ED

What you can do in this project (grades 3 and above):

- Learn how and where to bicycle safely
- Plan a bicycle camping trip
- Design and build a bicycle obstacle course
- Conduct a bike maintenance check

Resource: 4H446, *Bicycling* \$2.80

BACKPACKING & HIKING

What you can do in this beginning project (grades 3 and above):

- Plan a day hike, select items and plan the food
- Prepare a first-aid kit
- Learn to use a compass
- Prepare for dangerous weather
- Plan a camping trip, equipment, shelter
- Practice “Leave No Trace” principles while hiking
- Select group backpacking gear including a tent
- Learn to orient a map and use triangulation

Resources:

Level 1: 08043, *Hiking Trails (2004)* \$5.75
Level 2: 08044, *Camping Adventures (2004)* \$5.75
Level 3: 08045, *Backpacking Expeditions (2004)* \$5.75
Leader: 08046 *Outdoor Adventures Helper (2004)* \$5.75

CANOEING

What you can do in this project (grades 3 and above):

- Learn how and where to canoe safely
- Select and care for equipment
- Explore aquatic environments
- Plan a canoe camping trip

ENTOMOLOGY (INSECTS)

What you can do in this beginning project (grades 3 and above):

- Learn about insects, their behavior and life history
- Discover the parts of an insect’s body
- Collect and compare insects
- Explore how insects communicate and move
- Learn how an insect protects itself
- Investigate entomology careers
- Make an insect identification key
- Explore various gardens and insect habitats

Resources:

Level 1 & 2 08392 Project Butterfly Wings Youth Guide \$3.99
_Level 1: 08440, *Teaming with Insects, Level 1* \$6.95
_Level 2: 08441, *Teaming with Insects, Level 2* \$6.95
_Level 3: 08442, *Teaming with Insects, Level 3* \$6.95
Leader: 08393 Project Butterfly Wings Facilitator Guide \$7.95
Leader: 08444, *Teaming with Insects Facilitator’s Guide* \$6.95

EXPLORING YOUR ENVIRONMENT

What you can do in this project (grades 3 and above):

- Explore the four elements of life: sun, air, water and soil
- Use your senses to explore the environment
- Connect to the environment through plants and animals
- Learn how the environment is affected by pollution
- Explore wildlife habitats and tracking
- Learn about groundwater
- Research pollination and how it works
- Begin to understand biodiversity
- Learn what climate has to do with the way we live

Resources: Level 1: 08411, *Earth’s Capacity* \$6.95
Level 3: 08410, *Ecosystems Services* \$6.95
08412, *Exploring Your Environment Facilitator Guide* \$6.95

FISHING

What you can do in this project (grades 3 and above):

- Identify types of tackle & organize a tackle box
- Identify different types of bait and fish in your area
- Learn to take proper care of your catch
- Learn to tie fishing knots
- Select a recipe and cook a fish
- Learn to reassemble a fishing reel
- Make artificial flies and lures
- Investigate fishing careers

Resources:

Level 1: 07598, *Take the Bait (2002)* \$5.75
Level 2: 07599, *Reel in the Fun (2002)* \$5.75
Level 3: 07600DD, *Cast into the Future (2002)* \$3.99
Leader: 07601DD, *Fishing Adventures- Helper (2002)* \$3.99

FORESTRY

What you can do in this project (grades 3 & above):

- Identify forest types, forest products and trees
- Describe how leaves affect rainfall
- Learn how trees move water from soil to canopy
- Diagram a leaf
- Understand major forest changes and their impact
- Select tree planting sites
- Create a community forest map

Resources:

Level 1: 08038, *Follow the Path (2004)* \$5.75
Level 2: 08039 *Reach for the Canopy (2004)* \$5.75
Level 3: 08040, *Explore the Deep Woods (2004)* \$5.75
Leader: 08041, *Forestry Helper’s Guide (2004)* \$5.75

RECYCLING

What you can do in this project (grades 3 and above):

- Learn about the impact of solid waste on the environment
- Learn to reduce, reuse and recycle

WATER

What you can do in this project (grades 3 and above):

- Identify water conservation and pollution issues
- Explore issues in your home, community or school
- Select an issue to focus on, develop and implement a plan

Resource: 4H855, *Give Water A Hand – Action Guide* \$4.90
4H850, *Give Water a Hand Leader* \$2.85

WILDFLOWERS

What you can do in this project (grades 3 and above):

- Learn about wildflowers in your neighborhood
- Learn to identify wildflowers and how to collect them

WINTER TRAVEL

What you can do in this project (grades 3 and above):

- Discover winter travel on cross-country skis and snowshoes
- Select and take care of equipment and clothing
- Experience a winter overnight campout
- Discover how trees and plants prepare for winter



SHOOTING SPORTS EDUCATION

<https://4h.extension.wisc.edu/opportunities/projects/shooting-sports/>

SHOOTING SPORTS LEADER

Resource: Each shooting sports leader must attend a Certification training to receive the WI Shooting Sports Basic 4-H Guidelines.

Check out the State 4-H Policies for guidelines about shooting sports <https://4h.extension.wisc.edu/resources/wisconsin-4-h-policies/>

Goals of the 4-H Shooting Sports program are to give youth thorough instruction in gun safety, provide proper training in the use of firearms, create an appreciation of natural resources, and develop self-confidence and responsibility. Wisconsin county leaders must participate in a shooting sports workshop sanctioned by the state prior to offering 4-H Shooting Sports as a project and must complete the county leader orientation. Workshops are held each year. Check with your county 4-H office for times and locations.

**** According to State policy, 4-H youth must be 12 years of age by the start of the program, event, or activity to operate any powder-burning firearm. This includes .22 handgun or rifle, muzzleloader handgun or rifle, or shotgun.**

***** Youth must work with state 4-H certified shooting sports leaders in any of the shooting sports disciplines**

AIR PISTOL LEADER

Each pistol leader must attend a Certification Training to receive the Pistol Guide & WI Shooting Sports Basic 4-H Guidelines.

AIR PISTOL

Resource: 753 Pistol Member Record Book \$7.50

What you can do in this project (grades 3 and above):

- Explore different air pistols
- Learn basic safety rules and guidelines
- Learn marksmanship and shooting procedures

AIR RIFLE LEADER

Each air rifle leader must attend a Certification Training to receive the Air Rifle Guide & WI Shooting Sports Basic 4-H Guidelines.

AIR RIFLE

What you can do in this project (grades 3 and above):

- Explore different types of air rifles
- Learn basic safety rules and range commands
- Learn various shooting positions used in competition

ARCHERY LEADER

Each archery leader must attend a Certification Training to receive the Archery Guide & WI Shooting Sports Basic 4-H Guidelines.

ARCHERY

Resource: 751 Archery Member Record Book \$7.50

What you can do in this project (grades 3 and above):

- Learn the fundamentals of archery marksmanship
- Learn rules and safety guidelines
- Make archery equipment
- Shoot with sights and different bows

HUNTING

What you can do in this project (grades 3 and above):

- Learn the history, philosophy and laws of hunting
- Learn to plan and equip yourself for a hunt

MUZZLELOADING LEADER

Each muzzleloading leader must attend a Certification training to receive the Muzzleloading Guide & WI Shooting Sports Basic 4-H Guidelines.

MUZZLELOADING

What you can do in this project:

- Explore muzzleloading history
- Study different muzzle loading guns and accessories
- Learn how to clean a muzzleloader
- Learn safety issues

Ages: Only 12 years old and above can shoot powder burning guns

RIFLE LEADER

Each rifle leader must attend a Certification training to receive the Rifle Guide & WI Shooting Sports Basic 4-H Guidelines.

RIFLE

Resource: 750 Rifle Member Record Book \$7.50

What you can do in this project:

- Explore rifle history and the different models
- Learn to sight-in your rifle and score targets
- Learn safe handling procedures and range rules

Ages: Only 12 years old and above can shoot powder burning guns

SHOTGUN LEADER

Each shotgun leader must attend a Certification training to receive the Shotgun Guide & WI Shooting Sports Basic 4-H Guidelines.

SHOTGUN

Resource: 752, Shotgun Member Record Book \$7.50

What you can do in this project:

- Learn the basic safety issues with shotgun handling
- Learn shooting fundamentals
- Learn the proper way to carry a shotgun

Ages: Only 12 years old and above can shoot powder burning guns



PLANT & SOIL SCIENCES

<https://4h.extension.wisc.edu/opportunities/projects/plant-soil-science/>

CROPS

What you can do in this project (grades 3 and above):

- Learn about variety selection, germination and planting

- Learn about nutrients, harvesting and storage
- Explore uses and marketing strategies for corn
- Establish and manage a forage crop
- Scout fields for pests, diseases and nutrition shortages
- Take an accurate forage sample
- Study growing techniques
- Explore types of grasses, including wheat, oats and barley
- Learn about growing conditions and nutrients
- Practice integrated pest management
- Compare production costs and marketing

FLOWERS

What you can do in this project (grades 3 and above)

- Identify flower parts and their functions
- Plant flowers and make flower arrangements
- Learn about plant needs and soil testing
- Select and start new plants and grow transplants
- Examine plants for insects and diseases

Resources: *Same resources as vegetable project*

07162, *Gardening: See Them Sprout* \$3.50
 4H1301A, *Forcing Spring Flowering Bulbs* \$.85
 A2935, *Evaluating & Judging Flowers & Indoor Plants*
 07163, *Gardening: Let's Get Growing* \$3.50
 07164, *Gardening: Take Your Pick* \$3.50
 07165, *Gardening: Growing Profits* \$3.50
 4H1041W, *Gardening Helper's Guide* \$6.95

FRUITS

What you can do in this project (grades 3 and above):

- Produce fruits from apples to berries
- Select the best fruit cultivar for your home garden

Resources: A1597, *Growing Strawberries in Wisconsin* \$4.00

A1610, *Growing Raspberries in Wisconsin* \$5.50
 A1960, *Growing Currants, Gooseberries, & Elderberries in Wisconsin* \$5.65
 A1656, *Growing Grapes in Wisconsin* \$4.00
 A2072, *Growing Pears in Wisconsin* \$4.00

HOME GROUNDS

What you can do in this project (grades 3 and up):

- Learn about seeding a lawn
- Study proper lawn care and maintenance
- Explore fertilization and pest management techniques
- Learn the importance of planting new trees and shrubs
- Learn basic maintenance: pruning and fertilization
- Explore landscape planning
- Select, place and plant trees and shrubs

Resources: 4H321, *4-H Lawn Care* \$1.25

A3067, *Selecting, Planting & Caring for Shade Trees* FREE
 G1923, *Planning & Designing Your Home Landscape* FREE

HOUSE PLANTS

What you can do in this project (grades 3 and above)

- Identify plant parts and their functions
- Grow house plants and start a plant from a cutting
- Make a dish garden
- Examine plants for insects and diseases

- Compare different fertilizers

Resources: *Same resources as vegetable project*

07162, *Gardening: See Them Sprout* \$3.50
 4H328, *Propagating & Growing House Plants* \$1.25
 07163, *Gardening: Let's Get Growing* \$3.50
 07164, *Gardening: Take Your Pick* \$3.50
 07165, *Gardening: Growing Profits* \$3.50
 4H1041W, *Gardening Helper's Guide* \$6.95

PLANT CRAFTS

What you can do in this project (grades 3 and above):

- Learn to harvest plants
- Use different drying techniques
- Learn how to use plant materials
- Learn how to make dried arrangements, corsages, etc.

Resources: 4H330, *Plant Crafts* \$1.00

4H453, *Plant Crafts Supplement* \$.90

VEGETABLES

What you can do in this project (grades 3 and above)

- Identify plant parts and their functions
- Explore germination and start a plant from a cutting
- Grow vegetables in containers
- Plan an outdoor garden; learn about composting
- Learn about plant needs and soil testing
- Compare organic and chemical fertilizers

Resources:

Grades 3-5, 07162, *Gardening: See Them Sprout* (2011) \$3.50
 Grades 6-7, 07163, *Gardening: Let's Get Growing* (2011) \$3.50
 Grades 8-10, 07164, *Gardening: Take Your Pick* (2011) \$3.50
 4H1041W *Gardening: Helper's Guide* (2016) \$6.95
 07164, *Gardening: Growing Profits* (2011) \$3.50
 4H395, *Organically Grown – Handbook* \$4.60
 4H409, *Nature's Herbs* \$1.15
 A3306, *Exhibiting & Judging Vegetables* FREE



STEM (Science, Technology, Engineering & Math)

<https://4h.extension.wisc.edu/opportunities/projects/stem/>

AEROSPACE

What you can do in this project (grades 3 and above):

- Build straw and paper rockets
- Identify types of aircraft
- Discover how weather affects flying
- Build and fly a kite
- Build, exhibit and launch model rockets
- Make a flight simulator
- Build an altitude tracker
- Discover the affects of gravity
- Explore life in space and aerospace careers

Resources:

Level 1: 06842, *Pre-Flight* (2003) \$5.75
 Level 2: 06843, *Lift Off* (2003) \$5.75
 Level 3: 06844, *Reaching New Heights* (2003) \$5.75
 Level 4: 06845, *Pilot in Command* \$5.75

GEOSPATIAL

ROBOTICS

Additional equipment and materials may be needed to complete some of the projects.

What you can do in this project (grades 3 and above):

- Explore and learn about robots arms
- Learn about robot form, function and design
- Build robots from everyday items
- Learn about basic electrical power and motors and gear system
- Build basic circuits
- Study basic elements of programming and instruction

Resources (\$7.95 each):

08431, *Junk Drawer Robotics Track Level 1- Give Robots a Hand* \$7.95

08432, *Junk Drawer Robotics Level 2 – Robots on the Move* \$7.95

08433, *Junk Drawer Robotics Level 3 – Mechatronics* \$9.95

08435, *4-H Robotics Youth Notebook* \$6.95

WIND ENERGY

Resource: 08383, *The Power of the Wind Youth Guide* \$5.75

08384, *The Power of the Wind Facilitator Guide* \$5.75

Publications can be found at: <https://4h.extension.wisc.edu/opportunities/projects/>

Some of the publications are available free of charge at: <https://learningstore.extension.wisc.edu> then click on “View PDF”

Or <https://4-h.org/parents/curriculum/>

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at <https://4h.extension.wisc.edu/opportunities/projects/> On these pages, you'll find descriptions for statewide projects, Internet resources and links of interest, state specialist contacts, ideas for project leaders, and other suggested 4-H resources.

WAUPACA COUNTY 4-H LITERATURE ORDER FORM

Jenny Heise, Leaders' Association Treasurer, N2220 Bean City Road, New London, WI 54961



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PLEASE ORDER BY NOVEMBER 30



(Orders received after November 30th will be processed; however, there may be a delay in receiving materials.)