



# Wisconsin 4-H Project Guide (with Supplements)

**This is your guide....** A 4-H project is an area 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.

So how do you know what projects are available to you? Your club organizational leader or enrollment coordinator can tell you what projects and resources are available in your county.

Do not forget to check out the project pages on the Wisconsin 4-H Web Site at <http://fyi.uwex.edu/wi4hprojects>. On these pages, you will find descriptions for statewide projects, Internet resources and links of interest, county fair exhibit suggestions, state specialist contacts, and other suggested 4-H resources.

Remember, you will learn more than “subject matter” as you complete your projects. You will learn many “life” skills that you will 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 do not even realize you do well.

Then compare your list with the projects described in this guide and any other project list you may receive from your county. Ask yourself if you have the equipment, money and time to do the projects that sound interesting.

Many projects have more than one level. If you have had a lot of experience in an area, you may want to skip the first or beginning level of a project. Many projects also have grade recommendations. These are only recommendations.

If this is your first year in 4-H, concentrate on doing only two or three projects well. Usually you can spend more than one year in a project unit because there are enough ideas there to span two or three years.

**4-H leaders . . .** If there are several units within a project and you are a leader for only one, then choose that unit. For example, if you are a Shooting Sports leader for archery, choose Archery. You will need to make more than one entry if you are a leader for more than one project unit. For example, if you are a Shooting Sports leader for archery and air pistol, choose both.



## YOUTH LEADERSHIP

<https://fyi.extension.wisc.edu/wi4hprojects/community-involvement/youth-leadership/>

### AMBASSADORS

#### YOUTH LEADERSHIP

What you can do in this project:

- Assess your leadership skills
- Practice effective communication skills
- Set goals and resolve conflict
- Plan a group event

Grades: 5-13

Resource: 4H375, *Leadership Road Trip: Where Are You Going?*

#### YOUTH LEADERSHIP LDR OR YOUTH LDR

Resources: 07903, *Leadership Mentor Guide for Grades K-5*  
07904, *Leadership Mentor Guide for Grades 6-12*



## YOUNGER MEMBERS

<https://fyi.extension.wisc.edu/wi4hprojects/younger-members/>

### CLOVERBUDS

What you can do in this project:

- Learn about your 4-H club or group, activities and events
- Begin developing different skills, e.g., working with others
- Explore your community and working together
- Discover areas of project interest
- Share with others what you have learned

Grade: K-2

Resources: *Wisconsin 4-H Cloverbud Learning Activities*  
4H710GPM, *The Big Book of 4-H Cloverbud Activities*

#### CLOVERBUDS LDR OR YOUTH LDR

Resources: *Essential Elements for Cloverbud Programs*  
*Cloverbud Leader Guide*

### EXPLORING

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

Grade: 3

Resource: 08171, *Exploring the Treasures of 4-H*

#### EXPLORING LDR

Resources: 08172, *Exploring Treasures of 4-H Helper's Guide*



## **SERVICE LEARNING & CITIZENSHIP**

<https://fyi.extension.wisc.edu/wi4hprojects/community-involvement/>

### **CITIZENSHIP**

What you can do in this project:

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

Grades: 4-13

Resource: 08153, *Citizenship Adventure Kit*

### **CITIZENSHIP LDR OR YOUTH LDR**

Resource: 08154, *Citizenship Guide's Handbook*

### **HISTORY & HERITAGE**

### **LATINO CULTURAL ARTS**

What you can do in this project:

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

Grades: 3-8

### **LATINO CULTURAL ARTS LDR OR YOUTH LDR**

Resource: 08180DD, *QuéRico! La Cultura Bilingual Helper's Guide*

### **SERVICE LEARNING**

What you can do in this project:

- Learn to give back to your community
- Reflect on your experiences
- Identify community needs
- Plan a service project and execute the idea
- Plan and implement your own service project
- Share your project plan and outcome with others
- Conduct an evaluation of your project

Grades: 5-13

Resource: 08182, *Agents of Change + CD*

08183, *Raise Your Voice + CD*

### **SERVICE LEARNING LDR OR YOUTH LDR**

Resource: 08184, *Service Learning Helper's Guide*



## **SELF-DETERMINED**

### **SELF-DETERMINED**

What you can do in this project:

- Create your own project or expand on an old one
- Select a project, develop a plan, identify resources
- Carry out and evaluate your plan

Grades: 3-13

Resource: 4H272, *Designing Your Own Project*

### **SELF-DETERMINED LDR OR YOUTH LDR**

#### **SELF-DETERMINED:**

#### **ANIMAL SCIENCES**

**ARTS & COMMUNICATION  
ENVIRONMENTAL EDUCATION  
FAMILY, HOME, & HEALTH  
MECHANICAL SCIENCES  
PLANT & SOIL SCIENCES**



## **ANIMAL SCIENCES**

<https://fyi.extension.wisc.edu/wi4hprojects/animal-sciences/>

### **BEEF**

What you can do in this project:

- Identify various beef breeds
- Identify parts of a beef animal
- Halter-break and show a calf
- Fit and judge beef cattle
- Recognize and raise a healthy animal
- Present oral reasons during judging
- Learn about feed ingredients, behavior and parasites
- Study how to do nose-print identification
- Learn beef carcass composition and retail meat cuts
- Explore selection and judging
- Learn about careers, health, reproduction, etc.
- Discover how to market your animal and by-products

Grades: 3-13

Resources: 08143, *Bite into Beef*

08144, *Here's the Beef*

08145, *Leading the Charge*

### **BEEF LDR OR YOUTH LDR**

Resources: 08146, *Beef Helper's Guide*

117R, *Beef Resource Handbook*

### **CAGE BIRDS**

### **CAGE BIRDS LDR OR YOUTH LDR**

### **CATS**

What you can do in this project:

- Select a cat
- Identify cat breeds
- Name the parts of a cat
- Handle and groom a cat
- Care for its health
- Create a budget
- Learn about cat senses and sounds
- Explore tricks to teach a cat
- Traveling with a cat
- Learn about feeding and emergency care
- Detect signs of illness and health issues
- Explore veterinary procedures
- Learn reproduction and cat body systems
- Learn showmanship and cat behavior
- Explore community laws and animal welfare

Grades: 3-13

08148, *Purr-fect Pals*

08149, *Climbing Up!*

08150, *Leaping Forward*

## CATS LDR OR YOUTH LDR

Resource: 08151, *Cat Helper's Guide*

## CAVIES

### CAVIES LDR OR YOUTH LDR

## DAIRY

What you can do in this project:

- Identify dairy breeds
- Study and identify parts of the dairy cow
- Learn how to select quality dairy calves
- Fit and show a calf
- Identify stages of calving and care
- 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
- Observe animal behavior
- Practice mastitis detections
- Learn to balance rations
- Practice pregnancy detection and delivery of a calf
- Learn body-conditioning scoring
- Promote dairy products
- Explore various dairy industry careers

Grades: 3-13

Resources: 08161, *Cowabunga*  
CANADA1, *Showmanship: Leading to Win*  
LDR, *Lifetime Dairy Record*  
08162, *Mooving Ahead*  
CANADA2, *Preparing to Lead*  
MPA, *Managerial Project Agreement*  
08163, *Rising to the Top*  
HMR, *WI 4-H Dairy Heifer Mgmt. Record*

## DAIRY LDR OR YOUTH LDR

Resource: 08164, *Dairy Cow Helper's Guide*

## DOGS

What you can do in this project:

- 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
- Explore dog health and nutrition
- Discover genetic problems and population control
- Learn showmanship and training techniques
- Learn about show-ring ethics
- Investigate responsible breeding
- Care for geriatric dogs
- Train service dogs
- Explore careers related to dogs

Grades: 3-13

Resources: 08166, *Wiggles and Wags*  
08167, *Canine Connection*  
4H439, *Dog Obedience – Novice & Beyond*  
08168, *Leading the Pack*  
4H437, *A Guide to Showmanship*

## DOGS LDR OR YOUTH LDR

08169, *Dog Helper's Guide*

4H458, *4-H Dog Judging Guidelines*

## DOGS OBEDIENCE TRAINING

### DOGS OBEDIENCE TRAINING LDR OR YOUTH LDR

## EXOTIC ANIMALS

### EXOTIC ANIMALS LDR OR YOUTH LDR

## DAIRY GOAT

What you can do in this project:

- Gain hands-on experiences in the goat project
- 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
- Develop judging skills
- Learn how to milk a goat properly
- Learn about genetics, diseases and breeding
- Study body-condition scoring and linear appraisal
- Understand bio-security and prevention measures
- Gain leadership and explore career opportunities

Grades: 3-13

Resource: 08352, *Getting Your Goat*  
08353, *Stepping Out*  
08354, *Showing the Way*

## DAIRY GOAT LDR OR YOUTH LDR

Resource: 08355, *Dairy Goat Helper's Guide*

## MEAT GOAT

What you can do in this project:

- 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
- Select a veterinarian and purchase breeding stock
- Understand reproduction cycle and keep records
- Fit and show meat goats
- Learn to control diseases
- Understand bio-security and quality assurance
- Formulate rations
- Evaluate goat pastures

Grades: 3-13

Resource: 07909, *Just Browsing*  
07910, *Get Growing with Meat Goats*  
07911, *Meating the Future*

## MEAT GOAT LDR OR YOUTH LDR

Resource: 07912, *Meat Goat Helper's Guide*

## PYGMY GOAT

### PYGMY GOAT LDR OR YOUTH LDR

## HORSE

What you can do in this project:

- Learn horse behavior and terms

- Study breeds and identify body parts
- Saddle, groom and bridle your horse
- Practice horse safety and horse selection
- Practice horsemanship and judging
- Understand horse selection and training
- Learn about tack, feeding and diseases
- Practice showing a horse and trail riding
- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers
- Train a horse
- Practice a round-pen workout
- Learn English and Western style bridles
- Understand equitation and riding styles
- Learn to set goals
- Compare costs of show clothing
- Present your horse in showmanship classes
- Rate your showmanship skills
- Practice proper show ethics

Grades: 3-13

Resources: 01518Y, *Giddy Up & Go*  
 CO200, *Horses & Horsemanship*  
 CO201, *Horse Science*  
 01519Y, *Head, Heart & Hooves*  
 01520Y, *Stable Relationships*  
 01521Y, *Riding the Range*  
 01522Y, *Jumping to New Heights*

### **HORSE/ HORSELESS HORSE LDR OR YOUTH LDR**

Resources: 01523F, *Horse Helper's Guide*

### **CLOTHES HORSE**

#### **CLOTHES HORSE LDR OR YOUTH LDR**

### **DRAFT HORSE**

What you can do in this project:

- Explore different breeds and characteristics
- Learn conformation, selection and nutrition
- Practice harnessing and hitching

Grades 6-8

Resource: 4H181, *Draft Horse*

### **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 grooming, saddling and bridling
- Learn about safety and equipment
- Learn about horsemanship
- Explore judging and oral reasons
- Learn selection, training and showing
- Practice trail riding skills
- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers

Grades: 3-13

Resource: 01518Y, *Giddy Up & Go*  
 01519Y, *Head, Heart & Hooves*  
 01520Y, *Stable Relationships*

### **HORSE MINIATURE HORSE**

### **MODEL HORSES**

#### **MODEL HORSES LDR OR YOUTH LDR**

### **PETS**

What you can do in this project:

- Explore your favorite pet or select a pet
- Identify pet body parts
- Learn to provide a safe environment
- Design a space for your pet
- Explore animal digestion and feeding
- Shop for pet supplies
- Determine the animal's sex and proper health
- Study pet behavior and communication
- Explore pet products
- Teach others about pets
- Understand how genetics work
- Explore animal welfare issues

Grades: 3-13

06359, *Pet Pals*  
 06360, *Scurrying Ahead*  
 06361, *Scaling the Heights*

### **PETS LDR OR YOUTH LDR**

Resource: 06362, *Pet Helper's Guide*

### **POULTRY**

What you can do in this project:

- Identify poultry breeds
- Learn parts of the bird
- Learn parts and functions of the egg
- Learn how to select and handle poultry
- Fit and show poultry
- Observe a healthy flock
- Select and judge broilers
- Discover how an egg is formed
- Prevent poultry diseases
- Discover how chicks imprint
- Organize a judging clinic
- Manage a laying flock
- Discover qualities of eggs
- Handle poultry products safely
- Process a chicken

Grades: 3-13

Resources: 06363, *Scratching the Surface*  
 CIR878, *From Egg to Chick*  
 06364, *Testing Your Wings*  
 A2880, *Chicken Breeds & Varieties*  
 06365, *Flocking Together*  
 MA, *Meat Animal Project Record*

### **POULTRY LDR OR YOUTH LDR**

Resource: 06366, *Poultry Helper's Guide*

## **POULTRY BANTAMS**

What you can do in this project:

- Discover bantam breeds and breed characteristics
- Learn how to get started raising bantams
- Select and mate bantams
- Incubate and rear their young
- Learn to feed and house birds
- Fit and show bantams

Grades: 3-13

Resources: NCR209, *Bantams*

## **POULTRY EXOTIC BIRDS (Ostrich, Emu)**

## **POULTRY GAME BIRDS (Quail, Pheasant)**

## **POULTRY MARKET**

## **POULTRY PIGEONS**

What you can do in this project:

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

Grades: 3-13

Resource: 4H135, *Pigeons*

## **POULTRY TURKEYS**

What you can do in this project:

- Learn about buying poultry
- Prepare a brooding area
- Raise range turkeys
- Feed and water turkeys
- Identify diseases

Grades: 3-13

Resources: NCR060, *Small Turkey Flock Management*

## **POULTRY WATERFOWL**

What you can do in this project:

- Learn about waterfowl breeds and parts
- Handle waterfowl properly
- Select and prepare waterfowl for market
- Incubate and exhibit waterfowl

Grades: 3-13

Resources: A3311, *Raising Waterfowl*

## **RABBITS**

What you can do in this project:

- Learn about selecting and handling rabbits
- Identify rabbit breeds and body parts
- Explore health issues and feeding
- Learn to select show rabbits
- Give oral reasons and judge rabbits
- Learn to tattoo
- Detect diseases
- Keep records of animals
- Learn about breeding and genetics
- Design a rabbitry
- Market rabbits
- Learn about disease prevention and rabbit registration

Grades: 3-13

Resource: 08080, *What's Hoppening?*

08081, *Making Tracks*

08082, *All Ears*

## **RABBITS LDR OR YOUTH LDR**

Resource: 08083, *Rabbit Helper's Guide*

## **RABBIT HOPPING**

## **RABBIT HOPPING LDR OR YOUTH LDR**

## **SHEEP**

What you can do in this project:

- Identify sheep breeds and body parts
- Observe sheep behavior
- Identify uses of wool and other by-products
- Fit and show sheep
- Learn to identify sheep parasites
- Promote meat safety
- Judge wool
- Diagnose sheep diseases
- Use medications safely
- Explore careers
- Set sheep production goals
- Plan sheep related activities
- Market sheep products and teach others
- Plan a judging contest
- Explore careers

Grades: 3-13

Resources: 06367, *Lambs, Rams and You*

06368, *Shear Delight*

06369, *Leading the Flock*

## **SHEEP LDR OR YOUTH LDR**

Resources: 06370, *Sheep Helper's Guide*

194R, *Sheep Resource Handbook*

## **SWINE**

What you can do in this project:

- Identify swine breeds, feeds and animal parts
- Practice judging market hogs
- Identify pork meat cuts
- Practice fitting and showing a hog
- Make a swine health care plan
- Identify diseases
- Assemble tack and pack a show box
- Plan and organize a facility expansion
- Complete a plan for a new pork product
- Learn to make breeding and culling decisions
- Judge a class of breeding gilts
- Design a preventative herd health plan
- Manage a feeding program

Grades: 3-13

Resources: 08065, *The Incredible Pig*

4H412, *Judging Breeding & Market Swine*

08066, *Putting the Oink in the Pig*

08067, *Going Whole Hog*

## **SWINE LDR OR YOUTH LDR**

Resources: 08068, *Swine Helper's Guide*

134R, *Swine Resource Handbook*

## VETERINARY SCIENCE

What you can do in this project:

- Learn different breeds of animals
- Interpret animal behavior
- Identify feed nutrients
- Describe animal life stages and systems
- Create health records for your animal
- Conduct food safety experiments
- Discover importance of immunity and bio-security
- Consider ethics and animal welfare
- Investigate the importance of genetics
- Understand diseases that spread from animals to humans
- Learn about diversity of veterinary careers

Grades: 3-13

Resources: 08048, *From Airedales to Zebras*  
08049, *All Systems Go*  
08050, *On the Cutting Edge*

## VETERINARY SCIENCE LDR OR YOUTH LDR

Resources: 08051, *Veterinary Science Helper's Guide*  
08744DD, *Animal Behavior* (digital download)  
08745DD, *Animal Vital Signs* (digital download)  
08746DD, *Disease Transmission*  
08748DD, *Principles of Bio-Security*  
08749DD, *Advanced Concepts in Animal Care*



## COMMUNICATION ARTS

<https://fyi.extension.wisc.edu/wi4hprojects/arts-communication/communications/>

## COMMUNICATIONS

What you can do in this project:

- Engage in non-verbal, verbal and written activities
- Strengthen your personal communication skills
- Encrypt codes, write songs and give directions
- Learn to become a confident communicator
- Present oral reasons, plan and present speeches
- Practice making good first impressions
- Polish your communication skills
- Explore communication careers
- Write résumés and interview for a job

Grades: 3-13

Resource: 08644DD, *Communications: Module 1*  
08645DD, *Communications: Module 2*  
08646DD, *Communications: Module 3*

## COMMUNICATIONS LDR OR YOUTH LDR

Resources: COMM04, *Voices From the Past*  
COMM05, *It's All in the Family*  
COMM07, *Communication Activities for 4-H Clubs*

## COMPUTER GRAPHIC DESIGN

## CREATIVE WRITING

What you can do in this project:

- Explore language and creative expression
- Stimulate your creativity and self-expression

- Enrich your joy of book reading

Grades: 3-13

Resources: COMM01, *Creative Wordworking*  
COMM03, *Crazy About Books Reading Circle*

## CREATIVE WRITING LDR OR YOUTH LDR

## DEMONSTRATIONS

## DEMONSTRATIONS LDR OR YOUTH LDR

## SIGN LANGUAGE

## SPEAKING

What you can do in this project:

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

Grades: 3-13

Resources: COMM02, *4-H Public Speakers Handbook*  
COMM06, *4-H Public Speaking Opportunities*

## SPEAKING LDR OR YOUTH LDR



## PERFORMING ARTS

<https://fyi.extension.wisc.edu/wi4hprojects/arts-communication/theatre-arts/>

## CLOWNING

What you can do in this project:

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

Grades: 3-13

Resource: 4H265, *Enter the Clowns*

## CLOWNING LDR OR YOUTH LDR

## DANCE

## DANCE LDR OR YOUTH LDR

## JUGGLING

What you can do in this project:

- Learn to select the right juggling ball
- Learn 3 steps to basic juggling

Grades: 3-13

Resource: 19083, *4-H Juggling with Andy Talen* (DVD in CES Media Collection)

## JUGGLING LDR OR YOUTH LDR

## MUSIC

What you can do in this project:

- Gain a greater appreciation for music
- Explore different ways to participate
- Listen, perform and compose various types of music
- Teach others and make instruments

Grades: 3-13

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

## MUSIC LDR OR YOUTH LDR

### PUPPETRY

#### PUPPETRY LDR OR YOUTH LDR

### THEATRE ARTS

What you can do in this project:

- Study acting, sound, movement, voice and speech
- Learn different ways to play a scene
- Try pantomime, clowning and improvisation
- Become a puppeteer
- Investigate the history of puppets
- Explore types of puppets and puppet characters
- Use puppets in community service work
- Plan and present a puppet show
- Study costumes, makeup, stage sets, props and sound
- Learn stage management
- Create sounds and disguises
- Make up your own character and bring it to life

Grades: 3-13

Resource: 08445, *Theatre Arts Beginner*  
08448Y, *Theatre Arts Journal*  
08446, *Theatre Arts Intermediate*  
08448Y, *Theatre Arts Journal*  
08447, *Theatre Arts Advanced*  
08448Y, *Theatre Arts Journal*

## THEATRE ARTS LDR OR YOUTH LDR



### VISUAL ARTS

#### METAL ENAMELING

What you can do in this project:

- Try enameling earrings, pins and other jewelry
- Learn to attach fasteners
- Create original designs and patterns

Grades: 5-13

Resource: 4H158, *Metal Enameling Members Guide*

#### METAL ENAMELING LDR

#### METAL ENAMELING YTH LDR

Resource: CIR009, *Metal Enameling Leader Guide*

#### NEEDLEPOINT

#### PAPER ART

### PHOTOGRAPHY

What you can do in this project:

- Explore the camera and learn to use it properly
- Learn the basics of lighting and composition
- Learn the use of different light sources
- Shoot photos that tell a story
- Learn about camera adjustments
- Learn about film speed, shutter speed and aperture
- Take silhouettes, candid, action shots and others
- Learn about wide-angle and telephoto lenses
- Explore the use of light meters and studio lighting
- Experiment with special effect photos

- Take still life photos and portraits

Grades: 3-13

Resource: 01920Y, *Photography Basics*  
01903Y, *Next Level Photography*  
01904Y, *Mastering Photography*

## PHOTOGRAPHY LDR OR YOUTH LDR

### POSTERS

### POTTERY

### RUBBER STAMPING

### SCRAPBOOKING

### STENCIL PAINTING

### STRING/WIRE ART

### STUFFED ANIMALS

### TIE DYING

### VIDEOGRAPHY

What you can do in this project:

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

Grades: 6-13

Resource: DVDFILM, *4-H Filmmaking Workshop* (DVD)  
IS401, *Action! Making Videos & Movies*

### WEAVING

### WEARABLE ART

### WOOD ART

### WOOD BURNING



### FAMILY, HOME & HEALTH

<https://fyi.extension.wisc.edu/wi4hprojects/family-home-health/>

## CHILD DEVELOPMENT

### HOME ENVIRONMENT

What you can do in this project:

- Learn about home care
- Learn to sand and finish a simple wood item
- Make small home decorative items for the home
- Explore the world of home interior design
- Focus on the application of design fundamentals
- Learn about purchasing furnishings for the home
- Restore or make a heritage item

Grades: 3-13

Resource: 4H425, *Exploring Your Home*  
4H465, *In My Home*

## HOME ENVIRONMENT LDR OR YOUTH LDR

### HEALTH

What you can do in this project:

- Practice first-aid skills to treat basic injuries
- Learn how to respond to someone who is choking
- Assemble a first-aid kit

- Identify your personal talent areas in health care
- Explore hygiene, nutrition and physical activities
- Share what you learn with others
- Design your own fitness plan
- Track your plan and review your progress
- Interview individuals in the health and fitness fields

Grades: 3-13

Resource: 08174, *First Aid in Action*  
 08380, *Health Rocks! Curriculum 1 – Beginning*  
 08175, *Staying Healthy*  
 08381, *Health Rocks! Curriculum 2 – Intermediate*  
 4H359, *Your Thoughts Matter: Navigating Mental Health*  
 08176, *Keeping Fit*  
 4H359, *Your Thoughts Matter: Navigating Mental Health*

## HEALTH LDR OR YOUTH LDR

### 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

Grades: 5-13

Resource: NCR591, *Walk in My Shoes Member Guide*

### INTERGENERATIONAL PROGRAMS LDR

Resource: NCR548, *Walk in My Shoes Leader Guide*



## CONSUMER EDUCATION

<https://fyi.extension.wisc.edu/wi4hprojects/family-home-health/>

### CONSUMER SAVVY

What you can do in this project:

- Learn your shopping style
- Use the yellow pages to find goods and services
- Know the difference between wants and needs
- Write a savings and spending plan
- Start a savings account
- Identify your personal spending values
- Understand advertising appeal and its affects
- See how peer pressure can influence your purchases
- Understand the risks of shopping on the Internet
- Define consumer responsibilities and ethics
- Understand your consumer rights
- Use comparison shopping techniques
- Understand the costs of owning a vehicle

Grades: 3-13

Resource: 08030DD, *The Consumer in Me*  
 08031DD, *Consumer Wise*  
 08032DD, *Consumer Roadmap*

### CONSUMER SAVVY LDR OR YOUTH LDR

Resource: 08033DD, *Consumer Savvy Helper's Guide*

## ENTREPRENEURSHIP

What you can do in this project:

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

Grades: 7-13

Resource: 08035DD, *Entrepreneurship: Be the E*

### ENTREPRENEURSHIP LDR OR YOUTH LDR

Resource: 08036, *Entrepreneurship Helper's Guide*

## PERSONAL FINANCE

What you can do in this project:

- Learn money management skills
- Learn how to live on a budget
- Learn about wants and needs, values and goal setting
- Explore ways to use and save money
- Learn the benefits and drawbacks of credit
- Survey and select financial services

Grades: 6-13

Resource: 07710DD, *Money FUNDamentals*  
 07711DD, *Money Moves*

### PERSONAL FINANCE LDR OR YOUTH LDR

Resource: 07712, *Financial Champions Helper's Guide*

## WORKFORCE READINESS

What you can do in this project:

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

Grades: 6-9

Resource: 08561, *Build Your Future Youth Notebook*

### WORKFORCE READINESS LDR OR YOUTH LDR

Resource: 08562, *Build Your Future Facilitator's Guide*



## FOODS AND NUTRITION

<https://fyi.extension.wisc.edu/wi4hprojects/family-home-health/foods-nutrition/>

### BREADS

### CAKE DECORATING

### CANDY MAKING

### FOOD PRESERVATION 1

What you can do in this project:

- Learn the basics of preserving food safely
- Use UW-Extension Safe Food Preservation Series

Grades: 6-13

Resources: B0430, *Canning Fruits Safely*  
 B1159, *Canning Vegetables Safely*  
 B2909, *Making Jams, Jellies & Fruit Preserves*  
 B3278, *Freezing Fruits & Vegetables*

### FOOD PRESERVATION 2

What can I do in this project:

- Continue learning food preservation techniques



- Use UW-Extension Safe Food Preservation Series

Grades: 6-13

Resources: B2267, *Homemade Pickles & Relishes*  
B2605, *Tomatoes Tart & Tasty*  
B3345, *Canning Meat, Wild Game, Poultry & Fish*  
B3570, *Canning Salsa Safely*

### FOOD PRESERVATION 3

#### FOOD PRESERVATION LDR OR YOUTH LDR

### FOODS & NUTRITION 1

What you can do in this project:

- Learn what is good to eat and how to fix simple foods
- Fix pizza, pancakes, fruit kabobs and granola bars
- Explore why calcium is important to our bodies
- Understand TV commercial messages about food

Grades: 3-4

Resource: 07144DD, *Six Easy Bites*

### FOODS & NUTRITION 2

What you can do in this project:

- Make main dishes, e.g., meatballs, pasta and salads
- Learn to make basic muffins and biscuits
- Learn to change recipes
- Reduce fat content in recipes
- Discover how to store fruit and vegetables

Grades: 5-6

Resource: 07146DD, *Tasty Tidbits*

### FOODS & NUTRITION 3

What you can do in this project:

- Learn to evaluate nutrition information and fad diets
- Develop your own exercise program
- Learn how to cook different cuts of meat
- Learn to divide large-quantity packages for family use
- Make baked chicken, breadsticks and stir-fried vegetables

Grades: 7-9

Resource: 07148DD, *You're the Chef*

### FOODS & NUTRITION 4

What you can do in this project:

- Learn how to make jelly, bake fish and marinate meat
- Conduct a food activity with young children
- Learn to divide recipes and make substitutions
- Plan menus on a budget

Grades: 10-12

Resource: 07150DD, *Foodworks*

### FOODS & NUTRITION LDR OR YOUTH LDR

Resource: 07730DD, *Foods Curriculum Helper's Guide*



## CLOTHING AND TEXTILES

<https://fyi.extension.wisc.edu/wi4hprojects/family-home-health/>

### CLOTHING

What you can do in this project:

- 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
- Donate a sewing project
- Identify types of fabric constructions
- Sew different buttonholes and seam finishes
- Use pressing tools and thread a serger
- Research different laundry products
- Use specialized sewing tools or equipment
- Combine patterns to create a design
- Create outdoor wear
- Design and embellish a garment
- Use a computer to print on fabric

Grades: 3-13

Resources: 08060, *Under Construction*  
4H2210, *FUNdamentals: STEAM Clothing 1*  
08061, *Fashion Forward*  
4H2220, *Simply Sewing: STEAM Clothing 2*  
08062, *Refine Design*  
4H2230, *A Stitch Further: STEAM Clothing 3*  
4H2240, *Maker's Guide: STEAM Clothing*  
4H2260, *Beyond the Needle: STEAM Clothing*

### CLOTHING LDR OR YOUTH LDR

Resource: 08063, *Sewing Expressions Helper's Guide*

### CROCHETING

### KNITTING

What you can do in this project:

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

Grades: 3-13

Resource: CC1402, *Knitting Made Easy*

### KNITTING LDR OR YOUTH LDR

### QUILTING



## MECHANICAL SCIENCES

<https://fyi.extension.wisc.edu/wi4hprojects/mechanical-sciences/>

### AUTOMOTIVE

### BICYCLES – ENG & TECH 1

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
- Choose a bike that's right for you
- Practice bike maintenance
- Learn road rules

Grades: 3-13

Resource: 08334, *Bicycling for Fun*  
08335, *Wheels in Motion*

### BICYCLING LDR OR YOUTH LDR

Resources: 08336, *Bicycle Helper's Guide*  
08399, *Bicycle Fix It! (DVD)*

## COMPUTERS

What you can do in this project:

- Learn about hardware, software and components
- Explore how computers work
- Learn the various programs and their features
- Visit the project's interactive website
- Build and repair a computer
- Identify the components and how they work together
- Learn to upgrade and create connections
- Install operating systems
- Discover how to create and manage networks
- Make decisions about network management
- Explore security issues and troubleshooting

Grades: 3-13

Resource: 08346, *Newbie Know How*  
01606Y, *Comp. Science & Programming with Scratch: 1*  
08347, *Inside the Box*  
01801Y, *Comp. Science & Programming with Scratch: 2*  
08348, *Peer to Peer*  
01802Y, *Comp. Science & Programming with Scratch: 1*

## COMPUTERS LDR OR YOUTH LDR

Resource: 08349, *Teens Teaching Tech*  
01607Y, *Comp. Science & Programming with Scratch: Level 1 Facilitator Guide*

## ELECTRICITY

What you can do in this project:

- Understand how to use electricity
- Identify electrical materials
- Wire a simple circuit
- Build a compass, flashlight, switch and electric motor
- Work with electrical equipment
- 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

Grades: 4-13

Resource: 06848, *Magic of Electricity*  
Resource: 06849, *Investigating Electricity*  
Resource: 06850, *Wired for Power*  
Resource: 06851, *Entering Electronics*

## ELECTRICITY LDR OR YOUTH LDR

Resource: 06852, *Electric Excitement Helper's Guide*

## LEGOS

## MECHANICAL SCIENCES

## MODEL CARS

## MODEL RAILROAD

## MODEL ROCKETRY

## RADIO-CONTROLLED PLANE REMOTE-CONTROLLED CARS SCALE MODELS

## SMALL ENGINES

What you can do in this project:

- Learn the basics of small engines
- Explore external engine parts and tools
- Identify the uses of small engines and safety issues
- Explore the internal parts of engines
- 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

Grades: 3-13

Resource: 08186, *Crank It Up!*  
08187, *Warm It Up!*  
08188, *Tune It Up!*

## SMALL ENGINES LDR OR YOUTH LDR

Resource: 08189, *Small Engines Helper's Guide*

## 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
- Practice farm and tractor safety
- Understand the mechanics of engines
- Identify accessory equipment
- Learn the functions of different operational systems
- Learn types of oil systems and fuel safety
- Learn how to hook on a PTO unit
- Learn tractor and machinery maintenance
- Focus on safety and maintenance
- Identify and work with operational systems

Grades: 3-4 (little or no experience)

Grades: 5-6 (little or no experience)

Grades: 7-9 (some prior experience)

Grades: 10-12 (some prior experience)

Resource: 4H961, *Starting Up: Getting to Know Your Tractor*  
4H962, *Tractor Operations: Gearing Up for Safety*  
4H963, *Moving Out: Learning About Your Tractor & Farm Machinery*  
4H964, *Learning More: Learning About Agricultural Tractors & Equipment*

## TRACTORS LDR OR YOUTH LDR

## TRACTOR CERTIFICATION

## WOODWORKING

What you can do in this project:

- Learn safety practices when working with wood and tools
- Use various hand tools, e.g., hammer and saw
- Identify types of nails and wood
- Sand and paint a piece of wood

- Identify functions of various tools
- Practice safety techniques
- Select a project to build, e.g., birdhouse or foot stool
- Use a screwdriver and combination square
- Compare different types of hinges
- Enlarge scale-drawn woodworking plans
- 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
- Evaluate exotic and veneer woods
- Create inlays and overlays
- Test various adhesives

Grades: 3-13

Resource: 06875, *Measuring Up*  
06876, *Making the Cut*  
06877, *Nailing It Together*  
06878, *Finishing Up*

### WOODWORKING LDR OR YOUTH LDR

Resource: 06879, *Woodworking Helper's Guide*



## NATURAL RESOURCES & ENVIRONMENTAL EDUCATION

<https://fyi.extension.wisc.edu/wi4hprojects/natural-sciences/>

### ADVENTURES

### AQUATIC SCIENCE

### ASTRONOMY

### BACKPACKING & HIKING

What you can do in this project:

- Plan a day hike, select items and plan the food
- Learn to organize and pack a backpack
- Select appropriate clothing
- Prepare a first-aid kit
- Learn to use a compass
- Prepare for dangerous weather
- Plan a camping trip
- Select equipment, including shelter
- Plan a camping trip menu and prepare supplies
- Practice "Leave No Trace" principles while hiking
- Study various organism habitats
- Select group backpacking gear including a tent
- Design a non-tent backpacking shelter
- Develop a personal conditioning program
- Learn to orient a map and use triangulation

Grades: 3-13

Resource: 08043, *Hiking Trails*  
08044, *Camping Adventures*  
08045, *Backpacking Expeditions*

### BACKPACKING & HIKING LDR OR YOUTH LDR

Resource: 08046, *Outdoor Adventures Helper's Guide*

### BEES

### BICYCLING – ENVIRON ED

### BIRDS

### CANOEING

### CONSERVATION

### ENTOMOLOGY (INSECTS)

What you can do in this project:

- 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
- Explore insect habitats
- Create an insect display
- Build an insect extractor
- Investigate entomology careers
- Raise and study mealworms and mosquitoes
- Observe a colony of ants
- Make an insect identification key
- Record and collect aquatic insects
- Explore various gardens and habitats

Grades: 3-13

Resource: 08440, *Teaming with Insects: Level 1*  
08392, *Project Butterfly Wings Youth Guide*  
08441, *Teaming with Insects: Level 2*  
08392, *Project Butterfly Wings Youth Guide*  
08442, *Teaming with Insects: Level 3*

### ENTOMOLOGY (INSECTS) LDR OR YOUTH LDR

Resource: 08444, *Teaming with Insects Facilitator's Guide*  
08393, *Project Butterfly Wings Facilitator Guide*

### EXPLORING YOUR ENVIRONMENT

What you can do in this project:

- 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 the world of biotechnology
- Learn the features of insect creatures
- Begin to understand biodiversity
- Learn what climate has to do with the way we live

Grades: 5-13

Resource: 08411, *Earth's Capacity*  
08410, *Ecosystems Services*

### EXPLORING YOUR ENVIRONMENT LDR OR YOUTH LDR

Resources: 08412, *Exploring Your Environment Facilitator Guide*  
PUB-CE-456, *Education Connection*  
PUBL-ER-001, *WI Endangered & Threatened Species*

### FISHING

What you can do in this project:

- 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
- Find fishing information on the Internet
- Cast a spinning rod and reel

- Learn to tie fishing knots
- Select a recipe and cook a fish
- Collect and analyze aquatic life
- Learn to reassemble a fishing reel
- Make artificial flies and lures
- Modify fishing equipment
- Investigate fishing careers

Grades: 3-13

Resource: 07598, *Take the Bait*  
07599, *Reel in the Fun*  
07600DD, *Cast into the Future*

### **FISHING LDR OR YOUTH LDR**

Resource: 07601DD, *Fishing Adventures- Helper's Guide*

### **FORESTRY**

What you can do in this project:

- Identify forest types, forest products and trees
- Age trees by counting rings
- Understand forest competition
- Find a state forest
- 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 urban tree planting sites
- Recognize different tree fruits
- Create a community forest map
- Identify forest biomes by continent
- Identify an unknown tree using a tree key

Grades: 3-13

Resource: 08038, *Follow the Path*  
08039, *Reach for the Canopy*  
08040, *Explore the Deep Woods*

### **FORESTRY LDR OR YOUTH LDR**

Resource: 08041, *Forestry Helper's Guide*

### **GEOLOGY**

### **HOME ENERGY**

### **RECYCLING**

### **WATER**

What you can do in this project:

- 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

Grades: 3-13

Resource: 4H855, *Give Water A Hand – Action Guide*

### **WATER LDR OR YOUTH LDR**

Resource: 4H850, *Give Water A Hand Leader Guide*

### **WEATHER**

### **WILDFLOWERS**

### **WILDLIFE**

### **WILDLIFE HABITAT**



## **SHOOTING SPORTS EDUCATION**

<https://fyi.extension.wisc.edu/wi4hshootingssports/>

### **SHOOTING SPORTS LDR OR YOUTH LDR**

Resource: Each Shooting Sports Leader should attend a Certification Training to receive the *WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

### **AIR PISTOL**

What you can do in this project:

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

Grades: 3-13

### **AIR PISTOL LDR OR YOUTH LDR**

Resource: Each Pistol Leader should attend a Certification Training to receive the *Pistol Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

### **AIR RIFLE**

What you can do in this project:

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

Grades: 3-13

### **AIR RIFLE LDR OR YOUTH LDR**

Resource: Each Air Rifle Leader should attend a Certification Training to receive the *Air Rifle Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

### **ARCHERY**

What you can do in this project:

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

Grades: 3-13

Resource: 751, *Archery Member Record Book*

### **ARCHERY LDR OR YOUTH LDR**

Resource: Each Archery Leader should attend a Certification Training to receive the *Archery Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

### **HUNTING**

What you can do in this project:

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

Grades: 3-13

### **HUNTING LDR OR YOUTH LDR**

## MUZZLELOADING

What you can do in this project:

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

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

## MUZZLELOADING LDR OR YOUTH LDR

Resource: Each Muzzleloading Leader should attend a Certification Training to receive the *Muzzleloading Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

## PISTOL (smallbore .22)

What you can do in this project:

- Explore the history of different types of pistols
- Learn basic safety rules and range commands
- Develop marksmanship and shooting procedures

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

Resource: 753, *Pistol Member Record Book*

## PISTOL LDR OR YOUTH LDR (smallbore .22)

Resource: Each Pistol Leader should attend a Certification Training to receive the *Pistol Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

## RIFLE

What you can do in this project:

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

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

Resource: 750, *Rifle Member Record Book*

## RIFLE LDR OR YOUTH LDR

Resource: Each Rifle Leader should attend a Certification Training to receive the *Rifle Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).

## SHOTGUN

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

Resource: 752, *Shotgun Member Record Book*

## SHOTGUN LDR OR YOUTH LDR

Resource: Each Shotgun Leader should attend a Certification Training to receive the *Shotgun Guide and WI Shooting Sports Basic 4-H Guidelines*. For more information see [Shooting Sports webpage](#).



## PLANT & SOIL SCIENCES

<http://fyi.uwex.edu/wi4hprojects/plant-soil-sciences/>

## CORN (CROPS 1)

What you can do in this project:

- Learn about variety selection, germination and planting
- Learn about nutrients, harvesting and storage
- Explore uses and marketing strategies for corn

Grades: 3-13

Resources: 4H440, *Marketing Your 4-H Crops*  
RS1, *Record Sheet – Crops Management*

## FORAGE (CROPS 2)

What you can do in this project:

- Establish and manage a forage crop
- Scout fields for pests, diseases and nutrition shortages
- Take an accurate forage sample
- Study growing techniques

Grades: 3-13

Resources: 4H440, *Marketing Your 4-H Crops*  
RS1, *Record Sheet – Crops Management*

## SMALL GRAINS (CROPS 3)

What you can do in this project:

- Explore types of grasses, including wheat, oats and barley
- Learn about growing conditions and nutrients
- Practice integrated pest management
- Compare production costs and marketing

Grades: 3-13

Resources: 4H440, *Marketing Your 4-H Crops*  
RS1, *Record Sheet – Crops Management*

## SOYBEANS (CROPS 4)

## WEED MANAGEMENT (CROPS 5)

## FLOWERS

What you can do in this project:

- Identify flower parts and their functions
- Plant flowers and make flower arrangements
- Give a presentation on flowers
- Prepare a flower exhibit
- Learn about plant needs and soil testing
- Select and start new plants and grow transplants
- Examine plants for insects and diseases
- Judge a flower exhibit
- Design a plant experiment
- Make a landscape plan
- Write instructions on how to force bulbs
- Compare different fertilizers: organic and chemical

Grades: 3-13

Resources: 07162, *Gardening: See Them Sprout*  
4H1301A, *Forcing Spring Flowering Bulbs*  
A2935, *Evaluating & Judging Flowers & Indoor Plants*  
07163, *Gardening: Let's Get Growing*  
07164, *Gardening: Take Your Pick*  
07165, *Gardening: Growing Profits*

## FLOWERS LDR OR YOUTH LDR

Resource: 4H1041W, *Gardening Helper's Guide*

## FRUITS

What you can do in this project:

- Produce fruits from apples to berries
- Select the best fruit cultivar for your home garden
- Produce fruits such as pears and grapes
- Learn about different varieties of cultivars

Grades: 3-13

Resources: A1597, *Growing Strawberries in Wisconsin*  
A1610, *Growing Raspberries in Wisconsin*  
A1960, *Growing Currants, Gooseberries, & Elderberries in Wisconsin*  
A1656, *Growing Grapes in Wisconsin*  
A2072, *Growing Pears in Wisconsin*

## FRUITS LDR OR YOUTH LDR

## HERBS

### HOME GROUNDS

What you can do in this project:

- 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
- Explore variety selection and appropriate placement
- Learn basic maintenance: pruning and fertilization
- Explore landscape planning
- Make a plan and put it on paper
- Select, place and plant trees and shrubs
- Maintain your home grounds

Grades: 3-13

Resource: 4H321, *4-H Lawn Care*  
A3067, *Selecting, Planting & Caring for Shade Trees*  
G1923, *Planning & Designing Your Home Landscape*

## HOME GROUNDS LDR OR YOUTH LDR

## HORTICULTURE

### HOUSE PLANTS

What you can do in this project:

- Identify plant parts and their functions
- Grow house plants and start a plant from a cutting
- Make a dish garden
- Prepare house plants for exhibit
- Learn about plant seeds and soil
- Select and start new plants and grow transplants
- Plant a terrarium
- Examine plants for insects and diseases
- Take a tour of a horticulture business
- Design a plant experiment
- Teach others how to grow house plants
- Compare different fertilizers: organic and chemical

Grades: 3-13

Resources: 07162, *Gardening: See Them Sprout*  
4H328, *Propagating & Growing House Plants*  
07163, *Gardening: Let's Get Growing*  
07164, *Gardening: Take Your Pick*  
07165, *Gardening: Growing Profits*

## HOUSE PLANTS LDR OR YOUTH LDR

Resource: 4H1041W, *Gardening Helper's Guide*

## PLANT CRAFTS

What you can do in this project:

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

Grades: 3-13

Resources: 4H330, *Plant Crafts*

## PLANT CRAFTS LDR OR YOUTH LDR

## SOIL SCIENCE

### VEGETABLES

What you can do in this project:

- Identify plant parts and their functions
- Explore germination and start a plant from a cutting
- Grow vegetables in containers
- Plan an outdoor garden
- Prepare a vegetable exhibit for show
- Learn about plant needs and soil testing
- Start new plants and grow transplants
- Build a compost pile and use mulches
- Grow plants in a cold frame
- Make a site analysis and landscape plan
- Compare organic and chemical fertilizers
- Research various insect control methods

Grades: 3-13

Resources: 07162, *Gardening: See Them Sprout*  
A3306, *Exhibiting & Judging Vegetables*  
07163, *Gardening: Let's Get Growing*  
07164, *Gardening: Take Your Pick*  
07165, *Gardening: Growing Profits*

### VEGETABLES LDR OR YOUTH LDR

Resource: 4H1041W, *Gardening Helper's Guide*



## **STEM (Science, Technology, Engineering & Math)**

<https://fyi.extension.wisc.edu/wi4hprojects/stem-science-technology-engineering-math/>

### STEM Exploring

## STEM LDR OR YOUTH LDR

### AEROSPACE

What you can do in this project:

- Build an introductory level rocket
- Compare birds and airplanes
- Make a space helmet
- Build straw and paper rockets
- Learn to read a map
- Identify types of aircraft
- Discover how weather affects flying
- Build and fly a kite
- Make a hot-air balloon model

- Build, exhibit and launch model rockets
- Test a paper hang glider
- Make a flight simulator
- Demonstrate why rockets fly
- Organize a kite-flying contest
- Design and build rockets and box kites
- Build an altitude tracker
- Plan a flight route
- Discover the affects of gravity
- Explore life in space and aerospace careers

Grades: 3-13

Resource: 06842, *Pre-Flight*  
 06843, *Lift Off*  
 06844, *Reaching New Heights*  
 06845, *Pilot in Command*

### **AEROSPACE LDR OR YOUTH LDR**

Resource: 06846, *Aerospace Adventures Helper's Guide*

### **GEOSPATIAL GEOCACHING**

### **ROBOTICS**

What you can do in this project:

- Explore and learn about robots arms
- Learn about robot form, function and design
- Build robots from everyday items
- Explore and learn about robots that move with legs, wheels and underwater.
- Learn about basic electrical power and motors, and gear system
- Build robots from everyday items
- Explore and learn about robots sensors and analog and digital systems
- Build basic circuits
- Study basic elements of programming and instruction

Resource: 08431, *Junk Drawer Robotics Track Level 1: Give Robots a Hand*  
 08435, *4-H Robotics Youth Notebook*  
 08432, *Junk Drawer Robotics Track Level 2: Robots on the Move*  
 08435, *4-H Robotics Youth Notebook*  
 08433, *Junk Drawer Robotics Track Level 3: Mechatronics*  
 08435, *4-H Robotics Youth Notebook*

### **ROBOTICS LDR OR YOUTH LDR**

### **SCIENCE**

### **WIND ENERGY**

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

### **WIND ENERGY LDR**

Resource: 08384, *The Power of the Wind Facilitator Guide*

## **OTHER PROGRAMS**



## **INTERNATIONAL PROGRAMS**

<https://wi4hinternational.org/>

### **INTERNATIONAL**

What you can do in this project:

- Explore the world around you through maps
- Track weather in various parts of the world
- Make your family tree by talking with relatives
- Explore where your ancestors came from
- Explore culture, fear, and identity
- Stretch your values and frame of reference
- Challenge stereotypes and assumptions
- Connect with global citizenship

Grades: 3-13

Resource: 01501F, *WeConnect: A Global Youth Citizenship Curriculum*

### **INTERNATIONAL LDR OR YOUTH LDR**