

# Wisconsin 4-H Project Guide (with Supplements)

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

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 offered in your county.

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at <a href="http://fyi.uwex.edu/wi4hprojects">http://fyi.uwex.edu/wi4hprojects</a>. On these pages, you'll find descriptions for statewide projects, Internet resources and links of interest, county fair exhibit suggestions, 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 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.

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're a leader for only one, then choose that unit. For example, if you're a Shooting Sports leader for just archery, choose Archery. You'll need to make more than one entry if you're a leader for more than one project unit. For example, if you're a Shooting Sports leader for archery *and* air pistol, choose both.

# YOUTH LEADERSHIP

# AMBASSADORS AMBASSADORS LDR

#### 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

Resources: 07905, My Leadership Workbook for Grades 3-5 07906, My Leadership Journal for Grades 6-8 07907, My Leadership Portfolio for Grades 9-12

#### 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

http://fyi.uwex.edu/wi4hprojects/younger-members/

#### CLOVERBUDS - grades K-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
- Discover areas of project interest
- Learn about 4-H activities and events
- Learn about working together as a club or team
- Share with others what you have learned
- Begin learning about specific 4-H project areas
- Learn to complete projects as an individual
- Share with others what you have learned

Resources: 05561, Cloverbuds – Activity Sheets 05562, Cloverbuds – Program Record 05563, Cloverbuds – Participation Summary

#### CLOVERBUDS LDR OR YOUTH LDR

Resources: 05560, 4-H Discovery Program for 6-8 Yr. Olds

#### **EXPLORING - grades 3+**

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

#### 10300 EXPLORING LDR OR YOUTH LDR

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

# SERVICE LEARNING & CITIZENSHIP

http://fyi.uwex.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: 4-12

Resource: 08153, Citizenship Adventure Kit

#### CITIZENSHIP LDR OR YOUTH LDR

Resource: 08154, Citizenship Guide's Handbook

# HISTORY & HERITAGE HISTORY & HERITAGE LDR OR YOUTH LDR

#### 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

#### LATINO CULTURAL ARTS LDR OR YOUTH LDR

Resource: 08180, QueRico! 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

Resources: 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

Resource: 4H272, Designing Your Own Project

#### SELF-DETERMINED LDR OR YOUTH LDR

SELF-DETERMINED ANIMAL SCIENCES
SELF-DETERMINED ARTS &
COMMUNICATION
SELF-DETERMINED ENVIRONMENTAL
EDUCATION

SELF-DETERMINED FAMILY, HOME, & HEALTH SELF-DETERMINED MECHANICAL SCIENCES SELF-DETERMINED PLANT & SOIL SCIENCES

# **ANIMAL SCIENCES**

http://fyi.uwex.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

Resources: 08143, Bite Into Beef

4H450, Judging Breeding & Market Cattle

MA, Meat Animal Project Record

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

Resources: 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

Resources: 08161, Cowabunga

CANADA1, Showmanship...Leading to Win

LEADER, 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

Resources: 08166, Wiggles and Wags

4H436, The Basics of Training Your Dog

08167, Canine Connection

4H439, Dog Obedience – Novice & Beyond

08168, Leading the Pack

4H437, A Guide to Showmanship

# DOGS LDR OR YOUTH LDR

Resources: 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

Resources: 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

Resources: 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**

- 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

Resources: 08053, Giddy Up & Go

CO200, Horses & Horsemanship

CO201, Horse Science 4H180, Pleasure Riding 08054, Head, Heart & Hooves 08055, Stable Relationships 08056, Riding the Range 08057, Jumping to New Heights

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

Resources: 08058, Horse Helper's Guide

#### **CLOTHES HORSE**

What you can do in this project:

- Learn how to make riding apparel and equipment
- Develop sewing and creative skills
- Understand textile selection and care

Resources: 4H374, Additional Patterns for Clothes Horse

4H389, Horse & Riding Attire

# CLOTHES HORSE LDR OR YOUTH LDR

Resource: 4H360, 4-H Clothes Horse Activity Guide

#### **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

Resource: 08053, Giddy Up & Go

4H266. Horses are Fun-Horseless Horse

08054, Head, Heart & Hooves 08055, 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

Resource: 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

Resources: 06363, Scratching the Surface

CIR878, From Egg to Chick MA, Meat Animal Project Record

06364, Testing Your Wings

4H281, Poultry for Fun & Food A2880, Chicken Breeds & Varieties

06365, Flocking Together

# 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

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

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

Resources: NCR060, Small Turkey Flock Management

MA, Meat Animal Project Record

#### 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

Resources: A3311, Raising Waterfowl

MA, Meat Animal Project Record

#### **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

Resources: 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 1

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

Resources: 06367, Lambs, Rams and You

4H421, Judging Breeding & Market Sheep

MA, Meat Animal Project Record

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

Resources: 08065, The Incredible Pig

4H412, Judging Breeding & Market Swine

MA, Meat Animal Project Record 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

08048, From Airedales to Zebras Resources:

> 4H334, Adventure Notebook 4H131. The Normal Animal 08049, All Systems Go 4H048, Animal Disease 08050, On the Cutting Edge 4H133, Animal Health

#### VETERINARY SCIENCE LDR OR YOUTH LDR

Resources: 08051, Veterinary Science Helper's Guide

4H192, Veterinary Science

4H323, The Normal Animal - Leader's Guide

# COMMUNICATION ARTS

http://fyi.uwex.edu/wi4hprojects/arts-communication/

#### **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

08156, Picking Up the Pieces Resources: 08157, Putting It Together

08158, The Perfect Fit

#### COMMUNICATIONS LDR OR YOUTH LDR

Resources: 08159, Communications Helper's Guide

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

COMM01, Creative Wordworking Resources:

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

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

#### SPEAKING LDR OR YOUTH LDR

# PERFORMING ARTS

http://fyi.uwex.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

4H265, Enter the Clowns Resource:

#### CLOWNING LDR OR YOUTH LDR

#### DANCE

DANCE LDR OR YOUTH LDR

# JUGGLING 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

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

#### MUSIC LDR OR YOUTH LDR

# **PUPPETRY**

#### PUPPETRY LDR OR YOUTH LDR

#### THEATRE ARTS

- 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

Resources: 08071, Become a Puppeteer!

#### THEATRE ARTS LDR OR YOUTH LDR

Resource: 08073, Theatre Arts Helper's Guide

# **VISUAL ARTS**

http://fyi.uwex.edu/wi4hprojects/arts-communication/

#### **ART**

What you can do in this project

- 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: 08140, Advanced Visual Arts: Sketchbook Crossroads 08141, Advanced Visual Arts: Portfolio Pathways

#### ART LDR OR YOUTH LDR

# BASKETRY BASKETRY LDR OR YOUTH LDR

#### **BLOCK PRINTING**

What you can do in this project:

- Design and cut blocks from different materials
- Print designs on cloth and paper
- Create your own original designs

Resource: 4H156, Block Printing Member Guide

# **BLOCK PRINTING LDR OR YOUTH LDR**

Resource: CIR008, Block Printing Leader Guide

# CERAMICS

CERAMICS LDR OR YOUTH LDR

# CREATIVE/CROSS STITCHERY CREATIVE/CROSS STITCHERY LDR OR YOUTH LDR

#### **DRAWING & PAINTING**

What you can do in this project:

- Learn to draw with pencil, chalk, crayon, etc.
- Learn to blend and shade
- Make surface rubbings
- Paint with watercolor, oil and acrylics
- Mix colors
- Mat and frame your artwork

Resource: 4H169, Drawing & Painting

#### DRAWING & PAINTING LDR OR YOUTH LDR

#### **FOLK ARTS**

What you can do in this project:

- Explore traditional folk arts
- Learn more from your family and community
- Learn storytelling
- Decorate eggs and make baskets

#### FOLK ARTS LDR OR YOUTH LDR

Resource: NCR534, Folk Arts Leader Guide

**BEADWORK** 

CALLIGRAPHY

FIBER ARTS

FLOWER CRAFTS

PRINT MAKING

STRING/WIRE ART

STUFFED ANIMALS

TIE DYING

WEARABLE ART

WOOD ART

# JEWELRY MAKING LDR OR YOUTH LDR

#### **LEATHERCRAFT**

What you can do in this project:

- Learn about the characteristics and uses of leather
- Use tools and equipment
- Make patterns and original designs
- Explore various leathercraft techniques

#### LEATHERCRAFT LDR OR YOUTH LDR

### **MACRAMÉ**

MACRAMÉ LDR OR YOUTH LDR

#### 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

Resource: 4H158, Metal Enameling Members Guide

#### METAL ENAMELING LDR OR YOUTH LDR

Resource: CIR009, Metal Enameling Leader Guide

# NEEDLEPOINT NEEDLEPOINT LDR OR YOUTH LDR

#### **PHOTOGRAPHY**

- 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, candids, 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

Resources: PC1, Focus on Photography

PC2, Controlling the Image PC3, Mastering Photography

#### PHOTOGRAPHY LDR OR YOUTH LDR

POSTERS
POSTERS LDR OR YOUTH LDR

POTTERY LDR OR YOUTH LDR

RUBBER STAMPING RUBBER STAMPING LDR OR YOUTH LDR

#### **SCRAPBOOKING**

#### **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: 6-12

Resource: IS401, Action! Making Videos & Movies

#### WEAVING

WEAVING LDR OR YOUTH LDR

WOOD BURNING WOOD BURNING LDR OR YOUTH LDR

#### FAMILY, HOME & HEALTH

http://fyi.uwex.edu/wi4hprojects/family-home-health/

#### CHILD DEVELOPMENT

What you can do in this project:

- Find out how you grow and develop
- 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
- See what makes your family special
- Discover how to match toys to ages of children
- Develop family rules
- Check for safety hazards
- Explore how to be an effective parent
- Gain experience as a teacher or coach
- Make babysitting and first-aid kits
- Check out child development careers

Resources: 08075, On My Own

08076, Growing With Others 08077, Growing in Communities

#### CHILD DEVELOPMENT LDR OR YOUTH LDR

Resource: 08078, Child Development Helper's Guide

#### 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
- Become more involved with activities around the home
- Learn to handle home tasks and entertain guests
- Refinish wood furnishings and make other home items
- Learn the principles of home design
- Learn scale, balance and proportion in home design
- Use the principles of design to arrange your home
- Create storage centers and restore furniture
- Focus on the application of design fundamentals
- Learn about purchasing furnishings for the home
- Restore or make a heritage item

Resources: 4H425, Exploring Your Home

4H426, Living With Others

4H427, Where I Live 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

Resources: 08174, First Aid in Action

08175, Staying Healthy 08176, Keeping Fit

# 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: 5-12

Resource: NCR591, Walk in My Shoes Member Guide

# INTERGENERATIONAL LDR OR YOUTH LDR

Resource: NCR548, Walk in My Shoes Leader Guide

# **CONSUMER EDUCATION**

http://fyi.uwex.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

Resources: 08030, The Consumer in Me

08031, Consumer Wise 08032, Consumer Roadmap

#### CONSUMER SAVVY LDR OR YOUTH LDR

Resource: 08033, 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: 7-12

Resource: 08035, 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

Resources: 07710, Money FUNdamentals

07711, 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: 08191, Get in the Act! Take 1 (with CD)

#### WORKFORCE READINESS LDR OR YOUTH LDR

Resource: 08192, Get in the Act! Take 1 Helper's Guide

# **FOODS AND NUTRITION**

http://fyi.uwex.edu/wi4hprojects/family-home-health/foods-nutrition/

**CAKE DECORATING 1** 

**CAKE DECORATING 2** 

**CAKE DECORATING 3** 

CAKE DECORATING LDR OR YOUTH LDR

### **CANDY MAKING**

CANDY MAKING LDR OR YOUTH LDR

# 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: 6-12

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: 6-12

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: 07144, 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: 07146, 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: 07148, 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: 07150, Foodworks

#### FOODS & NUTRITION LDR OR YOUTH LDR

Resource: 07730, Foods Curriculum Helper's Guide

# **CLOTHING AND TEXTILES**

http://fyi.uwex.edu/wi4hprojects/family-home-health/

#### **CLOTHING 1**

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

Resources: 08060, Under Construction

08061, Fashion Forward 08062, Refine Design

#### CLOTHING LDR OR YOUTH LDR

Resource: 08063, Sewing Expressions Helper's Guide

#### **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

#### CROCHETING LDR OR YOUTH LDR

#### **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

Resource: CC1402, Knitting Made Easy

#### KNITTING LDR OR YOUTH LDR

# QUILTING QUILTING LDR OR YOUTH LDR

# **MECHANICAL SCIENCES**

http://fyi.uwex.edu/wi4hprojects/mechanical-sciences/

# AUTOMOTIVE AUTOMOTIVE LDR OR YOUTH LDR

### **BICYCLES – ENG AND 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
- Choose a bike that's right for you
- Practice bike maintenance
- Learn road rules

Resources: 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

Grades: 6-8

- Discover how to create and manage networks
- Make decisions about network management
- Explore security issues and troubleshooting

Resource: 08346, Newbie Know How 08347, Inside the Box 08348, Peer to Peer

#### COMPUTERS LDR OR YOUTH LDR

Resource: 08349, Teens Teaching Tech

#### **ELECTRICITY**

- 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

Resources: 06848, Magic of Electricity

06849, Investigating Electricity

06850, Wired for Power 06851, Entering Electronics

#### ELECTRICITY LDR OR YOUTH LDR

Resource: 06852, Electric Excitement Helper's Guide

LEGOS

LEGOS LDR OR YOUTH LDR

MECHANICAL SCIENCES

MODEL CARS MODEL RAILROAD

MODEL ROCKETRY
MODEL ROCKETRY LDR OR YOUTH LDR

#### **SCALE MODELS**

What you can do in this project:

- 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

Resource: 4H424, Guidelines for Building Scale Models

# SCALE MODELS LDR OR YOUTH LDR

#### **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

Resources:

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

Resources: 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

Resources: 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

http://fyi.uwex.edu/wi4hprojects/natural-sciences/

#### **ADVENTURES**

- Learn how to camp safely in all weather conditions
- 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

#### ADVENTURES LDR OR YOUTH LDR

Resource: 4H443, 4-H Adventure Project

# ASTRONOMY ASTRONOMY LDR OR YOUTH LDR

#### **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

Resources: 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**

What you can do in this project:

- 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

#### **BIRDS**

#### **CANOEING**

What you can do in this project:

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

Resource: 4H447, Canoeing

# CONSERVATION CONSERVATION LDR OR YOUTH LDR

#### **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

Resources: 08392, Project Butterfly Wings Youth Guide 08392, Project Butterfly Wings Youth Guide

#### ENTOMOLOGY (INSECTS) LDR OR YOUTH LDR

Resource: 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 wildlife habitats and tracking
- Learn about groundwater
- Research pollination and how it works
- 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

Resources: 08411, Earth's Capacity 08410, Ecosystems Services

#### EXPLORING 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

Resources: 07598, Take the Bait

07599, Reel in the Fun 07600. Cast into the Future

#### FISHING LDR OR YOUTH LDR

Resource: 07601, 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

Resources: 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 GEOLOGY LDR OR YOUTH LDR

# HOME ENERGY LDR OR YOUTH LDR

#### RECYCLING

What you can do in this project:

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

Resource: 4H362, Recycling for Reuse

#### RECYCLING LDR OR YOUTH LDR

# SCIENCE DISCOVERY LDR OR YOUTH LDR

#### 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

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

#### WATER LDR OR YOUTH LDR

Resource: 4H850, Give Water A Hand Leader Guide

# WEATHER WEATHER LDR OR YOUTH LDR

#### WILDFLOWERS

What you can do in this project:

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

Resource: 4H392, Wildflowers

#### WILDLIFE

#### WILDLIFE LDR OR YOUTH LDR

#### WILDLIFE HABITAT

#### WINTER TRAVEL

What you can do in this project:

- 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

Resource: 4H448, Winter Travel

# SHOOTING SPORTS EDUCATION

http://fyi.uwex.edu/wi4hshootingsports/

#### 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: 3-12

#### 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: 3-12

# 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.

#### **ARCHERY**

- Learn the fundamentals of archery marksmanship
- Learn rules and safety guidelines

Make archery equipment

Shoot with sights and different bows

Grades: 3-12

Resource: 751, Archery Member Record Book

#### ARCHERY LDR OR YOUTH LDR

Each Archery Leader should attend a Certification Resource:

> 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:

#### 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

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

#### MUZZLELOADING LDR OR YOUTH LDR

Each Muzzleloading Leader should attend a Certification Resource:

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 Resources:

Resource: 753, Pistol Member Record Book

# PISTOL LDR (smallbore .22)

Each Pistol Leader should attend a Certification Resource:

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/

#### CROPS LDR OR YOUTH LDR

#### **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

4H355, 4-H Corn Project Manual Resources:

4H440, Marketing Your 4-H Crops

4H441, Is Direct Marketing for My Project? 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

4H349, Pest Scouting Alfalfa

4H440, Marketing Your 4-H Crops

4H441, Is Direct Marketing for My Project? 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

Resources: 4H356, 4-H Small Grains Manual

4H440, Marketing Your 4-H Crops

4H441, Is Direct Marketing for My Project?

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

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

#### 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

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 HERBS LDR OR YOUTH LDR

#### 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

Resource: 4H321, 4-H Lawn Care

Resources: A3067, Selecting, Planting & Caring for Shade Trees

A1730, Evergreens - Planting & Care

G1923, Planning & Designing Your Home Landscape

#### HOME GROUNDS LDR OR YOUTH LDR

# HORTICULTURE HORTICULTURE LDR OR YOUTH LDR

#### 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

Resources: 07162, Gardening: See Them Sprout

4H328, Propagating & Growing House Plants

07163, Gardening: Let's Get Growing 07164, Gardening: Take Your Pick

#### 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.

Resources: 4H330, Plant Crafts

4H453, Plant Crafts Supplement

#### PLANT CRAFTS LDR OR YOUTH LDR

# SOIL SCIENCE SOIL SCIENCE LDR OR YOUTH LDR

#### **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

Resources: 07162, Gardening: See Them Sprout

4H395, Organically Grown – Handbook

4H409, Nature's Herbs

A3306, Exhibiting & Judging Vegetables

07163, Gardening: Let's Get Growing 07164, Gardening: Take Your Pick

#### VEGETABLES LDR OR YOUTH LDR

Resource: 4H1041W, Gardening Helper's Guide

# STEM (Science, Technology, Engineering & Math)

 $\underline{http://fyi.uwex.edu/wi4hprojects/stem-science-technology-\\ \underline{engineering-math/}}$ 

# 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

Resources: 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**

What you can do in this project:

- Discover ways of thinking about geographic positions
- Learn about navigational tools: GIS, GPS, compasses
- Learn to measure distances
- Learn how to collect data
- Combine data with geographical positions
- Make maps of home, neighborhood and community
- Use multi-layered maps to attempt to solve problems
- Find ways to reduce traffic congestion

• Pinpoint pollution sources

Resources: CD8358, Exploring Spaces, Going Places CD

("Getting Out" section)

#### GEOSPATIAL LDR OR YOUTH LDR

#### **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

Resources: 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 08433, Junk Drawer Robotics Track Level 3:

Mechatronics

#### ROBOTICS LDR OR YOUTH LDR

# **SCIENCE**

# SCIENCE LDR OR YOUTH LDR

# WIND ENERGY

Resource: 08383, The Power of the Wind Youth Guide

**Leader Resources** 

Resource: 08384, The Power of the Wind Facilitator Guide

# **OTHER PROGRAMS**

#### SAFETY

SAFETY LDR OR YOUTH LDR

# **INTERNATIONAL PROGRAMS**

#### 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

Grades: 3-12

# INTERNATIONAL LDR OR YOUTH LDR