

Wisconsin 4-H Project Guide (with Supplements) Dane County

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. 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, pg. 3 Ambassadors Youth Leadership

Younger Members, pg. 3 Cloverbuds Exploring

Service Learning & Citizenship, pp. 3 Citizenship History & Heritage Latino Cultural Arts Service Learning

Self-Determined, pg. 3

Animal Sciences, pp. 4-8

Beef Cage Birds Cats Cavies Dairy Dogs Exotic Animals Goats (Dairy, Meat & Pygmy) Horses (All) Horseless Horse Llamas Pets Poultry (includes Domestic Waterfowl) Rabbits Sheep Swine **Tropical Fish** Veterinary Science

Communication Arts, pg. 8-9

Communications Creative Writing Demonstrations Sign Language Speaking

Performing Arts, pg. 9 Clowning Dance

Music Theatre Arts

Visual Arts, pp. 9-10 Arts & Crafts Block Printing Drawing & Painting Folk Arts Leathercraft Metal Enameling Photography Posters Scrapbooking Videography

Family, Home & Health, pp. 11

Child Development Fun and Fitness Health Home Environment Intergenerational Programs

Consumer Education, pg. 11-12

Consumer Savvy Entrepreneurship Personal Finance Workforce Readiness

Foods and Nutrition, pg. 12

Cake Decorating Candy Making Food Preservation Foods & Nutrition Microwave Cooking

Clothing and Textiles, pp. 12 & 13

Clothing Crocheting Knitting Quilting

Mechanical Sciences, pp. 13-15

Automotive Bicycles Computers Electricity Legos Model Rocketry Scale Models Small Engines Tractors Woodworking

Natural Resources & Environmental Education, pp. 15-16

Adventures Astronomy Backpacking & Hiking Bicycling Birds Canoeing Conservation Entomology (Insects/Butterfly)

Exploring Your Environment Fishing Forestry Geology Home Energy Recycling Science Discovery Water Weather Wildflowers Wildlife Winter Travel Shooting Sports, pp. 16-17 Air Pistol Air Rifle Archery Hunting Muzzleloading Rifle Shotgun Plant & Soil Sciences, pp. 17-19 Corn Crops Flowers Forage Fruits Herbs Home Grounds Horticulture House Plants Plant Crafts Small Grains Soil Science Soybeans Vegetables Weed Management STEM (Science, Technology, Engineering & Math), pg. 19-20 Exploring Wind Energy Aerospace Geospatial Robotics Science Other Programs, pg. 20 Safety **International Programs, pg. 20**



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

5-12 Grades:

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

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



YOUNGER MEMBERS

CLOVERBUDS 1-3

What you can do in this project:

K-2

- 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:

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

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:

Resource: 08171, Exploring the Treasures of 4-H

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

SERVICE LEARNING & ```` 4 ک **CITIZENSHIP**

CIVIC ENGAGEMENT

What you can do in this project:

- Discover and discuss public issues •
- Plan a project to change or improve your community 4-12

Grades:

Resource: 08153, Citizenship Adventure Kit 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

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

SERVICE LEARNING 1

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

Grades: 5-8

Resource: 08182, Agents of Change + CD

SERVICE LEARNING 2

What you can do in this project:

- Plan and implement your own service project
- Share your project plan and outcome with others
- Conduct an evaluation of your project

Grades: 9-12

Resource: 08183. Raise Your Voice + CD

Resource: 08184, Service Learning Helper's Guide



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:

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



ANIMAL SCIENCES

BEEF 1

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

Grades:

Resources: 08143, *Bite into Beef*

BEEF 2

What you can do in this project:

3-5

- 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 Grades: 6-8

Resources: 08144, Here's the Beef

BEEF 3

What you can do in this project:

- Explore selection and judging
 - Learn about careers, health, reproduction, etc.
- Discover how to market your animal and by-products

Grades: 9-12 Resources: 08145, *Leading the Charge*

BEEF 4

Resources: 08146, *Beef Helper's Guide* 117R, *Beef Resource Handbook*

CAGE BIRDS

CATS 1

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

Grades: 3-5 Resource: 08148, *Purr-fect Pals*

CATS 2

What you can do in this project:

- 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

Grades: 6-8 Resource: 08149, *Climbing Up!*

CATS 3

What you can do in this project:

- Explore veterinary procedures
- Learn reproduction and cat body systems
- Learn showmanship and cat behavior
- Explore community laws and animal welfare

Grades: 9-12

Resource: 08150, Leaping Forward

CATS 4

Resource: 08151, Cat Helper's Guide

CAVIES

DAIRY 1

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

Grades: 3-5

Resources: 08161, Cowabunga CANADA1, Showmanship: Leading to Win LDR, Lifetime Dairy Record

DAIRY 2

What you can do in this project:

- Learn about housing and hay quality
- Learn about milking and food safety
- Explore ways to keep an animal healthy
- Observe animal behavior

Grades: 6-8

Resources: 08162, Mooving Ahead CANADA2, Preparing to Lead MPA, Managerial Project Agreement

DAIRY 3

What you can do in this project:

- 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: 9-12

Resources: 08163, *Rising to the Top* HMR, *WI 4-H Dairy Heifer Mgmt. Record*

DAIRY 4

Resource: 08164, Dairy Cow Helper's Guide

DOGS 1

What you can do in this project:

3-5

- 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

Grades:

Resources: 08166, Wiggles and Wags 4H436, The Basics of Training Your Dog

DOGS 2

What you can do in this project:

6-8

- Explore dog health and nutrition
- Discover genetic problems and population control
- Learn showmanship and training techniques
- Learn about show-ring ethics

Grades:

Resources: 08167, *Canine Connection* 4H439, *Dog Obedience – Novice & Beyond*

DOGS 3

What you can do in this project:

- Investigate responsible breeding
- Care for geriatric dogs
- Train service dogs
- Explore careers related to dogs

Grades: 9-12

Resources: 08168, *Leading the Pack* 4H437, *A Guide to Showmanship*

DOGS 4

Resources: 08169, Dog Helper's Guide 4H458, 4-H Dog Judging Guidelines

DOGS OBEDIENCE TRAINING

EXOTIC ANIMALS

DAIRY GOAT 1

What you can do in this project:

3-5

- Gain hands-on experiences in the goat project
- Select, manage, fit and show goats
- Learn responsible goat ownership

Grades:

Resource: 08352, Getting Your Goat

DAIRY GOAT 2

What you can do in this project:

- 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 les: 6-8

Grades:

Resource: 08353, Stepping Out

DAIRY GOAT 3

What you can do in this project:

- 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: 9-12

Resource: 08354, Showing the Way

DAIRY GOAT 4

Resource: 08355, Dairy Goat Helper's Guide

MEAT GOAT 1

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
- Grades: 3-4

Resource: 07909, Just Browsing

MEAT GOAT 2

What you can do in this project:

- Recognize meat goat diseases
- Select a veterinarian and purchase breeding stock
- Understand reproduction cycle and keep records
- Fit and show meat goats

5-8

Grades:

Resource: 07910, Get Growing with Meat Goats

MEAT GOAT 3

What you can do in this project:

- Learn to control diseases
- Understand bio-security and quality assurance
- Formulate rations
- Evaluate goat pastures
- Grades: 9-12

Resource: 07911, Meating the Future

Resource: 07912, Meat Goat Helper's Guide

PYGMY GOAT

HORSE 1

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 Grades: 3-5
- Resources: 01518Y, Giddy Up & Go CO200, Horses & Horsemanship CO201, Horse Science

HORSE 2

What you can do in this project:

- Practice horsemanship and judging
- Understand horse selection and training
- Learn about tack, feeding and diseases
- Practice showing a horse and trail riding • 6-8

Grades:

Resource: 01519Y, Head, Heart & Hooves

HORSE 3

What you can do in this project:

- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers

Grades: 9-12

01520Y, Stable Relationships Resource:

HORSE 4

What you can do in this project:

- Train a horse
- Practice a round-pen workout •
- Learn English and Western style bridles
- Understand equitation and riding styles
- Grades:

Resource: 01521Y, Riding the Range

HORSE 5

What you can do in this project:

3-7

Learn to set goals •

8-12

- Compare costs of show clothing •
- Present your horse in showmanship classes •
- Rate your showmanship skills •
- Practice proper show ethics

Grades:

01522Y, Jumping to New Heights Resource:

Resources: 01523F, Horse Helper's Guide

HORSELESS HORSE 1

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 3-5

Grades:

Resource: 01518Y, Giddy Up & Go

HORSELESS HORSE 2

What you can do in this project:

- Learn about horsemanship
- Explore judging and oral reasons
- Learn selection, training and showing •
- Practice trail riding skills 6-8

Grades:

Resource: 01519Y, Head, Heart & Hooves

HORSELESS HORSE 3

What you can do in this project:

- Explore horse breeding, genetics and heredity
- Understand horse diseases and prevention
- Learn about fencing, pasturing and housing
- Explore horse-related careers

Grades: 9-12

Resource: 01520Y, Stable Relationships

HORSELESS HORSE: MODEL HORSE

LLAMAS

PETS 1

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 3-5

Grades:

06359, Pet Pals Resource:

PETS 2

What you can do in this project:

- Explore animal digestion and feeding
- Shop for pet supplies

6-8

- Determine the animal's sex and proper health
- Study pet behavior and communication
- Grades:

06360, Scurrying Ahead Resource:

PETS 3

What you can do in this project:

- Explore pet products
- Teach others about pets •
- Understand how genetics work
- Explore animal welfare issues

Grades: 9-12

06361, Scaling the Heights Resource:

PETS 4

Resource: 06362, Pet Helper's Guide

POULTRY 1

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

Grades: 3-5

Resources: 06363, Scratching the Surface CIR878, From Egg to Chick

POULTRY 2

What you can do in this project:

- Observe a healthy flock •
- Select and judge broilers
- Discover how an egg is formed •
- Prevent poultry diseases
- Discover how chicks imprint 6-8

Grades:

06364, Testing Your Wings Resources: A2880, Chicken Breeds & Varieties

POULTRY 3

What you can do in this project:

- Organize a judging clinic
- Manage a laying flock •
- Discover qualities of eggs •
- Handle poultry products safely •
- Process a chicken 9-12

Grades:

06365, Flocking Together Resources: MA, Meat Animal Project Record

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: 3-12

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 - 12Resource: 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: 3-12

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: 3-12

Resources: A3311, Raising Waterfowl

RABBITS 1

What you can do in this project:

- Learn about selecting and handling rabbits
- Identify rabbit breeds and body parts
- Explore health issues and feeding

Grades: 3-5

Resource: 08080, What's Hoppening?

RABBITS 2

What you can do in this project:

- Learn to select show rabbits
- Give oral reasons and judge rabbits
- Learn to tattoo
- Detect diseases •
- Keep records of animals
- Grades: 6-8

Resource: 08081, Making Tracks

RABBITS 3

What you can do in this project:

- Learn about breeding and genetics
- Design a rabbitry •
- Market rabbits
- Learn about disease prevention and rabbit registration

Grades: 9-12 08082, All Ears Resource:

RABBITS 4

Resource: 08083, Rabbit Helper's Guide

RABBIT HOPPING

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
- Grades: 3-5

Resources: 06367, Lambs, Rams and You

SHEEP 2

What you can do in this project:

- Learn to identify sheep parasites
- Promote meat safety •
- Judge wool •
- Diagnose sheep diseases
- Use medications safely •
- Explore careers •

Grades: 6-8 06368, Shear Delight Resources:

SHEEP 3

What you can do in this project:

- Set sheep production goals
- Plan sheep related activities
- Market sheep products and teach others
- Plan a judging contest
- Explore careers

Grades: 9-12

Resources: 06369, *Leading the Flock*

SHEEP 4

Resources: 06370, Sheep Helper's Guide 194R, Sheep Resource Handbook

SWINE 1

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

Grades:

Resources: 08065, The Incredible Pig 4H412, Judging Breeding & Market Swine

SWINE 2

What you can do in this project:

- Make a swine health care plan
- Identify diseases

6-8

3-5

- Assemble tack and pack a show box
- Plan and organize a facility expansion
- Complete a plan for a new pork product

Grades:

Resources: 08066, Putting the Oink in the Pig

SWINE 3

What you can do in this project:

- Learn to make breeding and culling decisions
- Judge a class of breeding gilts
- Design a preventative herd health plan
- Manage a feeding program les: 9-12

Grades:

Resources: 08067, Going Whole Hog

SWINE 4

Resources: 08068, Swine Helper's Guide 134R, Swine Resource Handbook

VETERINARY SCIENCE 1

What you can do in this project:

- Learn different breeds of animals
- Interpret animal behavior
- Identify feed nutrients
- Describe animal life stages and systems

Grades:

Resources: 08048, From Airedales to Zebras

VETERINARY SCIENCE 2

What you can do in this project:

- Create health records for your animal
- Conduct food safety experiments
- Discover importance of immunity and bio-security
- Consider ethics and animal welfare les: 6-8
- Grades:

Resources: 08049, All Systems Go

VETERINARY SCIENCE 3

What you can do in this project:

- Investigate the importance of genetics
- Understand diseases that spread from animals to humans
- Learn about diversity of veterinary careers
- Grades: 9-12

Resources: 08050, On the Cutting Edge

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

COMMUNICATIONS 1

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 Grades: 3-5

Resource: 08644DD, Communications: Module 1

COMMUNICATIONS 2

What you can do in this project:

- Learn to become a confident communicator
- Present oral reasons, plan and present speeches
- Practice making good first impressions
- Grades: 6-8

Resource: 08645DD, Communications: Module 2

COMMUNICATIONS 3

What you can do in this project:

9-12

- Polish your communication skills
- Explore communication careers
- Write résumés and interview for a job
- Grades:

Resource: 08646DD, Communications: Module 3

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:

3-12

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

Grades:

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

DEMONSTRATIONS 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: 3-12

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



PERFORMING 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: 3-12

Resource: 4H265, Enter the Clowns

DANCE

JUGGLING

What you can do in this project:

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

Grades: 3-12

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

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: 3-12

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

PUPPETRY

THEATRE ARTS 1

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
- Grades: 3-5

Resource: 08445, *Theatre Arts Beginner* 08448Y, *Theatre Arts Journal*

THEATRE ARTS 2

What you can do in this project:

- 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

Grades: 6-8

Resource: 08446, *Theatre Arts Intermediate* 08448Y, *Theatre Arts Journal*

THEATRE ARTS 3

What you can do in this project:

- 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: 9-12
- Resource: 08447, *Theatre Arts Advanced* 08448Y, *Theatre Arts Journal*

THEATRE ARTS 4



VISUAL ARTS

ART 1

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

Grades: 3-6

Resources: 4H592, Get Started in Art Curriculum

ART 2

What you can do in this project:

- Explore art techniques, culture and history of art
- Learn artistic challenges in drawing, fiber arts and sculpting
- Develop graphic design techniques

Grades: 7-12

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

ART 3

BASKETRY BEADWORK

BLOCK PRINTING

What you can do in this project:

5-12

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

Grades:

Resource: 4H156, Block Printing Member Guide

Resource: CIR008, Block Printing Leader Guide

CALLIGRAPHY CANDLE MAKING CERAMICS CREATIVE/CROSS STITCHERY

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

Grades:3-12Resource:4H169, Drawing & Painting

FIBER ARTS FLOWER CRAFTS FOLK ARTS GLASSWORK JEWELRY MAKING

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

Grades: 3-12

MACRAMÉ

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: 5-12

Resource: 4H158, Metal Enameling Members Guide

Resource: CIR009, Metal Enameling Leader Guide

NEEDLEPOINT

PHOTOGRAPHY 1

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

Grades: 3-5

Resource: 01920Y, Photography Basics

PHOTOGRAPHY 2

What you can do in this project:

- Learn about camera adjustments
- Learn about film speed, shutter speed and aperture
- Take silhouettes, candids, action shots and others

Grades: 6-8

Resource: 01903Y, Next Level Photography

PHOTOGRAPHY 3

What you can do in this project:

- 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: 9-12

Resource: 01904Y, Mastering Photography

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: 6-12

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

WEAVING WEARABLE ART WOOD ART WOOD BURNING



FAMILY, HOME & HEALTH

CHILD DEVELOPMENT

HOME ENVIRONMENT 1

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 des: 3-5

Grades:

Resource: 4H425, Exploring Your Home

HOME ENVIRONMENT 2 HOME ENVIRONMENT 3

HOME ENVIRONMENT 4

What you can do in this project:

- Focus on the application of design fundamentals
- Learn about purchasing furnishings for the home
- Restore or make a heritage item

Grades: 10-12

Resource: 4H465, In My Home

HOME ENVIRONMENT 5

FUN & FITNESS

HEALTH 1

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

Grades: 3-5

Resource: 08174, First Aid in Action 08380, Health Rocks! Curriculum 1 – Beginning

HEALTH 2

What you can do in this project:

6-8

- Identify your personal talent areas in health care
- Explore hygiene, nutrition and physical activities
- Share what you learn with others

Grades:

Resource: 08175, *Staying Healthy*

08381, Health Rocks! Curriculum 2 – Intermediate 4H359, Your Thoughts Matter: Navigating Mental Health

HEALTH 3

What you can do in this project:

- Design your own fitness plan
- Track your plan and review your progress
- Interview individuals in the health and fitness fields des: 9-12

Grades:

Resource: 08176, Keeping Fit

4H359, Your Thoughts Matter: Navigating Mental Health

INTERGENERATIONAL PROGRAMS

What you can do in this project:

5 - 12

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

Grades:

Resource:

e: NCR591, Walk in My Shoes Member Guide

INTERGENERATIONAL PROGRAMS LDR

Resource: NCR548, Walk in My Shoes Leader Guide



CONSUMER EDUCATION

CONSUMER SAVVY 1

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

Grades: 3-5

Resource: 08030DD, The Consumer in Me

CONSUMER SAVVY 2

What you can do in this project:

- 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

Grades:

Resource: 08031DD, Consumer Wise

CONSUMER SAVVY 3

6-9

What you can do in this project:

- Define consumer responsibilities and ethics
- Understand your consumer rights
- Use comparison shopping techniques
- Understand the costs of owning a vehicle

Grades: 10-12

Resource: 08032DD, Consumer Roadmap

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: 7-12

Resource: 08035DD, Entrepreneurship: Be the E

Resource: 08036, Entrepreneurship Helper's Guide

PERSONAL FINANCE 1

What you can do in this project:

- Learn money management skills ٠
- Learn how to live on a budget 6-8

Grades:

07710DD, Money FUNdamentals Resource:

PERSONAL FINANCE 2

What you can do in this project:

9-12

- 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:

Resource: 07711DD, Money Moves

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 •

6-9

Recognize your learning styles and personal qualities

Grades:

08561, Build Your Future Youth Notebook Resource:

Resource: 08562. Build Your Future Facilitator's Guide



FOODS AND 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: 6-12

B0430, Canning Fruits Safely Resources:

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

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:

Resource: 07144DD, Six Easy Bites

FOODS & NUTRITION 2

3-4

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:

Resource: 07146DD, Tasty Tidbits

FOODS & NUTRITION 3

5-6

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:

Resource: 07148DD, You're the Chef

FOODS & NUTRITION 4

7-9

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

Resource: 07730DD, Foods Curriculum Helper's Guide

MICROWAVE



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

Grades: 3-5

Resources: 08060, Under Construction 4H2210, FUNdamentals: STEAM Clothing 1

CLOTHING 2

What you can do in this project:

- Identify types of fabric constructions
- Sew different buttonholes and seam finishes
- Use pressing tools and thread a serger
- Research different laundry products

Grades:

6-8 Resource: 08061, Fashion Forward 4H2220, Simply Sewing: STEAM Clothing 2

CLOTHING 3

What you can do in this project:

- Use specialized sewing tools or equipment
- Combine patterns to create a design
- Create outdoor wear

9-12

- Design and embellish a garment
- Use a computer to print on fabric

Grades: Resource:

08062, Refine Design 4H2230, A Stitch Further: STEAM Clothing 3 4H2240, Maker's Guide: STEAM Clothing 4H2260, Beyond the Needle: STEAM Clothing

08063, Sewing Expressions Helper's Guide Resource:

CROCHETING

KNITTING 1

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

3-12 Grades:

Resource: CC1402, Knitting Made Easy

KNITTING 2 KNITTING 3

QUILTING WOOL SPINNING



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 Grades: 3-4

Resource: 08334, Bicycling for Fun

BICYCLING – ENG & TECH 2

What you can do in this project:

- Choose a bike that's right for you
- Practice bike maintenance
- Learn road rules
- Grades: 4-6

08335. Wheels in Motion Resource:

BICYCLING – ENG & TECH 3

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

COMPUTERS 1

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

Grades: 3-5

Resource: 08346, Newbie Know How 01606Y, Comp. Science & Programming with Scratch: 1

COMPUTERS 2

What you can do in this project:

- 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

Resource: 08347, Inside the Box 01801Y, Comp. Science & Programming with Scratch: 2

COMPUTERS 3

What you can do in this project:

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

Grades: 9-12

Resource: 08348, Peer to Peer 01802Y, Comp. Science & Programming with Scratch: 1

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

ELECTRICITY 1

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

Grades: 4-5

Resource: 06848, Magic of Electricity

ELECTRICITY 2

What you can do in this project:

- Work with electrical equipment
- Learn to read circuit diagrams
- Build a circuit and measure voltages
- Communicate in Morse code

Grades:

Resource: 06849, *Investigating Electricity*

ELECTRICITY 3

What you can do in this project:

6-7

- Develop a basic electrical tool and supply kit
- Understand the symbols on wires and cables
- Locate your home wiring system

Grades:

Resource: 06850, Wired for Power

ELECTRICITY 4

What you can do in this project:

8-9

- Identify electrical and electronic parts and devices
- Learn how to solder and prepare parts for assembly
- Assemble a circuit using a transistor

Grades: 10-12 Resource: 06851, Entering Electronics

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 1

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

Grades:

Resource: 08186, Crank It Up!

3-5

SMALL ENGINES 2

What you can do in this project:

- Explore the internal parts of engines
- Learn about engine sizes and safety issues
- Explore different jobs related to small engines

Grades: 6-8

Resource: 08187, Warm It Up!

SMALL ENGINES 3

What you can do in this project:

- Tear down and rebuild an engine
- Learn to use diagnostic tools
- Research rules and regulations in using small engines

Grades: 9-12

Resource: 08188, Tune It Up!

Resource: 08189, Small Engines Helper's Guide

TRACTORS 1

What you can do in this project:

- Learn and identify parts of the tractor
- Understand the basics of tractor maintenance
- Learn about different fuels and engine cooling systems
- Research different safety features and learn safety rules
- Grades: 3-4 (little or no experience)

Resource: 4H961, Starting Up: Getting to Know Your Tractor

TRACTORS 2

What you can do in this project:

- Practice farm and tractor safety
- Understand the mechanics of engines
- Identify accessory equipment
- Learn the functions of different operational systems
- Grades: 5-6 (little or no experience)

Resource: 4H962, Tractor Operations: Gearing Up for Safety

TRACTORS 3

What you can do in this project:

- Learn types of oil systems and fuel safety
- Learn how to hook on a PTO unit
- Learn tractor and machinery maintenance
- Grades: 7-9 (some prior experience)
- Resource: 4H963, Moving Out: Learning About Your Tractor & Farm Machinery

TRACTORS 4

What you can do in this project:

- Focus on safety and maintenance
- Identify and work with operational systems
- Grades: 10-12 (some prior experience)
- Resource: 4H964, Learning More: Learning About Agricultural Tractors & Equipment

TRACTOR CERTIFICATION WELDING

WOODWORKING 1

What you can do in this project:

3 - 4

- 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

Grades:

Resource: 06875, *Measuring Up*

WOODWORKING 2

What you can do in this project:

- 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 •

Grades:

Resource: 06876, Making the Cut

4-6

WOODWORKING 3

What you can do in this project:

- 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

Grades: 6-8

Resource: 06877, Nailing It Together

WOODWORKING 4

What you can do in this project:

- 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:

9-12 Resource: 06878, Finishing Up

Resource: 06879, Woodworking Helper's Guide

ৼ৾৾৻৵ NATURAL RESOURCES & 4 **ENVIRONMENTAL EDUCATION** *

ADVENTURES AQUATIC SCIENCE ASTRONOMY

BACKPACKING & HIKING 1

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

Grades:

Resource: 08043, Hiking Trails

3-5

BACKPACKING & HIKING 2

What you can do in this project:

Plan a camping trip •

6-8

- Select equipment, including shelter •
- Plan a camping trip menu and prepare supplies •
- Practice "Leave No Trace" principles while hiking •
- Study various organism habitats

Grades:

Resource: 08044, Camping Adventures

BACKPACKING & HIKING 3

What you can do in this project:

- 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: 9-12

Resource: 08045, Backpacking Expeditions

Resource: 08046, Outdoor Adventures Helper's Guide

BEES

BICYCLING – ENVIRON ED BIRDS CANOEING **CONSERVATION**

ENTOMOLOGY (INSECTS) 1

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 • 3-5

Grades:

Resource: 08440, Teaming with Insects: Level 1 08392, Project Butterfly Wings Youth Guide

ENTOMOLOGY (INSECTS) 2

What you can do in this project:

- Learn how an insect protects itself
- Explore insect habitats
- Create an insect display •
- Build an insect extractor
- Investigate entomology careers

Grades: 6-8

Resource: 08441, Teaming with Insects: Level 2 08392, Project Butterfly Wings Youth Guide

ENTOMOLOGY (INSECTS) 3

What you can do in this project:

- 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: 9-12

Resource: 08442, Teaming with Insects: Level 3

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

EXPLORING YOUR ENVIRONMENT 1

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 •

Grades: 5-7

Resource: 08411, Earth's Capacity

EXPLORING YOUR ENVIRONMENT 2

EXPLORING YOUR ENVIRONMENT 3

What you can do in this project:

11-12

- 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:

Resource: 08410, Ecosystems Services

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

FISHING 1

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

Grades:

Resource: 07598, Take the Bait

3-5

FISHING 2

What you can do in this project:

- 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 •

Grades:

Resource: 07599, Reel in the Fun

FISHING 3

What you can do in this project:

9-12

6-8

- Learn to reassemble a fishing reel •
- Make artificial flies and lures
- Modify fishing equipment
- Investigate fishing careers

Grades:

07600DD, Cast into the Future Resource:

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

FORESTRY 1

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 • 3-5

Grades:

08038, Follow the Path Resource:

FORESTRY 2

What you can do in this project:

- Learn how trees move water from soil to canopy
- Diagram a leaf
- Understand major forest changes and their impact •
- Select urban tree planting sites 6-8

Grades:

08039, Reach for the Canopy Resource:

FORESTRY 3

What you can do in this project:

- Recognize different tree fruits
- Create a community forest map
- Identify forest biomes by continent
- Identify an unknown tree using a tree key Grades: 9-12

Resource: 08040, Explore the Deep Woods

08041, Forestry Helper's Guide Resource:

GEOLOGY HOME ENERGY RECYCLING REPTILES SCIENCE DISCOVERY

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: 3-12

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

4H850, Give Water A Hand Leader Guide Resource:

WEATHER WILDFLOWERS WILDLIFE WILDLIFE HABITAT WINTER TRAVEL



SHOOTING SPORTS EDUCATION

SHOOTING SPORTS LDR SHOOTING SPORTS YTH LDR

Each Shooting Sports Leader should attend a Resource: 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 3-12

Grades:

AIR PISTOL LDR AIR PISTOL YTH LDR

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.

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

Each Air Rifle Leader should attend a Certification Resource: 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 - 12

751, Archery Member Record Book Resource:

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:

3-12

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

Grades:

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:

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

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

Only 12 years old and above can shoot powder burning guns Ages: Resource: 750, Rifle Member Record Book

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

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

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: 3-12

Resources: 4H440, Marketing Your 4-H Crops

RS1, Record Sheet – Crops Management

FORAGE (CROPS 2)

What you can do in this project:

3-12

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

Grades:

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

SMALL GRAINS (CROPS 3)

What you can do in this project:

3-12

- 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:

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

SOYBEANS (CROPS 4) WEED MANAGEMENT (CROPS 5)

FLOWERS 1

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 des: 3-5

Grades:

Resources: 07162, Gardening: See Them Sprout 4H1301A, Forcing Spring Flowering Bulbs A2935, Evaluating & Judging Flowers & Indoor Plants

FLOWERS 2

What you can do in this project:

- 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

6-8

Grades:

Resource: 07163, Gardening: Let's Get Growing

FLOWERS 3

What you can do in this project:

- Design a plant experiment
- Make a landscape plan
- Write instructions on how to force bulbs
- Compare different fertilizers: organic and chemical Grades: 9-12

Resource: 07164, *Gardening: Take Your Pick* 07165, *Gardening: Growing Profits*

Resource: 4H1041W, Gardening Helper's Guide

FRUITS 1

What you can do in this project:

• Produce fruits from apples to berries

• Select the best fruit cultivar for your home garden Grades: 3-12

Resources: A1597, Growing Strawberries in Wisconsin A1610, Growing Raspberries in Wisconsin A1960, Growing Currants, Gooseberries, & Elderberries in Wisconsin

FRUITS 2

What you can do in this project:

- Produce fruits such as pears and grapes
- Learn about different varieties of cultivars
- Resources: A1656, Growing Grapes in Wisconsin A2072, Growing Pears in Wisconsin

FRUITS 3

HERBS

HOME GROUNDS 1

What you can do in this project:

- Learn about seeding a lawn
- Study proper lawn care and maintenance
- Explore fertilization and pest management techniques des: 3-5

Grades:

Resource: 4H321, 4-H Lawn Care

HOME GROUNDS 2

What you can do in this project:

- Learn the importance of planting new trees and shrubs
- Explore variety selection and appropriate placement
- Learn basic maintenance: pruning and fertilization

Grades: 6-8

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

HOME GROUNDS 3

What you can do in this project:

- Explore landscape planning
- Make a plan and put it on paper
- Select, place and plant trees and shrubs
- Maintain your home grounds

Grades: 9-12

Resource: G1923, Planning & Designing Your Home Landscape

HORTICULTURE

HOUSE PLANTS 1

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

Grades: 3-5

Resources: 07162, Gardening: See Them Sprout 4H328, Propagating & Growing House Plants

HOUSE PLANTS 2

What you can do in this project:

- Learn about plant seeds and soil
- Select and start new plants and grow transplants
- Plant a terrarium
- Examine plants for insects and diseases

Grades: 6-8 Resource: 07163, *Gardening: Let's Get Growing*

HOUSE PLANTS 3

What you can do in this project:

- Take a tour of a horticulture business
- Design a plant experiment
- Teach others how to grow house plants
- Compare different fertilizers: organic and chemical des: 9-12

Grades:

Resource: 07164, *Gardening: Take Your Pick* 07165, *Gardening: Growing Profits*

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: 3-12

Resources: 4H330, Plant Crafts

SOIL SCIENCE

VEGETABLES 1

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 des: 3-5

Grades:

Resources: 07162, Gardening: See Them Sprout A3306, Exhibiting & Judging Vegetables

VEGETABLES 2

What you can do in this project:

- Learn about plant needs and soil testing
- Start new plants and grow transplants
- Build a compost pile and use mulches des: 6-8

Grades:

Resource: 07163, Gardening: Let's Get Growing

VEGETABLES 3

What you can do in this project:

- Grow plants in a cold frame
- Make a site analysis and landscape plan
- Compare organic and chemical fertilizers
- Research various insect control methods

Grades: 9-12

Resource: 07164, Gardening: Take Your Pick 07165, Gardening: Growing Profits

Resource: 4H1041W, Gardening Helper's Guide

STEM (Science, Technology, Engineering & Math)

STEM Exploring STEM LDR STEM YTH LDR

AEROSPACE 1

What you can do in this project:

- Build an introductory level rocket
- Compare birds and airplanes
- Make a space helmet

Resource: 06842, Pre-Flight

AEROSPACE 2

What you can do in this project:

- 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

Grades: 3-5

Resource: 06843, Lift Off

AEROSPACE 3

What you can do in this project:

- Build, exhibit and launch model rockets
- Test a paper hang glider
- Make a flight simulator
- Demonstrate why rockets flyOrganize a kite-flying contest
- Grades: 6-8

Resource: 06844, Reaching New Heights

AEROSPACE 4

What you can do in this project:

- 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: 9-12

Resource: 06845, Pilot in Command

Resource: 06846, Aerospace Adventures Helper's Guide

GEOSPATIAL GEOCACHING

ROBOTICS 1

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

08431, Junk Drawer Robotics Track Level 1: Give Resource: Robots a Hand 08435. 4-H Robotics Youth Notebook

ROBOTICS 2

What you can do in this project:

- 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 •

08432, Junk Drawer Robotics Track Level 2: Robots Resource: on the Move 08435. 4-H Robotics Youth Notebook

ROBOTICS 3

What you can do in this project:

- Explore and learn about robots sensors and analog and • digital systems
- Build basic circuits
- Study basic elements of programming and instruction

Resource: 08433, Junk Drawer Robotics Track Level 3:

Mechatronics 08435, 4-H Robotics Youth Notebook

SCIENCE

WIND ENERGY

08383, The Power of the Wind Youth Guide Resource:

Resource: 08384, The Power of the Wind Facilitator Guide



OTHER PROGRAMS

SAFETY



https://wi4hinternational.org/

INTERNATIONAL 1

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 2 & 3

What you can do in this project:

- Explore culture, fear, and identity
- Stretch your values and frame of reference
- Challenge stereotypes and assumptions
- Connect with global citizenship

Grades: 6-12 Resource:

01501F, WeConnect: A Global Youth Citizenship Curriculum