



# 2015-2016 Sauk County 4-H Project Selection Guide – with Project Curriculum

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

**Project vs. Exhibit . . .** Many people in 4-H tend to use the words Project and Exhibit interchangeably. However, they are two VERY different things.

- 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 explore, from art to woodworking, from computers to rabbits, from clothing to small engines, from aerospace to horses. If you are interested in learning more about something, there is probably a 4-H project to help you!
- An **exhibit** is an item that you have made during your 4-H project learning that you take to the County Fair. You will receive feedback from a judge on your exhibit.

**When you are enrolling in 4-H you are enrolling in a project, NOT selecting your fair exhibit.**

Don't forget to check out the project pages on the Wisconsin 4-H Web Site at <http://www.uwex.edu/ces/4h/onlinpro/allprojects.cfm>. 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.

## How to Select 4-H Projects

**4-H members . . .** First, make a list of the things you like to do or want to learn more about. Talk over your list with your parents, leaders and friends. They may recognize some special things you are good at that you don't even realize you do well. Then compare your list with the projects described in this guide. Ask yourself if you have the equipment, money and time to do the projects that sound interesting.

In the Sauk County 4-H Project Selection Guide you will see that most of the project areas are listed with three different levels. **These levels are based on the curriculum or project materials that are used to support learning in that project area. Youth in Sauk County will NOT enroll in Youth Leadership 1, or 2 or 3, they will just enroll in Youth Leadership.** The Levels that are listed refer to the curriculum that is used to support your project learning. This guide will help you know which curriculum book you should order. The 4-H program is set up to be a skill development program. Youth will enroll in a project area, Youth should spend 2-3 years working with that one project book per project area, until youth have mastered the skills from that area, as is reflected from completion of the project book for each unit for that project area. They will then move onto using the next level of project book for the next 2-3 years. Again, the different levels listed in the Sauk County 4-H Project Selection Guide help youth understand what they will learn as they progress through learning while using the project materials.

You may also notice under the curriculum or project books that there are grades listed. That is the grade level at which that project book was designed for. However if you are in 6<sup>th</sup> grade and this is your first year in a project area, you should still start with the first project book. You may get through the material in the book faster than 2-3 years, but there is information that is important for you to know before you move onto the 2<sup>nd</sup> project book.

If there are not any curriculum or project books listed underneath a project area you are interested in, please contact the UWEX office. Meg is working on finding project materials to support all of the project areas listed in this project selection guide.

## 4-H leaders

You will also make choices about what to enroll in. There will be an option for you to enroll in each project you will be leading in 4Honline as a LEADER. For example if you are the project leader for Astronomy, Cats and Exploring. You will enroll in Astronomy: Leader, Cats: Leader and Exploring: Leader. This Project Selection Guide will also list project resources for you to use as the Project leader for each project. As a project leader, it is recommended that you order each of the youth guides as well as the Leader materials. Project leaders who attend a Sauk County Project Leader training will receive a complete set (3 youth project books and one leader book) of project materials for one project area that they lead.

## Where to find the Project Curriculum and Materials

**Each 4-H youth member is eligible to receive one project book per year.** Club leaders have a Curriculum Selection Form. Each 4-H member is asked to select their top 3 project book choices and record them on the Curriculum Selection Form. **Curriculum selection forms are due to the Sauk County Extension office by December 1.** Every effort will be made to have youth receive their top priority project book. However, orders will be filled on a first come/first served basis.

Most of the project curriculum and materials can be ordered online at: [www.4-Hmall.org](http://www.4-Hmall.org), unless there is another ordering source listed by the materials. Please note that these materials are all protected with copy write and therefore cannot be photocopied. Remember that youth will use one project book for about 2-3 years. Each project book costs around \$5.00.

**Project Skills and Life Skills . . .** You will learn more than "project skills" as you complete your project work throughout the year. Project skills are things like learning how to measure, knowing how to saddle your horse, understanding the elements of design, and much more. Through your project work you will also 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!**

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## **CLOVERBUDS** **For youth in grades K-2**

### **CLOVERBUDS 1**

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

Grade: Kindergarten (5 year olds)

### **CLOVERBUDS 2**

What you can do in this project:

- Learn about 4-H activities and events
- Learn about working together as a club or team
- Share with others what you have learned

Grade: 1

### **CLOVERBUDS 3**

What you can do in this project:

- Begin learning about specific 4-H project areas
- Learn to complete projects as an individual
- Share with others what you have learned

Grade: 2

### **CLOVERBUDS LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/cloverbuds.cfm>



## **EXPLORING** **For youth in their first 1-2 years** **in 4-H**

### **EXPLORING**

This project is for 4-H members who are in their first 1-2 years in the 4-H program. What you can do in this project:

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

Grade: 3-4

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

### **10300 EXPLORING LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/exploring.cfm>



## **CITIZENSHIP, SERVICE** **LEARNING & YOUTH** **LEADERSHIP**

### **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 LEADER**

Resource: 08154, *Citizenship Guide's Handbook*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/citizenship.cfm>

### **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*

### **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*

### **SERVICE LEARNING LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/ServiceLearning.cfm>

### **YOUTH LEADERSHIP 1**

What you can do in this project:

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

Grades: 3-5

Resource: 07905, *My Leadership Workbook for Grades 3-5*

### **YOUTH LEADERSHIP 2**

What you can do in this project:

- Explore how leaders are different
- Develop a multi-media presentation
- Set and achieve team goals
- Practice teamwork

Grades: 6-8

Resource: 07906, *My Leadership Journal for Grades 6-8*

### **YOUTH LEADERSHIP 3**

What you can do in this project:

- Build trust in a group
- Assess your own strengths and weaknesses
- Write vision and mission statements
- Contribute to a group project

Grades: 9-12

Resource: 07907, *My Leadership Portfolio for Grades 9-12*

### **YOUTH LEADERSHIP LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/leadership.cfm>



## **SELF-DETERMINED**

### **SELF-DETERMINED**

What you can do in this project:

- Create your own project in a project area that does not already exist.
- 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**
- **SELF-DETERMINED ARTS & COMMUNICATION**
- **SELF-DETERMINED ENVIRONMENTAL EDUCATION**
- **SELF-DETERMINED FAMILY, HOME, & HEALTH**
- **SELF-DETERMINED MECHANICAL SCIENCES**
- **SELF-DETERMINED PLANT & SOIL SCIENCES**

### **SELF-DETERMINED LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/selfdetermined.cfm>



## **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: 3-5

Resources: 08143, *Bite Into Beef*

### **BEEF 2**

What you can do in this project:

- 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 LEADER**

Resources: 08146, *Beef Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/beef.cfm>

Additional Resources:

4H450, *Judging Breeding and Market Cattle* available to ORDER:  
[learningstore.uwex.edu/Judging-Breeding-and-Market-Cattle-P640C141.aspx](http://learningstore.uwex.edu/Judging-Breeding-and-Market-Cattle-P640C141.aspx)

08455 *Exploring Beef Health and Husbandry* available to ORDER:

[www.4-hmall.org/Product/beef/exploring-cattle-health-and-husbandry/08455.aspx](http://www.4-hmall.org/Product/beef/exploring-cattle-health-and-husbandry/08455.aspx)

### **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

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 LEADER

Resource: 08151, *Cat Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/cats.cfm>

## CAVIES

Resource: <http://4h.wsu.edu/em2778cd/pdf/pnw0573.pdf>

## CAVIES LEADER

Resources: Same as above

## DAIRY CATTLE 1

What you can do in this project:

- Identify dairy breeds and parts of the dairy cow
- Learn how to select quality dairy calves
- Fit and show a calf
- Identify stages of calving and care

Grades: 3-5

Resources: 08161, *Cowabunga*

## DAIRY CATTLE 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*

## DAIRY CATTLE 3

What you can do in this project:

- Practice mastitis detections
- Learn to balance rations
- Learn body-conditioning scoring
- Promote dairy products
- Explore various dairy industry careers

Grades: 9-12

Resources: 08163, *Rising to the Top*

## DAIRY LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/dairy.cfm>

Additional Resources:

*Lifetime Dairy Record* – available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=59>

*Managerial Project Agreement* – available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=67>

## DOGS 1

What you can do in this project:

- Learn basic skills for dog care and training
- Discover different dog breeds
- Learn how to keep a dog healthy and groomed

Grades: 3-5

Resources: 08166, *Wiggles and Wags*

## DOGS 2

What you can do in this project:

- Explore dog health and nutrition
- Discover genetic problems and population control
- Learn showmanship and training techniques

Grades: 6-8

Resources: 08167, *Canine Connection*

## DOGS 3

What you can do in this project:

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

Grades: 9-12

Resources: 08168, *Leading the Pack*

## DOGS LEADER

Resources: 08169, *Dog Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/dogs.cfm>

Additional Resources:

4H369F, *4-H Dog Project Health Supplement* available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=28841>

4H436, *The Basics of Training Your Dog* available online at:  
<http://www.uwex.edu/ces/4h/pubs/showdoc.cfm?documentid=339>

4H439, *Dog Obedience–Novice & Beyond* available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=15>

4H458, *4-H Dog Judging Guidelines* available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=16>

4H437, *A Guide to Showmanship* available to ORDER for \$1.50:  
<http://learningstore.uwex.edu/A-Guide-to-Showmanship-P669C145.aspx>

## EXOTIC ANIMALS

Resources:

Llamas:

<https://www.extension.purdue.edu/extmedia/4H/4-H-999-W.pdf>

Pygmy Goat:

<https://ir.library.oregonstate.edu/xmlui/bitstream/handle/1957/23100/4-HNO1130.pdf>

Angora Goat:

<http://4h.msue.msu.edu/uploads/resources/4H1480Your4-HAngoraGoatProject.pdf>

## EXOTIC ANIMALS LEADER

Resources: Same as above

## **DAIRY GOAT 1**

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

Grades: 3-5

Resource: 08352, *Getting Your Goat*

## **DAIRY GOAT 2**

What you can do in this project:

- Learn to keep your goat healthy
- Prepare for kidding
- Learn how to milk a goat properly

Grades: 6-8

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
- Gain leadership and explore career opportunities

Grades: 9-12

Resource: 08354, *Showing the Way*

## **DAIRY GOAT LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/goats.cfm>

Additional Resources:

4H369E *4-H Dairy Goat Project Health Supplement* available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=28838>

## **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

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

Grades: 5-8

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

Grades: 9-12

Resource: 07911, *Meating the Future*

## **MEAT GOAT LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/goats.cfm>

## **HORSE 1**

What you can do in this project:

- Study breeds and identify body parts
- Saddle, groom and bridle your horse
- Practice horse safety and horse selection

Grades: 3-4

Resources: 08053, *Giddy Up & Go*

## **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

Grades: 5-6

Resource: 08054, *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: 7-8

Resource: 08055, *Stable Relationships*

## **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: 9-10

Resource: 08056, *Riding the Range*

## **HORSE 5**

What you can do in this project:

- Learn to set goals
- Compare costs of show clothing
- Present your horse in showmanship classes
- Practice proper show ethics

Grades: 11-12

Resource: 08057, *Jumping to New Heights*

## **HORSELESS HORSE 1**

(You do *not* need a horse in this project)

What you can do in this project:

- Explore horse behavior, terms and breeds
- Identify body parts
- Learn grooming, saddling and bridling
- Learn about safety and equipment

Grades: 3-5

Resource: 08053, *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

Grades: 6-8

Resource: 08054, *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: 08055, *Stable Relationships*

## **HORSE/ HORSELESS HORSE LEADER**

Resources: 08058, *Horse Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/horses.cfm>

Additional Resources

4H266 *Horses are Fun – Horseless Horse* – available to order:  
<http://learningstore.uwex.edu/Horses-are-FunHorseless-Horse-P689C147.aspx>

*Horses & Horsemanship*, – available to ORDER:  
<http://www.4-hmall.org/Category/4-hcurriculum-horse.aspx>

*Horse Science*, – available to ORDER:  
<http://www.4-hmall.org/Category/4-hcurriculum-horse.aspx>

4H180, *Pleasure Riding*, – available to ORDER:  
<http://learningstore.uwex.edu/Pleasure-Riding-P681C0.aspx>

4H389, 4-H Clothing: Horse & Riding Attire, available to ORDER:  
<http://learningstore.uwex.edu/Horse-and-Riding-Attire-P651C143.aspx>

## **PETS 1**

What you can do in this project:

- Explore your favorite pet or select a pet
- Identify pet body parts
- Design a space for your pet

Grades: 3-5

Resource: 06359, *Pet Pals*

## **PETS 2**

What you can do in this project:

- Explore animal digestion and feeding
- Shop for pet supplies
- Study pet behavior and communication

Grades: 6-8

Resource: 06360, *Scurrying Ahead*

## **PETS 3**

What you can do in this project:

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

Grades: 9-12

Resource: 06361, *Scaling the Heights*

## **PETS LEADER**

Resource: 06362, *Pet Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/pets.cfm>

## **POULTRY 1**

What you can do in this project:

- Identify poultry breeds and parts of a bird
- Learn how to select and handle poultry
- Fit and show poultry

Grades: 3-5

Resources: 06363, *Scratching the Surface*

## **POULTRY 2**

What you can do in this project:

- Observe a healthy flock
- Select and judge broilers
- Prevent poultry diseases

Grades: 6-8

Resources: 06364, *Testing Your Wings*

## **POULTRY 3**

What you can do in this project:

- Organize a judging clinic
- Manage a laying flock
- Handle poultry products safely
- Process a chicken

Grades: 9-12

Resources: 06365, *Flocking Together*

## **POULTRY LEADER**

Resource: 06366, *Poultry Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/poultry.cfm>

Additional Resources:

CIR878, *From Egg to Chick* available online:

[http://chickscope.beckman.uiuc.edu/resources/egg\\_to\\_chick/](http://chickscope.beckman.uiuc.edu/resources/egg_to_chick/)

4H281, *Poultry for Fun and Food* available to ORDER:

<http://learningstore.uwex.edu/Poultry-for-Fun-and-Food-P697C0.aspx>

A2880, *Chicken Breeds and Varieties* available to ORDER:

<http://learningstore.uwex.edu/Chicken-Breeds-and-Varieties-P698C0.aspx>

A3311, *Raising Waterfowl* available to ORDER:

<http://learningstore.uwex.edu/Raising-Waterfowl-P1198C0.aspx>

NCR209, *Bantams* available to ORDER:

<http://learningstore.uwex.edu/Bantams-P703C0.aspx>

4H135, *Pigeons* available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=1>

## **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 Happening?*

## **RABBITS 2**

What you can do in this project:

- Learn to select show rabbits
- Give oral reasons and judge rabbits
- 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

Resource: 08082, *All Ears*

## **RABBITS LEADER**

Resource: 08083, *Rabbit Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/rabbits.cfm>

Additional Resources:

4H369I, *4-H Rabbit Project Health Supplement*, available online:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=28850>

## **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
- Diagnose sheep diseases
- Use medications safely
- Explore careers

Grades: 6-8

Resources: 06368, *Shear Delight*

## **SHEEP 3**

What you can do in this project:

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

Grades: 9-12

Resources: 06369, *Leading the Flock*

## **SHEEP LEADER**

Resources: 06370, *Sheep Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/sheep.cfm>

Additional Resources

4H369J, *4-H Sheep Project Health Supplement*, available online:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=28854>

4H421, *Judging Breeding and Market Sheep*, available to ORDER:

<http://learningstore.uwex.edu/Judging-Breeding-and-Market-Sheep-P779C0.aspx>

## **SWINE 1**

What you can do in this project:

- Identify swine breeds, feeds and animal parts
- Identify pork meat cuts
- Practice fitting and showing a hog

Grades: 3-5

Resources: 08065, *The Incredible Pig*

## **SWINE 2**

What you can do in this project:

- Make a swine health care plan and identify diseases
- Plan and organize a facility expansion
- Complete a plan for a new pork product

Grades: 6-8

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

Grades: 9-12

Resources: 08067, *Going Whole Hog*

### SWINE LEADER

Resources: 08068, *Swine Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/swine.cfm>

Additional Resources

4H369K, *4-H Swine Project Health Supplement*, available online:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=28861>

4H421, *Judging Breeding and Market Swine*, available to ORDER:  
<http://learningstore.uwex.edu/Judging-Breeding-and-Market-Swine-P811C0.aspx>

### VETERINARY SCIENCE 1

What you can do in this project:

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

Grades: 3-5

Resources: 08048, *From Airedales to Zebras*

### VETERINARY SCIENCE 2

What you can do in this project:

- Conduct food safety experiments
- Discover importance of immunity and bio-security
- Consider ethics and animal welfare

Grades: 6-8

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*

### VETERINARY SCIENCE LEADER

Resources: 08051, *Veterinary Science Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/vetscience.cfm>

Additional Resources

4H369, *4-H Veterinary Science Project Animal Health Supplement*:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=10>

4H323, *Normal Animal*, available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=7>

4H334, *Adventure Notebook*, available to ORDER:  
<http://learningstore.uwex.edu/Adventure-Notebook-P820C0.aspx>

### VETERINARY SCIENCE LEADER cont...

4H048 *Animal Disease*, available to ORDER:

<http://learningstore.uwex.edu/Animal-Disease-P821C0.aspx>

4H133 *Animal Health*, available to ORDER:

<http://learningstore.uwex.edu/Animal-Health-P823C0.aspx>



## 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: 08156, *Picking Up the Pieces*

### 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: 08157, *Putting It Together*

### COMMUNICATIONS 3

What you can do in this project:

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

Grades: 9-12

Resource: 08158, *The Perfect Fit*

### COMMUNICATIONS LEADER

Resources: 08159, *Communications Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/communications.cfm>

Additional Resources:

COMM04, *Voices From the Past*, available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11388>

COMM05, *It's All in the Family*, available online at:  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11390>

COMM07, *Communication Activities for 4-H Clubs*, online at  
<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11394>

## CREATIVE WRITING

What you can do in this project:

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

Grades: 3-12

Resources:

COMM01, *Creative Wordworking*, available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11382>

COMM03, *Crazy About Books Reading Circle*, available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11386>

## DEMONSTRATIONS

Let's Demonstrate

<http://4h.missouri.edu/resources/materials/docs/Y744.pdf>

Demonstration worksheet:

<http://4h.missouri.edu/resources/materials/docs/Y745.pdf>

Demonstration Ideas:

[http://extension.missouri.edu/marion/documents/Youth\\_Docs/4HResources/A%20FEW%20IDEAS%20FOR%20DEMONSTRATIONS%20AND%20ILLUSTRATED%20TALKS.pdf](http://extension.missouri.edu/marion/documents/Youth_Docs/4HResources/A%20FEW%20IDEAS%20FOR%20DEMONSTRATIONS%20AND%20ILLUSTRATED%20TALKS.pdf)

## 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*, available online at:

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11384>

## SPEAKING LEADER

COMM06, *4-H Public Speaking Opportunities- A Parent's Handbook*

<http://www.uwex.edu/ces/4h/pubs/pubdetails.cfm?publicationid=11392>

## DANCE

[http://pubstorage.sdstate.edu/AgBio\\_Publications/articles/4HYD514.28.pdf](http://pubstorage.sdstate.edu/AgBio_Publications/articles/4HYD514.28.pdf)

## DANCE LEADER

Resource: Same as above

## 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*

Available online at:

<https://store.extension.iastate.edu/Product/Music-Project-Guide-4-H-and-Youth-Development>

## MUSIC LEADER

Resource: 4H351, *Sing Along Songbook*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/Music.cfm>

Additional Resources: available online at:

<http://www.extension.iastate.edu/4hfiles/projects/hotsheets/MusicHotSheet.pdf>

## 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: *Theatre Arts - 1*

## THEATRE ARTS 2

What you can do in this project:

- Explore types of puppets and puppet characters
- Use puppets in community service work
- Plan and present a puppet show

Grades: 6-8

Resource: *Theater Arts - 2*

## THEATRE ARTS 3

What you can do in this project:

- Study costumes, makeup, stage sets, props and sound
- Create sounds and disguises
- Make up your own character and bring it to life

Grades: 9-12

Resource: *Theater Arts - 3*

## THEATRE ARTS LEADER

Resource: 08073, *Theatre Arts Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/theatre.cfm>



## 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*, available online:

<http://www.uwex.edu/ces/4h/pubs/showdoc.cfm?documentid=334>

### CLOWNING LEADER

Resource: Same as above



## **VISUAL ARTS**

You will no longer see Baskets, Beadwork, Block Printing, Calligraphy, Ceramics, Stitchery, Decoupage, Glasswork, Jewelry Making, Macramé, Mosaics, Rubberstamping, Latchhook, and others. NOW all of these areas will be listed under ART. **So if you are interested in any of the above name areas, enroll in Art. There is also still the option to enroll in Drawing and Painting, Folk Arts or Leathercrafting.** This decision was made for a couple of different reasons; first all of the areas that will no longer be listed do not have project materials to support youth in learning more about them, and second youth and adults seemed to be caused quite a bit of stress trying to make sure that they signed up for all of the different art area options to make sure they were “covered for the fair.” The project materials that support the Art project cover most of the areas that you will no longer see. Drawing and Painting, Folk Arts and Leathercrafting have project materials to support learning, so these will remain to be enrolled in as separate projects.

### **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

Resource: 08140, *Visual Arts: Sketchbook Crossroads*

### **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

Resource: 08141, *Visual Arts: Portfolio Pathways*

### **ART LEADER**

Resource: same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/arts crafts.cfm>

### **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: 3-12

Resource: 4H169, *Drawing & Painting*, available online at: <http://www.uwex.edu/ces/4h/pubs/showdoc.cfm?documentid=332>

### **DRAWING & PAINTING LEADER**

Resource: same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/drawing.cfm>

### **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

Grades: 5-12

Resource: is the same as for the Leader

### **FOLK ARTS LEADER**

Resource: NCR534, *Folk Arts Leader Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/folkarts.cfm>

### **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

Resource: 4H149, *Adventures in Leathercraft Members Guide*

### **LEATHERCRAFT LEADER**

Resource: CIR006, *Adventures in Leathercraft Leaders Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/leathercraft.cfm>

### **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: PC1, *Focus on Photography*

### **PHOTOGRAPHY 2**

What you can do in this project:

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

Grades: 6-8

Resource: PC2, *Controlling the Image*

### **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: PC3, *Mastering Photography*

### **PHOTOGRAPHY LEADER**

Resources: Same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/photography.cfm>

### **VIDEOGRAPHY/FILMAKING**

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: *4-H Filmmaking CD*



## **FAMILY, HOME & HEALTH**

### **CHILD DEVELOPMENT 1**

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

Grades: 3-4

Resource: 08075, *On My Own*

### **CHILD DEVELOPMENT 2**

What you can do in this project:

- 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

Grades: 5-6

Resource: 08076, *Growing With Others*

### **CHILD DEVELOPMENT 3**

What you can do in this project:

- 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

Grades: 7-10

Resource: 08077, *Growing in Communities*

### **CHILD DEVELOPMENT LEADER**

Resource: 08078, *Child Development Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/childdev.cfm>

### **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*

### **HEALTH 2**

What you can do in this project:

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

Grades: 6-8

Resource: 08175, *Staying Healthy*

### **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

Grades: 9-12

Resource: 08176, *Keeping Fit*

### **HEALTH LEADER**

Resources: Same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/health.cfm>

### **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

Grades: 3-5

Resource: 4H425, *Exploring Your Home*

### **HOME ENVIRONMENT 2**

What you can do in this project:

- Become more involved with activities around the home
- Learn to handle home tasks and entertain guests
- Refinish wood furnishings and make other home items

Grades: 6-7

Resource: 4H426, *Living With Others*

## HOME ENVIRONMENT 3

What you can do in this project:

- 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

Grades: 8-9

Resource: 4H427, *Where I Live*

## 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 LEADER

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/homeenv.cfm>



## 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: 08030, *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: 6-9

Resource: 08031, *Consumer Wise*

### CONSUMER SAVVY 3

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: 08032, *Consumer Roadmap*

### CONSUMER SAVVY LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/consumersavvy.cfm>

## 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 LEADER

Resource: 08036, *Entrepreneurship Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/entrepreneur.cfm>

## PERSONAL FINANCE 1

What you can do in this project:

- Learn about wants and needs, values and goal setting
- Learn money management skills
- Learn how to live on a budget

Grades: 6-8

Resource: 07710, *Money FUNdamentals*

## PERSONAL FINANCE 2

What you can do in this project:

- Explore ways to use and save money
- Learn the benefits and drawbacks of credit
- Survey and select financial services

Grades: 9-12

Resource: 07711, *Money Moves*

## PERSONAL FINANCE LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/finance.cfm>

## 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*

## WORKFORCE READINESS LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/workforce.cfm>



## **FOODS AND NUTRITION**

### **CAKE DECORATING**

Resource: <http://www.uwyo.edu/4-h/projects/cakedecorating/manual.pdf>

### **CAKE DECORATING LEADER**

Resource: Same as above

### **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 LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/foodsnutrition.cfm>

### **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: 3-5

Resource: *Cooking 101*

### **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: 5-7

Resource: *Cooking 201*

### **FOODS & NUTRITION 3**

What you can do in this project:

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

Grades: 7-9

Resource: *Cooking 301*

### **FOODS & NUTRITION 4**

What you can do in this project:

- Learn how to make jelly, bake fish and marinate meat
- Learn to divide recipes and make substitutions
- Plan menus on a budget

Grades: 9-12

Resource: *Cooking 401*

### **FOODS & NUTRITION LEADER**

Resource: 07730, *Cooking Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/foodsnutrition.cfm>

## **CLOTHING AND TEXTILES**

### **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

Grades: 3-5

Resources: 08060, *Under Construction*

### **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*

### **CLOTHING 3**

What you can do in this project:

- Use specialized sewing tools or equipment
- Combine patterns to create a design
- Design and embellish a garment
- Use a computer to print on fabric

Grades: 9-12

Resource: 08062, *Refine Design*

### **CLOTHING LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/clothing.cfm>

Additional Resources:

07198, *Let's Sew! Beginner's Sewing Guide*

## **CROCHETING 1**

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

Grades: 3-12

Resource: CC1403, *Crochet Made Easy*

## **CROCHETING LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/crocheting.cfm>

## **KNITTING 1**

What you can do in this project:

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

Grades: 3-12

Resource: CC1402, *Knitting Made Easy*

## **KNITTING LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/knitting.cfm>



## **MECHANICAL SCIENCES**

### **BICYCLES 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*

### **BICYCLES 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

Resource: 08335, *Wheels in Motion*

### **BICYCLING LEADER**

Resources: 08336, *Bicycle Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/bicycling.cfm>

## **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, *Inside the Box*

## **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, *Peer to Peer*

## **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, *Teens Teaching Tech*

## **COMPUTERS LEADER**

Resource: 08349, *Newbie Know How, CPU Supplement*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/computer.cfm>

## **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: 6-7

Resource: 06849, *Investigating Electricity*

## **ELECTRICITY 3**

What you can do in this project:

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

Grades: 8-9

Resource: 06850, *Wired for Power*

## **ELECTRICITY 4**

What you can do in this project:

- 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*

## **ELECTRICITY LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/electricity.cfm>

## **LEGOS & K'NEX**

Resource: <http://oonto.uwex.edu/files/2010/08/LEGOS-AND-KNEX.pdf>

## **LEGOS & K'NEX LEADER**

Resource: Same as above

## **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

Grades: 3-12

Resource: 4H424, *Guidelines for Building Scale Models*

## **SCALE MODELS LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/scalemodels.cfm>

## **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: 3-5

Resource: 08186, *Crank It Up!*

## **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!*

## **SMALL ENGINES LEADER**

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/engine.cfm>

## **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*

## **TRACTORS LEADER**

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/tractors.cfm>

## **WOODWORKING 1**

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

Grades: 3-4

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: 4-6

Resource: 06876, *Making the Cut*

## 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*

## WOODWORKING LEADER

Resource: 06879, *Woodworking Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/wood.cfm>



## **NATURAL RESOURCES & ENVIRONMENTAL EDUCATION**

## ADVENTURES

What you can do in this project:

- 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

Grades: 3-12

Resource: 4H444, *Introduction to Adventures*

## ADVENTURES LEADER

Resource: 4H443, *4-H Adventure Project*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/adventures.cfm>

## ASTRONOMY

Resource:

<http://nys4h.cce.cornell.edu/Documents/About/Program%20Themes/SET/4-H%20Science%20Toolkit/Astronomy%201.pdf>

## ASTRONOMY LEADER

Resource: Same as above

## 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: 3-5

Resource: 08043, *Hiking Trails*

## BACKPACKING & HIKING 2

What you can do in this project:

- 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

Grades: 6-8

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*

## BACKPACKING & HIKING LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/backpacking.cfm>

## BEES

Resource: <https://www.extension.purdue.edu/extmedia/4h/4h-571-w.pdf>

## CONSERVATION - 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: 5-8

Resource: 08411, *Earth's Capacity*

## CONSERVATION - EXPLORING YOUR ENVIRONMENT 2

What you can do in this project:

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

Grades: 9-12

Resource: 08410, *Ecosystems Services*

## CONSERVATION - EXPLORING YOUR ENVIRONMENT LEADER

Resource: 08412, *Exploring Your Environment Facilitator Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/environment.cfm>

Additional Resources:

PUB-CE-456, *Education Connection*

PUBL-ER-001, *WI Endangered & Threatened Species*

## 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

Grades: 3-5

Resource: 06853, *Teaming with Insects 1*

## 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: 06854, *Teaming with Insects 2*

## 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: 06855, *Teaming with Insects 3*

## ENTOMOLOGY (INSECTS) LEADER

Resource: 06856, *Teaming with Insects Facilitators Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/entomology.cfm>

Additional Resources:

*Butterfly WINGS Youth Guide*, available to ORDER at:

<http://www.4-hmall.org/Category/4-hcurriculum-butterfly.aspx>

*Butterfly WINGS Facilitator Guide*, available to ORDER at:

<http://www.4-hmall.org/Category/4-hcurriculum-butterfly.aspx>

## 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: 3-5

Resource: 07598, *Take the Bait*

## 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: 6-8

Resource: 07599, *Reel in the Fun*

## FISHING 3

What you can do in this project:

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

Grades: 9-12

Resource: 07600, *Cast into the Future*

## FISHING LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinepro/fishing.cfm>

## FORESTRY 1

What you can do in this project:

- Identify forest types, forest products and trees
- Age trees by counting rings
- Describe how leaves affect rainfall

Grades: 3-5

Resource: 08038, *Follow the Path*

## FORESTRY 2

What you can do in this project:

- Learn how trees move water from soil to canopy
- Understand major forest changes and their impact
- Select urban tree planting sites

Grades: 6-8

Resource: 08039, *Reach for the Canopy*

## FORESTRY 3

What you can do in this project:

- Recognize different tree fruits
- Create a community forest map
- Identify forest biomes by continent

Grades: 9-12

Resource: 08040, *Explore the Deep Woods*

## FORESTRY LEADER

Resource: 08041, *Forestry Helper's Guide*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/forestry.cfm>

## GEOLOGY

Resources:

<http://wgnhs.uwex.edu/>

<http://www2.ca.uky.edu/agc/pubs/4db/4db01po/4db01po.pdf>

<http://4h.missouri.edu/projects/curriculum/Y9410.pdf>

## GEOLOGY LEADER

Resources: Same as above

## RECYCLING

What you can do in this project:

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

Grades: 3-12

Resource: 4H362, *Recycling for Reuse*

## RECYCLING LEADER

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/recycling.cfm>

## ROCK CLIMBING

The Rock Climbing project must be led by a certified leader, and youth must participate in the county wide rock-climbing project. Monthly meetings will be held from about May – September. Youth enrolled in the project will be contacted by The project leaders about when meeting will be held.

## 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*

## WATER LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/water.cfm>

## 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

Grades: 3-12

Resource: 4H392, *Wildflowers*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/wildflowers.cfm>

## WILDLIFE

Resource:

<https://www.extension.purdue.edu/extmedia/4H/4-H-907-W.pdf>

## WILDLIFE LEADER

Resource: Same as above

## 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

Grades: 3-12

Resource: 4H448, *Winter Travel*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/wintertravel.cfm>

## WINTER TRAVEL LEADER

Resource: Same as above



## SHOOTING SPORTS EDUCATION

### SHOOTING SPORTS LEADER

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

Webpage: <http://fyi.uwex.edu/wi4hshootingports/>

### AIR RIFLE & .22

Air Rifle and .22 Rifle will only be offered at the Reedsburg location. You must have your own equipment.

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

## .22 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*

## AIR RIFLE & .22 LEADER

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

Webpage: <http://fyi.uwex.edu/wi4hshootingports/>

## ARCHERY

The Archery project is offered in three different areas of the county. When enrolling for the archery project please enroll in the area you will be participating in.

Archery: Baraboo/North Freedom

Archery: Reedsburg

Archery: Sauk Prairie

You do not need to own a bow. There are bows available for you to use. If you do have a bow of your own, you may use it. There is a \$10 fee for this project which is due at the first meeting.

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

Resource: 751, *Archery Member Record Book*

## ARCHERY LEADER

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 webpage.

Webpage: <http://fyi.uwex.edu/wi4hshootingports/>



## PLANT & SOIL SCIENCES

### CROPS –

You will enroll in CROPS in 4HOnline and be able to learn about any of the items listed below with crops.

#### CROPS 1 - CORN

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: 4H355, *4-H Corn Project Manual*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/corn.cfm>

#### CROPS 2 - FORAGE

What you can do in this project:

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

Grades: 3-12

Resources: 4H349, *Pest Scouting Alfalfa*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/forage.cfm>

#### CROPS 3 - SMALL GRAINS

What you can do in this project:

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

Grades: 3-12

Resources: 4H356, *4-H Small Grains Manual*  
4H440, *Marketing Your 4-H Crops*  
4H441, *Is Direct Marketing for My Project?*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/smallgrains.cfm>

#### CROPS LEADER

Resources: Same as above as listed under Corn, Forage and Small Gains

#### FLOWERS 1

What you can do in this project:

- Identify flower parts and their functions
- Plant flowers and make flower arrangements
- Transplant plants
- Learn about plant pests

Grades: 3-5

Resource: 4H 966, *Floriculture A*

## FLOWERS 2

What you can do in this project:

- Learning about perennials and house plants.
- Select and start new plants from seeds
- Examine plants for insects and diseases
- Learn how to dry flowers and make your own potpourri

Grades: 6-8

Resource: 4H 967, *Floriculture B*

## FLOWERS 3

What you can do in this project:

- Develop planter gardens
- Take cuttings from plants
- Create dried arrangements and terrariums
- Begin to explore floriculture careers

Grades: 9-10

Resource: 4H 968, *Floriculture C*

## FLOWERS 4

What you can do in this project:

- Develop an all seasons garden
- Explore greenhouse gardening
- Learn about the global flower market
- Create seasonal arrangements

Grades: 11-13

Resource: 4H 969, *Floriculture D*

## FLOWERS LEADER

Resource: Floriculture Supplemental CD

Additional Resources:

4H1301A, *Forcing Spring Flowering Bulbs*

A2935, *Evaluating & Judging Flowers & Indoor Plants*

Resources available to order from:

<https://mdc.itap.purdue.edu/subcategory.asp?subCatID=357&CatID=16>

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/flowers.cfm>

## 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: 3-7

Resources: A1597, *Growing Strawberries in Wisconsin*

A1610, *Growing Raspberries in Wisconsin*

A1960, *Growing Currants, Gooseberries, &*

*Elderberries in Wisconsin*

## FRUITS 2

What can I do in this project:

- Produce fruits such as pears and grapes
- Learn about different varieties of cultivars

Grades: 8-12

Resources: A1656, *Growing Grapes in Wisconsin*

A2072, *Growing Pears in Wisconsin*

## FRUITS LEADER

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/fruits.cfm>

## 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

Grades: 3-5

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*  
A1730, *Evergreens – Planting & Care*

## 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*

## HOME GROUNDS LEADER

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/homegrounds.cfm>

## 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

Grades: 3-12

Resources: 4H328, *Propagating & Growing House Plants*

## HOUSE PLANTS LEADER

Resource: Same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/houseplants.cfm>

## 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*

4H453, *Plant Crafts Supplement*

## PLANT CRAFTS LEADER

Resources: Same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/plantcrafts.cfm>

## VEGETABLES & GARDENING 1

What you can do in this project:

- Identify plant parts and their functions
- Grow vegetables in containers
- Plan an outdoor garden

Grades: 3-5

Resources: 07162, *Gardening: See Them Sprout*

## VEGETABLES & GARDENING 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

Grades: 6-8

Resource: 07163, *Gardening: Let's Get Growing*

## VEGETABLES & GARDENING 3

What you can do in this project:

- Grow plants in a cold frame
- Make a site analysis and landscape plan

Grades: 9-10

Resource: 07164, *Gardening: Take Your Pick*

## VEGETABLES & GARDENING 4

What you can do in this project:

- Compare organic and chemical fertilizers
- Begin to research careers in Gardening and Possibly start your own business

Grades: 11-12

Resource: 07165, *Gardening: Growing Profits*

## VEGETABLES & GARDENING LEADER

Resource: 07166, *Gardening Helper's Guide*

Webpage: [4h.uwex.edu/onlinpro/vegetables.cfm](http://4h.uwex.edu/onlinpro/vegetables.cfm)

Additional Resources:

4H395, *Organically Grown – Handbook*, available to ORDER at:  
<http://learningstore.uwex.edu/Organically-Grown-Handbook-P760C218.aspx>

4H409, *Nature's Herbs*, available to ORDER at:  
<http://learningstore.uwex.edu/Natures-Herbs-P762C218.aspx>

A3306, *Exhibiting & Judging Vegetables*, available to ORDER at:  
<http://learningstore.uwex.edu/Exhibiting-and-Judging-Vegetables-P763C218.aspx>



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

### AEROSPACE & MODEL ROCKETRY 1

What you can do in this project:

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

Grades: K-2

Resource: 06842, *Pre-Flight*

### AEROSPACE & MODEL ROCKETRY 2

What you can do in this project:

- Build straw and paper rockets
- Learn to read a map
- Identify types of aircraft
- Build and fly a kite

Grades: 3-5

Resource: 06843, *Lift Off*

### AEROSPACE & MODEL ROCKETRY 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 fly

Grades: 6-8

Resource: 06844, *Reaching New Heights*

### AEROSPACE & MODEL ROCKETRY 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 effects of gravity
- Explore life in space and aerospace careers

Grades: 9-12

Resource: 06845, *Pilot in Command*

### AEROSPACE & MODEL ROCKETRY LEADER

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

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/aerospace.cfm>

### GEOSPATIAL 1

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

Grades: 4-12

Resource: CD8358, *Exploring Spaces, Going Places CD*

### GEOSPATIAL LEADER

Resource: Same as above

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/geospatial.cfm>



### **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

Grades: 3-5

Resources: 08431, *Junk Drawer Robotics Track Level 1: Give Robots a Hand*

### **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

Grades: 6-8

Resource: 08432, *Junk Drawer Robotics Track Level 2: Robots on the Move*

### **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

Grades: 9-12

Resource: 08433, *Junk Drawer Robotics Track Level 3: Mechatronics*

### **ROBOTICS LEADER**

Resources: 08434, *Virtual Robotics Track DVD*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/robotics.cfm>

#### **Additional Resources:**

08435, *4-H Robotics Youth Notebook*

<http://www.4-hmall.org/Category/robotics.aspx>

### **WIND ENERGY**

What you can do in this project:

- Design, create, build and test wind powered device.

Grades: 6-8

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

#### **Leader Resources**

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

Webpage: <http://www.uwex.edu/ces/4h/set/index.cfm>

### **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

Resource: 4H812, *And My World*

### **INTERNATIONAL LEADER**

Resource: 4H812, *And My World*

Webpage: <http://www.uwex.edu/ces/4h/onlinpro/international.cfm>