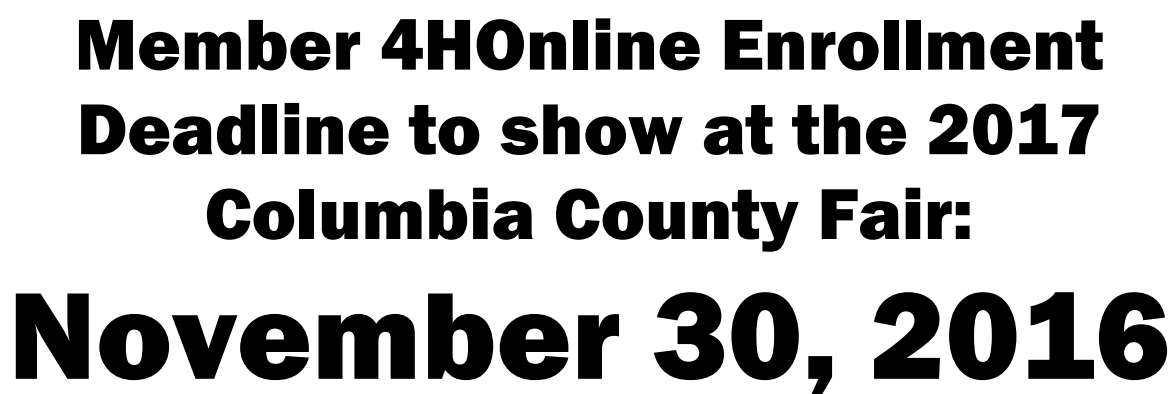


# Columbia County 4-H Project Guide



# **2016-2017 Columbia County 4-H Project Guide**

## **New and Re-Enrolling Members things to do on or before November 30<sup>th</sup>:**

- ☐ Enroll or Re-Enroll on 4HOnline.
- ☐ Complete the following and return to your club leader by your club deadline:
  - ☐ 2016-2017 Columbia County 4-H  
Mandatory Family Enrollment Information Form

*Your enrollment is not complete until you have done all of the above items. If you have any questions, please ask your general leader or contact Jennifer at 608-742-9687 or [Jennifer.Evans@ces.uwex.edu](mailto:Jennifer.Evans@ces.uwex.edu).*

**Add Project Deadline: November 30, 2016**  
**Drop Project Deadline: May 1, 2017**  
**Club Change Deadline: May 1, 2017**

# LET'S GET STARTED!



Welcome to the 2016-2017 4-H program year! We hope this will be a fantastic year of learning and fun for your family. One of the most unique things about 4-H is that it allows members to develop expertise in areas of study that interest them. Then it provides them with a variety of opportunities to pass their knowledge on to other kids!

## WHO MAY ENROLL?

Youth may enroll in 4-H from kindergarten through grade 13. Youth will continue to be eligible for membership through the next 4-H year following their graduation from high school.

## CLOVERBUD PROJECT

The Columbia County Cloverbud Project is the only project available for kindergarten, 1<sup>st</sup> & 2<sup>nd</sup> grade youth.

## EXPLORING PROJECT

The Columbia County Exploring Project is only for 3<sup>rd</sup> graders, usually for new 4-H members who have not previously been in the Cloverbud Project. It is strongly suggested that first year regular members take no more than two (2) projects. For members in 3<sup>rd</sup> grade, you may choose to take Exploring and one or two other projects. Members who have been Cloverbuds are encouraged to enroll in projects other than Exploring.

## WHY 4HONLINE?

All families will again enroll in Wisconsin 4HOnline rather than submitting paper enrollment forms.

**4HOnline** is designed for multiple uses:

- ❖ Members/Families/Leaders: Forgot your projects? Need to update your address, email, and/or phone(s) numbers? Need to fill in a health form because you're going to camp or are chaperoning at a 4-H event? For these reasons and more, you can log in to 4HOnline and look at your information or update it. You can access your information year-round.
- ❖ General Leaders/Project Leaders: Need to email all the members in the project? Need to contact a member but forgot their complete name and need their phone number? Go into 4HOnline and get some help.
- ❖ Newsletters: All newsletters are posted on 4HOnline. If you lose your copy, there's one available for you here.
- ❖ The county staff uses 4HOnline on a continuous basis.

**Enrollment Begins: September 3, 2016.**  
**ENROLLMENT DEADLINE: NOVEMBER 30, 2016**  
***to show at 2017 Columbia County Fair!!***  
***No exceptions will be made.***

**CHANGE IN PERSONAL INFORMATION!!** If your personal information changes at any time during the year, please take a moment to make the changes in 4HOnline, so that the UW-Extension office can serve you the best way possible. **NOTE:** We are not notified if you make changes to your 4HOnline record. Our email and mailing lists for the newsletter and the weekly update are separate from 4HOnline. Please contact the UW-Extension office **and** your General Leader with your new information or you may miss out on some communications.

## **ENROLLMENT**

New enrollments will be taken any time of the year. The November 30<sup>th</sup> deadline to show at the fair is for all 4-H members, whether a new enrollment or a re-enrollment. 4HOnline project addition or deletion cut-off is December 1<sup>st</sup>. Any changes after that date must come through the UW-Extension Staff by completing the “Add or Drop Project Form” located at <http://columbia.uwex.edu/4-h-youth-development/4-h-forms/4-h-enrollment-forms/>.

Help is needed if you have trouble getting into or understanding enrollment on 4HOnline, need help knowing what project to enroll in, or with any other issue that may come up during enrollment period. DO NOT WAIT UNTIL THE LAST DAY TO ENROLL! If you have problems, help may not be available if you wait until the last minute. Set yourself a deadline so that any problems can be addressed **prior to** Wednesday, November 30<sup>th</sup>, which would mean contacting the UW-Extension Office by Friday, November 25<sup>th</sup> during regular work hours. Our numbers are 608-742-9680 (office); Jennifer 608-742-9687; or Karen 608-742-9684. Please do not email if you are having issues with enrollment.

## **NEW ENROLLMENTS**

Please follow the instructions on the “*Enrolling in 4HOnline as a NEW family*” instructions included in your packet. You must have a valid email in order to enroll. You will also need to know which Columbia County 4-H Club you want to participate in. If you have any questions, please feel free to contact Jennifer Evans, 4-H Administrative Assistant, at 608-742-9687 or [Jennifer.Evans@ces.uwex.edu](mailto:Jennifer.Evans@ces.uwex.edu). You can also make arrangements to come into the office and Jennifer will help you walk through the enrollment process, if necessary.

## **RE-ENROLLMENT**

If you were a member or leader in 4HOnline last year, all of your information will still be in that program. You will only need to do the following:

- Log in with your user name (email) and password that you have previously created.
- On the family home screen, click on the orange button labeled Continue to Family.
- On your Member/Volunteer list, find the family member you wish to re-enroll and click on Edit next to their name.
- At the bottom of the next screen, click on the button for **Enroll for 2016-2017**.
- You will now see the Personal Information you entered when you first enrolled. Look over the information and make any corrections. Keep in mind that the *Years in 4-H* and *Grade* have already advanced one year. (Exception to Grade advancement: If you were in 12<sup>th</sup> grade in 2014-2016, your grade will be blank. There are different choices to make if you are in the year beyond high school.) When you are done, click on **Continue**.
- Next is the Additional Information screen where you will need to accept the agreements and answer the Photo Release and Accommodations questions. Click **Continue** when done.
- The Health Form for members is optional at enrollment, but you could be asked to complete it in the future if you attend any events that require one. Click **Continue** when done.
- If you are an adult volunteer and see the Volunteer Screening page, then it has been 4 years since the last time a background check has been completed. You need to check over the answers to the questions and correct as needed. This page will only appear every 4 years. Click **Continue** when done.
- On the Participation ⇨ Club screen, confirm the correct club is listed. If you serve in a volunteer role (but not as a project leader) click on **Edit** and select the volunteer type. Click on **Update** to save the change. Click on **Continue** when done.
- On the Participation ⇨ Projects screen, confirm all the projects you are enrolled in are listed. The *Years in Project* will already have advanced. Add any missing projects. If you are dropping a project, click on **Edit** for that project and then click on **Delete**. After making sure all your projects are listed correctly, click on **Submit Enrollment**.

All past members and leaders not re-enrolled by the November 30, 2016 deadline will be archived. If someone is archived and they want to return to 4-H, we can retrieve the record at that time.

## RECOMMENDATIONS FOR ENROLLMENT IN PROJECTS

### WHAT WILL YOU BECOME AN EXPERT IN?

Make a list of the things you would like to do or 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 realize you do well, and that may influence what you will choose.

- 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.
- Finally, consider who will help you learn and grow in your project. This might be a club project leader, county-wide 4-H project committees, a friend, or a relative. If you need help finding a leader, please contact the Extension Office and we will assist you with locating possible leaders for the project/s that most interest you!

### **SPECIAL NOTES REGARDING CHOOSING PROJECTS/LITERATURE FOR ALL MEMBERS/LEADERS**

- If you want to change from one level of a project to another, say *Art 1* to *Art 2*, please add the new project [*Art 2*], put in the *Years in Project* currently shown in *Art 1*, and then delete *Art 1*. The only project that should be showing is *Art 2* in this example.
- If you want to be a Youth Leader in a project, keeping with the example above, choose *Art – Yth Ldr* as your project, then in *Volunteer Type*, choose *Youth Leader*. No project should have *Youth Leader* as a *Volunteer Type* unless the project is “\_\_\_\_\_ - *Yth Ldr*”. Your Youth Leader Years in Project are however long you have been an official Youth Leader in that project, not the years you've been in the project yourself (e.g. if you have been in the *Art* project for 6 years, and you are for the first time enrolling in *Art – Yth Ldr*, your years in project for *Art – Yth Ldr* would be “1”).
- Literature: Please remember that the only literature available in Columbia County is the literature listed in the 2016-2017 Columbia County 4-H Project Guide. To make it easier for your club leaders in collecting literature, please choose the literature that you wish to receive on 4HOnline **if they are listed in the current project guide**. If you want other materials not listed, please make sure your general leader is aware of that before project literature pick-up day. **(Your general leaders may have a paper form that they would prefer you complete for project literature. Please check with them before choosing literature online.)**

### **A couple more things...**

In order to complete the enrollment process, you will need to submit the following completed forms to your General Leader:

### ***2016-2017 Columbia County 4-H: Mandatory Family Information Form***

You can obtain this form from your general club leader or on-line at <http://columbia.uwex.edu/4-h-youth-development/4honline-enrollment-information/> (<http://columbia.uwex.edu/>, under 4-H Youth Development, 4-H Forms, 4-H Enrollment Forms). Turn the completed form in to your general club leader by the enrollment deadline (November 30, 2016) or when you have enrolled on 4HOnline as a new 4-H member or leader.

You will also need to pay your *4-H club dues*, if your club requires one. Check with your Club's General Leader for details about these fees or additional club-required paperwork. Your general leader will not approve your 4HOnline enrollment until your dues have been paid and forms handed in.

**Confused? Call the UW-Extension office at 608-742-9680. We'll try to help.**

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# Youth Leadership



## Youth Leadership I

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 II

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 III

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 Ldr

Resources: 4H395, *Youth Leadership Advisory Guide*  
07903, *Leadership Mentor Guide for Grades K-5*  
07904, *Leadership Mentor Guide for Grades 6-12*

Webpage: [4h.uwex.edu/onlinepro/leadership.cfm](http://4h.uwex.edu/onlinepro/leadership.cfm)

## Youth Leadership Yth Ldr

# Younger Members



## Cloverbuds

What you can do in this project:

- Learn about your 4-H club or group
- Learn about the 4-H program
- Learn about yourself and others
- Explore your community
- Begin developing different skills, e.g., working with others
- Sample a variety of projects offered in 4-H
- Discover areas of project interest

Grade: Kindergarten, 1<sup>st</sup> and 2<sup>nd</sup>

Resources: SHTS, *Cloverbud Activity Sheets*  
SHTS, *Cloverbuds Lego Project (optional)*

## CLOVERBUDS LDR

Resources: Activity Recommendations

Webpage: [4h.uwex.edu/onlinepro/cloverbuds.cfm](http://4h.uwex.edu/onlinepro/cloverbuds.cfm)

## CLOVERBUDS YTH LDR

## EXPLORING

What you can do in this project:

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

Grade: 3

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

## EXPLORING LDR

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

Webpage: [4h.uwex.edu/onlinepro/exploring.cfm](http://4h.uwex.edu/onlinepro/exploring.cfm)

# Citizenship & Service Learning



## CITIZENSHIP

What you can do in this project:

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

Grades: 4-12

Resource: 08153, *Citizenship Adventure Kit*

## CITIZENSHIP LDR

Resource: 08154, *Citizenship Guide's Handbook*

Webpage: [4h.uwex.edu/onlinepro/citizenship.cfm](http://4h.uwex.edu/onlinepro/citizenship.cfm)

## CITIZENSHIP YTH LDR

## 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*

## SERVICE LEARNING LDR

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

Webpage: [4h.uwex.edu/onlinepro/ServiceLearning.cfm](http://4h.uwex.edu/onlinepro/ServiceLearning.cfm)

## SERVICE LEARNING YTH LDR

# Self-Determined



## SELF~DETERMINED

What you can do in this project:

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

Grades: 3-13

Resource: 4H272, *Designing Your Own Project*

## SELF~DETERMINED LDR

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

## SELF~DETERMINED YTH LDR

# 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 4

## BEEF LDR

Resources: 08146, *Beef Helper's Guide*

117R, *Beef Resource Handbook*

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

## BEEF YTH LDR

## 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*

Online, *Cat Fitting & Showing*

[http://msue.anr.msu.edu/uploads/234/52171/Cat\\_Fitting\\_and\\_Showing\\_Manual.pdf](http://msue.anr.msu.edu/uploads/234/52171/Cat_Fitting_and_Showing_Manual.pdf)

## 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 LDR

Resource: 08151, *Cat Helper's Guide*

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

## CATS YTH LDR

## 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*

## 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*

## 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*

## DAIRY LDR

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

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

## DAIRY YTH LDR

## DOGS 1

What you can do in this project:

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

Grades: 3-5

Resources: 08166, *Wiggles and Wags*

Online, *The Basics of Training Your Dog*

<http://juneau.uwex.edu/files/2010/07/WI4HDogProj.pdf>

## 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
- Learn about show-ring ethics

Grades: 6-8

Resources: 08167, *Canine Connection*

Online, *Dog Obedience – Novice & Beyond*

<http://juneau.uwex.edu/files/2010/07/DogOb4H.pdf>

## 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*

Online, *A Guide to Showmanship*

<https://www.extension.purdue.edu/extmedia/4h/4-h-716-w.pdf>

## DOGS LDR

Resources: 08169, *Dog Helper's Guide*

Online, *4-H Dog Judging Guidelines*

[https://extension.unh.edu/resources/files/Resource002549\\_Rep3802.pdf](https://extension.unh.edu/resources/files/Resource002549_Rep3802.pdf)

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

## DOGS YTH LDR

## 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
- Feed your goat for maximum production
- Prepare for kidding
- Develop judging skills
- 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
- Understand bio-security and prevention measures
- Gain leadership and explore career opportunities

Grades: 9-12

Resource: 08354, *Showing the Way*

## DAIRY GOAT LDR

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

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

## DAIRY GOAT YTH LDR

## 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

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
- Evaluate goat pastures

Grades: 9-12  
Resource: 07911, *Meating the Future*

## MEAT GOAT LDR

Resource: 07912, *Meat Goat Helper's Guide*  
Webpage: [4h.uwex.edu/onlinpro/goats.cfm](http://4h.uwex.edu/onlinpro/goats.cfm)

## MEAT GOAT YTH LDR

### 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: 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: 6-8  
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: 9-12  
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: 3-7  
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
- Rate your showmanship skills
- Practice proper show ethics

Grades: 8-12  
Resource: 08057, *Jumping to New Heights*

## HORSE/HORSELESS HORSE LDR

Resources: 08058, *Horse Helper's Guide*  
Webpage: [4h.uwex.edu/onlinpro/horses.cfm](http://4h.uwex.edu/onlinpro/horses.cfm)

## HORSE/HORSELESS HORSE YTH LDR

### CLOTHES HORSE

What you can do in this project:

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

Grades: 3-12  
Resources: 4H374, *Additional Patterns for Clothes Horse*  
4H389, *Horse & Riding Attire*

### CLOTHES HORSE LDR

Resource: 4H360, *4-H Clothes Horse Activity Guide*  
Webpage: [4h.uwex.edu/onlinpro/horses.cfm](http://4h.uwex.edu/onlinpro/horses.cfm)

### CLOTHES HORSE YTH LDR

### DRAFT HORSE

What you can do in this project:

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

Grades: 6-8  
Resource: 4H181, *Draft Horse*

### HORSELESS HORSE 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

Grades: 3-5  
Resource: 08053, *Giddy Up & Go*  
4H266, *Horses are Fun-Horseless Horse*

### 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

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*

## 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

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

Grades: 6-8

Resource: 06360, *Scurrying Ahead*

## 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

Resource: 06361, *Scaling the Heights*

## PETS LDR

Resource: 06362, *Pet Helper's Guide*

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

## PETS YTH LDR

## 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*  
Online, *From Egg to Chick*

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

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
- Discover qualities of eggs
- Handle poultry products safely
- Process a chicken

Grades: 9-12

Resources: 06365, *Flocking Together*

## POULTRY LDR

Resource: 06366, *Poultry Helper's Guide*

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

## POULTRY YTH LDR

## 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 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: 3-12

Resource: 4H135, *Pigeons*

## POULTRY TURKEYS

What you can do in this project:

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

Grades: 3-12

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 Happening?*

## 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

Resource: 08082, *All Ears*

## RABBITS LDR

Resource: 08083, *Rabbit Helper's Guide*

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

## RABBITS YTH LDR

## SHEEP 1

What you can do in this project:

- Identify sheep breeds and body parts
- Observe sheep behavior
- Identify uses of wool and other by-products
- Fit and show sheep

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

Resources: 06368, *Shear Delight*

## 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 LDR

Resources: 06370, *Sheep Helper's Guide*

194R, *Sheep Resource Handbook*

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

## SHEEP YTH LDR

## 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: 3-5

Resources: 08065, *The Incredible Pig*

## SWINE 2

What you can do in this project:

- Make a swine health care plan
- Identify diseases
- Assemble tack and pack a show box
- Plan and organize a facility expansion
- Complete a plan for a new pork product

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 LDR

Resources: 08068, *Swine Helper's Guide*

134R, *Swine Resource Handbook*

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

## SWINE YTH LDR

## 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: 3-5

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

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 LDR

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

4H323, *The Normal Animal - Leader's Guide*

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

## VETERINARY SCIENCE YTH LDR

# 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 LDR

Resources: 08159, *Communications Helper's Guide*

COMM04, *Voices From the Past*

COMM05, *It's All in the Family*

COMM07, *Communication Activities for 4-H Clubs*

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

## COMMUNICATIONS YTH LDR

## 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: Online, *Creative Wordworking*

Online, *Crazy About Books Reading Circle*

Resource: <http://fyi.uwex.edu/wi4hprojects/arts-communication/communications/>

## CREATIVE WRITING LDR

## CREATIVE WRITING YTH LDR

## 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: Online, *Public Speaking... 4-H Style*

[http://texas4-h.tamu.edu/wp-content/uploads/2015/09/publications\\_public\\_speaking\\_4h\\_style.pdf](http://texas4-h.tamu.edu/wp-content/uploads/2015/09/publications_public_speaking_4h_style.pdf)

Online, *A Guide to Making Great*

*4-h Speeches*

<http://4h.unl.edu/documents/guidetomakinggreatspeeches.pdf>

## SPEAKING LDR

## SPEAKING YTH LDR

# 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: Online, *Enter the Clowns*

<http://fyi.uwex.edu/wi4hpublications/files/2015/10/4H265spf.pdf>

## CLOWNING LDR

## CLOWNING YTH LDR



## MUSIC

What you can do in this project:

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

Grades: 3-12

Resource: <http://fyi.uwex.edu/wi4hprojects/arts-communication/music/>

## MUSIC LDR

Resource: 4H351, *Sing Along Songbook*

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

## MUSIC YTH LDR

## 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 Book 1 - Beginner*

## 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 Book 2 - Intermediate*

## 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 Book 3 - Advanced*

## THEATRE ARTS LDR

Resource: 08073, *Theatre Arts Group Activity Guide*

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

## THEATRE ARTS YTH LDR

## 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

## 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

## ART LDR

Resource: 08141, *Arts & Crafts a Palette of Fun*

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

## ART YTH LDR

## BLOCK PRINTING

What you can do in this project:

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

Grades: 5-12

Resource: 4H156, *Block Printing Member Guide*

## BLOCK PRINTING LDR

Resource: CIR008, *Block Printing Leader Guide*

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

## BLOCK PRINTING YTH LDR

## DRAWING & PAINTING

What you can do in this project:

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

Grades: 3-12

Resource: Online, *Drawing & Painting*

<http://fyi.uwex.edu/wi4hpublications/files/2015/10/4H169.pdf>

## DRAWING & PAINTING LDR

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

## DRAWING & PAINTING YTH LDR

## LEATHERCRAFT

What you can do in this project:

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

Grades: 3-12

Resource: 4H149, *Adventures in Leathercraft Member's Guide*

## LEATHERCRAFT LDR

Resource: CIR006, *Adventures in Leathercraft Leader's Guide*



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

## LEATHERCRAFT YTH LDR

### METAL ENAMELING

What you can do in this project:

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

Grades: 5-12

Resource: Online, *Metal Enameling Member's Guide*

<http://fyi.uwex.edu/wi4hpublications/files/2015/10/4H158.pdf>

### METAL ENAMELING LDR

Resource: Online, *Metal Enameling Leader's Guide*

Webpage: <http://fyi.uwex.edu/wi4hpublications/files/2015/10/CIR009a.pdf>

## METAL ENAMELING YTH LDR

### 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, candids, 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 LDR

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

## PHOTOGRAPHY YTH LDR

### POSTERS

Grades: 3-12

Resource: Online, <http://aces.nmsu.edu/4h/documents/making204-h20posters.pdf>

### POSTERS LDR

## POSTERS YTH LDR

### FILMMAKING

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: Online, <http://4-h.org/parents/curriculum/filmmaking/>

## 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, *Growing 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 LDR

Resource: 08078, *Growing All Together*

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

## CHILD DEVELOPMENT YTH LDR

### 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 LDR

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

## HOME ENVIRONMENT YTH LDR

## 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 LDR

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

## HEALTH YTH LDR

# 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 LDR

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

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

## CONSUMER SAVVY YTH LDR

## ENTREPRENEURSHIP

What you can do in this project:

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

Grades: 7-12

Resource: 08035, *Entrepreneurship: Be the E*

## ENTREPRENEURSHIP LDR

Resource: 08036, *Entrepreneurship Helper's Guide*

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

## ENTREPRENEURSHIP YTH LDR

## PERSONAL FINANCE 1

What you can do in this project:

- 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:

- 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: 9-12

Resource: 07711, *Money Moves*

## PERSONAL FINANCE LDR

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

Webpage: [4h.uwex.edu/onlinepro/finance.cfm](http://4h.uwex.edu/onlinepro/finance.cfm)

## PERSONAL FINANCE YTH LDR

## WORKFORCE READINESS

What you can do in this project:

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

Grades: 6-9

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

## WORKFORCE READINESS LDR

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

Webpage: [4h.uwex.edu/onlinepro/workforce.cfm](http://4h.uwex.edu/onlinepro/workforce.cfm)

## WORKFORCE READINESS YTH LDR

# Foods and Nutrition

## BREADS

Resource: FY, *Rising to the Occasion*

## BREADS LDR

## BREADS YTH LDR

## CAKE DECORATING 1

Beginners Years 1 & 2 of the project

Resources: 902-1232, *Wilton Cake Decorating Beginner's Guide*

- *Decorating Cakes: A Reference*
- *Wilton Cupcakes*
- *Celebrate! With Fondant*

## CAKE DECORATING 2

Intermediate Years 3 and 4 of the project

## CAKE DECORATING 3

Advanced

Years 5 and above of the project

## CAKE DECORATING LDR

## CAKE DECORATING YTH LDR

## FOOD PRESERVATION 1

What you can do in this project:

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

Grades: 6-12

Resources: B0430, *Canning Fruits Safely*

B1159, *Canning Vegetables Safely*

B2909, *Making Jams, Jellies & Fruit Preserves*

B3278, *Freezing Fruits & Vegetables*

## FOOD PRESERVATION 2

What can I do in this project:

- Continue learning food preservation techniques
- Use UW-Extension Safe Food Preservation Series

Grades: 6-12

Resources: B2267, *Homemade Pickles & Relishes*

B2605, *Tomatoes Tart & Tasty*

B3345, *Canning Meat, Wild Game, Poultry & Fish*

B3570, *Canning Salsa Safely*

## FOOD PRESERVATION LDR

Webpage: [4h.uwex.edu/onlinepro/foodsnutrition.cfm](http://4h.uwex.edu/onlinepro/foodsnutrition.cfm)

## FOOD PRESERVATION YTH LDR

## FOODS & NUTRITION 1

What you can do in this project:

- Among other topics, youth learn how to use MyPlate, avoid spreading germs while cooking, measure and mix ingredients, test baked goods for doneness, brown meat, and set the table for a family meal

Grades: 3-4

Resource: 01512Y, 4-H *Cooking 101*

## FOODS & NUTRITION 2

What you can do in this project:

- Topics include understanding and preventing foodborne illnesses, thawing frozen foods, proper knife techniques, how to read Nutrition Facts labels, and how to make soups, rice, pasta, and other foods.

Grades: 5-6

Resource: 0513Y, 4-H *Cooking 201*

## FOODS & NUTRITION 3

What you can do in this project:

- Practice making bread, grilling meats and vegetables
- Youth learn about yeast, gluten, and different types of fats

Grades: 7-9

Resource: 01514Y, 4-H *Cooking 301*



## FOODS & NUTRITION 4

What you can do in this project:

- Learn about herbs and spices
- Learn how to make ethnic foods
- Practice making cakes, candy, pastries, and pies.

Grades: 10-12

Resource: 01515Y, 4-H *Cooking 401*

## FOODS & NUTRITION LDR

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

Webpage: [4h.uwex.edu/onlinepro/foodsnutrition.cfm](http://4h.uwex.edu/onlinepro/foodsnutrition.cfm)

## FOODS & NUTRITION YTH LDR

# 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
- Sort clothes for laundry and remove stains
- Donate a sewing project

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

Grades: 9-12

Resource: 08062, *Refine Design*

## CLOTHING LDR

Resource: 08063, *Sewing Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/clothing.cfm](http://4h.uwex.edu/onlinepro/clothing.cfm)

## CLOTHING YTH LDR

## CROCHETING

What you can do in this project:

- Learn to select and purchase yarn, thread and equipment
- Explore crocheting and finishing techniques

- Understand care instructions for crocheted items

Grades: 3-12

Resource: CC1403, *Crochet Made Easy*

## CROCHETING LDR

Webpage: [4h.uwex.edu/onlinepro/crocheting.cfm](http://4h.uwex.edu/onlinepro/crocheting.cfm)

## CROCHETING YTH LDR

## KNITTING

What you can do in this project:

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

Grades: 3-12

Resource: CC1402, *Knitting Made Easy*

## KNITTING LDR

Webpage: [4h.uwex.edu/onlinepro/knitting.cfm](http://4h.uwex.edu/onlinepro/knitting.cfm)

## KNITTING YTH LDR

## QUILTING

Resources: Online, <http://www2.ca.uky.edu/agcomm/pubs/4jf/4jf12pa/4jf12pa.pdf>

## QUILTING LDR

## QUILTING YTH LDR

# Mechanical Sciences

## BICYCLES – ENGR AND 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*

## BICYCLES – ENGR AND 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

Resource: 08335, *Wheels in Motion*

## BICYCLES – ENGR AND TECH LDR

Resources: 08336, *Bicycle Helper's Guide*

08399, *Bicycle Fix It! (Video)*

Webpage: [4h.uwex.edu/onlinepro/bicycling.cfm](http://4h.uwex.edu/onlinepro/bicycling.cfm)

## BICYCLES – ENGR AND TECH YTH LDR





## 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*

## 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*

## 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*

## COMPUTERS LDR

Resource: 08349, *Teens Teaching Tech*

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

## COMPUTERS YTH LDR

## 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 LDR

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

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

## ELECTRICITY YTH LDR

## SCALE MODELS

What you can do in this project:

- Assemble and create scale models of trains, cars, etc.
- Learn how to obtain materials you need in construction
- Learn to display your model and judge it

Grades: 3-12

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

## SCALE MODELS LDR

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

## SCALE MODELS YTH LDR

## 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 LDR

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

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

## SMALL ENGINES YTH LDR

## 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 and 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 and Equipment*

## TRACTORS LDR

Webpage: [4h.uwex.edu/onlinepro/tractors.cfm](http://4h.uwex.edu/onlinepro/tractors.cfm)

## TRACTORS YTH LDR

## 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 LDR

Resource: 06879, *Woodworking Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/wood.cfm](http://4h.uwex.edu/onlinepro/wood.cfm)

## WOODWORKING YTH LDR

# 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 LDR

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

Webpage: [4h.uwex.edu/onlinepro/adventures.cfm](http://4h.uwex.edu/onlinepro/adventures.cfm)

## ADVENTURES YTH LDR

## 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 LDR

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

Webpage: [4h.uwex.edu/onlinepro/backpacking.cfm](http://4h.uwex.edu/onlinepro/backpacking.cfm)

## BACKPACKING & HIKING YTH LDR

## BIRDS

Resource: 4H340, *Getting to Know Birds*

## CANOEING

What you can do in this project:

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

Grades: 3-12

Resource: 4H447, *Canoeing*

Webpage: [4h.uwex.edu/onlinepro/canoeing.cfm](http://4h.uwex.edu/onlinepro/canoeing.cfm)

## 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, *Creepy Crawlies*

## 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, *What's Bugging You?*

## 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, *Dragons, Houses, & Other Flies*

## ENTOMOLOGY (INSECTS) LDR

Resource: 06856, *Entomology Group Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/entomology.cfm](http://4h.uwex.edu/onlinepro/entomology.cfm)

## ENTOMOLOGY (INSECTS) YTH LDR

## 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 3

What you can do in this project:

- 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: 11-12

Resource: 08410, *Ecosystems Services*

## EXPLORING YOUR ENVIRONMENT LDR

Resources: 08412, *Exploring Your Envir. Facilitator Guide*

4H335, *Naturespace Guide*

Webpage: [4h.uwex.edu/onlinepro/environment.cfm](http://4h.uwex.edu/onlinepro/environment.cfm)

## EXPLORING YOUR ENVIRONMENT YTH LDR

## 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 LDR

Resource: 07601, Fishing Adventures - Helper's Guide

Webpage: [www.uwex.edu/ces/4h/onlinepro/fishing.cfm](http://www.uwex.edu/ces/4h/onlinepro/fishing.cfm)

## FISHING YTH LDR

## 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

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
- Diagram a leaf
- 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
- Identify an unknown tree using a tree key

Grades: 9-12

Resource: 08040, *Explore the Deep Woods*

## FORESTRY LDR

Resource: 08041, *Forestry Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/forestry.cfm](http://4h.uwex.edu/onlinepro/forestry.cfm)

## FORESTRY YTH LDR

## RECYCLING

What you can do in this project:

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

Grades: 3-12

Resource: 4H362, *Recycling for Reuse*

## RECYCLING LDR

Webpage: [4h.uwex.edu/onlinepro/recycling.cfm](http://4h.uwex.edu/onlinepro/recycling.cfm)

## RECYCLING YTH LDR

## WILDFLOWERS

What you can do in this project:

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

Grades: 3-12

Resource: 4H392, *Wildflowers*

Webpage: [4h.uwex.edu/onlinepro/wildflowers.cfm](http://4h.uwex.edu/onlinepro/wildflowers.cfm)

## 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: [4h.uwex.edu/onlinepro/wintertravel.cfm](http://4h.uwex.edu/onlinepro/wintertravel.cfm)

# Shooting Sports Education



## SHOOTING SPORTS LDR

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

Webpage: [4h.uwex.edu/onlinepro/shooting/index.cfm](http://4h.uwex.edu/onlinepro/shooting/index.cfm)

## SHOOTING SPORTS YTH LDR

## AIR PISTOL

What you can do in this project:

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

Grades: 3-12

## AIR PISTOL LDR

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

Webpage: [4h.uwex.edu/onlinepro/shooting/index.cfm](http://4h.uwex.edu/onlinepro/shooting/index.cfm)

## AIR PISTOL YTH LDR

### AIR RIFLE

What you can do in this project:

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

Grades: 3-12

### AIR RIFLE LDR

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: [4h.uwex.edu/onlinpro/shooting/index.cfm](http://4h.uwex.edu/onlinpro/shooting/index.cfm)

## AIR RIFLE YTH LDR

### 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

### ARCHERY LDR

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

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

## ARCHERY YTH LDR

### HUNTING

What you can do in this project:

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

Grades: 3-12

## HUNTING LDR

## HUNTING YTH LDR

### MUZZLELOADING

What you can do in this project:

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

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

## MUZZLELOADING LDR

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 webpage.

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

## MUZZLELOADING YTH LDR

### 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

### PISTOL LDR (smallbore .22)

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

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

### PISTOL YTH LDR (smallbore .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

### RIFLE LDR

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

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

## RIFLE YTH LDR

### 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

### SHOTGUN LDR

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

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

## SHOTGUN YTH LDR

# **Plant & Soil Sciences**

## CROPS LDR

## CROPS YTH LDR



## CORN (CROPS 1)

What you can do in this project:

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

Grades: 3-12

Resources: 4H355, *4-H Corn Project Manual*

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

## FORAGE (CROPS 2)

What you can do in this project:

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

Grades: 3-12

Resources: 4H349, *Pest Scouting Alfalfa*

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

## SMALL GRAINS (CROPS 3)

What you can do in this project:

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

Grades: 3-12

Resources: 4H356, *4-H Small Grains Manual*

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

## 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

Grades: 3-5

Resources: 07162, *Gardening: See Them Sprout*  
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

Grades: 6-8

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*

## FLOWERS LDR

Resource: 07166, *Gardening Helper's Guide*

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

## FLOWERS YTH LDR

## 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: Online, *Growing Strawberries in Wisconsin*

Online, *Growing Raspberries in Wisconsin*

Online, *Growing Currants, Gooseberries, &*

*Elderberries in Wisconsin*

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

## FRUITS 2

What can I do in this project:

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

Resources: Online, *Growing Grapes in Wisconsin*

Online, *Growing Pears in Wisconsin*

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

## FRUITS LDR

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

## FRUITS YTH LDR

## 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: Online, *Selecting, Planting & Caring for Shade Trees*  
Online, *Evergreens – Planting & Care*  
<http://fyi.uwex.edu/wi4hprojects/plant-soil-sciences/home-grounds/>

## 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 LDR

Webpage: [4h.uwex.edu/onlinepro/homegrounds.cfm](http://4h.uwex.edu/onlinepro/homegrounds.cfm)

## HOME GROUNDS YTH LDR

## 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 and 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: BU7154, *Branching Out*

## 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

Grades: 9-12

Resource: BU7155, *Digging Deeper*

## HOUSE PLANTS LDR

Resource: 07166, *Gardening Helper's Guide*

Webpage: [4h.uwex.edu/onlinepro/houseplants.cfm](http://4h.uwex.edu/onlinepro/houseplants.cfm)

## HOUSE PLANTS YTH LDR

## 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 LDR

Webpage: [4h.uwex.edu/onlinepro/plantcrafts.cfm](http://4h.uwex.edu/onlinepro/plantcrafts.cfm)

## PLANT CRAFTS YTH LDR

## 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

Grades: 3-5

Resources: 07162, *Gardening: See Them Sprout*

## 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

Grades: 6-8

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*

## VEGETABLES LDR

Resource: 07166, *Gardening Helper's Guide*

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

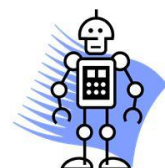
## VEGETABLES YTH LDR

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

## 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 fly
- Organize 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*

## AEROSPACE LDR

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

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

## AEROSPACE YTH LDR

## 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*  
("Getting Out" section)

## GEOSPATIAL 2

What you can do in this project:

- Learn how to collect data
- Combine data with geographical positions
- Make maps of home, neighborhood and community

Grades: 4-12

Resource: CD8358, *Exploring Spaces, Going Places CD*  
("On the Trail" section)

## GEOSPATIAL 3

What you can do in this project:

- Use multi-layered maps to attempt to solve problems
- Find ways to reduce traffic congestion
- Pinpoint pollution sources

Grades: 4-12

Resource: CD8358, *Exploring Spaces, Going Places CD*  
("Reaching Your Destination" section)

## GEOSPATIAL LDR

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

## GEOSPATIAL YTH LDR

## 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

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

08435, *4-H Youth Robotics Notebook*

08430, *Virtual Robotics Track DVD*

## 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

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

08435, *4-H Youth Robotics Notebook*

08430, *Virtual Robotics Track DVD*

## 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 Youth Robotics Notebook*

08430, *Virtual Robotics Track DVD*

## ROBOTICS LDR

Resources: 08434, *Robotics Platforms Track DVD*

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

NOTE: Robotics literature is **not** specific to NXT  
Robots used in robotics classes.

## ROBOTICS YTH LDR



# **INTERNATIONAL** **PROGRAMS**



## **INTERNATIONAL**

What you can do in this project:

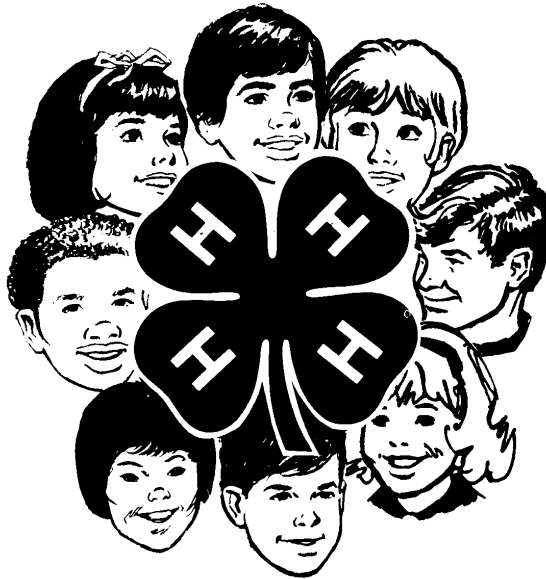
- Explore the world around you through maps
- Track weather in various parts of the world
- Make your family tree by talking with relatives
- Explore where your ancestors came from

Grades: 3-12

## **INTERNATIONAL LDR**

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

## **INTERNATIONAL YTH LDR**





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