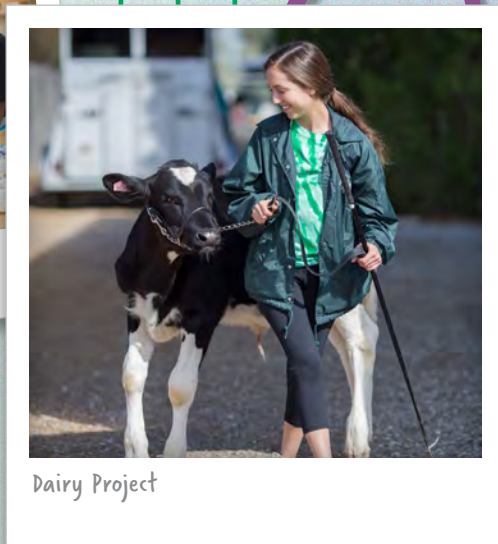


**WISCONSIN 4H**

# PROJECT GUIDE

**QUICK VERSION**



**Extension**  
UNIVERSITY OF WISCONSIN-MADISON

# Contents

This guide gives youth and families a chance to explore all the projects Wisconsin 4-H has to offer in seven project groupings:

<b>Expressive Arts</b> PAGE 6	<b>Leadership and Community</b> PAGE 7	<b>Family, Home, and Health</b> PAGE 8	<b>Agriculture and Animal Science</b> PAGE 9
<b>Plant and Soil Science</b> PAGE 10	<b>Environmental/ Outdoor Education</b> PAGE 11	<b>Science, Technology, Engineering, and Math (STEM)</b> Page 12	

## What Is 4-H?

4-H is the nation's largest youth development and empowerment organization.

In Wisconsin, more than 26,000 youth are members of 4-H. The 4-H programming aims to engage youth in activities to increase their leadership, communication, and critical thinking skills. Our programs center on the 4-Hs—head, heart, hands, and health. This is the foundation for everything we do.

Wisconsin 4-H has over 5,600 volunteers who serve as mentors for 4-H youth. They help provide a safe, engaging place for youth to take risks, practice independence, and master new skills. Research shows there are many benefits to being involved in 4-H. 4-H youth are<sup>1</sup>:



**4X**

more likely to make contributions to their communities

**2X**

more likely to be civically active

**2X**

more likely to participate in out-of-school programs

**2X**

more likely to make healthier choices

## What Is a 4-H Project?

A 4-H project is a specific area of interest for 4-H members and volunteers. Youth choose which project(s) they want to enroll in each year. In 4-H, we believe in "learning by doing." That means project participation involves hands-on learning in the activities that spark youth interest.

### Project Area Learning Opportunities

Youth may explore a project independently, or several members interested in the same subject or topic can form a project group. Some, but not all, projects have volunteers to lead youth groups in hands-on learning. Check the county 4-H website or contact the 4-H educator to find out what options are available.

- **Club Project Meetings**—Volunteer club project leaders and/or youth leaders may organize project activities during club meetings.
- **County-wide Project Meetings**—County-wide education committee volunteers and/or 4-H program educators may organize educational opportunities at a county level.
- **Statewide Project Area Learning Events**—Statewide education committee volunteers and/or 4-H program educators may organize project learning opportunities for youth across the state.
- **Individual Learning**—Youth can learn at their own pace using 4-H curriculum.

<sup>1</sup> Lerner, R. M., et. al. (2005). *4-H Study of Positive Youth Development*. Retrieved from: [4-H.org/about/research](http://4-H.org/about/research). Graphic from [National 4-H Council FY 2019–2021 Strategic Plan](#).

## Self-Determined Projects

Self-determined projects are your chance to explore beyond what 4-H usually offers! If you look at all the projects listed in this guide and still don't see your Spark, you can choose a self-determined project. Make sure to plan what you want to do in the project. Be specific and write down your goals.

This project area is available in each of the project groupings. It is most suitable for older youth ready for more self-paced, self-guided learning.

## How to Get Started

**Getting involved in 4-H is as easy as 1-2-3!**

1. **Join a 4-H Club**—Visit your [county's Extension website](#) to learn more about 4-H clubs. You can join any time of year.
2. **Create a 4-H Online account**—Youth can enroll in Wisconsin 4-H through 4-H Online. Re-enrollment is required each year.
3. **Choose your project areas**—Project areas are specific areas of interest for 4-H members and volunteers. Youth may explore a project on their own, or several members interested in the same subject or topic can form a project group. Sign up for the project areas you want in your 4-H Online enrollment.

### QUICK LINKS



**Find your county Extension website:**  
[counties.extension.wisc.edu](http://counties.extension.wisc.edu)



**4-H Online:**  
[wi.4honline.com](http://wi.4honline.com)

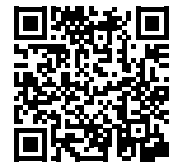
### Tips for choosing a project area

- To narrow down the project list, think about:
  - ✓ Things you are passionate about
  - ✓ Causes that matter to you
  - ✓ Emotions you appreciate about yourself
  - ✓ People, places, or things that matter most to you
- Then, choose the projects you want. Consider starting with two project areas:
  - ✓ One you are already familiar with and interested in
  - ✓ One you want to explore more
- Youth in grades 5K-2 may only sign up for the Cloverbud project, which is a chance for them to explore all 4-H has to offer at an age-appropriate level.
- The [Sparks Road Map](#) can help if you are unsure where to start.
- Check with your county Extension office to learn if there is a fair deadline for project sign-ups.



### Looking for project resources?

Visit [projects.wi4h.org](http://projects.wi4h.org) for more information.



### Looking for learning opportunities?

Visit [opportunities.wi4h.org](http://opportunities.wi4h.org) for statewide events and opportunities.



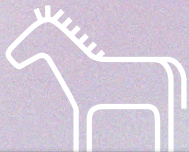
**VOLUNTEERS** are essential to 4-H project area learning. Adult family members, community members, and local experts can all become 4-H Project Leaders. If you or someone you know is interested in learning more, connect with your local 4-H program educator.



# Find Your 4-H SPARK Project Area

**START HERE!**

Follow the arrows to explore your project options with 4-H.



**Do you enjoy working with animals?**

**YES**



You may want to explore **AG & ANIMAL SCIENCE**

Youth in **Ag & Animal Science** enjoy things like raising healthy animals for fun or food, riding horses, caring for pets, or teaching their dog tricks.

**YES**

**Do you love spending time outside?**

**NO**



You may want to explore **ENVIRONMENTAL/ OUTDOOR EDUCATION**

Youth in this project area enjoy things like riding ATVs and snowmobiles, learning about insects, hiking, adventure sports, and protecting the environment.

**YES**

**NO**

**Do you love spending time outside?**

**YES**



You may want to explore **PLANT & SOIL SCIENCE**

Youth in **Plant & Soil Science** enjoy things like growing vegetables or flowers, growing crops, learning about soil, or creating a fairy garden.

**Do you enjoy creating delicious food, decorating your room, or working with younger children?**

**What do you like to do indoors?**



NO

Do you enjoy exploring new technologies, creating experiments, and discovering the basics of programming?



Visit [projects.wi4h.org](https://projects.wi4h.org) for more information on each project category.

YES



You may want to explore **FAMILY, HOME, & HEALTH**

Youth in **Family, Home, & Health** enjoy learning about things like babysitting, interior decorating, sewing, helping around the house, being healthy, and cooking or baking.

NO

YES



You may want to explore **STEM**

Youth in **STEM** (science, technology, engineering, and math) enjoy things like building with LEGO®, problem solving, working with engines or electricity, exploring outer space, coding, robots, and building things.

Do you like to spend time making plans, helping run events, and completing projects?

YES



You may want to explore **LEADERSHIP & COMMUNITY**

Youth in **Leadership & Community** enjoy things like helping younger kids, being camp counselors, leading and organizing events, exploring culture (their own and others'), and working with a team on special projects.

NO



You may want to explore **EXPRESSIVE ARTS**

Youth in **Expressive Arts** enjoy making scrapbooks, collecting things, drawing or doing crafts, taking pictures, playing with puppets, or acting and singing.

# Expressive Arts



Art Appreciation • Computer Graphic Design • Creative Writing • Fiber & Textile Arts  
Folk Arts & Crafts • Performing Arts • Photography • Upcycling • Videography • Visual Arts

## Art Appreciation

Art is everywhere! In this project, youth will discover various art forms, grow their understanding of historical and cultural contexts, and develop their own creative expressions. Cultivate your creativity, critical thinking, and cultural awareness.

## Fiber & Textile Arts

Youth will explore fiber art techniques, including weaving, knitting, crocheting, felting, and embroidery. This project will help them develop fine motor skills, creativity, and an appreciation for the diversity of fiber arts.

## Folk Arts & Crafts

Youth will explore various folk arts, learn traditional techniques, and understand their cultural significance. This project will help youth develop artistic skills, cultural awareness, and an appreciation for the rich heritage of folk arts.

## Performing Arts

The Performing Arts begin with imagination and creativity. Delve into the dynamic and expressive world of performing arts. Participants will learn various performance techniques, understand the cultural significance behind different performance styles, and create their own performances.

## Visual Arts

Is art your Spark? Cutting and pasting, painting, sculpting, drawing, printing, and construction with various materials are all exciting hands-on activities in the Visual Arts project. With art, you can share your thoughts, explore your emotions, find a career, or change the world.

## Creative Writing

This Creative Writing project inspires and nurtures the storytelling abilities of 4-H youth. Participants will explore various forms of creative writing, including short stories, poetry, and personal narratives. The project aims to enhance writing skills, boost confidence, and encourage self-expression.

## Photography

The 4-H Photography project helps youth explore the world through the lens of a camera. Learn about equipment, capturing great images, and sharing your knowledge with others.

## Computer Graphic Design

The Computer Graphic Design project introduces 4-H youth to the exciting world of digital art and design. Participants will learn to use graphic design software, develop their artistic skills, and create visually appealing projects.

## Upcycling

The Upcycling project teaches 4-H youth the importance of sustainability and creativity by transforming old or discarded items into new, useful products. Participants will learn various upcycling techniques, develop their crafting skills, explore the business of upcycled products, and contribute to environmental conservation.

## Videography

Videos are part of our daily lives. Learning to make videos teaches media literacy—the ability to fully understand media messages that come at us daily. Videography is art, communications, and technology all at once.

### EXPRESSIVE ARTS

#### Learning Opportunities

- Go to [Art Beat!](#) or [Arts Camp](#).
- Take part in workshops at a local 4-H learning event.
- Join a state arts team—State 4-H Arts Team, Communications, Media, and Marketing (COMM) Team, or Drama Company.
- Submit entries to the statewide Photography Contest.
- Attend a community art or craft workshop.

#### Looking for project resources?

Visit [projects.wi4h.org](https://projects.wi4h.org) for more information.



#### Looking for learning opportunities?

Visit [opportunities.wi4h.org](https://opportunities.wi4h.org) for statewide events and opportunities.



# Leadership and Community

Civic Engagement • Cloverbud • Cloverbud Youth Leader • Communications • Community Service Exploring • Global & Cultural Education • History & Heritage • Intergenerational • Leadership • Workforce Readiness



## Civic Engagement

Discover what is important to you and others, set goals, take action, and build a stronger community. Through this project, you can become an active community member, investigate a public issue, learn about the roles of governing officials, and carry out a plan to solve a problem.

## Cloverbud

Cloverbud project activities involve youth in grades 5K–2 in learning at an age-appropriate level while having fun with hands-on, engaging activities. It's their chance to explore what 4-H has to offer.

## Cloverbud Youth Leader

Become a Cloverbud Youth Leader and practice youth leadership skills like teamwork, communication, decision-making, and caring. The Cloverbud project is for youth in grades 5K–2. It is their chance to learn what 4-H has to offer. Youth leaders can help create a welcoming environment and lead activities.

## Communications

Communication is all about how we connect with others. That might be through listening, sharing information, telling stories, or giving a speech, American Sign Language (ASL) and other languages, giving a presentation or demonstration, writing, or body language.

## Community Service

In 4-H, we pledge our "hands to larger service." Community service is an essential part of 4-H clubs and groups. Service learning goes deeper by bringing together community needs, knowledge, and time to reflect. Youth

may choose community service as their project focus, or it could be an activity they help with in other club or project spaces.

## Exploring

This project is designed for first-year members of any age to learn about the many 4-H project areas or as a stepping stone from Cloverbud to other projects. Explorers complete a mini-project, learn about your club, and involve your family and friends in 4-H.

## Global & Cultural Education

Lessons on global citizenship are as close by as your local grocery store, library, highway, or school. In this project, you'll gain self-awareness, explore the beliefs and views of others, and develop skills for talking with people who are different from yourself.

## History & Heritage

Finding out about family history can be like going on a treasure hunt. Heritage is the history of a family, including the traditions, customs, foods, and more passed from one generation to the next.

## Intergenerational

Do you know someone from another generation? Who are they? What do they care about? The Intergenerational project is your chance to connect with an older adult and make a difference in their life while they make a difference in yours.

## Leadership

Youth of any age can learn to be leaders—in their club, community, country, and world. In this project, you can build teamwork, communication,

organization, goal management, meeting management, decision-making, and problem-solving skills.

## Workforce Readiness

In these changing times, youth must prepare for careers and jobs that don't currently exist. Young people will need well-rounded skills to apply to any career and a willingness to learn about and try exciting new careers. This project will help equip youth with the soft skills to apply and interview for their first job during and after high school.

### LEADERSHIP AND COMMUNITY

#### Learning Opportunities

- Take part in a 4-H camp as a participant or youth leader.
- Go to project workshops to try something new.
- Plan and conduct a local community service project with help from your 4-H club or group members.
- Take part in state and national leadership conferences such as [Youth as Partners in Civic Leadership](#), [Summer Academy](#), [Citizenship Washington Focus](#), [National 4-H Conference](#), or [National 4-H Congress](#).
- Join the [4-H COMM Team](#).
- Become a youth leader in a club or project. Teach others about something you know.
- Participate in statewide 4-H youth leadership through [Fall Forum](#), [Wisconsin 4-H Leadership Council](#), or [Collegiate 4-H](#).
- Interview an adult about their career, community, or life.

# Family, Home, and Health

Candy Making • Child Development • Consumer Savvy • Entrepreneurship • Food Decorating  
Food Preservation • Foods & Nutrition • Health • Home Environment • Personal Finance • Sewing • Sports & Fitness



## Candy Making

Youth in the 4-H Candy Making project will explore tools, techniques, safety precautions, ingredients, and more as they develop their skills. Based on specific skills, candy making is a chance to bring art and science into the kitchen!

## Child Development

Learn about children's ages and stages, age-appropriate toys, healthy snacks, and how to create games or stories for children. Learn what it means to be responsible for children and how to be a good babysitter.

## Consumer Savvy

Mastering consumer skills will help you succeed in many areas of life. Set personal goals, communicate clearly, and make smart decisions with money.

## Entrepreneurship

Investigate what it means to be an entrepreneur by learning about community businesses, exploring business ideas, and determining your skills to make career choices.

## Food Decorating

Creativity can be a piece of cake (or bread or other food)! This project teaches youth how to start making food for parties and events. It may start with knowing and practicing cake decorating skills and advance to creating beautiful works of food art. The only limits are ingredients and imagination!

## Food Preservation

Does your garden produce more tomatoes than you know what to do with? In the Food Preservation project, youth learn to freeze and dry foods. Then, learn what to do with those tomatoes, cucumbers, and other produce with advanced food preservation techniques.

## Foods & Nutrition

If you enjoy cooking or like good food, this project could be for you. Youth will have fun learning cooking basics and then advance over time to making gourmet meals. This project also focuses on nutrition and using MyPlate to guide eating, meal preparation, and planning.

## Health

The Health project helps youth explore health and wellness. Youth learn to assemble a first aid kit and treat minor injuries. They also learn to stay healthy and develop a personal fitness plan that includes physical, mental, emotional, social, and other aspects of health.

## Home Environment

Get creative with design, organization, and upcycling! Youth use decision-making skills, great taste, and big heart to make a difference through fun and meaningful activities that improve your room, home, and community.

## Personal Finance

Master money management skills! Learn how to save, budget, and make smart financial choices. Get ready to take control of your finances and build a bright future!

## Sewing

Have you ever wanted an outfit in a different color or style? Youth in the Sewing project learn basics like sewing a shirt or putting a zipper on a pair of pants. As youth advance, they may learn to choose and customize a design for the perfect look.

## Sports & Fitness

4-H members in this project will boost their sports skills and fitness! Learn fun ways to build flexibility, strength, and endurance while staying active and healthy. Let's get moving together!

### FAMILY, HOME, AND HEALTH Learning Opportunities

- Go to a workshop about your project area.
- Enter your project work in a county-wide event like Fashion Revue, Foods Revue, or the county fair (opportunities vary in each county).
- Interview a professional in a career you are interested in.
- Keep a journal about what you are learning and practicing in your project.
- Visit a local business related to your project.
- Volunteer with a local organization related to your project (e.g., community garden, food pantry, thrift store, or childcare center).
- Create a business plan to sell something you have created.

# Agriculture and Animal Science

Beef • Cats • Cavies • Dairy • Dogs • Exotic Animals • Goats • Horse  
Llamas/Alpacas • Pocket Pets • Poultry • Rabbits • Sheep • Swine • Veterinary Science



## Beef

The 4-H Beef project allows you to learn about breeds, selection, grooming, production, management, showmanship, marketing, and careers through a breeding or market animal.

## Cats

Cats can be wonderful companions to individuals and families. The 4-H Cat project helps you explore what kind of cat fits your family's lifestyle. Then, you'll learn about nutrition, health needs, and how to be a responsible owner.

## Cavies

Did you know that a cavy is what we commonly know as a guinea pig? In the 4-H Cavy project, you can learn about selecting and raising your animals.

## Dairy

The 4-H Dairy project teaches you about breeds, selection, grooming, production, management, showmanship, marketing, and careers through a dairy animal.

## Dogs

The Dog project will help you explore what kind of dog fits into your family's lifestyle and how to be an excellent trainer and caretaker of your dog. You will learn about dog breeds, dog ownership, and dog care and management, such as feeding, handling, record-keeping, grooming, and fitting.

## Exotic Animals

In the Exotic Animals project, you will explore what kinds of animals fit your family's lifestyle. Some examples include ostriches, emus, zebras, or zedonks.

## Goats

Do you want to be part of the country's fastest-growing livestock and dairy industries? The 4-H Goat project can teach you about selection, management, health, marketing, and careers in the goat industry.

## Horse

Love horses? Want to learn more? Whether you have a horse or not, in this project, you can take your love of horses to the next level—the 4-H level.

## Llamas/Alpacas

Llamas and alpacas can be excellent additions to a family farm and make great pets. This project helps you find the kind of llama or alpaca that fits your family's lifestyle. It will help you learn to be an excellent trainer and caretaker of your animal.

## Pocket Pets

The 4-H Pocket Pet project will help you explore what kind of pet fits into your family's lifestyle and how you can be an excellent caretaker. Pocket pets may include cage birds, reptiles, tropical fish, hamsters, gerbils, chinchillas, and more (but don't really put them in your pockets).

## Poultry

Explore the poultry industry, including turkeys, chickens, ducks, geese, pheasants, guinea hens, pigeons, or quail. Learn about species and breeds, eggs, feather features, health, feeding, handling, washing, managing a flock, ethics, showing, and careers.

## Rabbits

Whether you see rabbits as soft and cuddly pets or as a business opportunity, the Rabbit project is flexible for your interest. Through hands-on activities, learn about selection, care, breeding, and more.

## Sheep

The Sheep project introduces you to various fun and challenging activities, including identifying the parts of a sheep, selecting a project lamb, preparing for lambing season, identifying lamb meat products, and feeding and showing sheep.

## Swine

This project helps you learn about swine breeds, health care, production, management, showmanship, marketing, and careers in the swine industry. Learn principles of animal science and gain life skills, like responsibility, by owning, caring for, and keeping records.

## Veterinary Science

Learn about a veterinarian's role in animal and public health. Project activities will help you learn about veterinary equipment, diseases and health problems, and career opportunities as a veterinarian or volunteer. You do not have to own an animal to be part of this project!

### AGRICULTURE AND ANIMAL SCIENCE

#### Learning Opportunities

- Visit the University of Wisconsin Animal Science Department, Veterinary Lab, or Meat Lab.
- Job shadow an animal trainer, veterinarian, researcher, farmer, feed mill operator, or any other career you might be interested in.
- Take part in [statewide learning and judging events](#).
- Design and create the perfect home for your animal's health.
- Attend a conference or show about the species you are interested in.
- Give a demonstration about your animal or species.
- Volunteer with a local animal shelter or rescue organization.

# Plant and Soil Science

Crops • Horticulture & Gardening • Indoor Plants  
Landscaping & Design • Plant Crafts • Soil Science



## Crops

In this project, you will learn about different crops grown locally, regionally, and nationally to feed our world. The focus is on crop growth, diseases, and pests impacting agriculture production.

### Looking for project resources?

Visit [projects.wi4h.org](https://projects.wi4h.org) for more information.



### Looking for learning opportunities?

Visit [opportunities.wi4h.org](https://opportunities.wi4h.org) for statewide events and opportunities.



## Horticulture & Gardening

Growing food, flowers, fruit, and herbs is gardening. Horticulture, the science of growing, helps us understand what we produce, how and where to grow it, and more. Youth in this project may choose to grow plants to eat, look at, or both.

## Indoor Plants

Indoor plants add beauty and design to any space. Learn about indoor plant varieties and propagation suitable for your home environment. Youth may explore flowering and non-flowering plants.

## Landscaping & Design

Plants can produce food for your family and add beauty to the earth's landscape or your bedroom. Discover landscaping plants and design fundamentals to create a functional and beautiful environment year-round.

## Plant Crafts

Bouquets, corsages, and centerpieces. Cut flowers, dried flowers, or other plants. Plant crafts such as flower arranging, pressed flowers, evergreen arrangements, and more can add beauty to a room, an event, or someone's day. Youth in this project will explore ways to be creative with plants.

## Soil Science

Soil is more than just "dirt." Soil is alive with plants and animal life. In this project, grow your understanding of soil types, what plants need, and how seeds grow into plants. Then, explore how to support the soil by keeping it healthy and preventing erosion.

### PLANT AND SOIL SCIENCE

#### Learning Opportunities

- Measure the soil's health over time when you make changes to it.
- Visit a local florist, garden center, community garden, or tree farm to learn more about their work.
- Grow food or plants for a local non-profit organization that can use them.
- Interview a Master Gardener to explore volunteer opportunities.
- Plant your own garden or crop. Experiment with different techniques for growing plants.

# Environmental/Outdoor Education



Astronomy • Birds • Conservation • Entomology (Insects) • Geology • Maple Syrup  
Outdoor Recreation • Safety • Shooting Sports • Taxidermy • Wildflowers • Wildlife & Habitat

## Astronomy

The sky's the limit! The Astronomy project is your chance to explore stars, planets, comets, and more as you learn how we view and study the universe.

## Birds

Become a careful observer of wild birds in your area and around the state. Find out about their habitats, migratory patterns, what they eat, and more.

## Conservation

The Conservation project includes weather and climate, water science, recycling, exploring your environment, and more. Get involved to learn about the natural world and how to help protect it!

## Entomology (Insects)

Insects (including bees) are everywhere! Learn about different types of insects, the largest group of animals on earth, and why they are essential in our natural world. This project is your chance to collect, study, and display insects you find and learn about forensic entomology.

## Geology

Have you ever found a rock or fossil at a park and wanted to know what it was? Discover the types of minerals, rocks, and fossils found in Wisconsin. Dig into the Geology project!

## Maple Syrup

In the Maple Syrup project, youth will learn about the tools, trees, and techniques, all while learning to care for the environment.

## Outdoor Recreation

Let's get active outdoors! This project is for anyone who likes outdoor adventures, including backpacking, hiking, bicycling, camping, canoeing, fishing, rock climbing, winter travel, cross-country skiing, and downhill skiing. The sky is the limit, and adventures are waiting for you!

## Safety

Safety is essential when anyone uses motorized equipment! In this project, learn about water, fire, electricity, winter, tractor, recreational vehicle safety, and more.

## Shooting Sports

Discover the fun and challenge of learning to shoot archery, air rifle, air pistol, shotgun, muzzleloader, .22, or rifle. The objective is to teach kids safety, responsibility, discipline, and good sportsmanship.

## Taxidermy

The Taxidermy project combines an understanding of wildlife and habitat with art and creativity. Learn to mount animals, create a habitat for the mount, and display your work so it still looks alive.

## Wildflowers

Unlike flowers you might plant and grow, wildflowers grow wherever they find the right conditions. In Wisconsin, there might be prairie, woodland, and wetland flowers. Learn about what flowers grow where and why.

## Wildlife & Habitat

In this project area, you will learn about the different types of wildlife groups, their habitat needs, conservation, and interactions between humans and wildlife.

### ENVIRONMENTAL/ OUTDOOR EDUCATION

#### Learning Opportunities

- Take part in [Wildlife & Woods virtual classes](#).
- Compete in [statewide art, wildlife, and forestry contests](#).
- Visit a natural history or geology museum.
- Learn about and build skills to stay safe in the outdoors.
- Join the [Wisconsin National 4-H Shooting Sports Team](#).
- Volunteer with a nature restoration project in the community (e.g., prairie, park, trail).
- Plan a hiking, biking, or camping outing for your club or group.
- Visit a park or other public place that is known for something you are interested in (e.g., mountain biking, prairie flowers, wildlife, fishing, rockhounding).

# Science, Technology, Engineering, and Math



Aerospace • Coding & Computer Science • Energy & Electricity • GPS & Mapping • LEGO®  
Mechanical Sciences • Model Building • Robotics • Welding • Woodworking

## Aerospace

Explore the science of flight! Flying objects from kites to rockets have been studied for centuries. In this project, you will discover the science behind moving objects through the air.

## Coding & Computer Science

Our world is based on technology. Explore machine learning, computer coding, and applications using software tools. Investigate hardware, software, networks, and data management.

## Energy & Electricity

The Energy & Electricity project offers opportunities for hands-on exploration of how energy is transferred and transformed. Build simple to complex electric circuits to understand how we harness energy safely and efficiently.

### Looking for project resources?

Visit [projects.wi4h.org](https://projects.wi4h.org) for more information.



### Looking for learning opportunities?

Visit [opportunities.wi4h.org](https://opportunities.wi4h.org) for statewide events and opportunities.



## GPS & Mapping

Youth discover the world of orienteering using maps and global positioning system (GPS) technology to explore the world around them or plan an adventure.

## LEGO®

Youth use LEGO® bricks to build simple and complex structures with creativity and imagination. Youth can build structures and landscapes using various bricks to practice engineering, design, and construction skills.

## Mechanical Sciences

Youth will learn about manual and fuel-powered machines, tools, safety, and maintenance. They will get hands-on experiences that will help them understand how machines, such as lawn mowers, ATVs, and model airplanes, operate and how to keep them running.

## Model Building

In the Model Building project, youth will explore designing items in a three-dimensional space using architecture and engineering principles. Youth can express their creativity by creating small-scale models like planes, cars, trains, and more!

## Robotics

Through hands-on activities, youth will learn the basics of robotic systems, structures, sensors, control, and programming.

## Welding

Youth will explore several techniques for joining metal safely and efficiently. Learn how to repair a metal item or create amazing art with this useful skill.

## Woodworking

Youth enrolled in the Woodworking project will explore basic wood types and woodworking techniques. Topics include accurate measurements, the use of basic hand tools and power tools, and creating joints.

### STEM

### Learning Opportunities

- Plan and lead a project workshop for younger members.
- Visit a local business that works in a STEM-related field. Ask to job shadow someone who works there.
- Explore different techniques for building or creating things in your project area.
- Identify the essential tools needed for your project and assemble your own toolkit.
- Start a small business related to your project area.
- Attend [Space Camp](#) or [Advanced Space Academy](#).
- Volunteer to help a local organization using your project skills.

# Project Listings at a Glance

Find the project areas within each of the seven project groupings on these pages. Examples help youth and families think about what types of project-based learning they might participate in when they sign up for the project area. Learning experiences are not limited to what's listed here. Some counties may suggest what county fair departments the project areas align with.

**Project areas are current as of October 2025.**



 <b>Expressive Arts</b>	
Project area	Examples of project-based learning within project area
<b>Art Appreciation</b>	Celebrating art, art in your future
<b>Computer Graphic Design</b>	
<b>Creative Writing</b>	
<b>Fiber &amp; Textile Arts</b>	Macrame, rug hooking, tie dyeing, wearable art, creative/cross stitchery, needlepoint, weaving, string/wire art, handmade dolls, knitting, crocheting, wool spinning, weaving
<b>Folk Arts &amp; Crafts</b>	Basketry, beadwork, calligraphy, candle making, decorative boxes, decoupage, fuzzy posters, liquid embroidery, rock art, soap making, soap carving, wood art, wood burning, leathercraft, blacksmithing
<b>Performing Arts</b>	Clowning, dance, juggling, music, theater arts, puppetry
<b>Photography</b>	
<b>Self-Determined–Expressive Arts</b>	
<b>Upcycling</b>	Trash and Treasure
<b>Videography</b>	
<b>Visual Arts</b>	Block printing, ceramics, collages, drawing and painting, glasswork, jewelry making, metal enameling, mosaics, ornaments, paper art, plastercraft, posters, print making, pottery, rubber stamping, scrapbooking, Sculpey clay, stencil painting

 <b>Leadership and Community</b>	
Project area	Examples of project-based learning within project area
<b>Civic Engagement</b>	Citizenship
<b>Cloverbud</b>	
<b>Cloverbud Youth Leader</b>	
<b>Communications</b>	Demonstrations, sign language, speaking, Books on the Move
<b>Community Service</b>	Service learning
<b>Exploring</b>	
<b>Global &amp; Cultural Education</b>	Latino cultural arts, international
<b>History &amp; Heritage</b>	
<b>Intergenerational</b>	
<b>Leadership</b>	Youth leadership
<b>Self-Determined–Leadership &amp; Community</b>	
<b>Workforce Readiness</b>	



## Family, Home, and Health

Project area	Examples of project-based learning within project area
<b>Candy Making</b>	
<b>Child Development</b>	
<b>Consumer Savvy</b>	
<b>Entrepreneurship</b>	
<b>Food Decorating</b>	Cake decorating
<b>Food Preservation</b>	
<b>Foods &amp; Nutrition</b>	Microwave, cooking, baking, breads
<b>Health</b>	
<b>Home Environment</b>	Decorative wreaths, interior design
<b>Personal Finance</b>	
<b>Self-Determined—Family, Home, &amp; Health</b>	
<b>Sewing</b>	Clothing, quilting, regalia making, stuffed animals
<b>Sports &amp; Fitness</b>	Softball, bowling, fun and fitness



## Agriculture and Animal Science

Project area	Examples of project-based learning within project area
<b>Beef</b>	Beef feeder, beef meat animal products (map)
<b>Cats</b>	
<b>Cavies</b>	
<b>Dairy</b>	
<b>Dogs</b>	Dog obedience
<b>Exotic Animals</b>	Ostrich, emu, zebras, zedonk
<b>Goats</b>	Meat goat, dairy goat, pygmy goat
<b>Horse</b>	Horseless horse
<b>Llamas/Alpacas</b>	
<b>Pocket Pets</b>	Cage birds, reptiles, tropical fish, hamsters, gerbils, chinchilla
<b>Poultry</b>	Poultry bantams, poultry game birds (quail, pheasant), poultry market, poultry pigeons, poultry turkeys, poultry waterfowl
<b>Rabbits</b>	Rabbit hopping, rabbits market
<b>Self-Determined—Animal Sciences</b>	
<b>Sheep</b>	Sheep meat animal products (map)
<b>Swine</b>	Swine meat animal products (map)
<b>Veterinary Science</b>	



## Plant and Soil Science

Project area	Examples of project-based learning within project area
<b>Crops</b>	Corn, soybeans, small grains (wheat, oats, barley, and rye)
<b>Horticulture &amp; Gardening</b>	Herbs, vegetables, fruits, flowers, hydro/aquaponics
<b>Indoor Plants</b>	House plants
<b>Landscaping &amp; Design</b>	Home grounds
<b>Plant Crafts</b>	Flower arranging, flower crafts
<b>Self-Determined—Plant &amp; Soil Sciences</b>	
<b>Soil Science</b>	



## Environmental/ Outdoor Education

Project area	Examples of project-based learning within project area
<b>Astronomy</b>	
<b>Birds</b>	
<b>Conservation</b>	Weather and climate, exploring your environment, water science, aquatic science, water, recycling
<b>Entomology (Insects)</b>	Bees
<b>Geology</b>	Rockhound
<b>Maple Syrup</b>	
<b>Outdoor Recreation</b>	Adventures, backpacking and hiking, bicycling, camping, canoeing, fishing, rock climbing, winter travel, cross country skiing, downhill skiing
<b>Safety</b>	Off-highway vehicles, tractor certification, snowmobiling
<b>Self-Determined-Environmental/Outdoor Education</b>	
<b>Shooting Sports-Air Pistol</b>	
<b>Shooting Sports-Air Rifle</b>	
<b>Shooting Sports-Archery</b>	
<b>Shooting Sports-Gun Safety</b>	
<b>Shooting Sports-Muzzleloading</b>	
<b>Shooting Sports-Pistol</b>	
<b>Shooting Sports-Rifle</b>	
<b>Shooting Sports-Shotgun</b>	
<b>Taxidermy</b>	
<b>Wildflowers</b>	
<b>Wildlife &amp; Habitat</b>	Wildlife, hunting, forestry



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

Project area	Examples of project-based learning within project area
<b>Aerospace</b>	Model rocketry, flying
<b>Coding &amp; Computer Science</b>	Computers
<b>Energy &amp; Electricity</b>	Wind energy, home energy, electricity, solar power
<b>GPS &amp; Mapping</b>	Geocaching, geospatial
<b>LEGO®</b>	
<b>Mechanical Sciences</b>	Automotive, tractors, small engines, maintenance and repair
<b>Model Building</b>	Model cars, model railroad, remote controlled cars, scale model, model rocketry, radio-controlled plane
<b>Robotics</b>	
<b>Self-Determined-STEM</b>	
<b>Welding</b>	
<b>Woodworking</b>	

### Looking for project resources?

Visit [projects.wi4h.org](https://projects.wi4h.org) for more information.



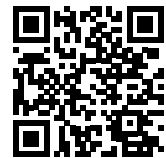
### Looking for learning opportunities?

Visit [opportunities.wi4h.org](https://opportunities.wi4h.org) for statewide events and opportunities.





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