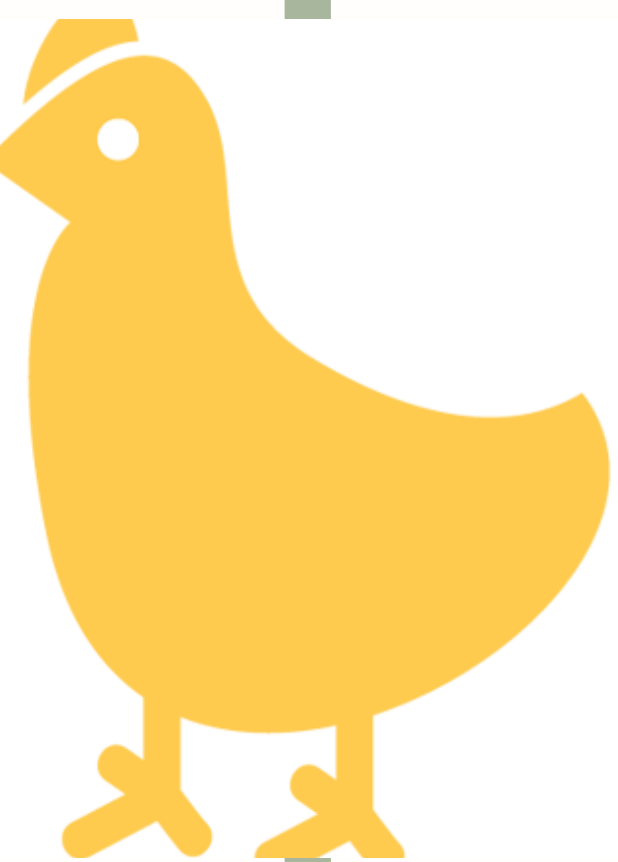


GRANT COUNTY 4-H PRESENTS

4-H PROJECT GUIDE



Project resource guide to help 4-H members learn about everything from aerospace to workforce readiness. Whether you are a new or novice member, use the project sheets to explore age-appropriate activities, resources and exhibit ideas.

4-H Beef Project

South Dakota ranks 5th in the nation for the number of beef cattle. Beef production plays a vital role in our state. Through the 4-H beef project, members can learn how to feed, care for, and keep accurate records of one or more head of cattle. Making day to day decisions about their own animals, helps prepare them in many ways for future careers in the beef industry.



Areas and Stages of Youth Development

➤ ***Beginners***

Learn about the breeds of cattle. Try livestock judging to learn parts of a beef animal. Discover different feeds for your animal. Set a daily feeding and care routine. Learn to break your calf to lead and proper grooming techniques.

➤ ***Juniors***

Juniors start learning about quality assurance. Discover the nutritional needs of your calf and how the digestive system works. Understand livestock evaluation when studying structure and frame size. Learn to present oral reasons.

➤ ***Seniors***

Keep accurate records of your beef project. Be able to locate and identify all cuts of beef. Evaluate beef carcasses. Learn to fit your animal for the show ring. Know the reproductive system of a beef cow. Mentor a younger beef exhibitor.

4-H Programming Priorities

➤ ***Leadership***

Provide an opportunity for youth to learn at a showmanship or fitting clinic. Start a livestock judging team. Arrange a farm tour for the local elementary school.

➤ ***Health & Wellness***

Animals play a role in children's cognitive development as well as teaching responsibility, caring, and respect all while developing children's ability to nurture.

➤ ***Science***

Study how beef animal systems work, such as reproductive and digestive. Learn how environmental factors impact the livestock industry.

➤ ***Agriculture***

Help audiences learn about agriculture and understand where their food comes from. Showcase beef as a valuable source of protein.

Get Involved

Youth Voice



- Poster on beef cuts of meat and preparation
- Project “WHY” on expected progeny differences
- Demonstrate proper vaccination techniques

Community Service



- Promote beef during May-Beef Month
- Assist during weigh in at Achievement Days
- Host a petting zoo at local fair to educate community members

Career Connections



- Breed association representative
- Farmer/rancher
- Feedlot manager
- Veterinarian
- Carcass grader
- Embryologist

Exhibit Ideas

- Market beef
- Breeding beef
- Bucket/feeder calf (county only)
- Poster on genetics, marketing, nutrition or biosecurity
- Beef curriculum 1, 2, or 3
- Construct a new or recycled item to be used for your beef project

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H](#)
- [Iowa State University Extension and Outreach, 4-H Youth Development, Beef](#)

4-H Companion Animal Project

What do hermit crabs, Guinea pigs, and cockatoos all have in common? They can all make great companion animals and 4-H exhibits! The 4-H companion animals project helps youth explore a wide variety of animals that can be used for companionship and do not require the same types of resources that livestock does.



Areas and Stages of Youth Development

➤ ***Beginners***

As a beginner your goal should be to learn the basics of your companion animal. You should know proper care, grooming, and feeding for your companion animal. Create a plan to prevent your animal from getting lost.

➤ ***Juniors***

After knowing the basics of proper care, start exploring more information about your companion animal. This should include nutritional needs for your pet, its reproductive cycle, and how to train your companion animal.

➤ ***Seniors***

Seniors should continue to deepen their knowledge about their companion animal. Research what diseases are common for your animal and what their symptoms are. You can also research the domestication history of animals.

4-H Programming Priorities

➤ ***Leadership***

The care of animals of any size leads to many leadership experiences. You have to be responsible and care for another living thing.

➤ ***Health & Wellness***

Health and wellness of your animal is an important part of companion animal ownership. It is important to keep your companion animal healthy.

➤ ***Science***

The biology of your companion animal is important to understand. Learning more about it will let you keep your companion animal healthy.

➤ ***Agriculture***

The care of companion animals can give insight into the care of larger animals including livestock. It can also lead to discussions about animal ethics.

Get Involved

Youth Voice



- Discuss safety around unfamiliar companion animals
- Illustrated talk about your companion animal's diet
- Construction of a proper habitat

Community Service



- Collect needed supplies for a local animal shelter
- Organize a group of 4-H members to volunteer at an animal shelter

Career Connections



- Animal assisted therapy
- Boarding
- Companion animal publications
- Genetics
- Grooming

Exhibit Ideas

- Exhibit your cat or pet at the fair
- Make a first aid kit for a pet- tell why and how each item is used
- Share diet and nutrition information for raising a healthy pet
- Attend a pet show; take photos and make a notebook about pet breeds

Learning Resources

- [National 4-H Curriculum](#)
- [University of Nebraska-Lincoln, Animal Science, Companion Animal Science Option](#)
- [California 4-H Project Sheet Series, 4-H Pets and Small Animals](#)
- [Iowa 4-H Project Hot Sheet, 4-H Pets Project](#)

4-H Dairy Cattle Project

Whether you enjoy drinking a cold glass of milk or just really like cows, the dairy cattle project area is for you! Get hands on experience by caring for, milking, and feeding your dairy cattle. Gain knowledge in areas such as dairy product production, nutrition needs for dairy cattle, and management of a dairy operation. By raising your own calf, heifer, or cow, you can learn how to select, handle, fit, and show a dairy animal. Display this knowledge through presentations, educational displays, posters, or showmanship!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the breeds of dairy cattle and the parts of a cow. Select a dairy calf and prepare it for show by learning to appropriately handle, feed, and groom your animal. Begin studying dairy product production and milking equipment.

➤ ***Juniors***

Further knowledge of dairy cattle selection through dairy judging. Learn about the digestive system, medication administration and the effects on food safety, and animal health issues. Understand the nutritional value of dairy products.

➤ ***Seniors***

Seniors have experience showing dairy cattle. Explore career options and promote the dairy industry/products. Study breeding and reproduction techniques, balance feed rations, and evaluate feed quality and body condition for dairy cattle.

4-H Programming Priorities

➤ ***Leadership***

Become an advocate for the dairy industry by providing tours of your dairy operation and communicating with consumers about dairy production.

➤ ***Health & Wellness***

Study the nutrition value of dairy products and promote the health benefits of dairy consumption.

➤ ***Science***

Science is everywhere in dairy production: learn the anatomy of dairy cattle, the chemistry of product manufacturing, and technology advancements in the industry.

➤ ***Agriculture***

Use your knowledge of the project area to promote the industry and provide information on appropriate animal treatment and dairy production.

Get Involved

Youth Voice



- Illustrated talk on different breeds of dairy cattle
- Discuss the tools needed to show dairy
- Speech on choosing a show animal

Community Service



- Volunteer at a dairy promotion event
- Discuss dairy production with consumers
- Provide a tour of your dairy operation

Career Connections



- Agriculture business
- Veterinarian
- Food scientist
- Breed association representative
- Dairy herd manager/owner
- Nutritionist

Exhibit Ideas

- Show your calf, heifer, or cow
- Display on the nutritional value of dairy products
- Constructed rope halter or other show equipment
- Poster on dairy breeds or dairy cattle production in South Dakota
- Display on business aspects of dairy production

Learning Resources

- [National 4-H Curriculum](#)
- [Kansas 4-H, Dairy Cattle](#)
- [California 4-H Project Sheet, 4-H Dairy Cattle Project](#)

4-H Dairy Goats Project

Did you know that dairy goats produce milk, mohair, and meat? Not just dairy cattle produce dairy products! Popular goat products include milk, cheese, soap, lotion, wool, yarn, and textiles. 4-H members can learn skills in handling, caring for, and training a goat. Youth can also learn more about nutrition and safety. There are also many projects youth can participate in without owning a goat. 4-H'ers can show a goat, give presentations, make posters or display exhibits relating to dairy goats and dairy goat products.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners will learn basic knowledge about goats, including major parts, breeds, gender, and color. They gain basics about goat housing, caring and grooming a goat, show techniques, and goat training. They also learn to evaluate goats.

➤ ***Juniors***

Gain in-depth knowledge of all goat body parts and know different breeds of dairy goats. Gain knowledge of feed rations, evaluate body condition scores, breeding decisions, diseases, and vaccinations. Learn basic record keeping skills.

➤ ***Seniors***

Seniors understand changes in their goat each year and breeding decisions to build a better show goat. Gain knowledge of uses for different breeds of dairy goats, milk production records, milk safety/quality, and feed rations/quality.

4-H Programming Priorities

➤ ***Leadership***

Be a leader, mentor, and role model in the barn and show ring. Organize a tour of your farm and plan a judging event or showmanship clinic.

➤ ***Health & Wellness***

Learn about health benefits of goat's milk. Research commercial goat's milk production, food safety, microbiology, and safe handling.

➤ ***Science***

Compare differences in cow's milk to goat's milk and examine milk quality. Learn different breeds of dairy goats and diseases that can occur.

➤ ***Agriculture***

Youth can participate in events where you can bring your goat, for example petting zoos. They can also discuss and promote animal welfare and ethics.

Get Involved

Youth Voice



- Speak about various goat topics
- Promote animal welfare and ethics
- Advocate for dairy industry
- Demonstrate making goat's milk products

Community Service



- Organize tour of your farm
- Volunteer your animals for petting zoos, etc.
- Help at a promotional dairy event
- Set up pens at county fair/show

Career Connections



- Veterinarian
- Farmer
- Nutritionist
- Geneticist
- Breed representative
- Goat products entrepreneur

Exhibit Ideas

- Posters on Parts of a goat, Feeding, Goat Milk Products, Dairy Goat Breeds, or Diseases.
- Emergency medical, show, or kidding supplies kit
- Make goat milk soap/lotion
- Food safety exhibit
- County/state/fun show

Learning Resources

- [National 4-H Curriculum](#)
- [Michigan State University Extension, 4-H Goat Project](#)
- [American Dairy Goat Association](#)

4-H Dog Project

Are you a dog person? Want to learn how to train and handle a dog like a pro? Join the dog project! Youth will learn everything from basic care for a dog to advanced training practices. South Dakota 4-H offers obedience, rally, showmanship, and agility training through county 4-H programs. Ever dreamed of owning a dog? Want to build knowledge without owning a dog? Enroll into the dog project and study the experience of a dog owner. Build knowledge through volunteering, service projects, and creating display exhibits!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start by forming a bond with their dog and teaching basic commands. They will be able to explore breed standards and distinguish parts of a dog. Understand safety concerns when handling dogs.

➤ ***Juniors***

Juniors teach more advanced skills to their dog and practice off leash. They learn how to correct negative behavior. Research internal anatomy, body system functions, disease and prevention methods, and vital signs of their dog.

➤ ***Seniors***

Seniors continue to build on obedience commands such as retrieving dumbbells over jumps. They understand dog reproduction and nutritional requirements and can distinguish characteristics between all breeds of dogs.

4-H Programming Priorities

➤ ***Leadership***

Youth can share their knowledge and skills learned in the dog project with other 4-H members, community members, and civic groups.

➤ ***Health & Wellness***

Dogs promote good health and wellness and can help reduce stress. Involvement keeps youth active by walking and practicing training techniques with their dog.

➤ ***Science***

Youth will learn about dog health signs, dog diseases, and prevention, as well as dog anatomy and functions. They will also explore the nutritional needs of dogs.

➤ ***Agriculture***

Dogs are a valuable tool to agriculture. Youth could explore how dogs are used in livestock production and wildlife management.

Get Involved

Youth Voice



- Speech about different dog breeds
- Illustrated talk on caring for your dog
- Demonstrate how to make healthy dog treats

Community Service



- Volunteer at a pet shelter
- Visit an assisted living with your dog
- Assist with obedience classes
- Raise money for building a local dog park

Career Connections



- Dog trainer
- Groomer
- Veterinary medicine
- K-9 police officer
- Search and rescue officer
- Pet rescue director
- Therapy dog handler

Exhibit Ideas

- Training and showing your dog in different events
- Educational display on dog care or breeds
- Compare dog foods and share results with club
- Interview a veterinarian about microchipping your dog
- Develop a video about training your dog

Learning Resources

- [National 4-H Curriculum](#)
- [Wharton County 4-H Project One Pager, 4-H Dog Project](#)

4-H Embryology Project

What came first? The chicken or the egg? In the embryology 4-H project area, youth can discover the development of living things and get hands on experience with incubating eggs and watching them hatch. From research and experiences, youth can create displays and posters showing their interest and learning in the project area.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start learning about embryonic development in different species. Participate in a chicken egg incubation and hatching process and learn the composition of an egg and the growth and development of a chicken.

➤ ***Juniors***

Continue studying development and study reproductive techniques of different species. Learn about the principles of incubation, including temperature, humidity, positioning of eggs, and environmental influences and incubation techniques.

➤ ***Seniors***

Seniors understand and are able to correctly lead a chicken incubation and hatching process. They can teach others about responsibility in caring for a living thing and are familiar with reproduction and development of some animal species.

4-H Programming Priorities

➤ ***Leadership***

Youth learn skills in responsibility and develop a respect for living things. They can educate others in the incubation and hatching process.

➤ ***Health & Wellness***

Youth learn to care for a living thing and feel accomplished in a completed process, which is important to mental health.

➤ ***Science***

Learn about the reproduction and development of animal species. Get real life experience by hatching and caring for your own eggs.

➤ ***Agriculture***

Using experiences in this area, youth show respect in caring for living things and can promote that respect for animals in all areas of agriculture.

Get Involved

Youth Voice



- Illustrated talk on development of chicken eggs
- Speech on embryonic stages of growth for a species

Community Service



- Volunteer at a poultry/egg operation
- Lead a classroom activity on egg incubation and hatching

Career Connections



- Clinical embryologist
- Animal embryologist at a wildlife preserve, zoo, or farm
- Lab technician/assistant
- Microbiologist
- Veterinarian

Exhibit Ideas

- Poster on the process of incubation
- Display showing the stages of embryonic development for a species
- Display of pictures of an incubation and hatching process
- Poster showing parts of an egg or a chicken

Learning Resources

- [National 4-H Curriculum](#)
- [University of Illinois Extension, Incubation and Embryonic Development](#)
- [Michigan State University Extension](#)

4-H Entomology & Bees Project

Interested in learning more about the creatures that make life possible? The entomology project area is just for you! Whether you recognize it or not, insects play an important role in our everyday lives. Did you know that without honeybees, we might not have all that delicious food on our table? Learn more about the amazing world of insects and arthropods! Learn which insect live in the soil, on plants, in homes, and on pets, even starting an insect collection of your own!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn about the basics of insects, what classifies something as an “insect,” learn about biodiversity in insects and the most common orders and families of insects. Older members may start to collect and identify insects.

➤ ***Juniors***

Juniors learn about tools that entomologists use, continue their insect collections, and learn about insects that may be in their houses. Older members may also start to learn about beekeeping with the help of a local beekeeper.

➤ ***Seniors***

Senior members learn about the different careers associated with entomology, identifying orders and families of insects, integrated pest management, and forensic entomology. Senior members can manage honeybee colonies on their own.

4-H Programming Priorities

➤ ***Leadership***

Members can mentor a younger member new in the project area, lead a community service project, or present a workshop to their club.

➤ ***Health & Wellness***

Members can teach their fellow club members about the benefits of using honey rather than sugar or how insects are vital to food supplies

➤ ***Science***

Learn about the different orders and families insects are in, along with the vast differences in each species of insect.

➤ ***Agriculture***

Members can contact a school teacher and give a presentation about insects and how they are vital to food supplies and pollination.

Get Involved

Youth Voice



- Teach someone the parts of an insect
- Demonstrate how to make an insect collection net
- Communicate the benefits of insects in our lives

Community Service



- Plant a pollinator garden in your community
- Help a local entomologist with a “bug” day to teach about insects

Career Connections



- Entomologist
- Educator
- Beekeeper
- Researcher
- Forensic entomologist (law enforcement)

Exhibit Ideas

- Display about insects parts
- Insect collection
- Diary of insect observations
- Display about insect collection tools
- Insect collection of invasive species
- Design a pollinator garden
- Collect honey from your beehive

Learning Resources

- [National 4-H Curriculum](#)
- [Wyoming Entomology](#)
- [How to make an awesome insect collection](#)
- Indiana 4-H Beekeeping Guides:
 - [Level 1](#)
 - [Level 2](#)
 - [Level 3](#)
 - [Helpers Guide](#)

4-H Horse Project

Saddle up for the Horse 4-H project area! Become experienced in horse nutrition, handling, safety, and care. Participate in the county horse program and show to learn riding techniques, patterns, and showmanship. Create posters or do demonstrations to show this knowledge. Whether you're a horse enthusiast or just starting out, there's plenty of opportunities in the Horse 4-H project area.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn safety and horse basics. They gain confidence in evaluating conformation. Horseback, they will begin performing basic patterns, controlling speed and direction of horse, and creating a firm and correct seat.

➤ ***Juniors***

Juniors have a knowledge of husbandry, vitals, and health care and can present oral reasons on horse evaluation. Horseback, they increase confidence in skills, difficulty of patterns at a variety of gates, and improve coordination of aids.

➤ ***Seniors***

Seniors display knowledge of diseases, genetics, and nutrition and evaluate a variety of classes: halter and performance. Horseback, they display confidence in seat position, smoothly use all aids, and efficiently ride patterns.

4-H Programming Priorities

➤ ***Leadership***

Assist in coaching a judging, quiz bowl, or hippology team. Plan a horse show or clinic. Volunteer to help with horse safety training for younger 4-H members.

➤ ***Health & Wellness***

Riding and caring for a horse promotes physical fitness. Core strength and exercise help form a strong seat. Research shows horses improve mood and relieve stress.

➤ ***Science***

Learning about nutrition, diseases, and genetics provides platform for 4-H'ers to explore science. Youth get hands on math skills when balancing rations.

➤ ***Agriculture***

Knowledge and insight into the size of the equine industry and its impact across agriculture, horse project members contribute and actively engage in agriculture.

Get Involved

Youth Voice



- Presentation on a horse related topic
- Share knowledge with a community group or horse club
- Create a vaccination information display

Community Service



- Volunteer at local stable or equine therapy center
- Organize clothing and tack swap
- Plan a fun show or trail ride
- Coach a judging team

Career Connections



- Horse trainer
- Farrier
- Equine industry professional
- Veterinarian
- Nutritionist
- Reproductive specialist

Exhibit Ideas

- Show in a county, state, or fun horse show
- Create a leather product
- Participate in a trail ride
- Make a horse first aid kit
- Make riding apparel and equipment
- Participate in hippology, quiz bowl, public presentation, or judging

Learning Resources

- [National 4-H Curriculum](#)
- [Kansas State University Research and Extension, 4-H Youth Development, Horse](#)
- [Benefits of Horse Ownership](#)
- [North Dakota 4-H Project Sheet, 4-H Horse](#)

4-H Meat Goat Project

Join this fast paced growing sector of the agriculture industry—market goats! Learn about breeds, husbandry, showmanship, nutrition, reproduction and much more! Develop your herd, evaluate both breeding and market animals, and create friendships.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners gain confidence and understanding on basic goat parts, husbandry, and nutrition. Understand proper production practices for ensuring a safe food supply. Evaluate both breeding and market goats.

➤ ***Juniors***

Expand knowledge on goat diseases, nutrition, and better understand production practices. Be able to evaluate goats and provide oral reasons to defend placings. Through reasons and presentations, expand communication skills.

➤ ***Seniors***

Seniors have detailed knowledge of goat reproduction, nutrition, and diseases while be able to clearly communicate knowledge to others. Serve as a leader and role model to younger project members. Investigate career opportunities.

4-H Programming Priorities

➤ ***Leadership***

By sharing knowledge of the meat goat industry and teaching other members about the project, youth are leaders in their club and community.

➤ ***Health & Wellness***

Working with livestock and goats provides an opportunity for physical activity, time spent outdoors, and stress relief.

➤ ***Science***

Gaining knowledge of nutrition, diseases, and genetics provides a way to explore science. Youth get hands-on math skills when balancing rations for their animals.

➤ ***Agriculture***

4-H members will gain insight into the agricultural issues impacting the meat goat industry.

Get Involved

Youth Voice



- Illustrated talk on breeds of goats
- Demonstration on scrapie tags and identification
- Discuss current issues within the meat goat industry

Community Service



- Plan and teach a fitting and showmanship clinic
- Educate the community on scrapie's tags
- Safe meat handling demonstration

Career Connections



- Veterinarian
- Nutritionist
- Feed salesman
- Ag marketing analyst
- Ag teacher
- Goat extension specialist
- Ag business associate

Exhibit Ideas

- Show a meat goat in showmanship and/or confirmation classes
- Give a demonstration showing how to prepare and fit a meat goat before competition
- Create a poster to make the public more aware of meat goat industry

Learning Resources

- [National 4-H Curriculum](#)
- [UF/IFAS Extension Florida 4-H Project Handout, 4-H Meat Goat Project](#)

4-H Poultry & Eggs Project

The poultry project area is for all youth interested in chickens, pigeons, waterfowl, game birds, and turkeys. In the poultry project youth have the opportunity to show their birds, and their chicken's eggs, at Achievement Days and the South Dakota State Fair. Whether or not you own a bird, you can participate in poultry judging at the State Fair, teach others about your favorite species of poultry through a talk or display, or explore the poultry 4-H curriculum.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginner poultry project members should be knowledgeable of the breeds they exhibit, including class, breed use, and key characteristics. Be able to locate and name key parts of a bird.

➤ ***Juniors***

Juniors should advance their knowledge from a beginner level. Learn how to evaluate eggs and poultry products, be able to candle eggs for viability, and describe the signs of a healthy bird.

➤ ***Seniors***

Senior poultry project members should continue advancing their knowledge and be knowledgeable of the major breeds within the species they exhibit and explain biosecurity practices.

4-H Programming Priorities

➤ ***Leadership***

Participants can become a leader by assisting with their local show, mentoring fellow youth who are new to the project, and managing their own flock.

➤ ***Health & Wellness***

Health & wellness are addressed as members learn about the nutritional value of eggs & poultry and proper practices to keep their birds and themselves healthy.

➤ ***Science***

Breeding, hatching, feeding, processing and consuming poultry all provide chances to explore the science of improving a member's poultry project.

➤ ***Agriculture***

Teaching youth about birds and their uses advances agriculture. One example is assisting a school teacher with an embryology project in their classroom.

Get Involved

Youth Voice



- Demonstrate preparing a bird for the show
- Illustrated talk teaching others about eggs
- Talk about selecting a bird for show or production

Community Service



- Donate poultry or eggs to a local food pantry
- Visit a nursing home with your favorite bird
- Assist an elementary teacher with hatching chicks

Career Connections



- Hatchery manager
- Poultry veterinarian
- Nutritionist
- Geneticist
- Poultry farm manager
- Poultry food scientist
- Ornithologist

Exhibit Ideas

- Display a dozen of your chicken's eggs
- Create a poster about the types of chicken combs
- Display on the classes of chickens and some breeds in each
- Put together a booklet on common poultry diseases
- Compare breeds and their uses

Learning Resources

- [National 4-H Curriculum](#)
- [UW, Wyoming 4-H, Poultry](#)
- [Iowa 4-H Project Hot Sheet, 4-H Poultry Project](#)
- [Michigan State University Extension, 4-H Poultry Project](#)

4-H Rabbit Project

Flopsy, Mopsy, Cottontail and Peter. Maybe Beatrix Potter stories were your first introduction to rabbits back when you were just a toddler. No matter what your age, rabbits are fascinating creatures. Cute and cuddly, large and small, straight ears or floppy; there's much to learn about rabbit varieties.

Your rabbit may live in the barn or in hutch in your yard; it may even be your house pet! No matter whether your rabbit is raised for meat or is your roommate, you can begin your journey in 4-H in the rabbit project.



Areas and Stages of Youth Development

➤ ***Beginners***

Understand the responsibility of caring for an animal. Learn about rabbits, identify parts and breeds, purchase, feed, and care for their rabbit, learn the correct showmanship procedures, and begin record keeping.

➤ ***Juniors***

Learn the different rabbit body types, proper grooming techniques, and common rabbit diseases. Understand the difference between 4 class and 6 class rabbits as well as the income and expenses of the project.

➤ ***Seniors***

Establish a rabbit breeding program, manage a rabbit herd, and find buyers for rabbits. Also, design a housing unit for a rabbit herd. Learn breed genetics and how to tell if a rabbit is pregnant.

4-H Programming Priorities

➤ ***Leadership***

Become a leader in the project area by volunteering at a local rabbit show, teaching others to safely handle and show rabbits, and bring a rabbit to a petting zoo.

➤ ***Health & Wellness***

Confidence is built by caring for a rabbit and working with the animal reduces stress. Also, reading with rabbits creates a safe reading environment.

➤ ***Science***

Gain knowledge of rabbit/animal anatomy, genetics, and breeding animals. Understand the impact of the environment on a rabbit herd.

➤ ***Agriculture***

Understand and promote the role of rabbits in the agriculture industry and promote animal ethics.

Get Involved

Youth Voice



- Discuss showmanship with the scorecard as a reference
- Speak about care and feeding of a rabbit
- Illustrated talk on breed identification

Community Service



- Reading with rabbits program for elementary youth
- Share rabbit project with Cloverbuds, a learning center, and childcare facilities

Career Connections



- Rabbit producer
- American Rabbit Breeders Association judge
- Animal rescue
- Small animal veterinarian
- Biologist

Exhibit Ideas

- Make your own rabbit carrier or cage
- Develop a breeding herd
- Show a rabbit
- Rabbit showmanship
- Display on how to tattoo a rabbit
- Display on the medical uses of rabbits
- Participate in rabbit skill-a-thon

Learning Resources

- [National 4-H Curriculum](#)
- For information regarding rabbits refer to the *Standard of Perfection*, published by the American Rabbit Breeder's Association, Inc.

4-H Sheep & Wool Project

Do you love sheep? Well, the 4-H Sheep Animal project area might be the perfect fit for you! Market type sheep are used for food production processes, while the breeding type sheep allow you to create and improve your own flock, including wool production. 4-H members can learn the aspects of caring for sheep, such as management, production, marketing, showing, and evaluation. Youth can also participate in other areas of the sheep project, such as public presentation, fashion revue, special foods, and display exhibits.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners gain a basic knowledge of sheep. Identify and understand different breeds of sheep and their intended industry purposes, distinguish the body parts of a sheep, and understand feeds and their nutritional quality.

➤ ***Juniors***

Juniors learn different showmanship and fitting techniques. Know disease care and prevention for their flock, appropriate flock handling techniques, and understand breeding and marketing decisions based on evaluation standards.

➤ ***Seniors***

Seniors advance their knowledge of animal handling, ethics, and care. Understand business aspects and can organize and plan production records, develop cost and expense records, and understand marketing animals and herds.

4-H Programming Priorities

➤ ***Leadership***

Within this project area youth can lead by teaching others about the sheep and wool project, assisting with a livestock show, and forming a livestock judging team.

➤ ***Health & Wellness***

Youth learn nutrition by studying their flock's needs and recognize different cuts of lamb as a meat choice. Also preparing a lamb for show requires daily exercise.

➤ ***Science***

Understand the science behind meat production, nutrition, and genetics. Learn differences in cuts of lamb and of other meats and participate in meat judging.

➤ ***Agriculture***

Learn animal care and forming opinions as not only a producer, but also a consumer. Advocate the importance of agriculture in regard to the sheep project.

Get Involved

Youth Voice



- Demonstration on showmanship techniques for market lambs or breeding sheep
- Discuss nutrition for sheep
- Illustrated talk on uses for wool

Community Service



- Provide tours of your sheep operation
- Help clean county livestock show buildings and pens
- Lead a sheep showmanship clinic for other youth

Career Connections



- Sheep producer: meat or wool production
- Flock manager
- Veterinary medicine
- Feed/mineral sales
- Feedlot manager
- Ag communications

Exhibit Ideas

- Showing sheep:
 - Breeding
 - Market
 - Showmanship
- Fashion revue: construct or purchase an outfit made with wool
- Livestock judging
- Poster/display on sheep nutrition, grooming, breed identification
- Exhibit wool
- Special foods: cooking with lamb

Learning Resources

- [National 4-H Curriculum](#)
- [University of Illinois Extension](#)
- [North Dakota 4-H Project Sheet, 4-H Sheep](#)

4-H Swine Project

Oink Oink! Pigs do not roll in the mud for fun. They roll in the mud to keep cool because pigs cannot sweat. This is only one of the amazing facts you will learn about swine through being part of the 4-H swine project. The swine project teaches why people raise swine, how to select a pig for your project, feeding and caring for your pig, learning about swine behavior, parts of a pig and how to fit and show swine. Your swine project will also teach you a great deal about the food supply continuum and your role in each segment from producer to consumer.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn to feed their animal so it reaches ideal market weight. Daily work with their animal teaches them to recognize their animal's health and focuses on learning proper feeding, training, showmanship, and grooming techniques.

➤ ***Juniors***

Identify popular retail cuts, administer vaccinations and medications, and understand proper usage and storage of medication. Recognize the phenotype of animals that are competitive in the show ring and productive in a herd.

➤ ***Seniors***

Understand EPDs, balance a swine ration, treat common swine diseases, and evaluate a swine carcass. Make breeding and marketing decisions based on knowledge obtained through years in the project area.

4-H Programming Priorities

➤ ***Leadership***

As a leader in the swine project area, youth can mentor younger members in proper swine care and showmanship skills and give a swine promotion presentation.

➤ ***Health & Wellness***

Discover and share delicious recipes that feature pork. Learn how to prepare pork properly and promote the health benefits of eating pork.

➤ ***Science***

Learn breeding and reproduction techniques in swine and study common diseases and parasites in livestock.

➤ ***Agriculture***

Promote the pork industry by sharing how a swine operation is a safe, vital and sustainable food source. Develop a biosecurity and waste management plan.

Get Involved

Youth Voice



- Discuss proper feeding and care of swine
- Give an Illustrated talk on swine breeds
- Present a speech on ear notching and other proper identification

Community Service



- Volunteer to clean and repair livestock pens and fences
- Lead a fitting and livestock showmanship clinic

Career Connections



- Veterinarian or veterinarian technician
- Swine technician
- Pharmaceutical representative
- Feed sales representative

Exhibit Ideas

- Participate in the 4-H swine show
- Poster/display on economic impact of swine to South Dakota
- Poster/display on general animal behavior, management, health and nutrition
- Poster/display of genetics and breeding
- Poster/display of importance of biosecurity

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Swine](#)

4-H Veterinary Science Project

The veterinary science 4-H project area connects a love for animals with an interest in science. Explore the many careers in animal and veterinary science, study the health and anatomy of animals, understand animal health in relation to humans, and learn through experience how to care for an animal. Whether you'd like to become a veterinarian or just want to learn more about your pet, this project area provides the opportunity to learn all about animals.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the differences between breeds of different species, the nutrition and exercise needs, animal welfare and ethics, and the basic anatomy of a species. Learn through experience by focusing on your own animals.

➤ ***Juniors***

Study animal disease prevention, signs, and treatment and understand biosecurity measures. Know the habitat/living conditions for a species, and be able to maintain health records for your animals.

➤ ***Seniors***

Begin exploring careers in veterinary and animal science. Understand normal/abnormal animal behavior, genetics and reproduction for different species, and the importance of quality assurance and food safety.

4-H Programming Priorities

➤ ***Leadership***

Using your expertise on animals, help other 4-H members with their animal projects and with showmanship or quiz bowl knowledge.

➤ ***Health & Wellness***

Animals need exercise, just like humans. Learn the physical activity needs for your animal and ways to incorporate that into your own exercise routine.

➤ ***Science***

Understand animal anatomy and physiology and learn how vaccines and medications work to prevent and treat diseases.

➤ ***Agriculture***

Promote the livestock industry by sharing your knowledge and experience with animals.

Get Involved

Youth Voice



- Describe normal behaviors for a species
- Discuss biosecurity practices on your operation
- Describe your experience shadowing a veterinarian

Community Service



- Volunteer at your local animal shelter
- Organize a pet first aid class

Career Connections



- Small or large animal veterinarian
- Vet tech
- Animal geneticist
- Livestock nutritionist
- Veterinary anesthesiologist
- Veterinary surgeon

Exhibit Ideas

- Display on the body systems of a species
- First aid kit for large or small animals
- Journal of experiences shadowing a veterinarian
- Display on the nutrition needs for your livestock
- Poster showing correct vaccination techniques

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Veterinary Science](#)
- [California 4-H Project Sheet, 4-H Veterinary Science Project](#)

4-H Citizenship Project

When you see the American flag flying or say the Pledge of Allegiance at your club meeting, do you ever wonder what it means to be an American citizen? Within the citizenship project area, learn about the rights and responsibilities to a family, community, state, country, and the world. Explore how democracy works and how to participate in the democratic process to bring change. Even within the 4-H creed, youth believe there are opportunities through 4-H for them to become useful citizens.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can get to know other club members and their hobbies. Develop a family tree identifying places relatives lived and traditions. Discover the history of your school or community. Take a tour of your city hall or county courthouse.

➤ ***Juniors***

Observe a community board meeting. After your observation, collect samples of by-laws and constitutions to compare them. Know the names of your local and state representatives and the committees they serve on.

➤ ***Seniors***

Interview a local/county official and learn the goals for your community. Share resources for youth and families in the community. Identify an important cause and determine how to make a difference. Apply for Citizenship Washington Focus.

4-H Programming Priorities

➤ ***Leadership***

Develop relations with local, state, and national officials. Youth take leadership roles in their 4-H club and apply that experience to other areas.

➤ ***Health & Wellness***

Youth can plan service projects for their community that promote health and wellness such as a food drive or an athletic activity, such as a 5K run.

➤ ***Science***

Connect with your natural world and gain scientific skills by gathering information about your community. NASA models citizenship and science.

➤ ***Agriculture***

Youth can take responsibility to lead a local petting zoo. Through this, they can better inform community members about livestock and agriculture practices.

Get Involved

Youth Voice



- Illustrated talk about parliamentary procedure
- Attend a government meeting
- Study and speak about South Dakota government-related attractions

Community Service



- Explore the history of your community
- Host a civic official day for police officers, firefighters, or county officials
- Educational seminars

Career Connections



- House of representatives or senator
- Peace Corps or AmeriCorps VISTA
- Law enforcement
- Lawyer
- Computer analyst

Exhibit Ideas

- Collect news articles about an issue to be an informant
- Create a poster encouraging people to vote
- Explore and document career possibilities related to government
- Illustrate a poster using words and pictures about South Dakota

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa 4-H Project Hot Sheet, 4-H Citizenship](#)
- [NASA](#)

4-H Community Service Project

We love to hear about “random acts of kindness” and times when people “pay it forward.” What can you do to serve in your community? Find out in the 4-H community service project! In this project you will learn about your community and use your skills to help improve it. You can serve in your school, neighborhood, town, or your whole country!



Areas and Stages of Youth Development

➤ ***Beginners***

Begin the project by understanding that community service is volunteering and assisting in a particular area whether that is helping people or the environment. Beginner community service projects should be simple and obtainable..

➤ ***Juniors***

As youth become older, they will identify community service project areas of need in their community and set goals on how to aid in that area. These projects generally will involve more planning and organizing on behalf of the youth.

➤ ***Seniors***

Continue to build upon years of experience and lead a community service project from beginning to end. See the benefits of engaging in your community and country while valuing diversity and teamwork.

4-H Programming Priorities

➤ ***Leadership***

Youth can volunteer with projects they are passionate about and lead club projects. They can identify areas of need in the community and plan projects accordingly.

➤ ***Health & Wellness***

Community service has many personal benefits. Participating in it gives youth the opportunity to know that they are improving someone’s life and their community.

➤ ***Science***

Many community service projects involve caring for the environment. Clubs can adopt a stream or a ditch along a highway to keep clear of trash and debris.

➤ ***Agriculture***

Community supported agriculture is growing across the nation. A local harvest or community garden is a great place to volunteer and provide assistance.

Get Involved

Youth Voice



- Project “Why” speech on recycling
- Illustrated talk on service projects your 4-H club has done
- Demonstrate making a blanket to be donated

Community Service



- Community service possibilities are endless
- 4-H youth can give their time or donate materials and can work with other members on a project

Career Connections



- Community health nurse
- Counselor
- Social worker
- Teacher
- Librarian
- Camp director

Exhibit Ideas

- Make recycling bins for your classroom or home
- Create a care kit that can be given to a local shelter
- Design a poster listing your 4-H club’s community service
- Make a poster explaining how others can get involved in a particular area

Learning Resources

- [National 4-H Curriculum](#)

4-H Cultural Education, International Study & Exchange Programs Project

The world is a big place! In this project, you can learn more about your own culture, explore new cultures, share your experience as a host family, or be an exchange delegate. This is a great project to develop skills in discovering and understanding diversity, and learning to communicate across cultures. Expand your mind and become part of the global community!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can identify cultures other than their own, and see differences and commonalities. Explore your own family traditions and learn to be respectful of those different than yourself.

➤ ***Juniors***

Gain a greater awareness of different cultures. Explore other cultures, see what makes them unique, and find the value they have. Youth may be eligible to participate in an international exchange program.

➤ ***Seniors***

Appreciate different cultures & understand how they can work together. Compare & contrast to see things from someone else's view. Youth can participate in an international exchange program.

4-H Programming Priorities

➤ ***Leadership***

Youth can show leadership by being accepting of and helping others understand different cultures and by making friends with exchange students in school.

➤ ***Health & Wellness***

Youth can learn to prepare food from different countries, research popular sports or games in other countries, and compare different religions around the world.

➤ ***Science***

Explore areas such as earth sciences, zoology, biology, and oceanography of different regions of the world. Learn about famous scientists & advancements worldwide.

➤ ***Agriculture***

Learn about agriculture around the world and learn what it will take to feed a growing world population. Youth can learn about commodities, economics, and trade.

Get Involved

Youth Voice



- Present your family tree/ancestry
- Participate in culture fair in your community/school
- Invite an exchange student to speak at a 4-H meeting

Community Service



- Raise money for international aid association
- Volunteer at cultural center
- Make display bringing awareness to international issue

Career Connections



- Translator
- Teacher
- International business
- Ambassador
- Peace corps
- Military
- Travel agent

Exhibit Ideas

- Family tree/genealogy project
- Experiences as host family/exchange student
- Traditional food from another country
 - Ethnic baked goods
- Clothing, crafts, music, dances, or games from another country/culture

Learning Resources

- [National 4-H Curriculum](#)
- [California 4-H Project Sheet, 4-H Global Education Project](#)

4-H Service Learning Project

Can you find a need in your community? Do you want to volunteer your time, resources and talents to find solutions? Service learning might be the perfect project for you! Expand the reach of your community service and help create long lasting impacts and change in your town. Need help starting? Begin by identifying a challenge, working with other volunteers to develop opportunities to solve the issue, then reflect on outcome and celebrate successes. Use those hands to larger service!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can identify areas within community that service project could benefit. Work alongside additional volunteers to determine service project size and scope. Responsible for identifying and assisting not overall implementation.

➤ ***Juniors***

Juniors are able to identify challenge, begin communication with involved parties, and handle basic coordination of project. Work with a team to bring project to completion. Reflect of value of project and celebrate successes.

➤ ***Seniors***

Seniors have the ability to implement a plan to solve community need based on assessment. Coordinate efforts of volunteers to allow successful completion of project and willingly celebrates and encourages success of future projects.

4-H Programming Priorities

➤ ***Leadership***

Youth are self-motivated to lead projects that identify and work to solve a challenge faced by their community.

➤ ***Health & Wellness***

Giving back to community provide sense of camaraderie and belonging. Depending on the nature of project the project, service can provide physical activity.

➤ ***Science***

Members can provide a solution that both meets a need and provides hands on experience in areas of science, technology, engineering, and mathematics.

➤ ***Agriculture***

Knowledge and awareness of agriculture can grow through experiences gained through service learning projects.

Get Involved

Youth Voice



- Youth identify challenge, coordinate effort, and realize change
- Actively engage community members and youth in dialogue to seek solutions

Community Service



- Needs drive (clothing, food)
- Domestic violence awareness
- Community clean-up
- Community literacy program

Career Connections



- Civic engagement
- Marketing
- Event management and coordinator

Exhibit Ideas

- Community needs survey
- Service project summary
- Community reflection
- Reflection artwork or a project
- Poster encouraging service learning

Learning Resources

- [National 4-H Curriculum](#)
- [Conducting 4-H Community Service Learning Projects, Virginia Cooperative Extension](#)
- [4-H Service Learning Standard and Best Practice Guide, University of Tennessee, Agricultural Extension Service](#)

4-H Communications Project

Do you like to talk to your friends? Maybe you enjoy sharing your own thoughts and stories with photos and videos from your phone or computer? Do you enjoy a good book? If so, these are forms of communicating. The world is filled with so many opportunities and ways to communicate and it impacts all of us every day.

By participating in the 4-H communications project, you will explore the exciting world of communication, and learn more about yourself and others.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the basic parts of a speech and create a speech with that format. Develop and present an illustrated talk. Practice communicating with gestures and add voice to a character. Write a thank you note.

➤ ***Juniors***

Juniors can create exciting and effective visual aids and practice using technology with presentations. Learn to write and present oral reasons. Practice electronic etiquette and learn to make good impressions.

➤ ***Seniors***

Seniors prepare a resume and prepare for an interview by practicing with a mentor. Present a persuasive speech. Be interviewed by a local radio station and speak about your 4-H experiences. Give constructive feedback to other speakers.

4-H Programming Priorities

➤ ***Leadership***

Give a presentation at a 4-H club meeting. Assist a younger 4-H member in preparing and practicing their presentation. Apply to be a county or state 4-H ambassador.

➤ ***Health & Wellness***

Communication gives youth the opportunity to be advocates in this area and can be used in 4-H clubs and communities to convey information about health and wellness.

➤ ***Science***

Youth can find interest in and research a topic related to science, technology, engineering, and math and discuss that with their 4-H club, school, and community.

➤ ***Agriculture***

A creative, educational idea involving interactive communication is leading a game of Ag-Vocacy topics at an event. Youth can also promote the agriculture industry.

Get Involved

Youth Voice



- Learn written, oral, and visual communication skills
- Develop confidence through public speaking
- Learn to organize and present information

Community Service



- Present a topic you are interested in to a community group
- Volunteer to read a book to students
- Help organize publicity for an event

Career Connections



- Journalism and communication
- Speech communication
- Drama and theatre
- Agricultural education
- Education and teaching

Exhibit Ideas

- Write a short story or a collection of poems
- Give an educational presentation, working exhibit, or public speech
- Prepare an exhibit describing the steps of preparing a speech
- Make a poster for the 4-H Poster Communication exhibit class

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa State University Extension and Outreach 4-H Youth Development, Communication](#)
- [University of California, 4-H Youth Development Program](#)
- [North Dakota 4-H Project Sheet](#)

4-H Drama & Theater Project

Do you like to act? Take part in the school play? Read books? Do book reports? The world of drama and theater impacts you every day. By participating in the 4-H Drama and Theater project, you will explore the exciting world of acting, and learn more about yourself and others.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners should be able to express an idea through pantomime and participate in group storytelling. They should also be able to create a character sketch. Youth should also be able to deliver a monologue.

➤ ***Juniors***

Juniors should be able to create a story through pantomime. They can use tone to impact the listener and be able to reverse roles. Youth should also be able to write a script and learn about costume design and stage positions.

➤ ***Seniors***

Seniors should be able to pantomime a story being told. They should also be able to improvise a scene based on resolving a conflict. Youth should be able to revise a scene in a play and direct scenes in different genres.

4-H Programming Priorities

➤ ***Leadership***

Youth can direct scenes and make decisions that will affect a theatrical performance, whether these choices are made as a director, stagehand, or costume designer.

➤ ***Health & Wellness***

Youth learn to think critically and develop social skills to cope with many different life situations. They can learn to see one proposed outcome of that situation.

➤ ***Science***

Youth see how lighting and set design will play into the finished project. They can learn the science of special effects and their safe implementation.

➤ ***Agriculture***

A story idea can have an agricultural setting or be used to promote the field of agriculture.

Get Involved

Youth Voice



- Express yourself through movement, voice, speech, and characterization
- Create and present a play
- Design costumes and stage sets

Community Service



- Organize and perform a play for a nursing home
- Read books or do puppet shows for children at a local library

Career Connections



- Actor/actress
- Director
- Lighting supervisor
- Costume designer
- Set layout
- Cameraman

Exhibit Ideas

- Portfolio of acting activities completed during the current year
- Illustration of a character created by the exhibitor
- Display illustrating a picture story developed by the exhibitor

Learning Resources

- [National 4-H Curriculum](#)

4-H Graphic Design Project

4-H graphic design applications using computer technology provide 4-H members with an opportunity to express their ideas and learn skills through study and project work. It begins with a message that is transformed into visual communication that transcends mere words. Graphic designers create and control the color, type, symbols, and photography; then, manage the production of the image designs to inform and persuade a specific audience. The work of graphic designers is part of our lives.



Areas and Stages of Youth Development

➤ ***Beginners***

As a beginner, explore the world of graphic design and determine what types of design interest you the most. Start learning how to use basic computer programs like Microsoft Office and Paint.

➤ ***Juniors***

Explore deeper the areas of graphic design that interest you. Begin working on original art and designs. Continue to explore graphic design computer programs, including Photoshop.

➤ ***Seniors***

Pick top area of interest in graphic design and explore possible career opportunities. Meet with and interview current graphic designers to gain insight about their careers. Gain expertise in your favorite graphic design computer program.

4-H Programming Priorities

➤ ***Leadership***

Effective leaders need to be able to communicate. Good graphic design concepts can be used to help leaders communicate their ideas with the public.

➤ ***Health & Wellness***

As part of a healthy lifestyle, it is important to learn where your passions lie. Further exploration of graphic design may help you discover a passion for it.

➤ ***Science***

Computer science and graphic design are linked together and exploration of one will lead to knowledge about the other.

➤ ***Agriculture***

For larger production operations, graphic design plays a large role in their marketing and promotion.

Get Involved

Youth Voice



- Discuss how color affects mood
- Illustrated talk on proper 4-H logo use
- Demonstrate computer graphic design programs

Community Service



- Design a brochure for a local charity
- Advertise the club's service project with a flyer
- Create cards to give to service members

Career Connections



- Email marketing designer
- User interface designer
- Information architect
- Mobile designer

Exhibit Ideas

- Drawn image
- Personalized card
- Brochure
- Marketing package
- Model, portraiture, etc.
- Graphic applications

Learning Resources

- [National 4-H Curriculum](#)
- [Rasmussen College](#)

4-H Music & Dance Project

Express your creative side in the music/dance 4-H project area. Whether you enjoy learning about your favorite type of music/dance or would rather perform your own piece, this area encourages a greater appreciation for expression through music and dance.



Areas and Stages of Youth Development

➤ ***Beginners***

Start playing an instrument or taking dance lessons. Learn to read music and follow a rhythm. Study a specific genre of music, including artists and history. Find out what music performance locations are in your area.

➤ ***Juniors***

Become fluent in a certain instrument/style of dance and with reading music. Explore different genres of music and dances. Learn how a radio station chooses music and how famous musicians began their careers.

➤ ***Seniors***

Write your own music and perform it individually or as an ensemble. Choreograph your own dance. Become familiar with different genres of music, instruments, and styles of dance. Offer a music or dance workshop/lessons.

4-H Programming Priorities

➤ ***Leadership***

Start your own music ensemble/dance group. Learn what it takes to direct a band/choir or to choreograph and teach a dance.

➤ ***Health & Wellness***

Listening to music and dancing can be a great way to relieve stress, which is important to mental wellness. Also, dancing is a fun way to remain physically fit.

➤ ***Science***

Explore sound waves; learn how they travel and the impact instrument shape has.

➤ ***Agriculture***

Some artists sing about life in a small town or rural area. Analyze how realistic they are and how you can accurately promote the field of agriculture through song.

Get Involved

Youth Voice



- Speak about a specific music genre/artist
- Demonstrate how to read music
- Demonstrate a type of dance

Community Service



- Perform at a local nursing home/assisted living
- Assist a music teacher with an elementary school concert

Career Connections



- Choir director
- Dance Instructor
- Choreographer
- Songwriter
- Music shop owner/manager
- Sound technician

Exhibit Ideas

- Display on a famous musician or genre of music
- Recording of yourself performing your own composition
- Recording of your own choreographed dance
- Display explaining how to read music

Learning Resources

- [National 4-H Curriculum](#)

4-H Photography Project

Photographers help us remember important events by capturing images on film or digitally. You will learn to explore the world of photography by learning about camera equipment, capturing great images, learning how to caption your images and sharing your images with others.



Areas and Stages of Youth Development

➤ ***Beginners***

Learn the different types of cameras and the parts of your camera. Determine when to use a tripod and flash photography. Take photos of people, places, landscapes, animals, or still life settings. Learn to tell a story through a photo.

➤ ***Juniors***

Find how shutter speeds and aperture affect photos and adjust the depth of field. Work with different lighting and utilize flash techniques. Use the rules of photography. Learn to caption a photo and to take a candid photo.

➤ ***Seniors***

Use different lenses such as wide angle and telephoto. Learn to use a light meter, practice with different light sources, and use filters and special film. Use framing, viewpoints, and lines to lead to the subject of the photo.

4-H Programming Priorities

➤ ***Leadership***

Volunteer to take photos at a community event or invite a guest photographer to give a demonstration at your 4-H club meeting.

➤ ***Health & Wellness***

Volunteer to photograph at local sports events or use pictures to tell a story of health and wellness. Go on a nature hike and photograph items found in nature.

➤ ***Science***

The sciences are present in all aspects of photography. The lenses, operation of the camera, electronic camera internals, and the film development all use science.

➤ ***Agriculture***

Photography is important to advocating agriculture. Use photos of agricultural products or farmers in the field to share the work and importance of the industry.

Get Involved

Youth Voice



- Illustrated talk on the different types of cameras
- Demonstration of methods to develop photos
- Interview a professional photographer

Community Service



- Serve as your 4-H club photographer
- Volunteer to take pictures at a community event
- Assist your local museum in archiving historic photos

Career Connections



- Photojournalist
- Studio photographer
- Scientific photographer
- Lighting specialist
- Graphic designer
- Magazine features editor
- Photo editor

Exhibit Ideas

- Poster of the parts of a camera
- Photographs of subjects including, but not limited to:
 - Portraits
 - Still life
 - Architecture
 - Landscapes
 - Plants
 - Macro images
- Use a computer to alter photos
- A video or PowerPoint presentation of images

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Photography](#)

4-H Public Speaking & Writing Project

Do you love to talk? Do you find yourself with a mind full of creative thoughts? Are you excited at the opportunity to write and share your thoughts with others? If so, the 4-H public speaking and writing project can help you learn to express yourself in a variety of ways, from speeches to written communication on topics that you love and are excited about! Let's get started!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners may consider having fun with this by creating a puppet and delivering a puppet show to Cloverbuds at a local club meeting. Use your love for words to write and draft a story book with pictures to share with children.

➤ ***Juniors***

Juniors can begin to expand their prepared speech or presentation beyond the local 4-H Club. For example, take the prepared masterpiece and enter it into a county or state fair or a local contest in the community!

➤ ***Seniors***

In addition to previous suggestions, a senior could film and evaluate oneself as a public speaker. Or, if you have discovered that you might be interested in an education in these areas, visit a college and discuss career options.

4-H Programming Priorities

➤ ***Leadership***

Give presentations to other 4-H clubs and organizations and use your speaking skills to promote 4-H to community members.

➤ ***Health & Wellness***

Communicate with others and write a public speech showcasing the power of health and wellness.

➤ ***Science***

Conduct a science experiment and project and report the findings to your local 4-H club or another organization.

➤ ***Agriculture***

Agriculture isn't just the process of sticking seeds into the ground; there are endless topics to speak about. Use your voice to promote agriculture!

Get Involved

Youth Voice



- Public speaking
- Demonstrations/illustrated talks
- Posters
- Written communication

Community Service



- Read a book to children at a local library
- Give a speech at a nursing home/assisted living center
- Teach a workshop on communication tips

Career Connections



- Journalism and communications
- Writer
- Education and teaching
- Business
- Drama and theatre
- Lobbyist

Exhibit Ideas

- Public speaking/presentation
- Write a narrative, expository, descriptive, or persuasive paper
- Poetry: collection of three or more short poems or one long poem
- Fiction or non-fiction prose: short story
- National 4-H communications curriculum

Learning Resources

- [National 4-H Curriculum](#)
- [University of Tennessee, 4-H Youth Development, 4-H Communication/Public Speaking Project](#)

4-H Videography Project

It's lights, camera, action for the videography 4-H project area! In this project area, youth can learn to use the video setting on a camera, plan scenes and transitions for a video, develop skills in capturing quality video, and edit clips to make a complete video.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start by exploring different cameras, methods to take video, and programs for editing. Learn what makes a quality video and create a complete video with a set goal.

➤ ***Juniors***

Juniors use lighting, exposure, focus, and angles to create a quality video. Understand how to incorporate sound effectively and at appropriate volumes. Complete a video with editing

➤ ***Seniors***

Seniors can create a video with a beginning, middle, and end and a set purpose. The video has quality visual and sound effects, and the member is skilled with a video editing program.

4-H Programming Priorities

➤ ***Leadership***

Coordinate and film a video to promote 4-H. Use video from county events to promote 4-H in your area or capture the many project areas 4-H has to offer.

➤ ***Health & Wellness***

Youth feel accomplished, which is important to mental wellness, in a completed process as they film and edit their own videos.

➤ ***Science***

Discover the science behind film development and video production.

➤ ***Agriculture***

Use video to show real experiences in agriculture and to promote the industry.

Get Involved

Youth Voice



- Demonstrate video capture on different cameras
- Discuss lighting and focus techniques
- Demonstrate a video editing tool

Community Service



- Create a series of video clips of your county fair
- Make a video to share a public service announcement

Career Connections



- Film/video editor
- Graphic designer
- Marketing coordinator
- Creative director
- Lighting/sound director
- Camera operator

Exhibit Ideas

- My 4-H project video
- Video of a performance
- Informational video
- Documentary video
- Display showing different cameras to capture video
- Instructional book describing a video editing program

Learning Resources

- [National 4-H Curriculum](#)

4-H Visual Arts Project

Are you creative? Love to make things? Like to explore new types of media and design? Then visual arts may be the project area for you! Experiment with different media types or focus on one. Your imagination is the only limit to expressing your creativeness.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn about the elements and principles of design and explore various media and processes they would like to try. Learn to use and care for art materials, tools and equipment. Begin a journal and/or picture scrapbook of projects.

➤ ***Juniors***

Juniors will experiment with the elements and principles of design to develop and refine their own unique use of media and artistic techniques. Explore art history and culture, art techniques, and the science behind the art.

➤ ***Seniors***

Seniors will apply the elements and principles of design to produce works of art. Explore and invent art-making techniques. Relate artistic ideas with societal, cultural, and historical context to deepen understanding.

4-H Programming Priorities

➤ ***Leadership***

A 4-H member can show leadership by conducting a project day, organizing an art gallery tour, or mentoring another member.

➤ ***Health & Wellness***

Visual arts is a great way to express yourself. It serves as an outlet for your creative energies. A feeling of well-being is a by-product of that outlet.

➤ ***Science***

All synthetic fibers and plastic, as well as any change of state are the result of science. The firing of ceramics causes a chemical change in the glaze.

➤ ***Agriculture***

Whether you are knitting with a wool fiber, working with leather, or painting on a linen canvas, you are using a product of the agriculture industry.

Get Involved

Youth Voice



- Illustrated talk on the elements and/or principals of art
- Demonstrate the use of your favorite medium
- Presentation on famous artists

Community Service



- Lead a craft lesson at a retirement center
- Organize and implement a project day for local youth
- Donate art supplies to a child care facility

Career Connections



- Activities director
- Art teacher
- Web designer
- Painter
- Gallery owner/manager
- Graphic designer
- Illustrator

Exhibit Ideas

- Educational display of the color wheel
- Use charcoal, pastel chalk, carbon, and pigment to create a picture
- Create a pinch, slab coil, or wheel thrown pot
- Stamped, sewn, or braided leather
- Decorative wooden articles

Learning Resources

- [National 4-H Curriculum](#)

4-H Child Development Project

The possibilities are endless in the child development 4-H project area! Learn how children grow and develop and apply that to create games, snacks, and books for children. Gain more experience by working with children and consider future career paths.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start by learning development stages, how children express emotions, and what a safe environment is. Using this knowledge, youth can create appropriate toys and games, identify choking hazards, and plan activities.

➤ ***Juniors***

Build on knowledge by classifying toys and activities for specific ages of children, make healthy and safe food choices, and plan and carry out age appropriate activities. Youth gain experience with assistance individually.

➤ ***Seniors***

Seniors have a strong knowledge of developmental stages and milestones. Apply this by learning guidance and discipline methods, working with children with special needs, observing child behavior, and working with children independently.

4-H Programming Priorities

➤ ***Leadership***

In your county 4-H program, assist with Cloverbud workshops and meetings. Younger 4-H members and children look up to you. Be a role model and set a good example.

➤ ***Health & Wellness***

Plan nutritious snacks and meals to promote the importance of healthy eating habits. Plan fun and active games to play and encourage children to play outdoors.

➤ ***Science***

Make learning fun! Expose children to science by doing safe, age appropriate, and entertaining science experiments.

➤ ***Agriculture***

Find ways to educate children about agriculture. Create lesson plans based on the age and developmental stage of children you'll be teaching.

Get Involved

Youth Voice



- Read a children's book to an elementary classroom
- Discuss age appropriate toys for children
- Demonstration on snacks appropriate for children

Community Service



- Volunteer to provide childcare during an event
- Collect and donate toys for a shelter
- Make blankets for a children's hospital

Career Connections



- Teacher
- Social work
- Nurse
- Childcare provider
- Psychologist
- Pediatrician
- Speech/language therapist

Exhibit Ideas

- Write and illustrate a children's book
- Create a babysitting kit
- Poster describing developmental stages
- Book of activities for children
- Make an age appropriate toy, game, or puzzle
- Display of a home safety checklist

Learning Resources

- [National 4-H Curriculum](#)
- [UF/IFAS Extension Florida 4-H Project Handout](#)
- [California 4-H Project Sheet](#)
- [Wisconsin 4-H Project](#)

4-H Clothing & Textiles Project

Create a style of your own! The clothing & textile 4-H project is designed to help you explore the world of clothing through sewing or good buymanship. Fashions come and go—learn to make your own style. Discover what looks best on your body, how to make it, where to buy clothing, and how to care for fabric.



Areas and Stages of Youth Development

➤ ***Beginners***

Learn to do laundry and read labels. Learn how to read patterns, cut fabric, sew by hand, and sew on buttons. Determine quality construction. Learn to select patterns, fabric, and notions. Learn the parts of and how to use a sewing machine.

➤ ***Juniors***

Examine the cost savings of buying new versus used clothing and accessories. Discover your personal style through clothing and accessories. Compete in Fashion Review at State Fair. Combine two or more patterns to create a design.

➤ ***Seniors***

Identify clothing styles that enhance figures using the principles of design. Learn about various types of retail sales. Understand the differences between natural and man-made fibers. Mentor a younger 4-H member in the project area.

4-H Programming Priorities

➤ ***Leadership***

Volunteer to take charge of washing your family's laundry. Organize a club field trip to a fabric store to learn about suitable fabrics for various sewing projects.

➤ ***Health & Wellness***

Dressing for success plays a vital role in our day to day lives and activities. Learning about personal care tools for skin and hair impacts your overall health.

➤ ***Science***

Understand the composition of different fibers and fabrics. Learn how static electricity works, use vinegar to set creases or conduct heat tests.

➤ ***Agriculture***

Learn how cotton is grown and manufactured and where natural fibers/leathers come from. Did you know South Dakota produces around 1.74 million lbs. of wool annually?

Get Involved

Youth Voice



- Participate in fashion revue
- Demonstrate basic sewing skills
- Present about garment quality

Community Service



- Donate gently used or outgrown clothing
- Organize a community clothing drive
- Help young members select outfits
- Teach a sewing class

Career Connections



- Apparel manufacturer
- Dry cleaner
- Fashion designer
- Seamstress
- Screen printer
- Textile engineer
- Theatrical costuming

Exhibit Ideas

- Educational display or poster
- Constructed clothing
- Selected (purchased) clothing
- Accessories
- Recycled garments or accessories
- Exploring textiles & sewing-curriculum
- A 'Style of Your Own' curriculum

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa State University Extension and Outreach 4-H Youth Development Clothing](#)
- [North Dakota 4-H](#)
- [United State Department of Agriculture, National Agricultural Statistics Service](#)

4-H Consumer Education Project

Each day, individuals make thousands of decisions! What jeans should I wear? What should I eat for breakfast? Should I buy a soda or sports drink after practice? What projects should I partake-in in 4-H this year? Should I spend my birthday money, or save it? The options are endless! The consumer education program seeks to grant youth the knowledge and skills to become more financially responsible consumers as youth are challenged to compare products, prices, and services that are a part of our everyday lives.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners will start acquainting themselves into different prices of the same product and services and will be introduced to the beginning stages of the decision making process.

➤ ***Juniors***

Junior continue to solidify their knowledge of price and product comparisons within the decision making process. Begin gaining an awareness of various resources to expand their expertise in product analysis.

➤ ***Seniors***

Senior 4-H members will use their knowledge of price and product comparisons and awareness of resources to formulate an understanding of the factors impacting consumers' decisions, while developing a realization of consumer rights.

4-H Programming Priorities

➤ ***Leadership***

Within a 4-H club, members can serve as treasurer and better understand the finances of an organization. Members can also volunteer to manage money at an event.

➤ ***Health & Wellness***

Youth can create a shopping list with nutritious food items at cost-effective prices and can study the decision making process in purchasing new running shoes.

➤ ***Science***

4-H members can discuss factors within the environment that might sway consumers' preference for a particular product.

➤ ***Agriculture***

4-H members can use consumer intuition to compare similar feeds/products to give their animals the competitive edge needed to reach their top performance potential.

Get Involved

Youth Voice



- Discuss effective decision making skills consumers can use when purchasing items
- Explain various factors that impact consumers' preferences

Community Service



- Educate community members about online shopping
- Help others explore their needs versus wants while shopping

Career Connections



- Economist
- Politician
- Marketing and advertisement
- Apparel designer
- Consumer behavior researcher
- Public relations

Exhibit Ideas

- Create a poster describing a comparative study of similar items
- Discuss factors that impact consumers' decisions and/or preferences
- Give a speech explaining consumer rights
- Inform the public of management/economic principles

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa 4-H Project Hot Sheet, 4-H Consumer Management](#)
- [North Dakota 4-H Project Sheet, 4-H Consumer Management](#)

4-H Entrepreneurship Project

The 4-H careers project will help you explore what it takes to get your first “paying” job, while working towards your ultimate dream job or career. The 4-H entrepreneurship project will help you explore what it takes to start and own a business. 4-H connects youth to important careers and strengthens their entrepreneurship skills. Entrepreneurship programs aim to increase the number of youth returning to rural communities in business and professions and to increase the number of youth who are entrepreneurs.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start by learning the definition of an entrepreneur. Learn the different types of businesses and research jobs that fit your interests. Begin developing skills in decision-making, effective communication, and time management.

➤ ***Juniors***

Understand credit, technology use for research, basic economic terms, and the value of teamwork. Learn about selecting the right employees for a business and identifying a target customer. Develop skills to sell a product.

➤ ***Seniors***

Learn how to market your business idea, record financial information, analyze customer satisfaction, and collect and pay sales tax. Practice business ethics and social responsibility. Set personal and academic goals.

4-H Programming Priorities

➤ ***Leadership***

Lead a group of friends in preparing a business idea and business plan. Invite business owners to a 4-H club meeting to discuss their business and answer questions.

➤ ***Health & Wellness***

A stable career is essential to mental wellness. Give a presentation about career planning to your 4-H club and teach others to build a resume.

➤ ***Science***

Identify two jobs that interest you in the STEM (science, technology, engineering, and mathematics) and interview adults in those positions.

➤ ***Agriculture***

Work with an agriculture business in your community and identify a product they carry. See if there is a larger market for that item.

Get Involved

Youth Voice



- Define your vision for starting a business of your own
- Discuss ways to identify your talents and interests

Community Service



- Volunteer to lead a fundraiser in your 4-H club and suggest products or services to sell
- Help plan a career fair at your school

Career Connections



- Small business owner
- Business consultant
- Salesperson
- Research and development
- Business reporter
- Recruiter
- Retailing manager

Exhibit Ideas

- Write a story or create a video about someone's typical day at their job
- Poster on a career that you're interested in
- Create a business plan/marketing strategy for an idea
- Create a display showing the path to finding a career

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Careers & Entrepreneurship](#)
- [University of Nebraska-Lincoln, Entrepreneurship Investigation](#)
- [North Dakota Workforce Intelligence Network](#)
- [North Dakota Department of Career & Technology Education](#)
- [RUReadyND.com Education & Career Planning](#)
- [North Dakota Commerce](#)
- [Marketplace for Kids](#)
- [Funderstanding](#)

4-H Home Environment Project

Our homes and apartments are not only our private spaces, but also places that we share with family and friends. Discover how to make living spaces more comfortable, organized, inviting, and relaxing. Learn about color, space planning, fabrics, furniture, and accessories. Don't just focus on inside the home either, outdoor design is a significant part of home environment and how we spend our time at home. From outdoor art creations to fun furniture re-dos, the home environment project area has lots of possibilities.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners gain the knowledge to determine items necessary in a space and how to shop for or make those items on a budget, as well as the importance of accessories to room design.

➤ ***Juniors***

Juniors learn to identify different furniture styles, create new life for old furniture, coordinate fabrics and designs, organize spaces to decrease clutter, and re-design and update existing spaces.

➤ ***Seniors***

Seniors gain the knowledge to select or create accessories for a room, identify energy wasters in a home or office and determine solutions, learn about lighting options, and how to re-do a large furniture item.

4-H Programming Priorities

➤ ***Leadership***

Youth will use their skills gained to teach others, organize display areas for the fair or other events, and work with towns to improve the layout of spaces.

➤ ***Health & Wellness***

Creating safe, clutter free, functional designs, and relaxing spaces for the home reduces overall stress and increases wellness.

➤ ***Science***

Discover how substances used for different finishing techniques impact the look, feel, durability, and environmental impact of a project.

➤ ***Agriculture***

Learn the impact that paint, solvents, and items taken to the landfill have on the land and how redoing existing items in more environmentally safe ways may help.

Get Involved

Youth Voice



- Demonstration creating constructed items for the home
- Presentation on purchasing home items on a budget
- Illustrated talk on interior design

Community Service



- Make blankets to donate
- Create centerpieces for a nursing home/assisted living center
- Re-make display shelves for a county fair

Career Connections



- Interior designer
- Personal shopper
- Building/landscape architect
- Furniture/floral designer
- Professional organizer
- Community planner
-

Exhibit Ideas

- Design board for a bedroom, or living room
- Wall hanging
- Blanket
- Color wheel
- Quilt
- Shopping comparison educational display
- Wood re-finishing
- Outdoor art created from re-used items
- Sewn accessory for a bedroom, living room, or kitchen

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Home Environment](#)

4-H Conservation & Stewardship Project

What will your legacy be? Through learning about conservation and stewardship, you will learn how your actions directly impact the future of our planet. Focus on topics ranging from natural resources to human impacts and everything in between! Conservation does not mean simply being hands-off in the natural world- rather, it is an understanding of the processes that occur and how humans can protect and benefit from them. Stewardship refers to how you live out this understanding of natural harmony.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners begin to understand topics of conservation and what it means to be a good steward. Select one conservation issue to explore in-depth, such as habitat loss, renewable energy, or natural resource conservation.

➤ ***Juniors***

Juniors continue to explore conservation and choose one topic to study and educate others on. Also begin to learn about the management of natural resources in their community.

➤ ***Seniors***

Seniors are able to articulate some of the integral conservation issues in their community and across South Dakota. They should also educate younger members- through a presentation, activity, field trip, or other method.

4-H Programming Priorities

➤ ***Leadership***

Through learning about conservation and stewardship, youth learn to advocate for policies that are in the best interest of the public and leave a lasting legacy.

➤ ***Health & Wellness***

Many studies show the importance of green space in people's health and well-being, but without conservation and stewardship, those green spaces would disappear.

➤ ***Science***

Conservation and stewardship require a working knowledge of natural resource sciences, including geology, wildlife management, ecology, biology, and forestry.

➤ ***Agriculture***

Conservation and agriculture, despite seeming contradiction, actually go hand in hand. Through good stewardship practices, the land can yield even better harvests.

Get Involved

Youth Voice



- Talk about simple tricks to reduce water usage
- Write a letter to your local newspaper about the importance of protecting the public park

Community Service



- Lead a shoreline cleanup on the local waterway
- Put up signs about the new recycling program in your town
- Start an annual clothing exchange

Career Connections



- Meteorologist
- State park naturalist
- National park service ranger
- Conservation officer
- Marine biologist
- Science teacher

Exhibit Ideas

- Create a timeline of events of South Dakota's wildlife
- Create a visitor guide for a local park
- Give a presentation on the history of a state or national park within South Dakota
- Conduct an environmental impact study of a proposed new structure

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa 4-H Project Hot Sheets](#) (based slightly off the Earth and Climate sheet and the Environment and Sustainability sheet)

4-H Energy for Farm, Home, & Transportation Project

Energy is a property that allows objects to move, affect others, or change temperature. There are various forms of energy including electrical, mechanical, chemical, thermal, or nuclear. Energy can be transformed from one form of energy to another but it is never lost.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners just getting started within the energy project area will be able to define various forms of energy (mechanical, chemical, etc.) and have an understanding of potential and kinetic energy.

➤ ***Juniors***

Juniors will be able to explain and demonstrate energy conversions and the basic laws of energy. Additionally, they will have a basic understanding of energy consumption.

➤ ***Seniors***

Seniors can further explore energy by researching the impact of energy consumption and learning about sustainable practices. They will have a good understanding of the benefits and costs related to various energy forms.

4-H Programming Priorities

➤ ***Leadership***

Take leadership by educating others about energy consumption and how to minimize their consumption of energy.

➤ ***Health & Wellness***

The human body requires energy to maintain a healthy lifestyle. Learn about how the body transforms and utilizes energy.

➤ ***Science***

Through studying energy and its impact on the world, youth are exploring physics and related sciences and scientific real world applications.

➤ ***Agriculture***

Agricultural practices utilize various forms of energy to produce the food that humans and animals use to provide energy to their bodies.

Get Involved

Youth Voice



- Present facts on renewable energy
- Demonstrate a change from potential to kinetic energy
- Illustrated talk defining different forms of energy

Community Service



- Create an environmentally friendly energy plan for your community
- Educate others on forms of energy

Career Connections



- Biology
- Chemistry
- Engineering
- Manufacturing
- Power

Exhibit Ideas

- Examine solar energy
- Build a model wind turbine
- Research biofuels and share your findings
- Build a display that explains energy transfer

Learning Resources

- [National 4-H Curriculum](#)

4-H Forestry Project

Trees are a window to the past and play an important part for the future health of our world. Learn how to read the forest by identifying tree types and species in your area, how to conduct a tree survey and its uses, and the many benefits trees provide for our environment and in our daily lives.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn why trees play an important role in the health of our environment, different forest climates, how people and animals use forests for habitat and resources, and plant parts, functions, and photosynthesis.

➤ ***Juniors***

Learn what trees need to grow, their stages, and challenges such as insects and disease. Other skills include identifying risks such as insect damage, forest fire potential, and estimating the volume of a standing tree and forest density.

➤ ***Seniors***

Seniors can learn methods of insect control, how to conduct a tree survey, available careers in forestry, and how different cultures around the world value and use forests historically and today.

4-H Programming Priorities

➤ ***Leadership***

Conducting a tree survey, teaching a class about tree identification, and volunteering to help with local tree plantings can showcase your leadership skills.

➤ ***Health & Wellness***

Get outside to learn the trees in your area by taking a hike through a national forest or park. Make observations of what grows along a bike path or local park.

➤ ***Science***

Forests exist across different ecosystems, climates, cultures and elevations. Many different insect and animal species depend on forests for shelter and food.

➤ ***Agriculture***

Trees are a renewable resource with high value to many different industries. Learning how to grow and harvest trees can lead to many different careers in Forestry.

Get Involved

Youth Voice



- Demonstrate how to identify leaves and common trees
- Create a community forest map
- Create a poster or display of leaves you collected

Community Service



- Monitor for invasive species or insects
- Help care for a tree in your community
- Volunteer to help plant trees in your area

Career Connections



- Silviculturist
- Arborist
- Logger
- Fuels specialist
- Parks and recreation
- Greenhouse owner/manager

Exhibit Ideas

- Poster: Parts of a tree, pruning techniques, tree farm operations and harvest methods
- Display: Bark or leaf collection, scrapbook of local trees and their history, how to plant a tree
- Visit a national forest and create a book to display

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Forestry](#)

4-H Geology & Minerals Project

The geology and minerals 4-H project area rocks! Collect and study different rocks, explore large geological structures, make your own crystals, learn the rock cycle, or create jewelry with rocks and minerals. You don't have to travel far to find exhibits; discover and identify the types of rocks, minerals, and fossils in South Dakota. Your interest and knowledge about geology and minerals is sure to be set in stone!



Areas and Stages of Youth Development

➤ ***Beginners***

Start or continue to build a rock collection, including labelling the type of rock and location found. Learn the types of rock, the rock cycle, and how rocks naturally change. Explore ways to make crystals.

➤ ***Juniors***

Understand mineral properties, tests, and uses. Research common minerals and geological structures found in South Dakota. Learn about fossils and discover ways to create molds and casts similar to a fossil.

➤ ***Seniors***

Research natural history to learn major geologic eras and the rocks and fossils found in South Dakota. Understand the rock cycle and apply mineral tests to determine properties. Promote conservation of minerals and geological structures.

4-H Programming Priorities

➤ ***Leadership***

Help younger 4-H members get their rock collection started. Coordinate a field trip to a state or national park and lead a nature walk to collect and study rocks.

➤ ***Health & Wellness***

Discovering rocks and minerals encourages time spent outdoors and allows youth to experience nature, or get active and hike to a geological structure.

➤ ***Science***

Explore other sciences in relation to geology: study the impact of weather on rock, the effects of mineral extraction, or the causes of volcanoes and earthquakes.

➤ ***Agriculture***

Agrogeology connects geology to agriculture practices. Learn about research being done to improve soil quality using minerals and rocks as a natural fertilizer.

Get Involved

Youth Voice



- Present your rock collection
- Demonstrate a crystal making process
- Illustrated talk on geological structures in South Dakota

Community Service



- Show your rock/fossil collection to an elementary classroom
- Educate community members on the importance of mineral conservation

Career Connections



- Geologist
- Environmental law
- Geological education
- Environmental geologist
- Mineralogist
- Paleontologist
- Engineering geologist

Exhibit Ideas

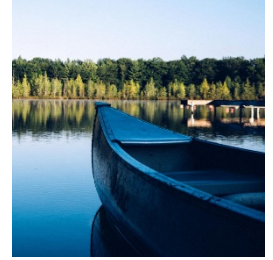
- Poster of the rock cycle
- Rock collection
- Create and display your own crystals
- Jewelry made with natural rocks/minerals
- Book on the fossils found in South Dakota
- Display on mineral characteristics
- Poster of the types of rock

Learning Resources

- [National 4-H Curriculum](#)
- [Purdue Extension, 4-H Geology project](#)
- [University of Illinois Extension 4-H, Geology](#)
- [Remineralize the Earth](#)

4-H Outdoor Education & Recreation Project

Do you like to go on adventures outdoors? Do you know how to prepare and be safe in the outdoors? Learn about that and much, much more in the outdoor education and recreation project area. Outdoor recreation consists of everything from canoeing and kayaking to birding and hiking. You probably do a lot of outdoor recreating without even realizing it!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners should identify several ways in which they already participate in outdoor recreation and look for avenues to learn new skills. They should also go on an adventure with friends or family!

➤ ***Juniors***

Juniors should try at least one new outdoor recreation activity. They should also begin learning about other opportunities that might not be available in their own community, such as white water rafting or rock climbing.

➤ ***Seniors***

Seniors should coordinate and implement an education day for younger members on outdoor recreation and safety. This might include teaching them a new skill, or simply helping them learn how to be safe outdoors.

4-H Programming Priorities

➤ ***Leadership***

One leadership aspect is challenging yourself and stepping out of your comfort zone. Outdoor recreation, when done safely, is a great way learn more about yourself!

➤ ***Health & Wellness***

Being healthy and fit is an important part of partaking in outdoor recreation. Youth must know their own abilities so they do not take on too much risk.

➤ ***Science***

Outdoor education and recreation are a natural extension of being curious in nature. By understanding ecology and conservation outdoor recreation is more meaningful.

➤ ***Agriculture***

A desire to participate in outdoor recreation also lends to participants wanting to care for the natural world, which leads to wise land management decisions.

Get Involved

Youth Voice



- Demonstration correctly wearing a personal flotation device
- Write a blog describing birds in your area
- Illustrated talk on hiking experience

Community Service



- Lead an outdoor activity for community members
- Pick up trash along a popular trail
- Fundraise for new equipment for a local park

Career Connections



- Park naturalist
- Conservation officer
- Wildlife manager
- Camp director
- Trail guide
- Canoe guide
- Wilderness EMT

Exhibit Ideas

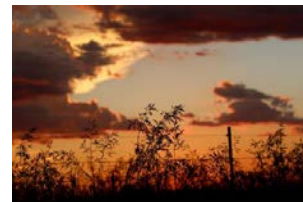
- Create a poster depicting birds you identified
- Make a waterway visitor guide
- Demonstrate how to tie various climbing knots
- Make a poster with different safety equipment for outdoor activities
- Put together a pocket survival kit

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa 4-H, Outdoor Adventures 4-H Project Hot Sheet](#)

4-H Range Management Project

South Dakota is made up of millions of acres of pasture and rangelands. Experience the different plants and animals that make them up and learn how to manage their interaction to preserve the resources for our future and enjoy them in the present!



Areas and Stages of Youth Development

➤ ***Beginners***

Learn the difference between grass, forbs, and shrubs, warm season and cool season, and native and introduced plants. Identify some common plants in your area. Learn about noxious weeds and why they are bad.

➤ ***Juniors***

Learn to identify and classify numerous plant species, how to properly collect and preserve plant specimens, understand the basics of rotational grazing, and how to use range management to be good stewards of the land.

➤ ***Seniors***

Become familiar with different grazing practices, calculate stocking rates, identify different methods for controlling weeds and when to use each method, design grazing systems, and recognize the different parts of a plant.

4-H Programming Priorities

➤ ***Leadership***

Show leadership by teaching non-farmers how proper range management benefits the environment or organize a range tour to collect plants with young 4-Hers.

➤ ***Health & Wellness***

Range management is all about the responsible use of natural resources so that it remains healthy for future generations to use and enjoy!

➤ ***Science***

Use math to calculate the carrying capacity of a pasture. Research different plant species and engineer cross fencing and water systems to increase the capacity.

➤ ***Agriculture***

Use your knowledge of range management to properly utilize a ranch's land and resources to improve the operation and the environment.

Get Involved

Youth Voice



- Speak about the benefits of rotational grazing
- Discuss the control of noxious weeds
- Demonstrate preserving plants using a plant press

Community Service



- Help ranchers control weeds in their pasture
- Create a native plant garden on your 4-H grounds
- Organize a community bird watching tour

Career Connections



- Ranch manager
- Bureau of Land Management agent
- Wildlife habitat manager
- Natural Resources Conservation Service

Exhibit Ideas

- Collect and preserve plants for a plant collection
- Make a grazing system display
- Create a poster explaining animal units
- Make an exhibit showing the parts of a plant
- Build your own plant press

Learning Resources

- [National 4-H Curriculum](#)
- [Wyoming 4-H, Range Management](#)
- [Society for Range Management](#)

4-H Soil & Soil Conservation Project

Soil is an essential resource for growing our food and fiber, and providing space for our recreational activities. In this project area, members can investigate the importance of soil to the ecosystem and agriculture production, and explore how human and natural activities impact soil characteristics and health.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can differentiate between soil textures, describe different types of erosion, and explain why soil is important to everyone.

➤ ***Juniors***

Juniors can determine the texture of a sample of soil, recognize the properties of different soil types, and describe methods of soil conservation.

➤ ***Seniors***

Senior should be advancing their knowledge from a junior level, and should also be able to use and understand web soil survey reports.

4-H Programming Priorities

➤ ***Leadership***

In this project, members can develop as leaders while teaching others about soil conservation and helping promote sustainable practices.

➤ ***Health & Wellness***

Composting and gardening is a great way to encourage youth to enjoy time being physically active outdoors while producing healthy foods.

➤ ***Science***

This project area requires scientific thinking when measuring quantities nutrients and contaminants of soil and conducting experiments to compare soils.

➤ ***Agriculture***

Soil is the foundation for agriculture, and in order to raise crops and feed for our livestock we need to be knowledgeable about soil management.

Get Involved

Youth Voice



- Illustrated talk on different soil characteristics
- Demonstrate how to determine soil texture
- Teach others about soil sustainability

Community Service



- Volunteer with the Natural Resource Conservation Service
- Develop a community compost container at a community garden
- Teach youth about soil

Career Connections



- Soil conservationist
- Soil microbiologist
- Agronomist
- Farmer
- Soil investigator
- Geologist
- Wetland specialist

Exhibit Ideas

- Create models of soil structures
- Measure the nutrition value of various soils
- Compare soil conservation management practices and their effect on pH, soil temperature and water holding capacity
- Complete a web soil survey

Learning Resources

- [National 4-H Curriculum](#)

4-H Water & Water Conservation Project

Did you know that the Earth's surface is more than 70% water? The average human body is almost 60% water! All of the water that exists in the world today is all there ever was or will be. The oceans, rivers, lakes, aquifers, and atmosphere contain all the Earth's water—there is no new water! Water is essential to support life on Earth. Conservation is an important practice that ensures we have enough water, and preserving water quality keeps our water supply clean and free of pollution. Why is water important to you?



Areas and Stages of Youth Development

➤ ***Beginners***

Learn about the water cycle, what a watershed is, sources of water, how pollution affects water quality, why conservation is important, how to reduce water use at home, and general water safety tips.

➤ ***Juniors***

Juniors can expand their learning to include: watersheds/wetlands ecology, local water sources, drought and other issues related to agriculture, testing for nutrients and/or contamination, and water pollution.

➤ ***Seniors***

Seniors grow their skills through scientific exploration and by becoming leaders in local water resources and conservation. Explore creative solutions to address water quality, pollution, run-off, and implement community service.

4-H Programming Priorities

➤ ***Leadership***

Being a leader in water-wise practices and finding solutions to water related issues has an impact on local and global resources... “water you waiting for?!”

➤ ***Health & Wellness***

Understanding how water is important to human and community health is important. The health of watersheds and wetland ecosystems is equally vital for our planet.

➤ ***Science***

Explore wetlands, water resources, and conservation through science experiments, collect measurements and data, or engineer a creative solution that addresses water.

➤ ***Agriculture***

Clean water is essential to agriculture. How water resources are managed has a direct effect on the production of food and other goods.

Get Involved

Youth Voice



- Discuss agricultural practices and the impact on water quality
- Presentation on water resources management
- Illustrated talk on the water cycle

Community Service



- Organize a watershed clean-up day
- Teach youth about water safety
- Track your local water quality

Career Connections



- Water resources management
- Wastewater treatment and reclamation
- Water quality technician
- Environmental engineer
- Hydrologist

Exhibit Ideas

- Make a rain collection barrel
- Design a rain/run-off garden
- Keep a journal on water quality monitoring
- Conduct a water science experiment
- Poster of water conservation methods
- Create a model of the water cycle
- Make a water filtration model

Learning Resources

- [National 4-H Curriculum](#)
- [Kansas State University Research and Extension, 4-H Youth Development, Environmental Sciences](#)
- [Water Rocks!](#)

4-H Wildlife & Fisheries Project

In the wildlife and fisheries 4-H project area, youth can discover the ecosystems and animal species around them and gain expertise with fishing. Discover concepts in biology and use that knowledge to conserve wildlife habitats and natural ecosystems or catch and interest in fishing.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn about food chains/webs, habitats, and characteristics of different animal species. Identify different types of tackle and bait. Understand and apply safety in nature. Discover what animal and plant species are in your area.

➤ ***Juniors***

Understand the relationship between animals and plants, wildlife survival adaptations, and the importance of conservation practices. Become efficient with fishing skills in casting, reeling, and handling a fish.

➤ ***Seniors***

Understand the impacts between urban areas and wildlife ecosystems, conservation practices of wildlife habitats, and animal interactions with other species and the environment. Learn to repair and modify fishing equipment.

4-H Programming Priorities

➤ ***Leadership***

Be a role model and leader by displaying and encouraging positive environmental practices and teaching safety around wild animals.

➤ ***Health & Wellness***

This project area promotes spending time outdoors, which is important to both mental and physical wellness.

➤ ***Science***

Discover concepts in biology and ecology, from species interactions to types of freshwater marine life and animal survival needs to the energy flow of ecosystems.

➤ ***Agriculture***

Farmers and ranchers make best use of their land while preserving wildlife habitats.

Get Involved

Youth Voice



- Illustrated talk on bird species in your area
- Speak about the importance of preserving wildlife habitats

Community Service



- Build birdhouses for a local park
- Pick up trash at a park or lake
- Communicate the importance of removing invasive species

Career Connections



- Habitat restoration biologist
- Marine biologist
- Wildlife area manager
- Park ranger
- Fish and wildlife law enforcement officer

Exhibit Ideas

- Construct a bird feeder
- Book identifying animal tracks
- Display showing species of fish in a nearby lake
- Constructed fishing tackle
- Book about a certain wildlife species
- Display on a habitat improvement project

Learning Resources

- [National 4-H Curriculum](#)
- [Kansas State University Research and Extension, 4-H Youth Development, Wildlife](#)
- [Iowa State University Extension and Outreach, 4-H Youth Development, Wildlife](#)
- [California 4-H Project Sheet, 4-H Wildlife Project](#)

4-H Food Preservation Project

Food preservation is a way to enjoy fresh-grown fruits, meats and vegetables all year! What football tailgating event would be complete without chips and salsa? Do you add pickles to your hamburger? Do you prefer jam or jelly with your peanut butter sandwich? Many every day foods we eat are preserved by canning, pickling, freezing or drying.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn skills, such as sorting and cleaning vegetables, freezing berries, making refrigerator pickles, and learning, with assistance, to use a dehydrator or pressure canner. Youth will understand food safety and its importance.

➤ ***Juniors***

Juniors should know the importance of correctly processing and sealing canned products. Make salsa using farm-grown products, learn about pectins and make jam, and discover which fruits and vegetables freeze and can well.

➤ ***Seniors***

Seniors can demonstrate knowledge of pressure canning, share the importance of correct jar size in canning, understand why headspace and tight seals are important, learn how vinegar can be used to prevent spoilage, and make meat jerky.

4-H Programming Priorities

➤ ***Leadership***

Food preservation is for feeding communities. Youth can teach a food preservation method and share the importance of food safety and correct canning.

➤ ***Health & Wellness***

Promote consumption of fruits and vegetables all year, and list alternatives that are preserved when fruits/vegetable are outside of their growing season.

➤ ***Science***

Learn which vegetables/fruits are better fresh and which can be preserved. Study food preservation methods. Analyze nutrition information for different foods.

➤ ***Agriculture***

Share the importance of locally grown foods and their preservation. Contact state industry groups; promote their products through recipes and preservation methods.

Get Involved

Youth Voice



- Demonstrate how to dry apples with a food dehydrator
- Communicate the importance of food safety when preserving fruits/vegetables

Community Service



- Help preserve the harvests of a community garden
- Share resources on canning methods
- Donate extra preserved vegetables from your garden

Career Connections



- Food technologist
- Garden production worker
- Food safety specialist
- Entrepreneur
- United States Department of Agriculture employee

Exhibit Ideas

- Exhibit canned foods exhibits including jams or jellies, canned meat, pickles, fruits, vegetables or salsa
- Dried fruits, vegetables, or herbs
- Fruit leather
- Create a poster highlighting food safety with food preservation

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Food Preservation](#)
- [National Center for Home Food Preservation](#)

4-H Food Science Project

If you have ever baked a cake or even eaten an apple, you have taken part in food science. Food science encompasses how our body utilizes food (nutrition) as well as what changes food goes through on its way to our plates (food safety and preparation).



Areas and Stages of Youth Development

➤ ***Beginners***

Practice safe food handling practices including hand washing. Conduct experiments including taste-testing of food, maybe even invent a new flavor of ice cream! Understand where your food comes from and how to properly measure ingredients.

➤ ***Juniors***

Understand how different foods are made, such as yogurt and pasta. Learn to prevent foodborne illness. Explore protein chemistry by separating and cooking eggs in different ways. Experiment and learn to make cheese with heat and enzymes.

➤ ***Seniors***

Teach others to cook safely. Understand how physical and chemical reactions occur, osmosis and diffusion in food processes, and the role of compounds like starch and gluten. Learn why color and texture changes as food is cooked.

4-H Programming Priorities

➤ ***Leadership***

Youth may share knowledge learned through food science demonstrations. Encourage and mentor younger members to participate in the 4-H Special Foods Contest.

➤ ***Health & Wellness***

Learn the importance of safe food handling practices. While experimenting with food science and recipes, understand how to balance food intake and physical activity.

➤ ***Science***

Explore how adjusting ingredients within a recipe alters the final product. Learn about the functions of food properties such as carbohydrates, fats, and gluten.

➤ ***Agriculture***

Youth understand where their food comes from, including the role of producers and the food groups. Learn which states produce different commodities.

Get Involved

Youth Voice



- Illustrated talk describing what gluten is and how it works
- Discuss careers in food science
- Demonstrate how to measure ingredients

Community Service



- Present a workshop to educate others on food safety
- Organize a food drive
- Teach others in your community how to preserve foods

Career Connections



- Distribution
- Education/research
- Food safety
- Healthcare
- Marketing
- Processing
- Quality

Exhibit Ideas

- Public presentation/poster on areas in food science (examples may include how bread is baked, pasta making, why some fruits turn brown when sliced, or facts on gluten)
- Research the science behind a cooking process and create a “Project Why”

Learning Resources

National 4-H Curriculum: <https://4-h.org/parents/curriculum/>

Fight the BAC!: <https://www.fightbac.org/>

4-H First Aid & Health Project

First aid is the immediate care given to an injured or suddenly ill person and every person should be trained in how to administer first aid. First aid does not take the place of getting proper medical treatment by a qualified and licensed practitioner but knowing first aid and how to properly apply is important.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners should understand the basics of first aid and convey the message through educational posters and/or displays. The exhibits show a basic knowledge of first aid, as well as how to stay safe and avoid injuries.

➤ ***Juniors***

Understand the basic skills of first aid and be able to exhibit those. The member can communicate that knowledge through educational displays and demonstrations. The member knows the ABC's of first aid care (Airway, Breathing, Circulation).

➤ ***Seniors***

Seniors can demonstrate advanced first aid skills, exhibit proper prevention methods to avoid injuries and illness, and can communicate these skills through public speaking, displays, and demonstrations of first aid in action.

4-H Programming Priorities

➤ ***Leadership***

Acquire the knowledge and skills necessary to administer first aid care as a first responder and demonstrates first aid training and awareness.

➤ ***Health & Wellness***

Through the 4-H first aid project the 4-H member learns the importance of healthy lifestyle choices and learns skills in promoting safety, wellness, and fitness.

➤ ***Science***

Through the 4-H first aid project, members learn about career choices in medicine, pharmacy, and healthy living.

➤ ***Agriculture***

Learn the importance of farm safety education, promoting safe farming practices, and the skills necessary for prevention and aid of farm accidents.

Get Involved

Youth Voice



- Demonstrations on first aid administration
- Communication about the importance first aid certification
- Teach classes on fitness and health

Community Service



- Teach classes on proper first aid administration
- Make first aid kits for community centers
- Teach how to avoid injuries and prevent illness

Career Connections



- Physician
- Nurse/nurse practitioner
- Emergency medical technician (EMT)

Exhibit Ideas

- Educational displays
- Educational posters
- First aid kits
- CPR instructions and/or demonstrations
- Public speaking presentations
- Winter survival kits
- Emergency preparedness kits
- Emergency animal care kit

Learning Resources

- [National 4-H Curriculum](#)

4-H Fitness & Sports Project

Do you love playing sports, being in shape, or preventing athletic injuries? Youth involved in the fitness and sports project will have the ability to share their passions for favorite activities and educating people about fitness tips and safety.

There are several types of 4-H projects that members can complete. Youth can organize a community service project, conduct demonstrations, design a poster, present an illustrated talk, share a job shadow experience, create an educational video, and more.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners work on locomotive skills such as jumping and skipping. They also should become knowledgeable of different games that they can play with their friends. Learn the benefits of limiting time in front of a screen.

➤ ***Juniors***

Juniors should be capable of locomotive skills and should work on balance and flexibility. They also explore different activities and decide find what interests them. Describe how to cut down on screen time).

➤ ***Seniors***

Seniors should have advanced locomotive skills. Learn the benefits of lifting weights and proper lifting form and understand the economic impact of sports. Youth can resist spending several hours in front of a screen.

4-H Programming Priorities

➤ ***Leadership***

Leadership in the fitness and sports project can include presenting exercise programs and education at school or in the community and encouraging participation.

➤ ***Health & Wellness***

Fitness and sports are correlated to health and wellness. It is important to realize why fitness and sports is beneficial to people of all ages.

➤ ***Science***

Science plays a big role in fitness and sports. A knowledge of how the muscular-skeletal system operates and can repair itself involves scientific knowledge.

➤ ***Agriculture***

Many exercise movements originate from common farm chores. Proper form is about safety and prevents injuries that may inhibit a person from work.

Get Involved

Youth Voice



- Demonstrate how to wrap an injury
- Communicate how to design an exercise plan
- Illustrate proper weightlifting movements

Community Service



- Volunteer to organize fitness events in the community
- Assist after school programs by designing physical activities for participants

Career Connections



- Coach
- Personal trainer
- Group exercise instructor
- Physical/occupational therapist
- Athletic trainer
- Physical education teacher

Exhibit Ideas

- Poster about equipment needed for a sport, why, and costs
- Map of safe bike routes
- Describe different options for group exercise
- Display emphasizing concussion awareness
- Share the importance of warming up properly

Learning Resources

- [National 4-H Curriculum](#)
- [California 4-H Project Sheet Series, 4-H Fitness Project](#)

4-H Health Project

Today's world is very health conscious with limitless choices and opportunities. You might ask what can I learn and pursue in the health project area? You could learn about nutrition and how important it is for your health, take a basic first aid course and research how to make a first aid kit, or organize and lead an exercise class. Make displays about the discoveries you've learned while researching and learning how health, wellness, physical activity, and nutrition work together for a healthier lifestyle.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn about basic first aid and how to care for minor injuries. Research and put together a basic first aid kit. Share the knowledge you have learned about the importance of good health, nutrition, and physical activity with others.

➤ ***Juniors***

Learn ways that you could add more physical activity to your daily routine. Learn how choosing a variety of healthy foods and participating in daily physical activity you can balance your calories and maintain a healthy weight.

➤ ***Seniors***

Seniors explore careers in the fitness, nutrition, and healthcare fields. Understand what you can do to prevent sport-related injuries. Learn about portion sizes, how to create healthy snacks, and how nutrient rich foods affect the body.

4-H Programming Priorities

➤ ***Leadership***

Lead your club in a fun exercise activity or help some develop and health/fitness program. Research and share a health related topic.

➤ ***Health & Wellness***

Learn about healthy eating and the importance of physical activity and teach that to others. Explore health career options.

➤ ***Science***

The application of science to health can involve learning how food is turned into fuel for the human body and exploring future careers in health science fields.

➤ ***Agriculture***

Farm Safety camps focus on health and safety issues in rural communities. Industry leaders can explain the safety of products that American farmers are producing.

Get Involved

Youth Voice



- Discuss different types of exercise
- Demonstrate how to make healthy snacks
- Explain the risks involved with smoking, alcohol, or drugs

Community Service



- Help plan a local health fair
- Coach a local elementary sports team
- Help plan a walk/run event in your community

Career Connections



- Nurse
- Physical therapist
- Healthcare administrator
- Radiologist
- Pharmacist
- Dentist
- Nutritionist/dietitian

Exhibit Ideas

- Educational display. Example: The effects of sunlight, assessing local health care needs
- Educational poster. Example: Sunscreen label, skin care, exploring job and career opportunities
- Homemade health and beauty products

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa 4-H Health](#)

4-H Safety Project

The Safety 4-H project area is designed for youth to gain the knowledge and skills to prevent injuries and accidents and how to get assistance when they occur. Become familiar with areas including but not limited to farm and rural safety, fire safety, injury and illness prevention, kitchen safety, internet and technology use, and environmental safety.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners know when and how to call 911 and how to report other dangerous situations. Identify warning labels on a product and demonstrate correct hand washing. Become familiar with kitchen safety, fire safety, and home alone safety.

➤ ***Juniors***

Identify safety equipment for sports and recreation activities. Promote safe use of the internet and technology and explain ways to prevent fires and other accidents. Understand safety on a farm and in a rural area.

➤ ***Seniors***

Seniors can communicate their knowledge of safety with younger 4-H members. Become First Aid/CPR certified. Understand how to make a safe environment for children. Identify and address safety hazards in your community.

4-H Programming Priorities

➤ ***Leadership***

Apply safety to any 4-H project and promote safety in all that you do. Set a good example for the younger 4-H members.

➤ ***Health & Wellness***

Physical activity is an important piece of a healthy lifestyle and knowing how to prevent injuries and remain adequately hydrated is just as important.

➤ ***Science***

Knowing the science behind accidents/injuries can help you better prevent those incidents.

➤ ***Agriculture***

Share your knowledge about remaining safe on your farm, around equipment, and in a rural area.

Get Involved

Youth Voice



- Speech on the importance of smoke alarms and a fire safety plan
- Discuss kitchen safety tips
- Show the safety equipment for riding a bicycle

Community Service



- Present a workshop at a farm safety camp
- Talk to an elementary classroom about calling 911
- Pick up trash at a local playground

Career Connections



- Health and safety engineer
- First aid/CPR instructor
- Fire inspector
- Health policy analyst
- State/local health department

Exhibit Ideas

- Lesson plan and summary of a safety workshop you led
- Display with a fire escape plan from a building
- Poster on appropriate times to call 911
- Display showing sport safety equipment
- Display on kitchen safety
- Poster on correct hand washing

Learning Resources

- [National 4-H Curriculum](#)
- [California 4-H Project Sheet Series, 4-H First Aid and Safety Project](#)

4-H Character Education Project

Good character is the foundation for everything positive in your life. Put your upstanding values to good use and share what a reputable citizen looks like with your peers. Developing your role in society is a process involving moral growth and leadership. Character education is defined as “efforts to help young people develop good character based on ethical values such as honesty, compassion, responsibility and respect for self and others”.



Areas and Stages of Youth Development

➤ ***Beginners***

Practice good behavior at home and school. Show your parents respect by doing what is asked of you. Be caring and treat others like you would want to be treated. Set a character goal for yourself!

➤ ***Juniors***

Elect a character officer for your 4-H club to be in charge of team building activities. Offer ideas to other members on establishing good character traits. Track your character traits in a journal.

➤ ***Seniors***

Seniors can participate in the 4-H Character All Star program, where youth represent their school and promote good character. Serve as a role model for excellent behavior. Volunteer to teach character education lessons with a 4-H Advisor.

4-H Programming Priorities

➤ ***Leadership***

Your critical thinking skills and ability to rely on your ethics will enable those around you to trust your leadership capabilities.

➤ ***Health & Wellness***

Doing the right thing feels good. Sometimes the right thing is difficult, but your conscience is clear. Mental health is an important aspect to overall wellness.

➤ ***Science***

As science and technology become the future, ethics and morals are incredibly important to the future generations.

➤ ***Agriculture***

A voice for agriculture is trustworthy, respected, and compassionate. Future farmers and ranchers will be responsible for feeding the world.

Get Involved

Youth Voice



- South Dakota 4-H Character All Stars representative
- Lead a character assembly in school
- Teach character education curriculum

Community Service



- Teach a senior citizen how to use technology
- Recognize veterans for their service
- Create a community recycling center
- Plan a leadership day

Career Connections



- Teacher
- Guidance counselor
- 4-H youth program advisor
- All career paths need persons to exemplify good character!

Exhibit Ideas

- Show a poster highlighting good character traits
- Educational display featuring how to give a good compliment
- Collect news articles about your club displaying their good character traits within the community

Learning Resources

- [National 4-H Curriculum](#)
- Mullins, Jessica Lynn, "[CHARACTER EDUCATION AND 4-H YOUTH DEVELOPMENT](#)" (2011). University of Kentucky Master's Theses. 85.

4-H Cloverbuds Project

Exploring, asking questions, and an eagerness to learn is what makes the Cloverbud age such an exciting time! The 4-H Cloverbuds program, specifically designed for children in kindergarten through third grade, appeals to a child's natural curiosity, enthusiasm for learning, and high energy level. Offering a wide variety of activities and experiences, in a non-competitive environment, encourages children to explore and think about the world around them. You and your child are sure to learn and grow through Cloverbuds!



Areas and Stages of Youth Development

➤ ***Five-Year Olds***

Participate in activities allowing them to work and play in small groups as well as asking and answering questions. Activities will focus on the process rather than the finished product. Perfection is not the primary goal.

➤ ***Six-Year Olds***

Youth continue to make friends as they play and learn in small groups. Activity remains focused on the process rather than the finished product. Exploration and creativity of youth is encouraged in order to stimulate conversation.

➤ ***Seven-Year Olds***

Take advantage of opportunities to practice skills and do projects that can be completed by beginner 4-H members. Cloverbuds will reflect on their learning experiences, preparing them for recording future experiences in a 4-H member book.

4-H Programming Priorities

➤ ***Leadership***

Small group work fosters cooperation and trust. Projects encourage practice and mastery, allowing youth to reflect on their work and identify areas for improvement.

➤ ***Health & Wellness***

Lesson plans are designed around physical activities that use large motor skills. Leaders create a positive environment through encouragement and praise.

➤ ***Science***

Children will be encouraged to take part in activities that can be done over and over in different ways, similar to that of science and engineering processes.

➤ ***Agriculture***

Cloverbud snacks should be simple and nutritious and are easily related to concepts that emphasize the importance of agriculture in South Dakota and everyday life.

Get Involved

Youth Voice



- Club meeting/activity participation
- Exhibit show and tell
- Small animal showmanship
- Companion animal showmanship

Community Service



- Park clean up
- Help with Meals on Wheels delivery
- Make tie blankets for a local shelter or care center
- Give Valentines to senior citizens

Career Connections



Leads to study of future career choices:

- Chef
- Entomologist
- Veterinarian
- Engineer
- Math teacher

Exhibit Ideas

- Dog
- Rabbit
- Companion animal
- Chocolate chip cookies
- Banana muffins
- Horticulture (beans, peas, carrots)
- Selected outfit
- School artwork (mixed media, watercolor projects, clay/ceramic)
- Homemade slime
- Completed craft kit

Learning Resources

- [National 4-H Curriculum](#)

4-H Economics, Business, & Marketing Project

When one thinks of economics, business and marketing, we often tend to think of high-rise city offices, corporate environments, etc. Sure, that's a direction you could go with this project area, but it's also useful in many more areas! Economics, business and marketing is everywhere around us! From your club level on up to Wall Street, there's a way to practice ethical decision making, use your talents and interests for a career, or simply help make a difference using these diverse and necessary skills.



Areas and Stages of Youth Development

➤ ***Beginners***

This is a wide ranging project area, and ideas include, but are not limited to: set a budget, develop a plan to save for a large purchase, learn basic economic terms and different types of businesses, research jobs that fit your interests.

➤ ***Juniors***

Juniors begin to set goals for saving/spending your earned money. Research selling a product and learn how to build a customer base. Interview a business owner to learn more. Learn how to make an idea into a business.

➤ ***Seniors***

Seniors work toward more set goals, but are not limited to: practice business ethics and social responsibility, understand the connection between school/work and set educational/personal goals, learn to market your own business idea.

4-H Programming Priorities

➤ ***Leadership***

In a 4-H club, youth can serve as treasurer. An individual or group can also prepare a business idea or volunteer to lead a fundraising activity.

➤ ***Health & Wellness***

Mental health is an important aspect to overall wellness. As you practice being a person of good character, you'll develop business ethics and be more successful.

➤ ***Science***

Economics, business, and marketing can't be done efficiently without the use of technology, making science dominant in the office work environment.

➤ ***Agriculture***

Being a successful producer requires a good knowledge of economics, business, and marketing. Marketing skills can be used to communicate topics in agriculture.

Get Involved

Youth Voice



- Define your vision for your own business
- Teach your 4-H club to create a resume
- Illustrated talk about your business idea

Community Service



- Assist promoting a 4-H event
- Volunteer at a career fair at school
- Work with a small business in your community to study a product/service

Career Connections



- Entrepreneurship (Start something of your own!)
- ANY business
- Marketing, promotions, public relations
- Event planning and promotions
-

Exhibit Ideas

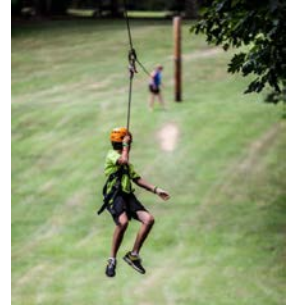
- Show a poster highlighting a career of your choice
- Write a story or create a video about someone's work day/career
- Create a workshop for younger 4-H members
- Create a business plan &/or marketing strategy for a business idea

Learning Resources

- [National 4-H Curriculum](#)
- [Marketplace for Kids](#)
- [North Dakota 4-H](#)

4-H Exploring the Treasures of 4-H Curriculum Project

Are you a new 4-H member and don't really know where to start in 4-H? The Exploring the Treasures of 4-H curriculum introduces youth in 2nd through 4th grade to the world of 4-H. In this curriculum, youth can explore different project areas such as citizenship, communication, food and nutrition, first aid, leadership, plant science, pets-small animals, science and technology. This is a beginner project area, but older youth can also use the curriculum to better develop their own leadership skills and promote 4-H.



Areas and Stages of Youth Development

➤ ***Beginners***

This project area was developed for beginners in the 4-H program. Beginners will experience a hands-on learning and an overview of 4-H. This project area has a guidebook that allows youth to complete all six chapters within the curriculum.

➤ ***Juniors***

Juniors can use this curriculum to expand their current knowledge of 4-H into different project areas in which they may have limited knowledge. Juniors can also promote the project area and share their experiences in 4-H.

➤ ***Seniors***

Seniors can create and lead group opportunities for younger members participating within the curriculum to help expand their knowledge. Seniors can also mentor younger members to help them complete the guidebook.

4-H Programming Priorities

➤ ***Leadership***

With the Exploring the Treasures of 4-H area, youth learn about personal development, citizenship, and service learning and can educate others using the curriculum.

➤ ***Health & Wellness***

In this project area, related to health and wellness, youth can learn different components of healthy living, safety, first aid, and consumer education.

➤ ***Science***

Science opportunities in the Exploring the Treasures of 4-H curriculum include areas such as environmental sciences, earth sciences, and science & technology.

➤ ***Agriculture***

Agriculture in the Exploring the Treasures of 4-H curriculum allows beginners to learn about plants, trees, and animals.

Get Involved

Youth Voice



- What I learned from the Exploring the Treasures of 4-H curriculum
- Illustrated talk describing community service project ideas

Community Service



- Clean a community park
- Plant flowers within your town
- Sending thank you notes to individuals who protect and serve your community

Career Connections



- Scientists
- Nurse
- Teacher
- Environmentalists
- Actor
- Elected official
- Meteorologists

Exhibit Ideas

- Completion of 3 of the 6 chapters within the guidebook
- Public presentation of what was learned using the curriculum
- Exhibits within any of the project areas

Learning Resources

- [National 4-H Curriculum](#)

4-H Hobbies & Collections Project

Too busy to begin a new 4-H project? That is okay! What you are already doing in your leisure time for enjoyment can be turned into a 4-H exhibit! By doing so, it also gives you documentation on why you are doing it, what it consists of, and what you have learned. Is your hobby or collection too valuable to bring to the state fair? Pictures can be taken instead and put in a binder. This is a project where documenting your interests and memories is easy to do and you will be able to look at in years to come.



Areas and Stages of Youth Development

➤ ***Beginners***

This project area teaches youth that what they like to do is important! They learn how to share their collection or hobby with others. It teaches organization skills by working to display what they have completed.

➤ ***Juniors***

This is an opportunity to expand your hobby or collection such as labeling a car in a collection with the make and model or to increase the difficulty by adding more pieces to your Lego collection or puzzle hobby.

➤ ***Seniors***

As a senior's interests expand, they will further develop skills relating to their exhibit. The member will discover what their passions are and gain expertise in that area as a continued hobby or future career.

4-H Programming Priorities

➤ ***Leadership***

Turning your leadership accomplishments into an exhibit, such as a scrapbook of your community service participation, will inspire others to do the same.

➤ ***Health & Wellness***

Hobbies include yoga, walking, running, weight-lifting, or a healthy recipe collections. Youth will be able to document their goals, progress, and achievements.

➤ ***Science***

Science related collections include rocks, bugs, antlers, feathers, etc. Areas such as astronomy, bird watching, and starting an aquarium include science hobbies.

➤ ***Agriculture***

There are many options for exhibits relating to agriculture such as bee keeping, seed collecting, raising animals, and collecting antiques.

Get Involved

Youth Voice



- Public presentation on how to display your collection
- Public presentation on how to complete your hobby

Community Service



- Share the products of your hobby with others
- Display collection for community members to enjoy
- Teach others how to do your hobby/collection

Career Connections



- These projects assist youth in determining what they like and feel comfortable doing, giving them a strong foundation in selecting their career.

Exhibit Ideas

Collections:

- Antlers
- Books
- Cars
- Coins
- Feathers
- Fishing lures
- Music
- Puzzles

- Recipes

Hobbies:

- Cake Decorating
- Cycling
- Fishing
- Gardening
- Flying Kites
- Needlework

Learning Resources

- [National 4-H Curriculum](#)

4-H Leadership Skills Development Project

While “leadership” is a common term, how many people have a real understanding of it and can be an effective leader? The leadership skills development 4-H project area is designed for youth to identify and achieve the skills needed to be a good leader. These skills can be developed through experience in a group setting or leadership position or by participating in activities focusing on communication, organization, responsibility, and teamwork.



Areas and Stages of Youth Development

➤ ***Beginners***

Plan and lead a fun activity for your local 4-H club. Look for and participate in activities to work on responsibility, teamwork, and communication/public speaking. Teach another member about a new project area or skill.

➤ ***Juniors***

Run for office in your local 4-H club or join your county 4-H junior leaders group. Identify characteristics of a good leader. Give a public presentation. Learn parliamentary procedure and skills in decision making.

➤ ***Seniors***

Apply for the State 4-H Ambassador program. Attend a leadership camp or workshop. Learn about different leadership styles and identifying strengths/weaknesses. Build on interview and communication skills. Teach a workshop for 4-H members.

4-H Programming Priorities

➤ ***Leadership***

Take advantage of any opportunity to lead. You don't have to hold an elected position; lead a service project or serve on a committee or team.

➤ ***Health & Wellness***

Pledge your health to better living. Be a role model for healthy lifestyles by promoting healthy habits, a balanced diet, and the importance of physical activity.

➤ ***Science***

Learn about the 4-H National Youth Science Day and lead a team to participate in the challenge.

➤ ***Agriculture***

Use your leadership skills to communicate about and promote the agriculture industry.

Get Involved

Youth Voice



- Speak about parliamentary procedure to be used in 4-H club meetings
- Demonstrate skills in communication, decision-making, and goal setting

Community Service



- Assess community needs, then plan and lead a service project according to those needs
- Lead team building activities for your 4-H club

Career Connections



- Sales
- Human resources
- Entrepreneurship
- Retail
- General management

Exhibit Ideas

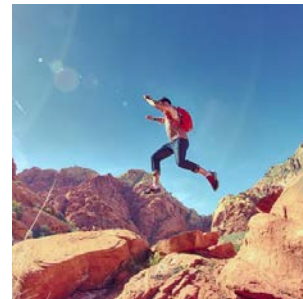
- Display describing different leadership styles
- Scrapbook of leadership positions you've held
- Poster on parliamentary procedure
- Display describing a community service project you coordinated
- Written goals for developing your leadership skills

Learning Resources

- [National 4-H Curriculum](#)
- [Kansas State Research and Extension, 4-H Youth Development, Leadership](#)
- [California 4-H Project Sheet Series, 4-H Leadership Development Project](#)
- [Iowa State University Extension, 4-H Youth Development, Leadership](#)

4-H Leisure Education & Recreation Project

What do you like to do for fun? Those games and activities you participate in now may be setting you up for a life of well-being. Leisure and recreation activities provide outlets for youth and adults to relax, socialize, and engage in healthy activities. You can investigate topics such as how to find and become involved in recreation activities, how to maintain equipment, and what health and wellness opportunities your community offers.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start with learning about the leisure and recreation opportunities available. Partake in new experiences and learn about the equipment and regulations of each one.

➤ ***Juniors***

Juniors understand the connection between leisure and recreation and lifetime health and wellness. They may choose to design a new experience for other youth in their area.

➤ ***Seniors***

Seniors can learn a new activity, and they should plan and implement a skills workshop for younger youth. Seniors may also choose to do a job shadow with a professional in the leisure activity or recreation field.

4-H Programming Priorities

➤ ***Leadership***

How can you lead others without taking care of yourself? By learning how to maintain a well-balanced lifestyle, you are setting yourself up for a success.

➤ ***Health & Wellness***

Leisure and recreation activities are an excellent opportunity to remain active and improve both physical and emotional health.

➤ ***Science***

Learn the proper nutrition and body mechanics for a variety of activities to eliminate fatigue and the possibility of injury.

➤ ***Agriculture***

Leisure and recreation activities help all people learn new skills, even those in underserved agricultural areas, thus leading to a better quality of life for all.

Get Involved

Youth Voice



- Demonstration on maintaining your camping gear
- Write an article about activities in your community

Community Service



- Organize a club hike at a nearby park
- Lead a fundraiser to update the school's sports equipment
- Volunteer with a summer recreation program

Career Connections



- Park director
- Athletic director or coach
- Park ranger
- Physical therapist
- Afterschool program coordinator
- City planner

Exhibit Ideas

- Demonstrate use and care for protective equipment for outdoor activities
- Video of yourself teaching others a new skill
- Organize a field trip to try a new activity

Learning Resources

- [National 4-H Curriculum](#)
- [Michigan State University, 4-H](#)

4-H Social Recreation Skills Project

Let's get outdoors! Hiking, camping, fishing, and canoeing are just a few things you can do outside to get in touch with nature. Explore the possibilities and have something to exhibit at your fair. The social recreation skills project area enables youth to gain a lifelong appreciation of the outdoors and nature.



Areas and Stages of Youth Development

➤ ***Beginners***

Start by choosing their adventure and items needed to carry out a day hike. Learn basic first aid and nature safety rules and explore the ideas of basic nature etiquette.

➤ ***Juniors***

Plan an overnight trip for peers or family (hiking, camping, or fishing). Learn the differences in supplies needed for a longer adventure and practice appropriate nature etiquette on the trip.

➤ ***Seniors***

Plan a multi-day trip (camping, hiking, canoeing, or fishing). Prepare for their multi day adventure (food, clothing, cooking, emergencies, etc.). Share your outdoor knowledge and nature etiquette rules.

4-H Programming Priorities

➤ ***Leadership***

Planning for an outdoor activity gives youth responsibility and leadership roles outside of normal everyday activities.

➤ ***Health & Wellness***

Outdoor activities would increase the health and wellness of all youth by incorporating physical activity.

➤ ***Science***

Social recreation skills allow youth to explore science in a real life outdoor setting.

➤ ***Agriculture***

Youth will recognize that agriculture is part of nature!

Get Involved

Youth Voice



- Illustrated talk on nature trails in your area
- Demonstrate how to safely start a fire
- Illustrated talk on "Leave No Trace"

Community Service



- Volunteer to mow and clean trails at state parks
- Plan an afterschool program to explore nature in your town
- Volunteer to be a camp counselor

Career Connections



- Park ranger
- Natural resources conservation district
- Wildlands firefighter
- Hunting lodge and guide service

Exhibit Ideas

Educational displays or posters:

- Nature trails
- Hiking essentials
- Leave no trace
- Care of camping gear
- Picking a camping site
- Fishing lures

Learning Resources

- [National 4-H Curriculum](#)

4-H Workforce Preparation (Career Exploration) Project

Let's go to work! Explore careers and connect with business leaders in your community through Workforce Preparation. Build valuable skills, such as resume writing, that will assist you in obtaining a job. Learn about today's workforce and how to successfully obtain your first paying job. This project is based on the national 4-H curriculum. Stop by your extension office to learn more and become a force in today's world.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn what it means to have a job and earn a paycheck. Build personal responsibility, communication, and organizational skills by completing tasks. Explore how to save and spend what is earned and how it impacts the local economy.

➤ ***Juniors***

Juniors identify and explore the 21st century skills that employers are looking for. Prepare to be part of the workforce and gain experience by shadowing at a local business. Begin building a resume that highlights their talents and skills.

➤ ***Seniors***

Seniors are writing dynamic cover letters and resumes. They can identify their own skills and communicate these through an interview. They develop 21st century skills and explore career possibilities in their community and beyond.

4-H Programming Priorities

➤ ***Leadership***

Youth discover their individual strengths and how they are essential for success in the workplace. They lead a workshop focusing on 21st century skills.

➤ ***Health & Wellness***

Maintaining health and wellness is important for success. Youth learn how to balance personal and professional responsibilities so they can work to their potential..

➤ ***Science***

STEM careers are abundant, and youth can explore possible career paths through 4-H STEM programs and participation in the National Youth Science Day.

➤ ***Agriculture***

The field of agriculture has many career possibilities. Youth are exposed to the many opportunities in their local community and state.

Get Involved

Youth Voice



- Give a presentation about career planning
- Create a display outlining the essential elements of a resume
- Organize a workshop to teach interview skills

Community Service



- Career fair
- Mentoring program
- Job shadowing
- Volunteering

Career Connections



- Human resources
- Guidance counselor
- Teacher
- Chief executive officer

Exhibit Ideas

- Tri-fold display: business leaders/job opportunities in your community
- 4-H curriculum unit
- Poster/display about a potential career
- Personal portfolio: cover letter and resume

Learning Resources

- [National 4-H Curriculum](#)

4-H Aerospace & Rocketry Project

Want to design, build, and launch your own rocket? Always been interested in airplanes and flight? Blast off to the aerospace and rocketry project area! Learn how technology has impacted air travel, discover the construction of rockets, space shuttles, kites, airplanes, and hot air balloons, study stars and outer space, and construct rockets and other aircraft. Whether you enjoy constructing aircraft or exploring the sciences behind it, you don't have to be a rocket scientist to enjoy Aerospace and Rocketry!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can identify the parts of a rocket, build a rocket, and gather the materials needed to launch the rocket. Know the different types of aircraft and the basics of flight. Understand and practice safety when launching your rocket.

➤ ***Juniors***

Study physics and learn how to increase efficiency in flying. Construct your own rocket launch system. Understand the function of aircraft parts and build other types of aircraft. Study astronomy, the atmosphere/weather, and airplanes.

➤ ***Seniors***

Seniors can assist/teach younger members in the project. Understand more complex parts such as rocket engines. Create your own aircraft models, such as a glider or hot air balloon. Build your own rocket or kite without a model.

4-H Programming Priorities

➤ ***Leadership***

When building and launching rockets and other aircraft, teach and promote safety. Stand out as an advocate in the science, technology, engineering, math area.

➤ ***Health & Wellness***

Whether you're launching rockets or flying a kite, time spent outdoors and physical activity is a large part of aerospace and rocketry.

➤ ***Science***

Discover the sciences of physics and chemistry and their relation to take off and flight. Study astronomy to learn about stars and outer space.

➤ ***Agriculture***

Advances in technology carry over into agriculture practices. Research how airplanes and other flight methods are used in the field of agriculture.

Get Involved

Youth Voice



- Demonstrate the construction of a model rocket
- Illustrated talk on the different types of aircraft
- Discuss the impact weather had on flight

Community Service



- Teach younger members about rockets and flying
- Volunteer at a local air show or event

Career Connections



- Aerospace engineer
- Materials and manufacturing engineer
- Rocket scientist
- Pilot
- Quality control inspector
- Ground radio operator

Exhibit Ideas

- Rocket from a kit or an original
- Constructed glider or kite
- Poster displaying safe launching of a rocket
- Model airplane or hot air balloon
- Display on space exploration or astronomy
- Design sketch of an airplane, helicopter, glider, etc.

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet](#)
- [California 4-H Project Sheet](#)

4-H Automotive, Small & Tractor Engines Project

Start your engines and get excited about the automotive, small and tractor engines 4-H project area! Explore your interest in tractors and cars and learn how engines work, what problems can occur and how to fix those problems, and even build your own small engine.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners start by learning basic information such as parts of an engine and tractor, the uses of different engines, spark plug maintenance, and the importance of clean air for an engine. Know safety with engine repair and tractor use.

➤ ***Juniors***

Juniors can begin to work on their own. They understand the tools needed for repair, water and air cooling systems, transmission power, compression ratios, and types of small engines. Gain more driving and operating materials experience with tractors.

➤ ***Seniors***

Learning occurs through experience. Seniors can use diagnostic tools, tear down and assemble an engine, fix an engine's electrical or fuel system, and understand regulations using small engines. Seniors are proficient in driving a tractor.

4-H Programming Priorities

➤ ***Leadership***

Educate younger members and community members on some basic skills in engine repair. Learn about small business start-up and operation in this field.

➤ ***Health & Wellness***

Working with small engines, safety is very important. Study and promote safety and proper body mechanics.

➤ ***Science***

Learn both the mechanical process that occur in an engine and the chemical reactions that are needed. Analyze the effect different fuel types have on an engine.

➤ ***Agriculture***

A knowledge of engine repair and maintenance is beneficial for using tractors and other small engines on farm and ranch operations.

Get Involved

Youth Voice



- Discuss differences in fuel types
- Speech on causes and prevention of tractor roll-overs
- Illustrated talk on the basic parts of an engine

Community Service



- Teach a workshop on small engine safety
- Repair a lawnmower engine for a community member
- Organize a battery recycling day

Career Connections



- Agricultural engineer
- Equipment sales
- Small engine technician/mechanic
- Farmer
- Automotive mechanic
- Electrical engineer

Exhibit Ideas

- Poster on safety with small engines/lawn and garden equipment
- Display showing how a small engine runs
- Display on maintenance of small engine parts
- Poster comparing tractors and their use
- Display showing restoration of a tractor engine

Learning Resources

- [National 4-H Curriculum](#)
- [Iowa State University 4-H Tractor Project](#)
- [Wisconsin 4-H Projects Small Engines](#)
- [Colorado State University Extension 4-H Project Sheet Small Engines](#)

4-H Bicycle Project

Riding a bicycle is great for transportation and a fun way to exercise! Whether you like biking with friends, riding for transportation, or fixing bicycles, the 4-H Bicycle Project could be the perfect match for you! Learn the essentials for getting started safely and successfully, including how to choose a bike, bike maintenance and repair, and road rules to make riding safe and fun. Participate in a race or bike the Centennial Trail. Take off with the 4-H bicycle project and discover the joys of riding a bike.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can control their bike while balancing, starting, and stopping. Recognize traffic signs and their meaning. Demonstrate how to signal and balance while turning. Select bicycle safety equipment and demonstrate how to fit a helmet.

➤ ***Juniors***

Identify bike parts and purposes. Select the right size bike and make adjustments to fit a bike correctly. Check bicycle tires, brakes, and chains. Make emergency turns safely. Locate and identify cycling hazards. Plan a bike trip.

➤ ***Seniors***

Seniors are able to find the cause and fix a flat tire, replace brake cables, and shift gears efficiently. Remove, clean, lubricate, and replace a bike chain. Plot a bike route. Ride safely in traffic and at night.

4-H Programming Priorities

➤ ***Leadership***

Leading a bicycle safety training workshop, hosting a bike rodeo, or planning a fun club bike trip are all ways to practice your leadership skills.

➤ ***Health & Wellness***

Bicycling is a good way to get outside and enjoy the outdoors. It is also a fun form of exercise the whole family can enjoy!

➤ ***Science***

Look at the mechanics of a bike. Why are the gears the size they are? How do the parts of a bicycle work together to turn the wheels and move the rider forward?

➤ ***Agriculture***

Riding a bike is a great way to lower your carbon footprint. Learn to read maps and create your own of your favorite bike routes.

Get Involved

Youth Voice



- Demonstrate safe cycling skills
- Illustrated talk on repair and maintenance of a bicycle
- Plan and participate in cycling events

Community Service



- Plan a charity bike ride
- Pick up trash along a bike path
- Do basic bike repairs for others
- Help a child learn how to ride a bike

Career Connections



- Sales & service
- Outdoor education
- Parks and recreation
- Exercise specialist
- Bicycle repair shop owner/manager
- Mechanical engineering

Exhibit Ideas

- Posters: benefits of cycling, local bike routes
- Demonstrations: proper bike size, bicycle safety, hand signals
- Decorate your bike's water bottle
- Participate in bike tours or races
- Document bike rides with photos, journals, or a scrapbook

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet](#)
- [University of Minnesota Extension 4-H Bicycle Project](#)
- [Purdue Cooperative Extension Service 4-H Bicycle Project](#)
- [University of Kentucky 4-H Youth Development Bicycle Project](#)
- [University of Kentucky 4-H Youth Development, The Army 4-H Express Guide to Bicycle Adventures](#)

4-H Computers & Technology Project

Many of the earliest computers were too big to fit in a bedroom, but today some can fit inside the palm of your hand or on your wrist. How do you like to use computers and technology? The 4-H computer and technology project offers endless possibilities. Whether you like to program electronics, make online scrapbook pages, design web pages, geocaching, or take a hike with a GPS unit, you will find your niche with this project. Technology advances every day – don't get left behind!



Areas and Stages of Youth Development

➤ ***Beginners***

Understand the foundations of computers and explore how computers work for various projects. Learn safety precautions while online. Create, save and retrieve files from a computer and use graphics. Learn educational apps to use.

➤ ***Juniors***

Juniors have knowledge of the building, maintaining, and repairing computer problems. Recognize the use of sites in research for school and 4-H projects. Edit photos using a photo editor. Use safety precautions while using technology.

➤ ***Seniors***

Understand how computers and technology will influence future careers. Use computers safe and ethically. Collaborate using computers and technology with peers. Create websites or blog with a working URL. Create a database for research.

4-H Programming Priorities

➤ ***Leadership***

Teach younger 4-H members about technology and how to use it. Create posters and flyers for a 4-H club or community event.

➤ ***Health & Wellness***

Create a spreadsheet for your health in regards to healthy eating, weight, and exercise. Create an online journal of your physical activity.

➤ ***Science***

Computer and Technology uses applied math and science to solve issues. Science helps understand how things work with the use of computers and technology.

➤ ***Agriculture***

Apps are used to keep track of animal feed and spray applied to fields. Precision Ag is all new technology. Video imaging helps producers with calving season.

Get Involved

Youth Voice



- Demonstrate Geo-caching or web design
- Educational poster or display about technology
- Communicate about cyber-bullying
- Volunteer with TeachSD

Community Service



- Teach technology to senior citizens
- Create posters or flyers for a non-profit
- Design a website or presentation to promote a local event

Career Connections



- Computer technician
- Software engineer
- Computer network architect
- Computer science
- Web and game designer
- 3D printing

Exhibit Ideas

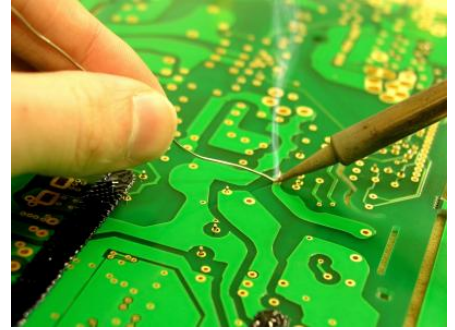
- Spreadsheet or database application
- Write a computer program
- Design a computer game
- Create an app
- Create a computer presentation
- Design a website
- Digitally enhanced photography
- Digital storybook
- Computer educational display or poster

Learning Resources

- [National 4-H Curriculum](#)

4-H Electricity Project

Every day we flip switches and push buttons to power and control various items, but how does flipping a switch turn on the light or how does pushing a button boot up the computer? The answer can be found by investigating electricity and circuits. The 4-H electricity program allows youth explore the science behind electricity and develop various skills including: safe electrical practices, proper usage of fuses and circuit breakers, proper wiring techniques, and so much more.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners in the electricity project will develop a basic vocabulary related to electricity including but not limited to current, voltage, resistors, and conductors. Youth will learn about building parallel and series circuits.

➤ ***Juniors***

Juniors in the electrical project will gain knowledge related to measuring electrical usage and determining electrical loads. They will also learn how to safely wire electrical components.

➤ ***Seniors***

Seniors participating in the electricity project will learn to differentiate between electric and electronic. Their knowledge related to electrical components such as resistors and capacitors will grow.

4-H Programming Priorities

➤ ***Leadership***

Youth can choose to incorporate leadership into their electrical project by leading a workshop on building circuits or organizing an electrical safety campaign.

➤ ***Health & Wellness***

Through the electrical project, youth can explore the role that electronics play within the health care industry and the impact they have in keeping us healthy.

➤ ***Science***

The physical sciences examine the basic principles of electrons and their movement. The movement of these electrons is known as electricity.

➤ ***Agriculture***

Electricity has a range of agricultural applications and is widely used in the field today. These applications can be explored through the electricity project.

Get Involved

Youth Voice



- Demonstration on properly wiring an outlet
- Illustrated talk about electrical safety
- Teach how to build a simple circuit

Community Service



- Promote electrical safety in your community
- Volunteer to help a neighbor check their home for electrical safety issues

Career Connections



- Automotive design
- Broadcasting/media
- Electrical engineer
- Electrician
- Instrumentation
- Line worker
- Power plant operator

Exhibit Ideas

- Make a circuit board
- Make or remake lamp
- Put together an electric motor
- Create a radio
- Make a flashlight
- Build an extension cord
- Create a poster about:
 - Wire types/sizes
 - Current
 - Conductors or resistors
 - Electrical safety

Learning Resources

- [National 4-H Curriculum](#)

4-H Engineering Project

Engineering—it's something we have all heard of but many have no clue what it is. Engineering is the application of mathematics, science, and technology to solve problems. It involves critical thinking, problem solving, communication, team work, and so much more. Engineering touches all walks of life and spans a variety of different disciplines.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners will be able to identify the steps of the engineering process and be able to use them to develop solutions to problems. Also begin to explore different fields of engineering.

➤ ***Juniors***

Juniors will be able to utilize the engineering design process to develop solutions. Identify various economic and safety issues related to a design.

➤ ***Seniors***

Seniors will be able to fully assess their engineering design project to determine if the design is adequate or needs to be redesigned.

4-H Programming Priorities

➤ ***Leadership***

Help out with a robotics or other engineering based workshop and teach the engineering design process.

➤ ***Health & Wellness***

Engineering allows youth to look at new and innovative ways to solve health and wellness problems.

➤ ***Science***

Engineering is the application of science knowledge to develop solutions. Through engineering, youth have the opportunity to experience science from all fields.

➤ ***Agriculture***

Technology and innovation (the result of engineering) are very important to the agricultural community. Youth can explore Agricultural Engineering.

Get Involved

Youth Voice



- Present the different fields of engineering
- Participate in an engineering camp/workshop

Community Service



- Build a doghouse for your neighbor
- Design a playhouse or tree fort for a park in your community

Career Connections



Fields of Engineering:

- Agriculture and biosystems
- Biomedical
- Chemical
- Computer
- Electrical

Exhibit Ideas

- Design and build a model bridge
- Design a drainage system for a field
- Make a model of a water purification system
- Build a robot prototype
- Create a poster of an engineering design process

Learning Resources

- [National 4-H Curriculum](#)

4-H Geospatial Project

Used in everything from growing crops to tracking down criminals, geospatial technology is one of the fastest growing industries in the United States. Geospatial technology is used to analyze the earth's features and visualize measurements. It generally involves global positioning systems (GPS), geographical information systems (GIS), and remote sensing (RS).



Areas and Stages of Youth Development

➤ ***Beginners***

Begin to learn about geospatial science while exploring concepts related to satellites, GPS, compasses, and maps. Identify locations and measure distances.

➤ ***Juniors***

Collect geographic data and analyze it to develop various types of maps. Begin to explore the concepts of remote sensing and its application.

➤ ***Seniors***

Develop multi layered maps and utilize them to explain how various forms of data are used to make the layers.

4-H Programming Priorities

➤ ***Leadership***

Take a leadership role by sharing knowledge of geospatial science and technology. Take your club geocaching or teach them to create a map.

➤ ***Health & Wellness***

Utilize your mapping skills to map safe routes for people in the community to walk/run/ride bike or map out places for outdoor recreation.

➤ ***Science***

Geospatial sciences uses technology to map geographical information. Explore the capabilities of GPS/GIS and the features that can be mapped.

➤ ***Agriculture***

GIS systems are used to map farmland topography and crop health. Precision agriculture is becoming more common in its use to maximize yields.

Get Involved

Youth Voice



- Create and discuss a map of important points
- Explain geospatial sciences role in precision agriculture
- Demonstrate geocaching

Community Service



- Create a community map highlighting family friendly parks
- Utilize a map to identify a need in your community

Career Connections



- Aviation
- Communication networking
- Construction
- Farming
- Military
- Mining
- Public safety/disaster relief

Exhibit Ideas

- Geocache log book
- A 'how to' guide for creating a geocache
- Make a geocache
- Create a map

Learning Resources

- [National 4-H Curriculum](#)

4-H Physics Project

If you have ever wondered how and why an object behaves a certain way, you may be interested in studying physics. Physics works to understand the universe's behavior through studying matter and its motion, along with energy and forces.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners will learn how to demonstrate and explain one-dimensional motion as well as predict basic behaviors of objects based on force diagrams.

➤ ***Juniors***

Juniors will learn how to demonstrate and explain two-dimensional motion, explain Newton's laws, as well as define and explain work and energy.

➤ ***Seniors***

Seniors will be able to define and explain physics terms such as moments, torque, and angular moment.

4-H Programming Priorities

➤ ***Leadership***

Youth can educate others about the laws of physics. They can take it a step further and talk about various phenomena related to motion and energy.

➤ ***Health & Wellness***

The human body requires energy to maintain a healthy lifestyle. Youth can learn how the body transforms and utilizes energy.

➤ ***Science***

Physics is the science behind the behavior of objects related to movement, energy, and forces.

➤ ***Agriculture***

An understanding of physics is very important to engineers who develop new technologies and practices to make agriculture more efficient.

Get Involved

Youth Voice



- Discuss the basic laws of physics
- Demonstrate a change from potential to kinetic energy

Community Service



- Educate others on Newton's laws
- Find a way to make your community more energy efficient

Career Connections



- Biology
- Chemistry
- Engineering
- Manufacturing
- Power

Exhibit Ideas

- Examine solar energy
- Create a model of the solar system
- Make a kaleidoscope
- Build a catapult
- Design a poster that explains simple machines
- Make a display showing the forces acting on an object

Learning Resources

- [National 4-H Curriculum](#)

4-H Robotics Project

They're not just a creation of science fiction, they exist all around us. Robots combine aspects of design, mechanics, and electronics together to manufacture materials, travel where humans can't, collect data, and aid people with disabilities. Join or start a 4-H robotics club, participate in the 4-H robotics challenge, or exhibit a robotics project.



Areas and Stages of Youth Development

➤ ***Beginners***

Get started learning about robots by participating in a robotics workshop. Learn to build a robot and to program basic functions.

➤ ***Juniors***

Expand upon your engineering knowledge and create your own robot designs. Learn about using sensors and a variety of flow commands within your robotics program. Explore opportunities to participate in advanced robotics competitions.

➤ ***Seniors***

Expand on your programming knowledge by learning to create new programming blocks or by learning a programming language like Robot C. Utilize your robot to complete complex tasks. Further explore career opportunities related to robotics.

4-H Programming Priorities

➤ ***Leadership***

Youth can show leadership within the robotics program by helping to facilitate a workshop on robotics as well as by mentoring younger youth in the project area.

➤ ***Health & Wellness***

Youth can explore a variety of career opportunities, many involving the use of technology and robotics in the healthcare fields and in promoting health and wellness.

➤ ***Science***

Robotics is filled with science, technology, engineering and math concepts. Youth will learn about physics, mechanics, electricity, and computer science.

➤ ***Agriculture***

The use of technology within agriculture is increasing every year. Learn about the use of robotics in agriculture.

Get Involved

Youth Voice



- Create and share a video about programming a robot
- Give a presentation on robot types
- Demonstrate a robot build

Community Service



- Utilize a robot to improve your community by picking up trash
- Teach younger 4-H members how to program a robot

Career Connections



- Aerospace
- Engineering
- Manufacturing
- Medical
- Military
- Pharmaceutical

Exhibit Ideas

- Build a robot from a kit and describe how the design allows the robot to perform specific functions
- Design and build a robot to complete a specific task
- Program a robot and exhibit the robot and program
- Make a poster on various types of robots

Learning Resources

- [National 4-H Curriculum](#)

4-H Welding Project

Learn how to safely and creatively join metal together by welding. Use your skills to make your own art, tools, and equipment! We use welded products every day, take some time to learn the methods behind different types of welding and learn how to use them yourself!



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the basics of welding including the required equipment, safety procedures, and how to create an arc. Other skills include how to cut metal with a saw, make basic joints, and weld simple beads.

➤ ***Juniors***

Build on skills and learn how to use different types of welders, cut metal with an oxyacetylene torch, and weld more difficult beads and joints.

➤ ***Seniors***

Learn advanced welding skills including welding different types of metal, welding vertically or overhead, welding with an oxyacetylene torch, and creating more intricate projects involving numerous beads and joints.

4-H Programming Priorities

➤ ***Leadership***

Leadership can be shown by organizing a tour of a welding shop, leading a team of welders in a service project, and promoting welding safety in your 4-H club.

➤ ***Health & Wellness***

Safety is an important aspect of welding. Practicing welding safety can help to increase situational awareness and identify hazards in all areas of life.

➤ ***Science***

From the basic math used to measure pieces of metal to the engineering behind robotic welders, science plays a key role in every welding project.

➤ ***Agriculture***

Welding is a very valuable skill in the agriculture industry. Everything from fences to farm equipment is made and repaired by welding.

Get Involved

Youth Voice



- Demonstrate welding equipment and safety
- Presentation on different types of welding and their use

Community Service



- Teach other 4-H members how to safely weld
- Weld a fence or fix metal structures for your county fairgrounds

Career Connections



- Metal fabricator
- Agricultural welder
- Welder/pipefitter
- Underwater welder
- Materials engineer
- Robot welder programmer

Exhibit Ideas

- Recycle scrap metal into art work
- Create an exhibit showing different types of beads
- Make a display highlighting different welding careers
- Build your own welding table
- Make an educational display teaching welding safety
- Weld your own show box

Learning Resources

- [National 4-H Curriculum](#)
- [North Dakota 4-H Project Sheet, 4-H Welding](#)
- [American Welding Society](#)

4-H Wood Science Project

Learn how to safely and creatively join metal together by welding. Use your skills to make your own art, tools, and equipment! We use welded products every day, take some time to learn the methods behind different types of welding and learn how to use them yourself!



Areas and Stages of Youth Development

➤ ***Beginners***

Learn safety rules, tool safety settings, measuring techniques, and the use of safety gear and hand tools. Identify various woods their texture. Learn to connect woods using glue and nails. Finish sanding and painting wood projects.

➤ ***Juniors***

Learn to use the right hand tools, measure and cut angles. Learn the importance of proper sanding and finish application. Have detailed knowledge to determine which woods are good for a project. Use stain to emphasize the grain of the wood.

➤ ***Seniors***

Seniors can use power tools correctly. Discover joining, clamping, and connecting techniques. Understand differences between wood, laminates, and veneers. Learn and apply principles of design/function. Explore entrepreneurial opportunities.

4-H Programming Priorities

➤ ***Leadership***

Conduct a basic building workshop for a younger club or be a project helped for younger members.

➤ ***Health & Wellness***

Learn about environmental protection. Discover the impact trees have on air quality and health benefits of spending time outdoors.

➤ ***Science***

Learn hands-on math skills when measuring and cutting materials. Gain knowledge about tree farms while learning about diseases from an arborist.

➤ ***Agriculture***

Gain knowledge into the natural resources, engineering, and manufacturing industry. Attend wood working shows to learn about tools, techniques, and products.

Get Involved

Youth Voice



- Presentation on wood working tools
- Demonstration on safe woodworking tool usage
- Develop an exhibit comparing different wood finishes

Community Service



- Build shadow box or bench
- Give a tour of your tree farm
- Build a bird feeder
- Join a Habitat for Humanity build

Career Connections



- Park ranger
- Lumber yard
- Forester
- Manufacturer
- Lumber jack
- Arborist
- Architecture engineer

Exhibit Ideas

- Repair/make and finish a piece of furniture
- Build a tack box for your show animal project
- Build a birdhouse, bird feeder, or doghouse
- Create your own design...table, cabinet, etc.
- Poster on safety precautions
- Presentation on 'green' woodworking

Learning Resources

- [National 4-H Curriculum](#)
- [Johnson County 4-H, 4-H Wood Science Project](#)
- [Oklahoma Cooperative Extension Service, Wood Science PDF](#)
- [North Dakota 4-H Project Sheet, 4-H Woodworking](#)
- [Iowa State University Extension and Outreach, 4-H Youth Development, Woodworking](#)

4-H Horticulture, Gardening, & Landscaping Project

Youth will learn how to outline, plant, sustain and harvest their own plant life for beauty, health and cuisine. This project will give youth an opportunity to learn that plants play an important role for animals and humans providing food, shelter, fiber, medicine, oxygen, and beauty. Gardens will also provide the setting to educate and/or emphasize the concepts of: Appreciation of nature, plant growth and development, science and nutrition.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can grow and sustain a garden, collect and identify seeds, harvest produce, identify garden insects, and exhibit products from a garden. They learn garden safety and the parts of a plant and their functions.

➤ ***Juniors***

Juniors can identify the different soil types, describe the necessary nutrients for a plant, and transport a plant. They learn the water cycle, how to make a meal with garden produce, and how a compost pile works.

➤ ***Seniors***

Seniors can make an herb garden, test soil samples, learn pest management methods, develop a plan for a traditional garden or raised bed garden, and create and implement a garden plan.

4-H Programming Priorities

➤ ***Leadership***

Youth can give a presentation or demonstration on gardening methods, assist in teaching a gardening class, or schedule a garden nursery tour for their 4-H club.

➤ ***Health & Wellness***

Related to health and wellness, youth can research and prepare a meal following USDA's MyPlate standards learn new cooking methods for produce.

➤ ***Science***

Youth really expand their knowledge of plants and soils. They can observe the steps from seed to table and experiment with gardening in different soil types.

➤ ***Agriculture***

Partnering with local farmers can give insight on growing produce. Grow and sell vegetables at the local farmers market and share gardening methods with consumers.

Get Involved

Youth Voice



- Illustrated talk describing the parts of a plant
- Demonstration on different garden tools and techniques
- Discuss vegetable harvest times

Community Service



- Donate extra garden produce to local food pantry
- Adopt a flower/vegetable/fruit garden or bed
- Volunteer at a community garden

Career Connections



- Operate a vegetable farm, plant shop, or landscaping service
- Marketing for a large operation
- Landscape Design
- Pest management

Exhibit Ideas

- Exhibit vegetables, herbs or flowers
- Make a poster identifying the parts of a plant
- Create a compost container
- Enter special foods using produce from your garden
- Design a garden
- Compare gardens made in different areas of your county, South Dakota or worldwide

Learning Resources

- [National 4-H Curriculum](#)
- [California 4-H Project Sheet, 4-H Vegetable Garden Project](#)
- [North Dakota 4-H Project Sheet, 4-H Horticulture](#)
- [Careers in Horticulture, Michigan State University](#)

4-H Plant Science, Crops & Weeds Project

Plant a seed and grow your knowledge in the plant science, crops, and weeds 4-H project area! Learn through experience by planting your own garden or analyzing a section of field from planting to harvest. Study the parts of a plant and the effect of weather, soil, fertilizers, water, weeds, and insects have on crop production. Get insight into South Dakota agriculture and the crops we produce.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the parts of a plant and their function. Investigate the impact different soils or fertilizers have on plants. Identify common insects and weeds in your area. Learn through experience by planting your own garden.

➤ ***Juniors***

Learn to take soil samples and interpret test samples. Determine optimal growing conditions and methods to protect your plants from weeds and insects. Study genetic engineering and plant diseases.

➤ ***Seniors***

Study the economic impact that crops from South Dakota have on the economy. Analyze the business and financial aspects of farming and how technology has influenced crop production. Look into careers in plant science and crop production.

4-H Programming Priorities

➤ ***Leadership***

Attend trainings and workshops focusing on crop production or plant science. Bring the experience back to your hometown to help gardeners and farmers.

➤ ***Health & Wellness***

Advancements in crop production have increased the availability of plant based foods. Learn the importance of plant foods in the human diet.

➤ ***Science***

Learn all about plant science; explore the different types of plants, the functioning of the vascular system, and the necessary elements for plant growth.

➤ ***Agriculture***

Agriculture is South Dakota's top industry, and with more than 19 million acres of cropland, crop production is necessary to our state, country, and world.

Get Involved

Youth Voice



- Illustrated talk on the parts of a plant
- Discuss ways to eliminate weeds
- Discuss the crops produced in South Dakota

Community Service



- Plant and maintain a community flower bed
- Deliver meals to farmers during harvest
- Teach at a farm safety camp

Career Connections



- Agronomist
- Precision agriculture
- Farmer
- Seed sales representative
- Plant breeder
- Weed scientist
- Soil scientist

Exhibit Ideas

- Crops including corn, wheat, barley, oats, flax, rye, sunflower seed, soybeans, and sorghum grain
- Results from an experiment on growing conditions
- Weed specimens
- Display showing plans to eliminate weeds
- Poster on types of plants

Learning Resources

- [National 4-H Curriculum](#)
- [Kentucky 4-H Project Fact Sheet, 4-H Plant and Soil Science Project](#)
- [North Dakota 4-H Project Sheet, 4-H Crop Production](#)

4-H Consumer Decision Making Judging Project

Choices, choices, choices! When shopping, how do you choose which item is the best? Consumer decision making (CDM) judging is comparing items and deciding which is better and why. A successful judge looks at a given scenario and selects the best choice based on the situation and criteria. This contest teaches youth how to make wise consumer choices. Senior members have the opportunity to compete at a national contest. Is this something that interests you? Contact your youth program advisor for more information.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners learn the basics of judging by reading the scenario and using given criteria to compare four items to see what the best choice is. They learn to take notes to compare the items and do check type questions.

➤ ***Juniors***

Juniors use the scenario and criteria given to choose the best item. They also take notes to answer check type questions.

➤ ***Seniors***

Seniors identify the criteria needed to choose the best item by taking notes to develop a system of analysis and comparison to justify their placing during oral reasons. The group think activity builds teamwork and leadership skills.

4-H Programming Priorities

➤ ***Leadership***

Confidence achieved while judging will give youth leadership skills. The senior group think activity teaches 4-Hers to work together to solve a problem.

➤ ***Health & Wellness***

Using skills gained from judging, youth will be able to make knowledgeable choices relating to health and wellness.

• ***Science***

Youth learn how to manage information to keep accurate records, collaborate, use resources wisely, and think critically.

➤ ***Agriculture***

Youth will make informed choices as they have learned how to look for specific criteria when buying items used in agriculture.

Get Involved

Youth Voice



Demonstrations, illustrated talks, public speeches, about:

- Taking notes
- Completing judging cards
- Oral reasons
- Being an informed shopper

Community Service



Volunteer to shop for others:

- Nursing home
- Food pantry
- Daycares
- Shelters

Career Connections



- CDM Judging helps youth in any career field as it teaches youth how to sort through information for pertinent details to make the best choice.

Exhibit Ideas

Examples of educational displays or posters:

- Steps to become a successful judge
- How to give oral reasons
- How to fill out a note grid
- How to make a judging class

Learning Resources

- [National 4-H Curriculum](#)

4-H Fashion Revue Project

In the fashion industry, the runway show is the means designers use to introduce new fashion collections as a form of visual merchandising. The art of coordinating an outfit to fit your body, lifestyle, budget and wardrobe will help as you dress for a lifetime. The fashion revue contest provides 4-H youth an opportunity to develop interview and personal presentation skills through judge interaction. A public style show, the culminating event, showcases youth's creativity and style.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners gain confidence by talking to judges about their clothing choices, whether purchased or constructed. Young models will understand appropriate styles, clothing care methods, and basic consumerism concepts with adult guidance.

➤ ***Juniors***

Juniors share clothing choices, purchased or constructed, with judges. There is a shift toward completing appropriate styles with accessories, as well as understanding their closet inventory. Juniors are role models for younger members.

➤ ***Seniors***

Seniors are seen as experts; they confidently present a well-coordinated and appropriately accessorized outfit, achieving an overall total look. Members know their closet inventory and make choices accordingly, considering garment care.

4-H Programming Priorities

➤ ***Leadership***

Through the experience of interviewing, event planning, writing and delivering fashion commentary, 4-H youth develop leadership skills and self-confidence.

➤ ***Health & Wellness***

Utilizing time management skills, individuals avoid stress by meeting deadlines. Healthy choices allows confident presentation in a variety of clothing styles.

➤ ***Science***

Youth utilize technical skills by programming the operating system within their machine. Fiber tests are used to determine fabric content.

➤ ***Agriculture***

Natural fibers are plant and animal by-products. Clothes constructed of these fabrics stimulates ag-based economy and emphasizes 'farm to clothing rack' concepts.

Get Involved

Youth Voice



- Write fashion commentary and narrate public style shows
- Demonstrate completion of wardrobe inventory
- Discuss purchasing clothes on a budget

Community Service



- Conduct a clothing drive
- Teach children basic sewing skills
- Organize your club to make tie fleece blankets
- Organize a city-wide garage sale

Career Connections



- Fashion merchandising
- Apparel designer
- Model
- Professional dry cleaner
- Clothing entrepreneur
- Tailoring
- FACS teacher

Exhibit Ideas

- Constructed garment or accessory
- Selected outfit
- Recycled project with worn out blue jeans
- Ironing techniques
- Stain removal techniques
- Educational display featuring new fabrics and why they were made (bulletproof vests, antibacterial, wicking)

Learning Resources

- [National 4-H Curriculum](#)

4-H Horticulture Skill-a-thon Project

What's your horticulture comfort level? Do you know what a tomatillo is? To know how to garden means you will never go hungry! The 4-H horticulture skill-a-thon is a contest that helps youth identify flowers, indoor plants, landscape ornamentals, fruits, nuts, berries, and vegetables. Be ready to expand your knowledge on greenhouses, turf, plant nutrition, landscaping, managing lawns and trees, and soil health. If this is something that interests you, contact your county 4-H youth program advisor.



Areas and Stages of Youth Development

➤ ***Beginners***

Youth prepare for the contest by studying the Beginner Plant Parts Study Guide and Your Vegetable Garden Study Guide for a written test. Learning the basic skill of gardening will be helpful for judging and vegetables and fruit ID.

➤ ***Juniors***

The Junior/Senior Plant Parts Study Guide and NJHA Study Guides will prepare youth for a written test as well as ID vegetables, fruits, nuts, berries, and landscape ornamentals and judge fruits, vegetables, and flowers/indoor plants.

➤ ***Seniors***

Youth will continue to build upon their previous horticulture identification and judging skills which will also include landscape ornamentals identification. Seniors will also take a written test.

4-H Programming Priorities

➤ ***Leadership***

Horticulture knowledge can be shared with 4-H clubs, community gardens, and master gardeners through demonstrations, talks, and community service projects.

➤ ***Health & Wellness***

Gardening is an excellent way to promote a healthy lifestyle by not only eating healthy, but also doing physical activity.

➤ ***Science***

Youth will learn aspects involving horticulture such as the science behind naming plants, disease resistant plants, and plant propagation.

➤ ***Agriculture***

Commercial horticulture is an important part of the US crop production economy. Youth can explore horticulture processing, floriculture, and fruit acreages.

Get Involved

Youth Voice



- Demonstrate how to plant garden seeds
- Illustrated talk on types of peppers
- Discuss the difference between cool and warm season grasses

Community Service



- Volunteer at a local community garden
- Coordinate planting and care for city-wide planters
- Grow pumpkins for a local charity

Career Connections



- Golf course maintenance
- Landscape architect
- Food crop marketing
- Greenhouse manager
- Horticulturist
- Research lab

Exhibit Ideas

- How to properly display vegetables
- Vegetable garden curriculum project activity guide
- Poster on garden insects
- Cornucopia display
- Herb plants mounted or dried
- Dried fruit or vegetable exhibit
- Fruit jelly, jams, or preserve display

Learning Resources

- [National 4-H Curriculum](#)

4-H Public Presentations Project

Do you like to share interesting information with your friends? Maybe you enjoy talking about your interests and talents. If so, these are forms of public presenting! Presenting in front of others is one of the greatest, most important skills to learn and master. It can be scary, but with practice and tips learned through 4-H, you'll be a pro in no time!

In the public presentations project area, you will be able to provide information through: public speaking, demonstrating, illustrating a topic, or explaining 'why'.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners can start by thinking about their favorite hobby or interest and telling friends and family about it, as well as develop and present a demonstration or illustrated talk.

➤ ***Juniors***

Juniors should be a little more comfortable speaking in front of others. Practice using less notes, work on a public speech where visual aids are minimal, and record your presentation to determine your speaking strengths and weaknesses.

➤ ***Seniors***

A senior public presenter should be able to give a presentation with little to no notes. Deliver a presentation in the "Project Why" area, present to a community group organization, complete public speech with not visual aids.

4-H Programming Priorities

➤ ***Leadership***

A key component of good leadership is your ability to speak and present to others. Take it a step further and promote project areas in 4-H through speaking.

➤ ***Health & Wellness***

Promote health & wellness with a demonstration or speech on healthy habits, good food choices, or the importance of physical activity.

➤ ***Science***

Research and present a science topic to educate your audience, demonstrations and illustrated talks are excellent opportunities for this.

➤ ***Agriculture***

Use your presentation skills to provide facts about an agriculture issue or topic or speak about your personal experiences on the farm or ranch.

Get Involved

Youth Voice



- Develop self-confidence through public presentations
- Practice self-expression and creativity
- Learn how to organize and present information

Community Service



- Teach a new skill to younger students in your school
- Present a topic at a meeting to address a community need
- Promote 4-H to others

Career Connections



- Education and teaching
- Business
- Journalism and communications
- Drama and theatre

Exhibit Ideas

- Public presentations consist of 4 project areas: Illustrated talk, demonstration, public speaking, and "Project Why"
- Present favorite project area or hobby
- Challenge yourself to research and present a topic you don't know much about

Learning Resources

- [National 4-H Curriculum](#)

4-H Robotics Challenge Project

They're not just a creation of science fiction, they exist all around us. Robots combine aspects of design, mechanics, and electronics together to manufacture materials, travel where humans can't, collect data, and aid people with disabilities. Join or start a 4-H robotics club, participate in the 4-H robotics challenge, or exhibit a robotics project.



Areas and Stages of Youth Development

➤ ***Beginners***

Get started learning about robots by participating in a robotics workshop. Learn to build a robot and to program basic functions

➤ ***Juniors***

Expand upon your engineering knowledge and create your own robot designs. Learn about using sensors and a variety of flow commands within your robotics program. Explore opportunities to participate in advanced robotics competitions.

➤ ***Seniors***

Expand on your programming knowledge by learning to create new programming blocks or by learning a programming language like Robot C. Utilize your robot to complete complex tasks. Further explore career opportunities related to robotics.

4-H Programming Priorities

➤ ***Leadership***

Youth can show leadership within the robotics program by helping to facilitate a workshop on robotics as well as by mentoring younger youth in the project area.

➤ ***Health & Wellness***

Youth can explore a variety of career opportunities, many involving the use of technology and robotics in the healthcare fields and in promoting health and wellness.

➤ ***Science***

Robotics is filled with science, technology, engineering and math concepts. Youth will learn about physics, mechanics, electricity, and computer science.

➤ ***Agriculture***

The use of technology within agriculture is increasing every year. Learn about the use of robotics in agriculture.

Get Involved

Youth Voice



- Create and share a video about programming a robot
- Give a presentation on robot types
- Demonstrate a robot build

Community Service



- Utilize a robot to improve your community by picking up trash
- Teach younger 4-H members how to program a robot

Career Connections



- Aerospace
- Engineering
- Manufacturing
- Medical
- Military
- Pharmaceutical

Exhibit Ideas

- Build a robot from a kit and describe how the design allows the robot to perform specific functions
- Design and build a robot to complete a specific task
- Program a robot and exhibit the robot and program
- Make a poster on various types of robots

Learning Resources

- [National 4-H Curriculum](#)

4-H Special Foods Contest

The 4-H special foods contest is your door to an epic culinary adventure. Explore resources at your fingertips: Facebook, Pinterest, or Grandma's cookbooks. Food is the center of almost every social event or gathering. Wow your family and friends with a recipe meeting MyPlate guidelines for healthy living.

Want more flare? Create a destination without leaving your dining area! Coordinate table ware, serving pieces and décor resulting in a theme to enhance the eye and taste appeal of your recipe.



Areas and Stages of Youth Development

➤ ***Beginners***

Beginners prepare a selected recipe, create a one-meal menu or a healthy snack menu, and visit with judges. Youth will be evaluated on proper cooking techniques, nutrition knowledge, and table setting.

➤ ***Juniors***

Juniors prepare a recipe, create a one-meal menu with at least four of the five food groups, and visit with judges. Youth will be evaluated on cooking techniques, expanded nutrition knowledge, and table setting with a centerpiece.

➤ ***Seniors***

Seniors prepare a recipe, plan an all-day menu, and visit with judges. Youth will be largely evaluated on their understanding of nutrition, cooking techniques, food safety, and appropriate table setting with centerpiece.

4-H Programming Priorities

➤ ***Leadership***

Build life skills such as organization, following directions, time management, responsibility, communication through contest involvement and interaction with judges.

➤ ***Health & Wellness***

MyPlate provides the five key elements of healthy eating patterns and youth understand the importance of a minimum of sixty minutes of physical activity per day.

➤ ***Science***

Understand the importance of food safety: separate to avoid cross-contamination, cook to proper temperatures, and refrigerate promptly and properly.

➤ ***Agriculture***

Youth receive YQCA certification enhancing their understanding of farm to plate concepts and the importance of safe foods entering the public food supply.

Get Involved

Youth Voice



- Demonstration on table setting or measuring dry and liquid ingredients
- Nutrition poster featuring MyPlate
- Illustrated talk on kitchen safety

Community Service



- Collect canned fruits and vegetables for a local food pantry
- Support community food outreach by serving or delivering meals

Career Connections



- Registered dietician
- Chef
- Food photographer
- Weight management counselor
- Sports nutritionist

Exhibit Ideas

- Educational display or poster
 - Foods and nutrition
 - Horticulture
 - Dairy foods
 - Food safety
- Foods and Nutrition
 - Muffin
 - Recipe adaptation
- Horticulture exhibit
- Home environment
 - Constructed fabric dining and/or kitchen accessory

Learning Resources

- [National 4-H Curriculum](#)
- [United States Department of Agriculture, ChooseMyPlate.gov](#)
- [Fight the BAC!](#)