Learning by Doing: Ignite your curiosity, meet new friends, and make lifelong memories. This guide gives a brief description of each of the official state 4-H projects. Support for each project can vary depending on your local program and the volunteers available to help. Exploring your interests through 4-H projects is a way to skills and experience different and exciting tasks. Materials can be ordered through your county or district extension office or online. Have a great time with your 4-H projects.

KANSAS 4-H
PROJECT SELECTION GUIDE

Beef

The beef project is a great way to learn about raising, caring for, and managing beef cattle. Begin with a bucket calf and build your own herd as part of the project. Participate in the Livestock Evaluation Contest through this project! You’ll learn about different breeds of beef cattle; parts of the animal; how to maintain feed and water; and how to judge beef cattle for market and/or breeding. Learn how to produce high-quality beef; how to use data and technology in an efficient beef cattle operation.

Dairy Goat

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Pipefitting

Learn important general electrical concepts as you gain skills in basic electrical circuits and digital systems. Build basic circuits. Design a robot. Program a robot to do a task.

SpaceTech

Build model rockets, robotics, and explore space. Navigate your world with GPS and make models. Learn about spacecraft and moon landings. This project can offer your interests exploring the field of science and technology.

Sheep

The sheep project can be a great way to learn about the sheep industry. You can enroll in either market or breeding projects. Throughout your years in the sheep projects you will learn about the parts of a sheep, breeds of sheep and their uses; manage and train sheep for show; learn safety procedures and management practices for maintaining a flock; identify symptoms, causes, and treatment of common diseases; study nutritional requirements for various sheep; learn about nutrition; and identification and genetics of sheep; study technology’s impact on sheep production; and explore career opportunities in the sheep industry.

Market Lamb

Select, raise, and show a market lamb. This project teaches gun safety, handling, and care and safety of shooting sports equipment, as well as practical shooting skills. Participate in Kansas All Breeds Junior Dairy Show; join a regional dairy goat organization; shows; join a regional dairy goat organization; shows; and Dairy Cow.

Learning by Doing: Participate in the Livestock Sweepstakes (includes: Livestock Judging Contest, Quiz Bowl, Skillathon, and Meats Judging Contest); and the State Swine Show at the Kansas State Fair. You’ll learn about wildlife behavior, habitat, and how they relate to humans. Some counties also offer Sporting Fish as an additional project.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Learning by Doing: You’ll learn about breeds of dairy goats, parts of a goat herd. Throughout the project, you can raise kids, and eventually create your own dairy herd. You can learn about breeds of dairy goats, parts of a goat herd, and how to maintain feed and water; and how to judge goat herd for market and/or breeding.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Learning by Doing: Participate in Kansas All Breeds Junior Dairy Show, Judging Contest, Skillathon, and Dairy Cow Quiz.

Dairy Cattle

In the beef project you’ll learn about raising and managing dairy animals. 4-H members usually start with a heifer calf or yearling heifer, begin with a bucket calf, and build your own herd as part of the project. Participate in the Livestock Evaluation Contest through this project! You’ll learn about different breeds of beef cattle; parts of the animal; how to maintain feed and water; and how to judge beef cattle for market and/or breeding. Learn how to produce high-quality beef; how to use data and technology in an efficient beef cattle operation.

Dairy Goat Calf

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Learning by Doing: Learn about dogs, breeds and choose the best breeds for your family, explore dog behavior, breeds, obedience, and agility training. Learn about proper nutrition to keep your dog healthy and happy.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Dairy Goat

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Dairy Cattle

In the beef project you’ll learn about raising and managing dairy animals. 4-H members usually start with a heifer calf or yearling heifer, begin with a bucket calf, and build your own herd as part of the project. Participate in the Livestock Evaluation Contest through this project! You’ll learn about different breeds of beef cattle; parts of the animal; how to maintain feed and water; and how to judge beef cattle for market and/or breeding. Learn how to produce high-quality beef; how to use data and technology in an efficient beef cattle operation.

Dairy Goat Calf

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Dairy Cattle

In the beef project you’ll learn about raising and managing dairy animals. 4-H members usually start with a heifer calf or yearling heifer, begin with a bucket calf, and build your own herd as part of the project. Participate in the Livestock Evaluation Contest through this project! You’ll learn about different breeds of beef cattle; parts of the animal; how to maintain feed and water; and how to judge beef cattle for market and/or breeding. Learn how to produce high-quality beef; how to use data and technology in an efficient beef cattle operation.

Dairy Goat Calf

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.

Dairy Cattle

In the beef project you’ll learn about raising and managing dairy animals. 4-H members usually start with a heifer calf or yearling heifer, begin with a bucket calf, and build your own herd as part of the project. Participate in the Livestock Evaluation Contest through this project! You’ll learn about different breeds of beef cattle; parts of the animal; how to maintain feed and water; and how to judge beef cattle for market and/or breeding. Learn how to produce high-quality beef; how to use data and technology in an efficient beef cattle operation.

Dairy Goat Calf

The dairy goat project is a great animal project for smaller properties. Goats are easy to train and handle. Milk can be consumed by the family, fed to kids, or sold to other market animals. You might start with one doe, raise kids, and eventually create your own dairy herd. Throughout the project, you can learn about breeds of dairy goats, parts of a dairy goat, how to milk and care for goats, and their uses; record keeping, and more.

Learning by Doing: Volunteer in your community; attend Citizen Education, a presentation, and much more.
As you older you can determine your family's favorite activity, care measure electric usage of appliances; test ground outdoors; explore electronics; build simple radios, microscopes, telescopes, and model airplanes; and explore careers in electronics and engineering.

Small Engines
Care small engines work as well as to service them and keep them running safely. Start by learning the parts and cycles of the engine. Then start an air to an efficiently running older. Older 4-H members will learn about fuel, repair, and rebuild small engines; understand rules and regulations for small engines; and explore starting a small engines business or career.

Power of the Wind
Discover the power of the wind. Learn how wind can be used for sailing, lifting, pumping water, and creating energy. Learn to design and build a wind powered boat; design and build wind turbines; observe why the wind blows; and discover the wind in art and literature.

Entomology
Have you chased butterflies or caught a ladybug to get a closer look? Do you think collecting bugs is fun? Then the Entomology project is right for you. You'll learn the body parts of an insect, how to locate and identify a bug, and how to exhibit an insect collection. Later on, you'll study how insects move and learn about insect behavior. In advanced project work, you'll learn about insect behavior.

Learning by Doing: 
Plant a butterfly garden. Catch and observe butterflies. Have you ever wondered how someone crocheted a scarf or embroidered the pillowcases? Partner with a peer to explore and discover the value of employment. Learn to identify trees; determine differences between needs and wants; develop a savings plan for a specific goal; practice comparison shopping; learn to make or repair something of personal or public use; learn to manage a checking account; recognize target advertising; identify consumer rights; and learn about the value of employment.

Learning by Doing: 
Have you ever wondered about casting on, knit, and purl stitches. Learning by Doing: 
Learn about different types of recreation; identify consumer rights; and learn about the Power of the Wind.

Health and Wellness
Health, exercise and recreation are vital parts of your daily lives. In these projects you can focus on good eating, healthy eating, exercise, sports and recreation, or first aid.

Horse
Love horses? Want to learn to handle care for, and ride your horse? Members may gain lease or their horse 75 percent of the time, whether owned or rented.国家级, no-own membership option for District.

Horseless horse members do not own or lease a horse. Learn about the basic coat colors, breeds, and anatomy of horses; study horse handling; understand what kind of diet a horse needs; learn about the value of employment; and participate in judging contests, quiz bowl, hippology, and give presentations. Horseless horse members may volunteer to assist with horse shows and trail rides.

Learning by Doing: 
Plan a room make-over; visit a design center, plan a photo contest or fair exhibit. Enter the - Learn shutter speeds and f-stops. Use the Rule of Thirds. Learn to capture a point in time. - Use filters. Learn to use a light meter. Create still-life photos. See the differences between normal, wide angle, telephoto, and macro photography. Learn to capture in the fair.

Learning by Doing: 
Join a 4-H Rabbit judging team; start with a doe and grow your project by selling rabbits. A project can help you learn about care and handling your birds. Learn how eggs are formed; learn how to select Judge/Producers; make an egg candler; learn about pecking orders; lead younger members in egg experiments; and learn about table setting for food; and learn about biotechnology and poultry careers.

Learning by Doing: 
Participate in the Poultry Judging Contest at the Kansas State Fair.

Rabbits
The rabbit project will help you learn how to care for and handle your rabbits. Learn about breeds of rabbits; identify the parts of a rabbit; learn good feeding and watering practices; learn about how to groom and handle your rabbit; and learn about specialty harvests and selling your rabbits. It is best to enroll in the fall to prepare for receiving your first pair of rabbits.

Learning by Doing: 
Join a 4-H Rabbit judging team; start with a doe and grow your project by selling rabbits.

Reading
Do you enjoy going in the spotlight? Do you like acting and performing on stage or setting up against the backdrop of a fair? Then you'll want to jump into the world of Performing Arts. The Home Environment project will help you explore an interior design career.

Learning by Doing: 
Plan a room make-over, visit a design center, and interview an interior designer.

Photography
Capture your family, friends and important moments of your life.

Level 1 - Learn how a camera works. Learn basic photo composition. Organize a photo story. Use digital cameras.

Level 2 - Learn shutter speeds and f-stops. Use the Rule of Thirds. Learn to capture a point in time.

Level 3 - Use filters. Learn to use a light meter. Create still-life photos. See the differences between normal, wide angle, telephoto, and macro photography. Learn to capture in the fair.

Learning by Doing: 
Enter a photo contest or fair exhibit. Enter the - Learn shutter speeds and f-stops. Use the Rule of Thirds. Learn to capture a point in time. - Use filters. Learn to use a light meter. Create still-life photos. See the differences between normal, wide angle, telephoto, and macro photography. Learn to capture in the fair.

Learning by Doing: 
Join a 4-H Rabbit judging team; start with a doe and grow your project by selling rabbits.

Self Determined
The self-determined project is just that—you decide what you do or study. Is there something you have a passion for that is not included in the 4-H project list? This is your opportunity...
Entomology

Have you chattered butterflies or caught a ladybug to get a closer look? Do you think collecting bugs is fun? Then the Entomology project is right for you. You’ll learn the body parts of an insect, you’ll be an insect detective, and you’ll exhibit an insect collection. Later on, you’ll study how insects move and learn about insect behavior. In advanced project work, you’ll learn about insect behavior.

Learning by Doing:
Plant a butterfly garden. Catch and observe bugs. Is it fun? Then the Entomology project is for you. Learn about insect behavior and become an insect detective. Join a 4-H Insect judging team; design and grow your project by selling rabbits. Start with a doe or lease, but must manage the rabbit. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cope with change; know that family forms change; learn physical changes of adolescence and learn the importance of sexual health; learn the parts and cycles of energy. You can also learn the heritage of many foods and gourmet and international meals. Develop your own recipes! In this project, you will have fun learning about different types of recreation; identify characteristics of friends. Learn socially accepted behaviors that develop friendships; respect others and their belongings; understand and practice family rules; express feelings in a positive way; learn to cop...
Participate in the Instructors Junior Apprentice projects. Through your years in the sheep projects you will learn various aspects of raising sheep, and make helpful decisions regarding sheep and their uses; manage and train sheep for show; learn safety procedures and management practices for making a flock; identify symptoms, causes, and treatment of common diseases; study nutritional requirements for various stages of production and genetics of sheep; study technology's impact on sheep production; and explore career opportunities in the animal industry.

**Market Lamb**
Select, raise, and show a market lamb. The ownership of the animal market ewes should not be returned to a breeding flock.

**Dairy Goat**
Want to learn about raising, caring for, and managing dairy goats? The Dairy Goat project will help you learn about local, state, and national judgement, learn about breeds of dairy goats, parts of a goat, and much more. The Dairy Goat project is a great animal project for learning how to select, groom, and show. Along with learning about the history of the breed, you will learn what makes the breed unique and how to manage the breed.

**Beef**
The beef project is a great way to learn about raising, caring for, and managing beef cattle. Begin with a bucket calf and build your own herd that you can show through the year. Through this project you will learn about different breeds of beef cattle; parts of the animal; how to identify different parts; and how to show beef cattle at market and/or during the show season. You will also learn how to produce high quality beef and how to use data and technology in an efficient beef cattle operation.

**Breast Buck**
This project is open to 7-12 year-old youth. Calves may be purchased or orphaned but is to be handled. Keep your bucket feed.

**Market Beef**
Select, raise, and show a market steer or heifer. Learn the value of performance data to make breeding decisions.

**Breeding Beef**
Select and show a breeding heifer. Learn the value of performance data to make breeding decisions.

**Breeding Beef**
Exhibit at local beef shows, State 4-H Livestock Sweepstakes at K-State (includes: Livestock Judging, Bull Show, Skilthion, and Meats Judging Contest), State Beef Show at the Kansas State Fair, and the Kansas Jr. Livestock Sweepstakes.

**Citizenship**
In the Citizenship project you’ll learn about yourself, family, and how to talk about these topics in your community, county, state and country. This project will encourage you to meet people and work with groups. You can design your own local projects, and you can work with other 4-H groups. You can also learn new skills and meet strangers from other countries.

**Clothing and Textiles**
Clothing and Textiles projects will introduce you to the world of clothing, fashion, and related careers. Learn to create and sew your own items in Clothing Construction or develop your sense of style and value through Buymanship. These materials can be ordered through your county or district extension office or online. Have a great time with your 4-H projects.

**Energy Management**
Energy Management includes the Electric/Electronics, Solar systems, and Photonics projects. These projects will help you understand how to power the world today and think about the future of energy needs.

**Electric/Electronics**
Learn important general electrical concepts as you explore topics, learning light switches and circuits, voltages and even building materials. Study energy use, magnetism, electronics and transistors.