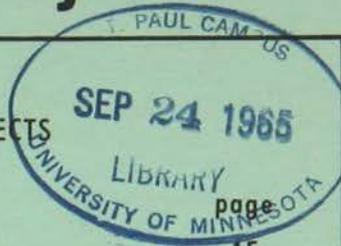


Leader's Guide to 4-H Projects



LIVESTOCK PROJECTS

	page
beef	3
dairy	3
swine	4
sheep	4
poultry	5
rabbits	5
horse	5
dog care and training	6

MECHANICAL PROJECTS

automotive care and safety	6
electric	6
shop	7
tractor	7

agronomy	8
beginner's conservation	9
soil and water conservation	10
entomology	11
forestry	12

HOME ECONOMICS PROJECTS

foods	15
clothing	18
home improvement—family living	19

SPECIAL PROJECTS

junior leadership	25
health	25
photography	26
safety—fire prevention	27

SPECIAL PROGRAMS FOR GROUP STUDY

career exploration	28
town and country business program	28
family life	28

OUTDOOR PROJECTS

fruit	13
flower gardening	13
lawn and landscape design	14
potato	14
vegetable gardening	14
indoor gardening	14

UNIVERSITY OF MINNESOTA

AGRICULTURAL EXTENSION SERVICE • U. S. DEPARTMENT OF AGRICULTURE

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This bulletin is a guide for you -- the leader -- for 4-H projects. Projects are areas of work in which a member enrolls to learn about the subject and to have useful work experiences. Projects are centered in the home; most projects can be done by the member working alone.

The projects are grouped under these categories: livestock, mechanical, outdoor, home economics, and special. Any project can be done by a group of young people as a club project in addition to individual work.

The first column in the project listings shows the phase or units in the project. Encourage young people in your club to select phases or units appropriate to their ability and maturity. Each succeeding level is intended to be more difficult and challenging. Encourage each member to progress so the 4-H project is interesting for him. By staying in one project and moving to advanced stages, a member can accomplish a great deal. A member may also carry projects in several areas of interest.

The second column lists the learning experiences or things to do or study. These are also listed on the member's records; we frequently call them requirements. Keep in mind, however, that a member might want to set some additional goals for himself as he works in his home and with his family. In most projects the members have bulletins to help them learn. If you want more details about a project get the member's records and bulletins from your county extension office.

The third column lists, in general, what is exhibited in the project. This is the guideline your county uses for the county fair. But check your own county premium list for exhibit requirements.

There are several group projects or special programs such as career exploration. They are of special interest to older members who desire activities with others of their own age.

4-H PROJECTS

Phase or Unit

Learning Experiences

Exhibit Suggestions

LIVESTOCK PROJECTS

BEEF

Own, manage, and keep a feed record for at least 6 months on one or more grade or purebred beef animals -- Hereford, Shorthorn, or Aberdeen Angus.

Beef Steer

It is recommended that your steer be born after March 1 and before August 31 of the previous year. Example: A steer shown in 1966 must have been born between March 1, 1965 and August 31, 1965. (Exhibition at the Junior Livestock Show is permitted when the animal qualifies under the rule regarding temporary incisor teeth.)

Beef steer

Beef Heifer

The following are examples of beef heifer age categories if animal is exhibited August 1:

Beef heifer

	<u>Age of animal</u>	<u>Born between</u>
	<u>months</u>	
Calf	7-11...	Sept. 1 to Dec. 31
Summer yearling.....	11-15...	May 1 to Aug. 31
Junior yearling.....	15-19...	Jan. 1 to April 30
Senior yearling.....	19-23...	Sept. 1 to Dec. 31
Two-year-old.....	23-27...	May 1 to Aug. 31

DAIRY

Objective is to present an opportunity for a 4-H member to:

- * Learn to select, feed, manage, and show dairy cattle.
- * Become more interested in home and farm by developing pride of ownership and love for good livestock.
- * Learn sound practices in breeding and management for dairy production, and discover value of keeping production records.
- * Learn about inheritance factors in dairy cattle, how milk is made, fitting and showing, the process of marketing dairy products, etc.

Enroll in any phase of the dairy project with one or more grade or purebred animals. It is recommended that the beginner project not be carried more than 2 years.

Personally manage and keep a record of all operations involved in feeding and caring for the animal.

The member must start not later than April 1 of the current year. After the first year of carrying an animal in this project, records should be kept on a continuous basis.

Calf

This project is recommended for younger members. Animals should be born between July 1 of the previous year and January 1 of the current year. Record should start not later than April 1.

Dairy calf

Yearling

This may be a continuation of the calf phase, using the same animal. Junior yearling must be between 12 and 18 months of age on July 1 of the current year. Senior yearling must be between 18 and 24 months of age on July 1 of the current year. If a new animal is purchased, the ownership and record keeping must begin not later than February 1.

Dairy yearling

Phase or Unit	Learning Experiences	Exhibit Suggestions
Two-Year-Old Heifer	This may be a continuation of the yearling phase, using the same animal. If a new animal is purchased, ownership and record keeping must begin not later than February 1 and prior to the first freshening. Two-year-olds must be between 24 and 36 months on July 1 of the current year.	Two-year-old dairy heifer
Advanced Dairy	This should be a continuation of the 2-year-old phase, using the same animal. Records must be kept on this cow in the <u>Advanced Dairy Project Record Book</u> as long as the animal is owned.	Cow
Herd Management	Use 4-H Ext. Bull. 54, <u>4-H Dairy Management Analysis Project</u> . The following are suggested phases that can be studied in this program: <ol style="list-style-type: none"> 1. Keep production, feeding, breeding, and veterinarian treatment records. 2. Analyze herd for culling considerations. 3. Study cows in herd and list sires to use on each. 4. Check on feed supply and needs. Prepare feeding program. 5. Check on protein cost in feeds sold locally. 6. Study response to increased grain feeding. 7. Determine if ration is adequate in protein. 8. Make complete checkup of milking machine installation. 9. Study cost and net returns of veal production. 10. Keep identity of calves following birth by ear-tagging, tattooing, or color-marking sketch. 11. Keep quality records on milk produced. 12. Carry out a recommended fly control program. 13. Work with veterinarian on disease control. 	

SWINE

BEGINNER: Barrow or Gilt	Own, raise, and keep at least a 3-month feed record on one or more purebred, grade, or crossbred gilts or barrows farrowed after February 1 and before May 31 of the current year.	Barrow or gilt
ADVANCED: Spring Litter	Own and raise a litter or litters of purebred, grade, or crossbred pigs farrowed between February 1 and May 31 of the current year. Keep a feed and rate-of-gain record from 56 days until pigs are marketed or exhibited at county show.	
Fall Litter	Own and raise a litter or litters of purebred, grade, or crossbred pigs farrowed between August 15 and October 15 of the current year. Keep a feed and rate-of-gain record from 56 days until pigs are marketed or exhibited at the spring show.	

SHEEP

BEGINNER: Ewe or Wether	Own, raise, and keep a feed record for at least 3 months on one or more grade or purebred ewe or wether lambs born after January 1 of the current year.	Ewe or wether
ADVANCED: Trio of Lambs	Own, raise, and keep a feed record for at least 3 months on three grade or purebred wether lambs born after January 1 of the current year.	Trio of lambs

Phase or Unit	Learning Experiences	Exhibit Suggestions
Ten Ewes	Own, raise, and keep a 135-day record on flock of 10 ewes. Mate to a purebred ram. Keep a record of lambing dates and wool clipped from each ewe. Use Form 4-H R-19.	
Western Lamb	Purchase, fatten, and market 15 or more western feeder lambs. Keep a feed and cost record. Use Form 4-H R-23.	

POULTRY

Market Poultry	Member should select one of the following, depending on his past experience: <ol style="list-style-type: none"> 1. Own, raise, and keep a feed record for at least 3 months on 25 or more chicks or 20 or more turkey poults, goslings, or ducklings. For broilers, a 9-week record is sufficient. 2. Assume responsibility for raising all or part of the family turkey flock with partnership arrangement for sharing work, expenses, and returns. 	A production pen of four pullets Ducks, geese, or turkeys--a breeding pen of one male and two females
Egg Production (for older club members)	Members should select one of the following, depending on his past experience: <ol style="list-style-type: none"> 1. Own, manage, and keep a yearly feed and production record on at least 50 pullets. 2. Manage and keep yearly records on the family flock of 100 or more pullets. Make partnership arrangement for sharing responsibilities, expenses, and income. 	

RABBITS

Members may qualify for one or both of the following phases: <ol style="list-style-type: none"> 1. Own two or more does of a medium or heavy breed of rabbit suitable for meat and fur. Raise at least three litters in a year from each doe. Own the buck you use, or have it in partnership. 2. Own a buck and two or more Angora rabbits. Shear animals at least three times a year. 	Three young rabbits from 2 to 3 months of age weighing 4 to 6 pounds
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HORSE

The object of the 4-H saddle horse project is to organize boys and girls into groups to: demonstrate how to care for and manage horses - including feeding, breeding, care, management and handling; stimulate an appreciation for horses; and train members in leadership.	Horse at halter Saddle showmanship
1. Own (alone or in partnership), feed, care for, and train one or more fillies, geldings, or stallions for at least 6 months. This animal may be a foal, yearling, 2-year-old, 3-year-old, or older. Mares or geldings may be purebred or high grade. Stallions should be registered or eligible for certificate of registry. Project must start not later than February 1. Continue for the full year. <u>(For safety's sake, only mares and geldings are allowed at 4-H events.)</u>	

2. Keep a record including weight, cost, amounts of feed, and equipment. Write a story and if possible exhibit and demonstrate.

DOG CARE AND TRAINING

Own, care for and train a dog. Study related topics such as breeds of dogs, parts of the animal and how to show the animal.

MECHANICAL PROJECTS

AUTOMOTIVE CARE AND SAFETY

BEGINNER: The Car and the Highway	Study traffic safety, automobile owner's manual, car upkeep, and cost records.
JUNIOR: Maintenance and Operation	Study car maintenance, costs, and operation.
ADVANCED: Operating the Car Efficiently	Study automobile selection and operation, community safety, and career opportunities.

ELECTRIC

The requirements in electric are presently under revision, but, in general, members will do the following:

BEGINNER	<p>To help 4-H Club members gain a beginning understanding of what electricity is and how it is used.</p> <p>To promote safety in the use of electricity and electrical equipment.</p> <p>To give 4-H Club members an opportunity to build simple electrical devices.</p> <p>To develop in 4-H members an inquisitiveness to explore the science of electricity.</p> <p>Do any four of the following:</p> <p>Conduct an electrical hazard hunt.</p> <p>Learn to read your electric meter.</p> <p>Locate the electrical service entrance in your home and learn to replace proper fuses.</p> <p>Figure operating cost of electrical equipment.</p> <p>Give an electric demonstration at your 4-H meeting.</p> <p>Rewire a study lamp.</p> <p>Make a simple electric motor.</p> <p>Make an extension cord.</p> <p>Make an electric bell system work for you.</p> <p>Make a circuit board.</p> <p>Make an apron to hold electrical tools.</p> <p>Make a simple resistance heater.</p> <p>Make a circuit chart.</p> <p>Make a galvanoscope (electricity measuring device).</p> <p>Make an electromagnet.</p> <p>Learn how to properly use an electric iron.</p> <p>Make an electric game.</p> <p>List other things you did or made.</p>	<p>Exhibits should relate to items made or to things learned.</p> <p>Any exhibit shown at the State Fair must not take more than 20 square feet of floor space.</p> <p>Science exhibits at the State Fair should fit on a shelf 12 x 24 inches and be no higher than 24 inches.</p>
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Phase or Unit	Learning Experiences	Exhibit Suggestions
JUNIOR	Requirements being developed.	
ADVANCED	Requirements being developed.	

SHOP

BEGINNER	<p>Make one simple article of wood such as a cutting board, breadboard, or book ends.</p> <p style="text-align: center;">or</p> <p>Learn to tie 5 or more knots.</p>	Exhibit items made during the project year.
JUNIOR	<p><u>Woodwork</u>: Make three or more simple articles of wood such as shop tools, bird house, lawn ornaments, small tool chest or simple furniture.</p> <p style="text-align: center;">or</p> <p><u>Ropework</u>: Learn to make short and long splices and prepare exhibit of 10 or more knots or splices.</p> <p style="text-align: center;">or</p> <p><u>Additional suggestions</u>: Do repair or maintenance work on screens, furniture, and fences.</p>	Any exhibit shown at the State Fair must not take more than 15 square feet of floor space.
ADVANCED	<p><u>Woodwork</u>: Make or refinish articles useful for self or family such as a lawn chair, workbench, toolbox, gun rack, or furniture; or build picket fence or paint garage. (For refinishing furniture or constructing furniture for a specific room, enrollment in the Home Improvement Family Living project is suggested.)</p> <p style="text-align: center;">or</p> <p><u>Metal work</u>: Make articles of metal useful for farm and home such as tools, tool chests, and articles made with the home welder such as a bag cart, post puller, or two-wheel trailer.</p> <p style="text-align: center;">or</p> <p><u>Concrete work</u>: Carry out projects on the farm or home with concrete such as building concrete steps or sidewalks, building flagstone walk or patios, or constructing concrete floors in buildings.</p> <p style="text-align: center;">or</p> <p><u>Ropework</u>: Learn to make short and long splices. Prepare exhibit of 10 or more knots and splices.</p> <p style="text-align: center;">or</p> <p><u>Additional suggestions</u>: Do repair and maintenance work on such items as screens, storm windows, or fence; exterior painting of buildings or fences; repairs made with concrete materials; or work on machinery or farm equipment.</p>	

TRACTOR

BEGINNER	<p>(This is for members beginning field work with a tractor. They should have mature judgment and physical stamina. Members should be approximately 14 years of age and should have full approval and guidance of their parents.)</p> <p>Study the tractor operator's manual for one tractor on the farm. Complete at least five worksheets and quiz sheets in Tractor Care Project A Units. Work with father, older brother, 4-H junior leader, or 4-H adult leader on safe tractor operation. Keep a record on one tractor of all fuel, oil, and grease used during a period of 1 month, and figure the costs.</p>	Members should be encouraged to demonstrate and to participate in tractor-driving contests sponsored for young people by extension groups or other organizations.
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Phase or Unit	Learning Experiences	Exhibit Suggestions
JUNIOR	<p>(Members should be at least 14 years of age and should have completed the beginners' project or equivalent.)</p> <p>Study the tractor operator's manual for one or more tractors on the farm. Complete at least five worksheets and quiz sheets in Tractor Care Project B Units. Develop a handy record system and use it for recording tractor use, servicing, and costs similar to Tractor Care Project C Units.</p> <p>Keep a complete cost record on a tractor for at least 4 months. Determine the annual investment and operating costs and the total tractor costs per hour. Operate a tractor at least 2 months and a minimum of 120 hours, including necessary servicing.</p>	
ADVANCED	<p>(Members should be at least 14 years of age and should have completed the junior project or equivalent.)</p> <p>Study the operator's manuals for at least five types of field machines used with tractors on your farm. Complete at least five worksheets and quiz sheets in Machinery Care D Units.</p> <p>Make an annual checkup. Perform needed annual servicing and repairs on at least one tractor and five field machines.</p> <p>Make an annual inventory of all tractors and machinery on your farm and determine the total investment costs and yearly depreciation costs.</p> <p>Determine the total yearly costs for a tractor and two other major items of equipment. Make a comparison of per unit costs of these two pieces of equipment with local custom charges. Compare costs of one present machine with new machine of same size, larger size, or smaller size.</p>	
<h2 style="margin: 0;">OUTDOOR PROJECTS</h2> <h3 style="margin: 0;">AGRONOMY</h3>		
BEGINNER	<p>Select at least two crop production practice units each year. Units can be repeated, but in any 1 year only one repeat can be carried.</p> <p>Unit 1. Learning to Know Seeds and Plants Unit 2. Building a Plant Press Unit 3. Plant Collections Unit 4. Germination Testing Unit 5. Soil Test Sampling Unit 6. Attend a Crop Production Field Demonstration Meeting Unit 7. Clean Market Grain Survey</p>	<p>Simple exhibits relating to units completed</p>
JUNIOR	<p>Grow at least 1 acre of a basic crop: corn, soybeans, small grain, or forage. Select at least one crop practice unit; units are explained in the bulletin. Beginner units may be selected as additional work.</p>	<p>Twenty ears of corn grown the project year; 10 to be displayed and 10 to be shelled and graded. Four quarts of soybeans or small grain</p>

Phase or Unit	Learning Experiences	Exhibit Suggestions
ADVANCED	Grow at least 5 acres of a basic crop: corn, soybeans, small grain, or forage. Select at least one crop practice unit. Beginner units may be selected as additional work.	Same as junior

BEGINNER'S CONSERVATION

This project offers a wide variety of experiences. Each member should select a unit and do two or more items in each unit selected. Members should proceed from Beginner's Conservation to any of the following projects: Soil and Water Conservation, Entomology, or Forestry.

Unit I. Insects	<ol style="list-style-type: none"> 1. Assemble insect collecting equipment and learn proper methods for collection and display. 2. Take a field trip with the 4-H Club, family, or a friend. Observe and record all the insects seen that are known or can be learned about from others. 3. Make a collection or mounted display of five or more insects. 4. Study and use safe control measures for one or more kinds of harmful insects. 5. Give a project talk or demonstration on insects at the 4-H Club or other community meeting. 6. Make a chart or collection showing the life cycle of an insect. 	Insect-collecting equipment
Unit II. Birds	<ol style="list-style-type: none"> 1. Build and maintain a birdhouse or feeder. Observe feeding habits and food preference of birds. 2. Take a field trip to identify and study the habits of birds. Learn to know at least five different birds. 3. Study and report migration habits of five different birds. Start a bird "diary." 4. Learn to identify nests of five or more birds and observe material used in building them. 5. Give a project talk or demonstration on birds at the 4-H Club or other community meeting. 6. Study and identify the game birds in the area. 	Birdhouse or feeder
Unit III. Trees and Shrubs	<ol style="list-style-type: none"> 1. Take a field trip to observe and record different conditions under which five or more trees and shrubs grow. 2. Make a plant press. Collect, identify, press, and mount leaves from five or more different trees and shrubs. 3. Learn two or more methods of planting trees or shrubs. Plant two or more trees or shrubs and care for them. 4. Collect, identify, and mount for display six or more cross section cuttings of wood. List common uses of these woods. 5. Study and prepare a list of different trees and shrubs that can be planted for windbreaks, wildlife food and cover, and yard planting. 6. Visit a forest ranger station, fire lookout tower, tree farm, or local forestry office. Write a brief report of what was learned. 	Mounted leaf collection or display of woods
Unit IV. Plants	<ol style="list-style-type: none"> 1. Obey state law governing removal of wild flowers. Take a field trip to study plants. Identify and list five or more wild plants. 2. Identify and mount as many weeds as possible that are growing nearby and learn how they can be controlled. 	Weed or seed collection

Phase or Unit	Learning Experiences	Exhibit Suggestions
Unit V. Animals	<ol style="list-style-type: none"> 3. Study material on how a plant grows. Write a brief story telling about plant growth. 4. Visit a wild flower area or an ungrazed woods several times during the spring and summer. Record the different flowers observed, together with the dates. 5. Give a project talk or demonstration on plants at the 4-H Club or other community meeting. 6. Plant seeds of corn, beans, and peas. Record the planting date. Water them. Record the date that plants come up. Note the difference in growth habits of the plants until they are 2 to 3 weeks old. <ol style="list-style-type: none"> 1. Take a field trip to observe signs of field and forest animals. Record what was seen. 2. Study the habits of gophers, moles, mice, and other rodents. Learn methods of controlling harmful rodents. 3. Study and make drawings of animal tracks showing individual footprints and trail patterns. 4. Study five fur-bearing or game animals found in this state--their foods, habits, and value. 5. Take a trip to a river or lake to observe fish, turtles, crayfish, and other animals. Record what was seen. 6. Complete a "Fire Arms Safety Course." Visit the local game warden. 	Soil type display
Unit VI. Soil and Water	<ol style="list-style-type: none"> 1. Take a hike in a hard spring rain. See what the running water does to the soil. 2. Study where our lake and stream water comes from--where it goes. 3. Fill a pint glass jar half full of sandy soil. Then fill the jar with water and shake it. After a few minutes see how the soil grains settled in layers. Find out why this happened. 4. Bring some things to a club meeting which have to do with soil or water conservation. For example, bring a plant from poor soil and one from good soil. Tell about them. 5. Collect small samples of sand, loam, or peat. Learn the difference. 6. Visit a well driller or local water department employee to learn about the water supply in the area. 	Soil type display
SOIL AND WATER CONSERVATION		
JUNIOR	<p data-bbox="403 1549 1062 1575">Complete at least three of subjects 1 through 8:</p> <ol style="list-style-type: none"> 1. Find out what a watershed is. 2. Assist in making and displaying a soil and water conservation fair booth, exhibit, or window display. 3. Compare topsoil depth of a sloping and a level field. 4. Take part in a land-judging event. 5. Attend a meeting or tour on some phase of soil and water conservation. 6. Collect samples of sand, loam, clay, and peat soils. Put in pint glass jars and label. 7. Visit a farmer who is using proper conservation field practices. Find out how he likes them. 8. Make inquiries about local water supplies for home, farm, industrial, and irrigation needs. 	Soil type display

Phase or Unit	Learning Experiences	Exhibit Suggestions
ADVANCED	<p>Complete at least three of subjects 9 through 16:</p> <ol style="list-style-type: none"> 9. Draw a map of the home farm (or any farm) on a sheet of paper and attach it to the record. On the map show the soil conservation practices, pastures, woodlots, cultivated fields, streams, ponds, and wildlife areas. Let 1 inch equal 40 rods. 10. Run a contour line on a field. Determine how strip cropping would be applied to the field. 11. Lay out and establish (with or without help) one of these practices: grassed waterway, contour strips, or terraces. 12. Obtain a soil sample box and instruction and field information sheets. Collect a proper soil sample and send it in for testing. Later have the county agent explain the fertility recommendations. Attach the fertilizer recommendation sheet to the record. 13. Improve, in the proper manner, at least a portion of a permanent pasture. 14. On an extra sheet of paper draw an outline of a farm (1 inch to equal 40 rods) and show the location of leading soil types. 15. Find out how a watershed project is set up. 16. Plan and plant a field windbreak for wind erosion control or set out seedlings on a slope for water erosion control. Select the proper trees and shrubs for these jobs. 	Conservation map of home farm

ENTOMOLOGY

A member might take entomology after having taken Beginner's Conservation. However, this is not required because there is a beginner phase in this project.

BEGINNER	<p><u>Minimum requirements:</u></p> <ol style="list-style-type: none"> 1. Make or buy: collecting net, one or more killing bottles, and one or more collection boxes. 2. Collect and mount <u>at least 25 different kinds of adult insects</u>. As many orders as possible should be represented in the collection but specimens do not have to be identified. <p><u>Suggested additional activities:</u></p> <ol style="list-style-type: none"> 1. Read an insect book. 2. Give a talk or demonstration on insects, insect collecting, or mounting before the 4-H Club or other groups. 3. Help control insects in the garden or home. 4. Collect and preserve immature insects (larvae, caterpillars, etc.). 	Insect collection of 25 different kinds of adult insects
JUNIOR	<p><u>Minimum requirements:</u></p> <ol style="list-style-type: none"> 1. Make or buy: insect display box (one or more 18- x 24-inch glasstop), pinning block, spreading block, spreading board, and other equipment. 2. Collect, mount, and label <u>at least 50 insects</u> from eight groups or orders. Include no more than four of any one species. 3. Identify <u>by order</u> all insects collected. 	Insect collection of at least 50 but not more than 100 specimens of adult insects representing at least eight major orders

Phase or Unit	Learning Experiences	Exhibit Suggestions
	4. Learn the life histories and controls, if necessary, of at least five different kinds of insects. (Fill out and insert one Insect Record Sheet, Form No. 1, for each study. These are the blue sheets in the back of 4-H Ext. Bull. 43.) <u>Suggested additional activities:</u> <ol style="list-style-type: none"> 1. Read one insect book. 2. Give a talk or demonstration on some phase of entomology. 3. Help control insects in garden, home crops, or livestock. 4. Collect and preserve immature insects (larvae, caterpillars, etc.). 	Life stages of an insect
ADVANCED	<u>Minimum requirements:</u> <ol style="list-style-type: none"> 1. Collect, mount, label, and exhibit <u>at least 100</u> insects from at least eight groups or orders; include no more than four of any one kind. 2. Identify and arrange all specimens in the collection by order. 3. Learn the scientific and common names of <u>at least five</u> important insects in the collection. 	Insect collection of 100 specimens of adult insects from eight orders

FORESTRY

This project is junior or advanced level work. In most cases members will have completed Beginner's Conservation but this is not required. First year project members must complete at least two phases taken from one or more divisions. Members enrolled 2 or more years must select at least one additional phase of work in any division each year.

Forest Appreciation	<ol style="list-style-type: none"> 1. Learn to know 15 trees found growing in Minnesota, or 10 trees if in the prairie region. List their names, the products they produce, and their use for farm and industrial purposes. 2. Learn how a tree grows, the various parts of the tree, the foods needed for growth, and where these foods are obtained. 3. Make a standard size wooden plant press for pressing specimens of leaves, flowers, grasses, and herbs. 4. Collect leaves, twigs, fruits, and seeds of 15 trees and shrubs found growing in Minnesota, or 10 if living in the prairie region. Identify, mount, and label them using an 8½-by 11-inch display card. List farm and industrial uses of trees. 5. Collect, identify, display, and label 15 native woods, noting their use on the farm. 6. Establish in your 4-H Club a lending library of forestry and conservation pamphlets and books. 	Leaf display Wood sample display
Forest Tree Nursery and Planting	<ol style="list-style-type: none"> 1. Collect hardwood seeds; plant and care for at least a 4- x 6-inch nursery bed. 2. Collect, store, plant, and care for 100 or more willow or cottonwood cuttings. 3. Make and care for a transplant bed of at least 250 evergreen seedlings. 4. Plant 50 or more seed spots with nut tree seeds. 5. Draw a plan for planting a new shelterbelt or removing the shelterbelt on the home farm. Then plant and care for at least 300 trees in carrying out the plan. 6. Renovate a woodlot by underplanting or plant a new woodlot of one-half acre or more in size. 	

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| Forest Protection | <ol style="list-style-type: none"> 1. Prepare and display three or more posters promoting forest and field fire protection. 2. Visit and observe the operation of a forest fire lookout station. Include in the story the service given by the lookout station. 3. Learn and demonstrate correct methods of building and putting out campfires. 4. Learn how to fight fires and organize a fire-fighting unit in the club for local protection. 5. Plan and maintain firelines of 12 feet width around wooded areas on the home farm. 6. Build and maintain a fence around improved pastures on the farm to prevent livestock grazing in woods or shelterbelts. | |
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| Harvesting Forest Products | <ol style="list-style-type: none"> 1. Draw map of farm showing location and acreage of woodland. List kinds of trees that occur in woodland. 2. Learn how woodlands are improved by proper cutting of trees. 3. Learn to estimate lumber content of logs by Scribner C log rule (legal rule for Minnesota). Measure the lumber content in 10 or more logs. 4. Learn to estimate board content in standing trees. Find the content in cords of wood or board feet of lumber of 10 or more trees. 5. Learn how to fell a tree properly. Harvest one-half acre or more of pulpwood; saw logs, posts, poles, or fuelwood. 6. Manage 1 acre or more of woodland as a farm crop. Perform all necessary cultural work (planting, thinning, pruning) and harvesting operations. 7. Tap 10 or more sugar maple trees for sap for maple syrup. If a large number of trees are tapped build equipment and produce maple syrup or sugar from the sap. | |
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FRUIT

Make a plan of the home fruit planting indicating what was already there, if anything, and what was planted this year. Grow one or more of the following units, using recommended varieties and practices.

- Unit A. Fifty or more June-bearing strawberry plants.
- Unit B. Fifty or more everbearing strawberry plants.
- Unit C. Twenty-five or more certified raspberry plants.
- Unit D. Three or more currant or gooseberry bushes.
- Unit E. Three or more grapevines.
- Unit F. Three or more apple or pear trees.
- Unit G. Three or more plum, cherry plum, or bush cherry trees.

Keep a record and write a story of cultural practices used and experiences gained from this project.

FLOWER GARDENING

BEGINNER	Know and grow several different kinds of flowers. Know the difference between annuals, biennials and perennials.	Flowers or flower arrangements
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Phase or Unit	Learning Experiences	Exhibit Suggestions
JUNIOR	<p>Do such areas of work or study and know as many of the following as possible.</p> <p>Make a plan for a flower garden. Plant annuals, biennials, or perennials. Transplanted plants. Study soil mixtures, divide perennials, apply plant food, make collections, exhibit or demonstrate.</p>	
ADVANCED	<p>Conduct and report on an experimental project such as the following:</p> <ol style="list-style-type: none"> 1. Test the effect of different fertilizer rates. 2. Experiment with various plant nutrients or growth regulators. 3. Compare propagation by seed, cuttings, dividing, grafting, etc. 4. Compare direct planting versus transplants. 5. Learn about growth characteristics of annuals, biennials and perennials. 6. Compare the growth results from different potting soil mixtures. 	
INDOOR GARDENING		
<p>Beginner, junior, and advanced projects are being developed.</p>		
LAWN AND LANDSCAPE DESIGN		
<p>Beginner, junior, and advanced projects are being developed.</p>		
POTATO		
	<p>Grow one-eighth acre or more of potatoes. Keep a record of the cost production and other items of interest. Write a story report of the project.</p>	Potatoes
VEGETABLE GARDENING		
BEGINNER	<p>Grow a garden of at least three or more vegetables for family use or help with the family garden. Make a plan for the garden before planting time. Know the variety of each vegetable planted.</p>	<p>Exhibit 3 vegetables, if permitted in county. Or if more are raised use the following as a guide.</p>
JUNIOR	<p>Grow a garden large enough in size to produce a variety of vegetables for family use. Do such things as make a plan for the garden, transplant, study plant parts, apply plant food, collect insects and diseases and exhibit and demonstrate</p>	<p>A balanced collection of six different kinds of vegetables--root, leafy, or vine crops. Potatoes should be included in the potato exhibit.</p>
ADVANCED	<p>Do work similar to junior and do some marketing if appropriate or other more advanced projects.</p>	<p>The number of vegetables to exhibit is:</p>

Large crops--one each.
Example: cabbage, squash, melon, pumpkin, cauliflower, celery, Swiss chard.

Middle size--three each.
Example: tomatoes, onions, peppers, cucumbers, kohlrabi, carrots, beets, rutabagas, turnips.

Small size--twelve each.
Example: snap beans, lima beans, green peas, ground cherries.

All vegetables should be correctly labeled, giving proper variety name.

HOME ECONOMICS PROJECTS

FOODS

BEGINNER:

Unit I. Snacks and Little Lunches

Select snacks which contribute to daily food needs. Learn why certain foods are needed, how to plan simple meals, how to read recipes, and prepare foods, especially for snacking. You'll also learn how to serve foods attractively.

Check county fair premium list for exhibits in foods for both snacks and little lunches and suppers.

First-year members: do all of these:

1. Plan, prepare, and serve five different snacks or lunches. Do as much of this work alone as possible.
2. Prepare part of the foods for at least three additional snacks or lunches. If mother agrees, make one of the foods for the meal rather than just "helping" with all of them.
3. Record the food eaten for 1 day (including snacks) to see if some food from each of the four food groups was included.

Exhibits usually come from the following categories:
4 oatmeal cookies
4 cupcakes or square of cake from commercial mix
4 plain muffins
1 loaf whole wheat bread
 $\frac{1}{2}$ loaf quick bread
Food science exhibit

Second-year members: do some of these in addition to those listed for first-year members:

4. Serve a snack to friends or relatives. Practice what the 4-H bulletin teaches about serving snacks attractively.
5. Begin a recipe collection or contribute to mother's. This can be a recipe file, scrapbook, notebook, or any other type of collection. Record only recipes for foods tasted and enjoyed.
6. Study prices of quantities of food and figure cost of one thing or serving. Examples: Figure the cost of one orange from a bag of oranges. Figure the cost of one glass of lemonade from frozen lemonade.

Exhibits at State Fair are in canning or food science.

Phase or Unit	Learning Experiences	Exhibit Suggestions
Unit II. Picnics and Suppers	<p>Purpose: To learn to plan, prepare, and serve attractive and tasty picnic and supper meals. To learn to assemble a picnic box; to be a good food shopper; to keep food safe and clean; to know about the science of foods; and to enjoy foods that help a person grow healthy and strong.</p> <p>First-year members: do at least 1 and 2 below.</p> <ol style="list-style-type: none"> 1. Plan, prepare, and serve at least five different picnics or suppers alone or with help. 2. Keep a record of the food eaten for 2 days. Check meals against the four food groups. 3. If the family needs picnic equipment, select or make some type of picnic equipment to make picnic preparation easier and the meal more pleasant. 4. Prepare some breads used in meals or pre-serve food by canning or freezing. <p>Second-year members: do some of these in addition to those listed for first-year members.</p> <ol style="list-style-type: none"> 5. Practice being a wise shopper. 6. Demonstrate one experiment learned in this project to club members. 7. Prepare three different centerpieces to add to the enjoyment of meals. 	See notes under Snacks and Little Lunches.
JUNIOR: Unit III. Creative Foods - Breads and Cereals	<p>Purpose: To learn to plan and prepare nutritious, attractive, and interesting meals and to develop skills necessary in preparation. To develop skill in and understanding of the principles of bread baking, cereal cookery, and food preservation. To learn about meal service, food selection, and buymanship.</p> <p>Do these food activities and record work:</p> <ol style="list-style-type: none"> 1. Plan, prepare, and serve eight different well balanced meals. Check each meal to see that it contains a food from each of the four food groups. 2. Assist with six additional meals by preparing a bread or cereal dish. Plan other foods in the meals that represent food groups other than breads or cereals. 3. Record all foods eaten for 2 days to determine if there are adequate foods from each food group. 4. Study a science principle. If possible work this into a demonstration, project, talk, or something similar. Examples: a. Make a gluten ball. b. Check the effect of various temperatures on yeast growth. c. Observe growth of molds. 	<p>Check county fair premium list for exhibits in foods for both creative foods and quick meals. Exhibits will likely come from the following categories:</p>
Unit IV. Quick Meals	<p>Purpose: To learn to plan, prepare, and serve well balanced, attractive quick meals. To make good use of the oven broiler and freezer. To develop good eating habits and meal patterns.</p>	See notes under Creative Foods--Breads and Cereals.

Do these activities and record work:

1. Plan, prepare, and serve eight different, well balanced quick meals. Include at least two breakfasts. By using the menus in the bulletin, learn good meal planning as well as how to make good use of appliances.
2. Assist with six additional meals by preparing one or more foods.
3. Record the food eaten for 2 days to see if the diet includes the essential amount of food from each of the four food groups.
4. Learn to prepare and enjoy one new food.
5. Learn to plan work when preparing meals. Make out a work plan for one quick meal. Do this several times to check improvement in efficiency.
6. Check menus planned and prepared with the six points for well planned meals as discussed in the 4-H bulletin.

ADVANCED:
Unit V. Family
Meals

Purpose: To learn to plan, prepare, and serve meals that are nutritionally adequate. To develop an understanding of food costs and buymanship. To acquire skills in meat and vegetable cookery; to learn to prepare an interesting variety of foods. To learn to serve these foods in an attractive and gracious manner.

Do items 1 and 2. Select two of items 3 through 6.

1. Plan, prepare, and serve 15 different meals for family and friends.
2. For each meal listed put an A or C in parenthesis after food containing a rich source of vitamin A or a good or fair source of vitamin C. Reference: Food for Fitness, USDA Leaflet 424.
3. Plan the family meals for 1 week; consider the nutritive value of foods used.
4. Make a market order for the meals planned in item 3 and estimate cost.
5. Prepare some breads used in meals or preserve food by canning or freezing.
6. Demonstrate at a local and/or county meeting.

Check county fair premium list for exhibits in foods for both Family Meals and Outdoor Cookery.

Exhibits will likely come from the following categories for both Family Meals and Outdoor Cookery:

4 rolled white sugar cookies
Double crust fruit pie
Pie shell
4 baking powder biscuits
1 loaf dark bread

1 nationality bread, loaf, ring, or 4 rolls
Food science display
2 jars fruit, vegetables or meat

Exhibits at State Fair are in canning or food science.

Unit VI. Outdoor
Cookery

Purpose: To learn to plan, prepare, and serve nutritionally adequate outdoor meals to family and friends. To learn what foods can be transported and safely served out-of-doors. To learn principles of food buymanship and time and money management. To develop understanding and skill in preparation of different foods through different kinds of outdoor cookery. To learn how to make the outdoor meal fun for all by planning enjoyable activities.

Do these two activities:

1. Plan, prepare, and serve 15 meals, eight of which should be outdoor meals. Use a variety of ways preparing outdoor food.

See notes under Family Meals.

A piece of equipment made for outdoor cookery.

2. For each meal listed on the record put an A or C in parenthesis after those foods which are a good source of vitamin A or good or fair source of C. Reference: Food for Fitness, USDA Leaflet 424.

CLOTHING

BEGINNER

Purpose: To help the member make simple-to-sew clothes. To learn what clothes cost and to make it a habit to take care of them.

Aprons, skirts, or simple dresses

Do all these activities:

1. Organize and equip a sewing box. Start with needles, pins, thimble, shears, tape measure, and wrist pin cushion.
2. Make one "easy-to-sew" garment such as apron, blouse, shirt, or nightie.
3. Sew on six or more buttons.
4. Keep a record of money spent for clothing for 1 month. Two or three purchases are enough.

Any clothing shown at the State Fair must be a complete outer garment.

Members may wear garments in the dress revue. They generally would not select accessories other than appropriate blouses, shoes, etc. However, other accessories are not prohibited.

A beginner with some sewing experience could select these items from the clothing record:

1. Add two new tools to the sewing box each year.
2. Make at least one of the following: jumper, dress, blouse, or skirt.
3. Iron one or more different articles, such as hankies or skirts, three times.
4. Keep a record of money spent for clothes for 1 to 3 months.

JUNIOR

Purpose: To improve sewing skills and learn new details in clothing construction. Patterns and fabrics used can be more difficult to sew than those used in Beginner's Clothing.

A complete outer garment

Members wearing their garments in a dress revue may select one or more accessories.

Do these activities:

1. Plan and make a dress.
2. Make one additional garment such as: skirt, blouse, dress, 4-H uniform, sports clothes, child's garment, pajamas, or housecoat.
3. Organize sewing equipment for more convenient use. Add one new or better tool each year.
4. Make (or acquire) and learn to use a different piece of pressing equipment each year such as: different sizes or kinds of press cloths, press mitts, a pressing roll, a tailor's ham, or well padded ironing board.
5. Repair eight or more garments by sewing on fasteners and restitching broken seams and hems.
6. List wardrobe garments that need to be added over a period of 4 months.
7. Keep account of all clothing purchases added to the wardrobe during the 4-month period.

Phase or Unit	Learning Experiences	Exhibit Suggestions
ADVANCED	<p>Purpose: To continue to develop clothing construction ability. To learn to make better selections, both in sewing projects and ready-to-wear purchases.</p> <p>Do these activities:</p> <ol style="list-style-type: none"> 1. Plan and describe the new outfit to be added to the wardrobe this year. 2. Make the main garment. 3. Make or remodel two additional garments such as: tailored dress, party dress, sports clothes, skirt, blouse, jacket, suit, coat, slacks, child's garment, pajamas, or house-coat. 4. Plan wardrobe needs at beginning of each season. 5. Keep a record of all money spent for personal clothing during the year. 	<p>A complete outer garment</p> <p>Members wearing their garment in a dress revue may select one or more accessories.</p>
HOME IMPROVEMENT—FAMILY LIVING		
BEGINNER	<p>Purpose: To learn to make the home a more pleasant and comfortable place to live and work in by:</p> <ol style="list-style-type: none"> 1. Helping at home. 2. Learning new and better ways of homemaking. 3. Making or selecting articles that make work easier and more fun. 	<p>Although the project offers opportunities for selecting as well as making articles, exhibits are always articles made unless otherwise specified.</p>
<p>Of the four units, the member must <u>complete one unit</u> the first year and two or more <u>units</u> the second year. He must keep a record of what is learned and items made or bought.</p>		
Unit I. In My Room and Around the House	<p>Things to do--in the room; complete two or more of these:</p> <ol style="list-style-type: none"> 1. Keep room tidy by dusting the floor and furniture often (every week), hanging up clothes every day, keeping dresser drawers tidy, and making bed every day. 2. Use a new storage device such as drawer dividers, shoe rack, or clothes bag. 3. Try the bed-making method suggested in the 4-H bulletin. 4. Make room more pleasant by adding something you like such as a picture, wallhanging, jewelry box, or plant. <p>Things to do--around the house; complete four or more of these:</p> <ol style="list-style-type: none"> 1. Help keep home neat and clean by dusting the furniture and floors. 2. Learn how to use the vacuum cleaner (if available). 3. Help select a cleaning supply to make job easier such as furniture polish, floor wax, a mop, or a brush. 4. Help family by setting the table often. 5. Try the table-setting method suggested in the 4-H bulletin. 	<p>One item or related items for use in the home such as towels, place mats, luncheon cloth, waste-basket, or dust mit</p>

Phase or Unit	Learning Experiences	Exhibit Suggestions
	<p>6. Add color to table by using a simple centerpiece such as fruit, flowers, or a plant.</p> <p>7. Help with the dishes often.</p> <p>8. Try the dishwashing method suggested in the 4-H bulletin.</p> <p>Things to make or buy:</p> <p>Make <u>or</u> select one or more articles to make your work easier and more fun such as dust mit, cleaning supply basket, wastebasket, clothes bag, pillowcases, wallhanging, place mats and napkins, tablecloth, shoe rack, or drawer dividers.</p>	
Unit II. It's Wash and Iron Time	<p>Things to do--complete two or more of these:</p> <ol style="list-style-type: none"> 1. Learn how to sort soiled clothes. 2. Help sort soiled clothes for laundry every week <u>or</u> for 4 weeks. 3. Dry clothes every week (hang clothes or put in dryer). 4. Learn how to fold and put away laundry. Do this often (every week, if possible). 5. Practice ironing easy things first such as napkins or handkerchiefs. 6. Help sprinkle and iron laundry. 7. Practice ironing gathered skirts and then sport blouses. 8. Learn how to care for iron by following the instruction booklet. <p>Things to make or buy:</p> <p>Make <u>or</u> buy one or more articles to make work easier and more fun such as: clothespin bag, bag for dampened clothes, sprinkling bottle, or laundry bag for soiled clothing.</p>	Article or articles related to laundry such as a clothespin bag or laundry bag
Unit III. Babysitting or Taking Care of Little Ones	<p>Help at home by caring for younger brothers and sisters. Do two or more of these activities:</p> <ol style="list-style-type: none"> 1. Feed children; play with them. 2. Dress them or change diapers; make their beds. 3. Try the child care suggestions in the 4-H bulletin. 4. Go shopping with someone older and help select an item for a child such as clothing, food, or toys. <p>Things to make or buy:</p> <p>Make <u>or</u> select one or more articles to make your job easier and more fun such as: children's toys--spool, stuffed, or building toys, toy box, or baby sitting kit.</p>	One toy or item for babysitting or for a child's room
Unit IV. Getting the Most for My Money	<p>Things to do:</p> <ol style="list-style-type: none"> 1. Plan the amount of money to be received in 1 month. 2. Plan what is needed to spend, save, and share for that month. 3. Record for that month the money received. 	

Phase or Unit	Learning Experiences	Exhibit Suggestions
JUNIOR	4. Divide money into envelopes marked Clothing, Food, School, Church, etc. 5. Follow spending plan. Record where money goes.	
	Purpose: To help the 4-H member: 1. Make home a more pleasant and comfortable place in which to live and work. 2. Understand where money comes from and where it goes. 3. Learn more about modern laundry. 4. Develop an understanding of younger children and how to care for them.	
Unit I. In My Room and Around the House	The member must complete <u>one unit</u> the first year and <u>two or more units</u> the second year. He must complete the "Report of Work Done" section and the "Story."	
	Complete two of the following: 1. Study the use and care of the vacuum cleaner. Use vacuum in as many ways as possible and care for it after each use. 2. Select at least two floor coverings used in the family home such as: vinyl, linoleum, hardwood, or wool carpeting. Learn about the daily, weekly, and special cleaning these two require. Take care of these two floor coverings for 1 month. 3. Learn about color (color wheel, primary and secondary colors, color schemes). Practice mixing colors from the three primary colors. Learn how to mix paints to lighten, darken, brighten, or dull them. Refer to Ext. Bull. 280, <u>Letting Color Work for You</u> . 4. Study the <u>storage in one area</u> of the home such as the kitchen, bedroom, reading, or study area. Make a plan of how the storage could be improved. Make at least <u>two</u> of these storage improvements. 5. Study requirements of good lighting. Select an area in the home and improve the quality of lighting there. Set up a new area according to lighting requirements such as a reading or study center, a sewing center, or a dressing table. 6. With the help of the family, select a room or area in the home that needs improvements. Make a plan of what is to be done such as rearranging furniture, adding new furniture or accessories, or making or selecting curtains or draperies. Carry out part of the plan this year.	One item or related item for use in the home such as sofa pillows, bulletin board, step shelves, pictures, closet accessories, or tablecover
Unit II. Getting the Most for My Money	Complete <u>two</u> of the following the first year: 1. Make a list of the things wanted and the cost of each. Arrange these items in order of priority--place what is wanted most first. Then write down <u>income</u> . List needs (what you have to pay for out of income). Find out how much is left over to apply toward what is wanted. <u>Decide what must be done to get the money for the first item</u> on the list. Then set about doing it.	

Phase or Unit	Learning Experiences	Exhibit Suggestions
Unit III. Modern Laundry	<ol style="list-style-type: none"> 2. Learn about the area bank. Visit a bank that handles both checking and savings accounts. Learn how to write and endorse a check and how to fill out a deposit slip. 3. Make a list of the things done for self that would cost money otherwise; for example: making gifts, sewing clothes, or sharing a bicycle. Put a cost beside each and total them. Are there other ways to stretch money? 4. Ask parents how much they spent for you last year over and above what was spent by self for one of the following: clothing, recreation, school, or health. If your parents keep no record, start now to keep a record of what your parents are paying for one of the four. <p>Complete at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. Try an experiment with different kinds of bleaches. Select three or four different fabric samples such as cotton, cotton-dacron blend, wool, or nylon. Find out what effect the different bleaches have on the different fibers. Refer to Ext. Bull. 282, <u>Home Laundering</u>. 2. Test new garments for colorfastness. Cut a small piece of fabric from the seam or belt and put it in a small glass jar with warm water. Shake well. Refer to 4-H bulletin, page 6. 3. Learn how to use and care for washer and dryer. Read the instruction book. Do the family laundry at least four times. 4. Learn how to use and care for iron. Read instructions for using and caring for iron. Do the family ironing at least four times and practice the proper use and care of the iron. 5. Analyze the home laundry area. Plan improvements that would make a job easier such as rearranging articles, improving lighting, providing cart for clothes, designing a more convenient drying space, or providing new ironing board cover. Make at least two of these improvements. 6. Learn about stain removal. Make a stain removal kit and keep it near laundry area. Refer to USDA Home and Garden Bulletin 62, <u>Removing Stains from Fabrics</u>. <p>Make or select an item that will make laundry easier--ironing board cover, iron, clothes basket liner, laundry bag.</p>	<p>One item or related items for laundry such as clothespin or laundry bag or an ironing board cover</p>
Unit IV. Child Care - Babysitting	<p>Complete at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. When you are babysitting outside of your home use the "Baby Sitter Information Guide" in your bulletin. 2. Learn about children's clothing such as colors, sizes, or special features. Go shopping to look at children's clothing. Make or select a clothing item for a child. 	<p>One toy or item for babysitting or item for a child's room</p>

3. If there are young children in your family, help to remodel a child's room or nursery. Make a plan for improvements such as painting, refinishing, adding accessories, or changing or adding storage. Make at least two of these improvements.
4. Make a babysitting kit. Include items you would need such as books, toys, and information sheet.
5. Make or select one or more toys for children.

ADVANCED

Purpose: To help member take an overall look at homemaking. To learn how to manage time, energy, and money. To learn how to select and care for furniture, linens, curtains, draperies, and other household items. To learn the importance of getting along with small children and how to care for them.

Requirements:

The member must complete one unit the first year and two or more units the second year. He must complete the "Report of Work Done" section and the "Story."

Unit I. In My Room and Around the House

Do two or more of the following:

1. Select a room in the home. Make a scale drawing of the furniture arrangement before and after. Rearrange the furniture so that it is most convenient for the activities carried on there.
2. Plan and develop a new area or room in the home such as a study center, a new storage area, a recreation area, or a play center for a child.
3. Study various types of floor coverings. Visit a local furniture store to see what is available in the community. Learn about new types of floor coverings and how to care for them. Care for two different floor coverings in the home for 3 months.
4. Study about the selection and care of the following: dishes (china, pottery, plastic, semi-porcelain), flatware (stainless, silver plate, sterling), and linens (bedding, bath, kitchen linens). Compare the costs, durability, care, and styles that are available in the community.
5. Learn to care for small kitchen appliances such as the toaster, coffeemaker, and electric skillet. Read the instruction books and care for at least two of these over a period of time. Make minor repairs or have them repaired if necessary.
6. Study the use of color in a room. Make a color plan using paint, floor covering, and fabric swatches. Carry out at least one color change this year such as making a new wall finish (paint or paper). Or paint, finish, refinish, or reupholster an article of furniture.
7. Learn to improve methods in cleaning and organizing supplies. Try new methods such as a different furniture polish, floor wax, or any cleaning supply. Keep cleaning supplies in a convenient place and try using a cleaning basket.

One item of furniture which is new, refinished or restyled, or furnishings such as curtains, draperies, rugs, or bed-spread

Phase or Unit	Learning Experiences	Exhibit Suggestions
Unit II. Getting the Most for My Money	<p>Make, select, renew, or improve at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. Accessories such as pillows, pictures, waste-basket, or other items. 2. Curtains or draperies. 3. A new lamp or lampshade. 4. Bedspread. 5. Rug. 6. Closet accessories for children's or other rooms. 7. Other. <p>Complete at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. Keep a record of the cost of a hobby interest. 2. Take an inventory (make a list) of all the equipment, big and little, mother has in her kitchen. Find out how much each costs. (Use a mail order catalog.) Total the cost of all. 3. If getting a driver's license, find out how much has been added to your family's car insurance because of this. <p>It costs money to own and run a car--keep a record of the cost to run the family car for 1 year.</p> <ol style="list-style-type: none"> 4. Find out approximately how much is spent on clothes for self in a year. How much does the entire family spend? What is the family's food bill for 1 month? For a year? 5. Make an inventory of net worth. List all possessions and their cost or value. Group them under headings such as: (1) Sports equipment - hunting, fishing, skating, etc.; (2) Recreation equipment - radio, phonograph, etc.; (3) Work equipment - iron, scissors, etc. 	One item or related item for a child's room
Unit III. Babysitting and Child Care	<p>Complete at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. Learn what to look for when selecting children's clothes. List the average amount of clothing and equipment needed for a new baby. Use a catalog and figure the total cost. 2. Learn how to make mealtime a pleasant and interesting experience for children. List some things you have learned about mealtime and feeding children. Refer to Ext. F. 220, <u>Food for Young Children</u>. 3. <u>Learn what to look for when selecting toys for the 0- to 2-year-old, 2- to 6-year-old, and 6- to 8-year-old. List the characteristics these toys should have.</u> 4. Bathe a baby or a small child. 5. Care for a child in the absence of other adults. <p>Complete at least one of the following:</p> <ol style="list-style-type: none"> 1. Select a garment for a small child. 2. Select a toy or game for a child. 3. Plan and make a storage space for toys. 4. Do some babysitting away from home. 	

Phase or Unit	Learning Experiences	Exhibit Suggestions
Unit IV. Modern Laundry	<p>Complete at least <u>two</u> of the following:</p> <ol style="list-style-type: none"> 1. Learn what to look for when choosing an iron. Read the instruction booklet and care for the family's iron. Do the family ironing as often as possible. 2. Learn what to look for when choosing a dryer-- gas or electric. Help with the family laundry as often as possible so as to learn how to use the dryer. 3. Study the label on a new garment or household fabric; wash or clean it according to instructions. 4. Learn what to look for when choosing a washer-- conventional or automatic. Visit an appliance store and find out the cost of each and their advantages and disadvantages. 5. Improve the family laundry area by rearranging the work area or adding new equipment such as a rack for hanging ironed garments or storage for laundry supplies. <p>Select or make <u>1</u> of the following:</p> <ol style="list-style-type: none"> 1. Iron. 2. Ironing board. 3. Ironing board cover. 4. Laundry bag. 5. Bag for dampened clothes. 6. A new cleaning supply (such as bleach, detergent, or water softener). 7. Others. 	<p>One item or item for laundry such as clothes-pin or laundry bag or ironing board cover</p>

SPECIAL PROJECTS JUNIOR LEADERSHIP

Purpose: To develop abilities and skills in working with others. The member should be 14 years old by January 1 of the current year and have completed at least 1 year of 4-H Club work. Each member, except those 16 years old or over, should be enrolled in at least one other project in addition to the Junior Leadership Project.

At the beginning of the club year each junior leader will work with the adult leader to plan his definite responsibilities. Responsibilities should be undertaken in at least one of the following Junior Leader Units:

- Unit A. Junior Member Leader
- Unit B. Junior Club Activity Leader
- Unit C. Junior Project Leader
- Unit D. Junior Club Leader

Suggestions for work in each unit are given in the 4-H bulletin.

HEALTH

There are no phases referred to as beginner, junior, or advanced, but there are suggestions for age groups.

10 to 12

1. Complete the record and worksheets for at least two of the subjects 1 through 6 in the 4-H Health bulletin.
2. Give a demonstration or talk, or assist with a club health project.

Phase or Unit	Learning Experiences	Exhibit Suggestions
13 years and over	<ol style="list-style-type: none"> 1. Complete the record and worksheets for two of the subjects 1 through 6 in the 4-H Health bulletin, preferably those not studied before. Study two of the subjects numbered 7 to 12. 2. Give a demonstration or talk, or assist with club health activities. 	

PHOTOGRAPHY

BEGINNER (ONE)	<p>Purpose of project To help you learn:</p> <ul style="list-style-type: none"> -how a camera takes a picture. -how to take care of your camera. -to hold and aim your camera. -to choose the best place from which to take the picture. -to spot your mistakes. -how to handle your negatives and pictures. -how to mount your pictures and prepare exhibits. -the fundamentals needed to advance to Unit II of the 4-H photography project. <p>Requirements</p> <ol style="list-style-type: none"> 1. Submit a minimum of 23 black-and-white pictures (no color) <ol style="list-style-type: none"> A. These should include five each of the following: <ol style="list-style-type: none"> (1) Buildings (2) Landscapes (3) People: individuals or groups (4) Animals B. Minimum of one sequence of two or more pictures. C. Best picture taken during the course of the project. 2. Mount pictures in record book and fill out picture record for each photograph. (Write picture record notes as each picture is taken.) 3. Start a negative file. 4. Learn definitions of photography terms. 5. Keep a record of all costs. 6. If possible prepare an exhibit of your pictures for display at: a fair, achievement day, club meeting, window display, or other public exhibition. 	<p>Six black and white prints, jumbo size (approximately $3\frac{1}{2} \times 4\frac{1}{2}$ inches), showing each of the following subjects: Buildings Landscapes People (either individuals or in groups) Birds or animals</p> <p>These must be mounted on a 17 x 22 cardboard and each picture appropriately captioned.</p> <p>A picture story of two or more black and white prints, jumbo size, so related that they tell a more complete story than one alone could do. (This could be pictures showing before and after, how to do it, or other related pictures.) These must be appropriately mounted.)</p>
JUNIOR (TWO)	<p>Purpose of project To help you learn:</p> <ul style="list-style-type: none"> -to tell a story with pictures. -camera positioning, action shooting, and picture composition (how subjects are arranged). -better use of natural lighting. -basic flash lighting. -to judge your own photos and correct mistakes. -more about adjustable cameras and cameras with fixed-speed shutters. -the fundamentals needed to advance to Unit III of the 4-H photography project. <p>Requirements</p> <ol style="list-style-type: none"> 1. Submit a minimum of 15 black-and-white pictures (no color). <ol style="list-style-type: none"> A. Your best picture of each of the following: <ol style="list-style-type: none"> (1) Buildings (2) Landscapes 	<p>Six black and white prints, jumbo size (approximately $3\frac{1}{2} \times 4\frac{1}{2}$ inches) showing each of the following subjects: Buildings Landscapes People (either individuals or in groups) Animals or birds Action</p> <p>A picture story of two or more black and white prints, jumbo size, so related that they tell a more complete story than one alone could do. Choose from the following topics or select your own:</p>

Phase or Unit	Learning Experiences	Exhibit Suggestions
	(3) People: individuals or groups (4) Animals or birds (5) Action B. A sequence of five pictures of a sunlit subject taken from the same position but at different times during the day; or five flash pictures. C. Minimum of two picture stories of two or more pictures each: (1) Before and after (2) How-to-do-it (3) 4-H activity, event, or project D. Best picture taken during the course of the project 2. Mount photographs in record book and fill out picture record for each. <u>Write picture record notes as each picture is taken.</u> 3. <u>File negatives.</u> 4. Keep record of all costs. 5. If possible, prepare an exhibit of your pictures for display in: a fair, achievement day, club meeting, window display, or other public exhibition.	Before and after How-to-do-it 4-H activity, event, or project A sequence of 5 black and white prints, jumbo size, of the same subject, from the same position at different times during the day, or 5 flash pictures.

ADVANCED (THREE AND FOUR)

Being developed

SAFETY—FIRE PREVENTION

Purpose: To make safe living a part of everyday life in the home, at school, at play, at work, on the farm, and on the highway. To become better citizens in the home and community by protecting self and others. To have a part in the local, state, and national safety and fire prevention programs.

BEGINNER

1. Study suggested work in each unit--home, fire, farm, traffic, and recreation and play. Make a survey of home living surroundings or farmstead. Then select work to do for safer living for self and family.
2. Select at least 10 items of work from two or more units.
3. Do something special such as help with a club safety booth, float, or exhibit. Or give a demonstration or illustrated talk in public on some phase of safety or fire prevention work done.
4. Complete the story report of work and experiences in the project.

JUNIOR AND ADVANCED: These members use the same record but there are slightly different requirements.

1. Study suggested work in each unit--home, fire, farm, traffic, recreation and play, and club and community activity. Make a survey of home living surroundings or farmstead. Then select work to do for safer living for self and family.
2. Work in two or more units is required.

Juniors - select a minimum of 10 items of work.

Advanced - select a minimum of 15 items of work.

3. Do somethings special such as help with a club safety project--booth, warning flags, or stop and yield signs. Or give a demonstration or illustrated talk in public on phases of safety or fire prevention work done.
4. Complete the story report of work and experiences in your project.

SPECIAL PROGRAMS FOR GROUP STUDY

The following group study or discussion type programs for older members or those 14 and over are usually conducted on a county wide or area level. Local clubs could conduct their own series of discussions if there were enough members. Older youth in the community might also be asked to take part. Enrollment in 4-H is not a requirement. There is no record keeping.

Career Exploration

This program is conducted as a group study program in some counties. The purpose is to help young people explore career opportunities in agriculture, home economics, and related fields.

Town and Country Business Program

This program is conducted in a few counties as a group study program. It has the following objectives:

1. To provide a greater understanding of business as it operates in the marketing field through firms associated with agriculture.
2. To explore and discuss employment opportunities in businesses that are closely related to agriculture.
3. To give youth who will go into farming a better appreciation of the problems and structure of agricultural marketing.
4. To point to the needs and benefits of training and education for youth who anticipate employment with agricultural business firms.
5. To teach some basic economic facts which will help participants better fit themselves into society.

CAREER EXPLORATION

The purpose is to help young people explore career opportunities in agriculture, home economics, and related fields.

TOWN AND COUNTRY BUSINESS PROGRAM

This study program of business and marketing has the following objectives:

1. To provide a greater understanding of business as it operates in the marketing field through firms associated with agriculture.
2. To explore and discuss employment opportunities in businesses that are closely related to agriculture.
3. To give youth who will go into farming a better appreciation of the problems and structure of agricultural marketing.
4. To point to the needs and benefits of training and education for youth who anticipate employment with agricultural business firms.
5. To teach some basic economic facts which will help participants better fit themselves into society.

FAMILY LIFE

This program may be conducted as a group study program to assist young people in developing a realistic conception of the benefits and responsibilities of marriage and a greater competence in the day-to-day affairs of family life. The course includes material on increased self understanding, information about the behavior of others, consequences of behavior, and knowledge of the means of achieving marital goals and practice in the development of human relations skills.

The number of meetings could be planned to suit the group. Possible meeting topics for which leader and member references are available are:

- Do Teenagers Need Families
- School Bells or Wedding Bells
- Going Steady
- Engagement--Prelude to Marriage
- Love
- The Mate Selection Process