

4-H County Fair Project Ideas



County Fair Project Ideas!

The following pages will provide exhibit suggestions for youth who choose to showcase their 4-H projects at the Washington County Fair! More specific details will be coming in the 2023 Information/Premium Book this spring.

AEROSPACE

Exhibit Suggestions:

- Build a model (rocket, airplane, satellite) and identify the parts.
- Explain the science about how airplanes fly.
- Explain how the model rocket flies.
- Identify parts of a hot air balloon and how they work.
- Discover and identify the basic parts of a helicopter and how they work.
- Make and demonstrate a hang glider.
- Compare and contrast different types of kites (flat, box, parafoil, etc).
- Discuss pros and cons of different types of flight (airplane vs helicopter vs jet, etc).

Requirements:

- Models or any other project object(s) can be used during the judging process.
- Flyable models should be ready for flight (do not include fuel or engines); recovery systems should be in place and operative.
- Members should be familiar with safety codes in the 4-H curriculum or that accompany the kit.

AGRONOMY

AGRICULTURAL TECHNOLOGY

Exhibit Suggestions:

- A display or presentation highlighting the technology used in agriculture such as GPS tools, drone use, implement technology, yield mapping, genetic engineering, seed traits, agricultural chemistry, precision agriculture, on-farm research, side by side trials, etc.

CORN

Exhibit Suggestions:

- A jar or clear container (equalling 8 cups) of shelled corn.
- A display of ears of dent corn, consisting of 6-10 ears of corn of the same variety.
- A bundle of corn stalks, consisting of stalks of the same variety.
- An educational display illustrating corn's plant reproduction, different types of corn, plant growth factors, plant characteristics, plant part identification, growing and using plants, plant growth and food production, examples of a plant disease, etc.
- A display using a 4-H project kit (a corn stalk growing out of a five-gallon pail).

Requirements:

- Crop must be grown on a farm with which you have a relationship with the producer and have interviewed the producer about the growing process. Crops must have been grown in the current or previous growing season.
- Include an information card listing the variety, soil and agronomy information of the crop if exhibit is a crop sample.
- Be familiar with crop input costs and the growing process.

FORAGES

Exhibit Suggestions:

- A dried sample, in a 3-5 inch tied, dried bundle, clear container of ensiled forages or in a sample 4-6 inch slab of a bale of forage. Forages include alfalfa, warm season grasses, cool season grasses, sorghum, native grasses, silage, etc. It is recommended that a sample analysis of your forage accompanies the sample.
- An educational display illustrating one of the following ideas: nutritional analysis of feedstuff, plant reproduction, plant growth factors, plant characteristics, growing and using plants, plant growth and food production, examples of a plant disease, etc. of forages.
- **A display using a 4-H project kit (grass grown in a container showing how forages are grown).**

Requirements:

- Crop must be grown on a farm with which you have a relationship with the producer and have interviewed the producer about the growing process. Crops must have been grown in the current or previous growing season.
- Include an information card listing the variety if the exhibit is a crop sample.
- Sample could be in a clear plastic container or large clear plastic bag.
- Be familiar with crop input costs and the growing process.

PLANT AND SOIL SCIENCE

Exhibit Suggestions:

- Take soil samples and compare soil analysis (soil analysis can be done by obtaining kits at your local Extension Office).

- An exhibit showing different varieties of cover crops, etc. (seed or plant)
- A plant life cycle exhibit highlighting the growth of a plant from seed to a mature plant.
- A display using a 4-H project kit (using a root viewer to show the soil and root structure of plants).

SMALL GRAINS

Exhibit Suggestions:

- A jar or clear container (equalling 8 cups) of any small grain variety. This could include wheat, oats, rye, barley, etc.
- A dried sample, in a 3-5 inch tied, dried bundle of the same variety.
- An educational display illustrating one of the following ideas: plant reproduction, plant growth factors, plant characteristics, usage of plants, plant growth and food production, examples of a plant disease, etc. of a small grain.

Requirements:

- Crop must be grown on a farm with which you have a relationship with the producer and have interviewed the producer about the growing process. Crops must have been grown in the current or previous growing season.
- Include an information card listing the variety if the exhibit is a crop sample.
- Be familiar with crop input costs and the growing process.

SOYBEANS

Exhibit Suggestions:

- A jar or clear container (equalling 8 cups) of soybeans.
- A dried sample, in a 3-5 inch tied, dried bundle of the same variety.
- An educational display illustrating plant reproduction, plant growth factors, plant characteristics, usage of plants or seeds, plant growth and food production, examples of a plant disease, etc. of a soybean.
- **A display using a 4-H project kit (growing soybeans in a five-gallon bucket).**

Requirements:

- Crop must be grown on a farm with which you have a relationship with the producer and have interviewed the producer about the growing process. Crop must have been grown in the current or previous growing season.
- Include an information card listing the variety if the exhibit is a crop sample.
- Be familiar with crop input costs and the growing process.

SPECIALTY CROPS

Exhibit Suggestions:

- An adequate sample of a specialty crop such as sugar beets, edible beans, black beans, kidney beans, field produced sweet corn, peas, carrots, potatoes, popcorn, etc. Dried products should be in a jar or clear container (equalling 8 cups); fresh products on a plate or flat box.
- A dried sample, in a 3-5 inch tied, dried bundle of the same variety.
- An educational display illustrating one of the following ideas: plant reproduction, plant growth factors, plant characteristics, usage of plants, plant growth and food production, examples of a plant disease, etc. of a specialty crop.

Requirements:

- Crop must be grown on a farm with which you have a relationship with the producer and have interviewed the producer about the growing process. Crops must have been grown in the current or previous growing season.
- Include an information card listing the variety if the exhibit is a crop sample.
- Be familiar with crop input costs and the growing process.

WEEDS & PESTS

Exhibit Suggestions:

- A display or presentation highlighting any current pests in agriculture or horticulture. Could include their life cycle, prevention or treatment, their impact on the plant, etc.
- A weed display or book identifying different weeds in agriculture or horticulture. Highlight one weed in depth, a class of weeds (such as grasses or broad leaves) or a collection of different weeds. Could include identification details, life cycle, weed control, the impact on crop production, etc.
- A display, book or poster identifying insects that are harmful to crops or other plants.
- *Note: Do not include live or dried noxious weed samples in your display (check current listing at <https://www.mda.state.mn.us/plants/pestmanagement/weedcontrol/noxiouslist.aspx>). If you are bringing in a sample of weed seeds, put it in a sealed container.

BICYCLE

Exhibit Suggestions:

- Exhibit showing built, restored, reconditioned or rebuilt bikes.

- Display showing types of bikes, parts of a bike, maintenance, traffic rules, bicycling hazards, city/county/regional bike or active transportation plans, how to wear a helmet, equipment used to teach others about bike repair or first aid, etc.
- Documentation (such as slideshow, notebook, picture book, poster or film) of a bike rodeo or other bike event you helped with, or research on some other aspect of bicycling that was presented to a class, committee or service club.

CHILD & FAMILY DEVELOPMENT

Exhibit Suggestions:

- Toy, game, puzzle, puppets, art/craft materials, etc., made from new or recycled/throw-away material.
- Babysitting kit/travel kit/rainy day kit.
- Original book, story, poem, song, play, cookbook, audio or video tape and narrative, activity book, safety manual for children.
- Scrapbook, photographs, items, reports, video, etc., on family heritage with description of what was learned about self and family.
- A creatively developed program and/or item used for or with a person with differing abilities (i.e. learning difficulties, physically impaired, etc.).
- Display exploring different types of families (nuclear, blended, single parent, childless, foster, etc).
- An educational display explaining foster care/foster families in Minnesota
- Display exploring resources for children alone at home (i.e. activities, games, kits).
- An educational display about youth mental health. Explore strategies to help youth cope with stress, anxiety, etc. with busy bags, sensory bottles/activities, conversation tips, etc.
- Display sharing your experience job shadowing an early childhood education provider, child care provider or another youth worker.
- An educational display with resources available to lower income families (i.e. WIC, Food Shelf, etc).

Requirements:

- Exhibitors should be prepared to discuss, in conference judging, the age and other characteristics of the child for whom the exhibit is intended and how the exhibit contributes to the child's growth, development, and well-being.
- If the exhibit is designed to be interactive with children, the item should be used with children before exhibiting and a photograph of this activity should accompany the exhibit. Signs of use will not detract from the placing of the exhibit.

CITIZENSHIP

Exhibit Suggestions:

- Highlight of community projects and/or citizenship activities which you or your club completed under your leadership. Include plans of action as well as the impact of each.
- An educational display illustrating the description of a service project, which may include: how you identified the need in your community, developed a project to address the need, carried out the project, and reflected on the results.
- An educational display illustrating how you've researched, reflected, and learned more about yourself, your family, and your friends.
- An educational display illustrating how you've researched, reflected on, and learned more about your community, its history, and how to be a good neighbor.
- An educational display illustrating how you've developed a tour of a local community, government or community agency; learned how government functions; and learned about police, fire protection, health, sanitation, safety, and tourism in your community.
- A display on different parts of the world, highlighting their cities, culture, history and more.
- A display explaining how you organized and led tours in your towns, communities, courthouse or historic places.
- An educational display on how the government works or the functions of various government agencies.
- A display on community organizations, agencies or service departments like fire departments, police departments, sanitation, tourism, etc.
- Complete a service project and create a display of what you did and why you did it.

CLOTHING AND TEXTILES

Constructed Clothing

Exhibit Suggestions:

- Include an information tag listing: pattern company name and number or inspirational photo for design, fiber content of fabric and care instructions.
- Constructed garment such as a blouse, shirt, top, skirt, pants, sweatshirt, jumper, dress, outerwear, etc.
- Constructed garment utilizing a fabric or technique new to the exhibitor, such as synthetic suede, active sportswear, micro-fibers, satin, etc.
- Using tailoring techniques to construct a garment
- Wearable art that can be included as part of the constructed garment.
- Educational poster or display on a clothing or textiles subject of your choice. Examples: career in industry, difference in fabric, how fabric is made, evolution of clothing, cost comparison, clothing selection, care of fabric, etc
- Garment mended, repaired or recycled, with color photo of original garment and explanation of steps used.

Upcycled Clothing

Exhibit Suggestions:

- Significant alterations to a garment. Examples: oversized t-shirt made into a cinched t-shirt dress, alternating the style of the garment, updating an old prom dress to make it current, etc.
- Wearable art that can be added to purchased garment.

Requirements:

- An upcycled garment is one that is constructed from a previously worn garment that has been updated/alterd in a way to produce a new garment.
- Colored photo of original garment and colored photo of new garment

Purchased Clothing

Exhibit Suggestions:

- Additional information that could be included in 8 1/2" x 11" binder:
 - Cost per wear
 - Cost comparison (construction vs. purchased)
 - Inventory of wardrobe (not including undergarments)
 - Educational facts about fabric in garment(s)
 - Additional photos showing ways it can be used in existing wardrobe
 - Accessories/shoes worn
 - Any other educational information not listed above
- Purchased garment such as a blouse, shirt, top, skirt, pants, sweatshirt, jumper, dress, outerwear, etc.
- Pre-used garments not altered. Examples: thrift store, garage sale, hand-me-down, etc.

Requirements:

- The purchased garment or outfit must be accompanied by an 8-1/2" x 11" binder with the following information:
 - Colored photo of member wearing the garment. Label photo with name, county, and color of complexion, hair and eyes.
 - Cost of garment and explanation of why garment was purchased
 - Fabric content and care of garment
 - Examples of ways it will be used in existing wardrobe
 - Sale receipt and tags, if available

Sewn Non-Garment

Exhibit Suggestions:

- Non-clothing sewn, constructed item. Examples: simple home or clothing accessory item such as a pillow, apron, book bag, belt, placemat, gym bag, sewing kit, etc.
- Non-clothing article using a pattern or your own idea.

Requirements:

- Include an information tag listing: pattern company/kit name or source, fiber content of fabric and care instructions.

Fashion Revue Constructed Clothing

Fashion Revue Purchased Clothing

Fashion Revue Upcycled Clothing

Fashion Revue Constructed or Purchased or Upcycled Exhibit Suggestions:

- Judging is on the overall completed look which includes the outfit, accessories and overall appearance

Fashion Revue Constructed or Purchased or Upcycled Requirements:

- Participants may model any clothing they have constructed, purchased or upcycled as a part of their 4-H clothing project.
- Garments are required to be modeled during conference judging and fashion show.

CLOVERBUDS (limited to 3 projects)

Exhibit Suggestions:

- Cloverbuds are youth who have completed grades K-2. Cloverbud programs emphasize cooperative rather than competitive experiences—in accordance with our guidelines all cloverbuds will receive a participation ribbon, rather than the blue, red, white or champion ribbon.
- Cloverbud general exhibits can be made at home, at a 4-H or non 4-H meeting or event.

- Cloverbud animal science areas include posters in the following Beef, Dairy, Goat, Horse, Llama & Alpaca, Poultry, Rabbit, Sheep & Swine, or participation in the Pet Show..

CONSUMER EDUCATION & MONEY MANAGEMENT

Exhibit Suggestions:

- A budget workbook, income/expenses graphs, impact of supply chains on consumers, savings plans, etc.
- Junior exhibitors: a basic comparison of similar products with different pricing.
- Intermediate exhibitors: include additional aspects of products other than just price
- Senior exhibitors: compare numerous components (nutritional value, cost per ounce, fabric content, longevity, etc).

CRAFTS & FINE ARTS (no more than 2 exhibits per category)

CRAFTS

Exhibit Suggestions:

- For a beginner, choose a project that teaches new techniques. For advanced, choose a project requiring masterful craftsmanship.
- Work directly from a kit, diamond painting, social media influenced/inspired, LEGO kits, model replicas, no sew/tie blankets, ceramic casts, paint by number, etc.

Requirement:

- Each exhibit will be evaluated on its individual merit as a craft/kit.
- Emphasis is on the creative process and the implementation of design elements and principles. The craft/kit exhibit develops from someone else's ideas and can be easily replicated, modified and repeated by others.
- All projects need to be presented in a finished manner.

FINE ARTS

Exhibit Suggestions:

- For a beginner, choose a project that teaches new techniques. For advanced, choose a project requiring mastery.
- Original work (no kits) in drawing, painting, sculpture, paint pouring, textiles, pottery, jewelry making, fiber art, quilling, etc

Requirements:

- Each exhibit will be evaluated on its individual merit as an original fine art.
- Emphasis is on the creative process and the implementation of design elements and principles. The fine art exhibit should show proof that it is developed from the 4-H'ers own ideas and imagination.
- All art objects must be appropriately finished. For state fair eligible: exhibits must be ready for hanging, displaying, etc. (i.e. wire or hooks on paintings, bases for 3 dimensional work, etc.)

CREATIVE WRITING

Exhibit Suggestions:

- Series of original poems.
- An original short story.
- A children's story or a story written specifically for young children, typically includes illustrations
- Series of social media posts or an article educating the public on a topic you are passionate about.
- An original graphic novel including characters' dialogue, plot line and illustrations.
- A display on the different types of poems or your favorite author
- A display on "What is Creative Writing?"

Requirements:

- Creative Writing exhibits should be an original written piece; if the work of others are quoted or included, be sure to include proper citation.
- Display your work in a way that can be viewed by fairgoers (printed in a binder, written on a canvas, hung on a display, etc.)

ENGINEERING DESIGN

Exhibit Suggestions:

- Using everyday items to build a simple machine to complete a simple task
- Using everyday items to create a product to solve a real life situation
- Using LEGOS to create and test different types of bridge designs
- Engineering a bridge – using everyday items create a bridge to sustain 5 pounds of weight
- Engineering a roller coaster – Use KNEX or other materials to engineer and create a roller coaster
- Engineering a catapult/trebuchet – use everyday items to create a machine to launch a marshmallow a minimum of 3 feet
- Engineer a wind turbine to solve a problem (example: using the wind energy to lift a bucket)

Requirements:

- Include description of the problem/challenge being solved
- Include description of how a design process was used to solve problem
- Description(s) can be verbal or written

ENGINEERING DESIGN CHALLENGE LEVEL 1 & 2

Engineering Design Challenge Team Member:

Level 1 - grades 3 -8 (suggested)

Level 2 grades 7 - 12 (suggested)

Each member (regardless of age) needs to register in one of these levels.

An Engineering Design Challenge machine is based on a Rube Goldberg-type machine, an overly complex contraption designed to accomplish a simple task. The best machines use a variety of everyday items to create a series of chain-reaction steps to accomplish a simple task. In the project, youth employ engineering, physics, humor, and storytelling to create their machine.

This program requires a team of at least 3 and no more than 10 youth members.

Exhibit Suggestions:

- Engineering Design Challenge machine itself
- Display, binder, poster, video illustrating the process of the doing the activity/project

Requirements:

- Please refer to the [Engineering Design Challenge Level 1 and 2 Handbooks](https://z.umn.edu/4hedc) (z.umn.edu/4hedc) for complete details.
- Teams of at least 3 youth
- Machine must complete a minimum of 10 steps
- Machine must operate in 2 minutes or less
- Exhibit physical size limited to 6 ft x 6 ft x 6 ft
- Describe how an engineering design process was used to complete the project.
- Provide a journal record illustrating the process of completing the project.

Note: The Engineering Design Challenge showcase event occurs outside of the State Fair (typically before the State Fair). In 2022, teams can choose to participate in person or virtually. Teams choosing to participate virtually will need to submit a video of their machine prior to virtual judging. Please refer to the [Engineering Design Challenge Level 1 and 2 Handbooks](https://z.umn.edu/4hedc) (z.umn.edu/4hedc) for complete details

EXPLORING ANIMALS

Exhibit Suggestions:

- An educational exhibit to show or explain something 4-H'er made, did, learned, or may explore consumer issues, breeds or careers.
- Poster, journal, video, 3 ring binder of animal being explored.
- Explore basic care & handling, basic feeding, basic housing, animal welfare & ethics, etc.

Requirements:

- This area is for 4-H'ers who wish to learn more about a given species. Animal ownership is not required.
- Exploring Animals include: Beef, Dairy, Dairy Goat, Meat Goat, Llama/Alpaca, Poultry, Rabbit, Sheep or Swine.
- Youth interested in cats, dogs, horses or other domesticated pets (guinea pigs, snakes, rats, etc) should see appropriate sections of the premium book.

FISHING SPORTS

Exhibit Suggestions:

- Fish identification. Describe the habitat and food needs of selected fish; develop a panel display explaining the life history of a fish; create a model or exhibit identifying the parts of a fish.
- Fishing Knots: Identify how and where each knot is used; fishing equipment which is made or repaired such as lures, fishing rods and reels, ice fishing rig, or other fishing equipment
- Safety practices and techniques that are related to fishing (& ice fishing) or boating
- Examples of how water quality affects the fish ecosystem
- Create a display or diagram of Aquatic habitats, invasive species
- Tactics to fish for various species of fish, techniques and equipment used
- Cultural aspects of fishing
- Regional differences across the US/world. (Types of fish, environments, ways to fish, considerations)
- Research commercial fishing for food industry
- Explore career opportunities
- Local Department of Natural Resources fishing regulations

Requirements:

- If any lures or pieces are part of a display, ensure that pieces are secured and hooks are not going to be a safety concern (enclosed).
- Do not include live fish as part of the exhibit.

FOODS AND NUTRITION

FOODS

Exhibit Suggestions:

- Food items such as:
 - Bars & Cookies (no commercial mixes)
 - Breads (no commercial mixes)
 - Cakes (no commercial mixes)
 - Pastries (no commercial mixes)
 - Gluten Free Baked Goods
 - Homemade Meal
 - Other Homemade Food
 - Fun with Convenience Foods
 - Recipe Adaptation to Improve Nutrition
 - Cake/Cupcake & Cookie Decorating
- Food science experiment
- Exhibit showing food and/or kitchen safety.
- Investigate food allergen of your choice
- Display about careers in the food industry

Requirements:

- Exhibit may be food items and/or displays.
- Exhibitors should be prepared to discuss with the judge: recipes, references, information sources, methods, etc., as appropriate to that exhibit.
- Exhibits containing perishable foods, which may be discarded, must include a colored photograph of the food. Print the photo and recipe on an 8 ½" x 11" paper.

Note: If food safety is a concern, judges reserve the right not to taste and/or judge foods items.

NUTRITION

Exhibit Suggestions:

- One serving of nutritious food (vegetable or fruit dish, snack, bread, dairy, etc.). Include 8½ x 11 poster showing nutritional value, recipe, and a photo of the food.
- Study of nutrients needed for yourself or someone else, using the dietary guidelines and MyPlate.
- Make a food or fitness plan for yourself or someone else and show how it relates to nutritional and energy needs. (Example: an athlete on a volleyball team, a teen who doesn't have a lot of time).
- Adapt a recipe(s) to show healthier ingredient choices.
- Study of how physical fitness and/or food choices are related to disease (such as: cancer, heart disease, osteoporosis, diabetes, etc.).
- Study of labels from similar food items, comparing important nutrient content like fat, fiber, and sugar.
- Explore nutrition-related careers

FOOD PRESERVATION

Exhibit suggestions:

- Suggested exhibits include one (1) jar or one (1) bag of product:
 - Vegetables or fruits
 - Jams, jellies, preserves, low-sugar spreads (no frozen)
 - Pickled products (fermented or added acid, including pickles, sauerkraut, relishes, salsa).
 - Meats, poultry and/or fish. (Fish must be in pint jars.) Must be processed in a pressure canner.
 - Note: Preserved fish count toward the limit that can be in your possession.
 - Dried vegetables or dried fruits.
 - Dried herbs.
 - Beef or venison jerky.
- Learn about cottage food producer requirements in Minnesota
- Display about different methods of freezing foods
- Explore commercially available freezer bags to see which produces the best quality
- Display about preserving foods that you've hunted and/or caught

- Research different methods for harvesting and preserving butchered meat
- Make a poster about making freezer jams/jellies
- Research illnesses you can get from improper food preservation
- Teach others about safe canning methods
- Display about canning equipment and its purpose
- Learn about preserving foods in a pressure canner
- Compare current food preservation techniques with those used in the past

Requirements:

- Consult the authorities (University of Minnesota Extension/other state Extension publications, USDA, National Center for Home Food Preservation) and follow the recommendations for the year (or closest to) for all recipes, procedures, and processing times. Recipes from pectin packages, etc. are acceptable.
- All food preservation exhibits must be labeled or have a note card that includes county, name, grade, product, style of pack, processing method (boiling water bath or pressure canner), date, processing time, date processed and source of recipe. Pressure canned items indicate dial or weighted gauge and how many pounds of pressure used.
- Jars must be heat-tempered clear glass canning jars, not commercial glass jars (i.e. glass mayonnaise jars).
- All jars must be sealed. Jellies and jams must be covered with lids.
- Use pint jars for fruit, vegetables, and fish; one-half pint jars for jams and jellies; 2- 1 pint jars or one quart jar for pickled products.
- No artificial food coloring should be added to entries.
- Dried foods may be stored in glass jars, self-sealing plastic bags or airtight plastic bags. The quantity of dried foods should be: fruits and vegetables 1/2 cup or more of each, herbs - 1/4 cup of each in whole leaf form, 3 strips of meat (i.e. venison or beef jerky).
- Foods must be preserved within the past year.

GLOBAL CONNECTIONS

Exhibit Suggestions:

- Make a poster exploring your own culture. What are the important elements of your culture and how is it different from other cultures?
- Make a display of coins, stamps or postcards from other countries. How are they used? What is the meaning of the images on them?
- Record an oral history interview with someone from another culture living in your community.
- Service learning: Teach English to non-native English speaking people. What did you learn from doing this?
- Make a collection of foreign recipes and prepare them for others. Consider Hmong or Somali cuisine, or another that of another Minnesota group.
- Prepare an exhibit of items, pictures, maps, charts, slides/tapes, drawings, illustrations, writings or displays that depict the heritage of the member's family or community or 4-H history.
- Prepare a display illustrating what you have learned about a country's or U.S. region's geography, economy, agriculture, people, language, housing, culture, music, crafts, clothing, holidays or other aspects.
- Pick a country to study, then look up which one of the fifty U.S. states has a similar population to that country. Create a presentation documenting the similarities and differences between the identified country and the state based on the following topics:
 - Climate and weather
 - Culture and traditions
 - Food and cuisine
 - Language

HEALTH & WELLNESS

Exhibit Suggestions:

- Research and report on a health issue of your choice.
- Report on a community service project that you conducted or volunteered with that relates to a health issue or addresses a community need.
 - Include objectives, audience, timetable, program description, materials, community support and evaluation.
 - Examples might include food distribution centers, homeless shelters, vaccine clinics, blood drives, community run/walk events such as a 5K,
 - Share the results of a service project you conducted in your community to address a health-related need.
 - Make a personal connection with an organization or group working to address health disparities or health inequities in your community (for example, availability and access to safe and affordable housing).
- Conduct a community health assessment for your county, tribe, city or school. What are they doing well to support people's wellbeing? What challenges have arisen? What solutions are they offering to support the community? What will you do now that you have this information?
- Research resources that are available to you in your community. Does this provide information useful to you or your peer group? What did you learn and do with the information?
- Organize a peer support group, conference, a seminar, a workshop, or a chemical-free party. What is your goal in creating this group?
- Promote health through campaigns, activities, and events centered on specific health issues.
 - Create a health day/week at school or arrange a health topic at your 4-H club meeting.
 - In collaboration with others (school, peers, etc.) develop an "anti-bullying" campaign to address Social Media Health.

- Create a Day in the Life Timeline to identify how you spend your day -
 - Where can you set goals to include more healthy practices such as mindfulness, fitness, movement, more fruits or vegetables, etc.?
 - Share some ways you incorporate self-care and/or mindfulness practices into your daily routines.
 - How do you manage schedules/Stress Management?
 - What steps do you take to ensure you are nourishing your body throughout the day?
- Create a video or musical production addressing a cause that's connected to health and wellness.
- Design a model of the human skeleton and label the bones or learn about other organs and systems of the human body
- How does fitness, motion, or athletics fit into a healthy lifestyle for you
- Careers in the health science industry

HOME ENVIRONMENT

Exhibit Suggestions:

- Finished or refinished item, or reupholstered furniture with before and after photos.
- Repaired, restored, remodeled or upcycled item for the home.
- An article remade or reclaimed for the home with a link to the past, including history of use.
- Description, diagrams/photos, samples and cost of a redecorating or remodeling plan showing before and after.
- Item creation for the home - for appeal or for practical use.
- Home organization and functionality (i.e. make a spice rack).
- Environmentally friendly home improvements; assess energy efficiency.

Requirements:

- Members exhibiting in this project should be prepared to discuss how their exhibit applies to the home, how and where it is used or displayed, and all details of how it was made or selected.
 - They should know about the subject matter of the specific exhibit, the materials used, how and why it was done, costs involved, and alternatives considered
- A photograph and details showing its place in the home environment must accompany exhibits that are items for the home.
- Pictures and wall hangings that are exhibited should be finished.
- Purchased kits are allowed to be used.

HORTICULTURE

FLOWER GARDENING

Exhibit Suggestions:

- When exhibiting cut flowers, we suggest:
 - three stems of one variety of annual flowers, or
 - one stem of a hardy perennial, or
 - one stem of summer flowering bulbs, or
 - one blossom of a tea rose, or
 - one stem of a hardy shrub rose.
- Flower bouquet or arrangement on any theme.
- Display of dried flowers with a card explaining the drying method.
- My Flower Garden - Exhibit on poster board, not to exceed 22 x 28". Include a plan of the garden drawn to scale, the correct variety name and pictures (or photographs) of the flowers grown. Be prepared to discuss the process from soil preparation to blooming.
- Educational Exhibit showing the principles of propagation or reproduction, nutrition, culture and physiology (how a plant lives and grows).
- A display using a 4-H project kit showing how plants or vegetables absorb color and change their leaf color.

Requirements:

- Label each container according to kind or variety.
- Outdoor living flowers and plants are to be exhibited in this area (including Outdoor Fairy Gardens)
- Live plant material will be accepted if it can be maintained in a fresh condition with ease.

INDOOR GARDENING

Exhibit Suggestions:

- Two or more varieties of house plants with common and botanical name.
- Terrarium or dish garden: consider terrarium material of general terrarium plant of native and woodland plants of Minnesota.
- Educational exhibit showing plant propagation, plant history, forcing bulbs, life cycle of a flowering plant, etc.

Requirements:

- Indoor living flowers and plants are to be exhibited in this area (including Indoor Fairy Gardens)
- Potted Plants:

- Flowering plants should be in bloom.
- Foliage plants should be in vigorous condition.
- Plants should be grown in the exhibited container for at least one month prior to fair.
- Plants In Hanging Containers:
 - Container for the plant should not be more than 10" in depth or diameter.
 - Maximum total length of hanger and plant should not exceed 4'
 - Evaluation will include appropriateness of plant for a hanging container, condition, arrangement, hanger to container to plant relationship, and plants being well established.
- Terrariums:
 - The terrarium may not exceed 24" in any dimension.
 - Terrarium should be planted four to six weeks ahead of exhibiting.
 - Members must be able to identify all plant materials in their terrariums and know why they were selected for use (quality, container and design).

LANDSCAPE DESIGN

Exhibit Suggestions:

- A 3D model of a landscaping design (24x36 inches)
- A binder detailing the exhibit with photos, design, budget, key explaining certain pieces in the design, etc..
- A colored design of the layout with colors. Adding explanation of why certain colored plants and what they add to the design.
- Using a computer and designing landscaping, garden area or new treeline development.
- A display about turf management of golf courses vs baseball fields and why certain types of grasses are used.
- Types of turf grasses for home use.
- Creating a landscape project for a nursing home, hospital or other places with people in care. Using plants or bird feeders for patient comfort.
- Discussion options of either annual or perennial plants used.
- Pollinator gardens

Requirements:

- Include a design (paper or 3D model)
- Itemization of supplies, plants, trees, grasses, rocks, bricks, pavers, gates/fences, structures, and other materials used in the design
- A budget
- If multi-year, describe the yearly benchmarks.
- Identify software or computer programs used.
- Mentions elements of landscape design such as: Balance, Focalization, Simplicity, Rhythm and Line, Proportion, and Unity.

INDUSTRIAL TECHNOLOGY

METAL WORK

Exhibit Suggestions:

- Metal work is the creation of metal structures by cutting, bending and assembling processes. It is a value-added process involving the creation of machines, parts, and structures from various raw materials. Could also include a display on properties, uses, or processing of metals
- It is encouraged that youth provide a binder or supporting documentation about the work on the project - pictures of the process, statement of materials purchased or tools utilized etc.

WOODWORKING

Exhibit Suggestions:

- Woodworking is the skill of making items from wood (or wood substitute/alternative product), and could include cabinet making (cabinetry and furniture), wood carving, joinery, carpentry, woodturning or other wood manipulation techniques. Could also include a display on properties, uses, or processing of wood or wood alternatives.
- It is encouraged that youth provide a binder or supporting documentation about the work on the project - pictures of the process, statement of materials purchased or tools utilized etc.

Requirements:

- Please contact 4-H staff if your project is an oversized exhibit.

MECHANICAL SCIENCE

Exhibit Suggestions:

An exhibit focusing on any mechanical science area such as (but not limited to) automotive, implement, heavy equipment, machine, recreation vehicle, small engine, tractor, electric:

- An educational display of some aspect of a machine or a piece of equipment use, operation, modification, repair, care, reconditioning, etc.

- An educational display on the history, purpose, technology or design of a machine or a piece of equipment.
- Engine that has been reconditioned or repaired.
- A device constructed by a member utilizing a powersource.
- Restoration of an engine, vehicle, tractor, machine or implement (body work and/or mechanical)
- Modification of an engine, vehicle, tractor, machine or implement
- If bringing an engine, vehicle, tractor, machine or implement as a project, consider including a binder or display outlining your project process from research to project completion.
- Diagram of wiring in your home/farm showing switch locations, fuse boxes, wire size, capacities, fuse sizes, total bulk wattage, appliance wattage, number of circuits, and type of wiring installation.

Requirements:

- Motorized projects must adhere to safe building and operating design.
- Check space and transportation requirements for large exhibits with your local Extension Educator. Large exhibits may be displayed outdoors
- Fuel must be removed from exhibits for display (fuel can be added for judging purposes, but then removed after judging for safety purposes).
- A colored wiring diagram or schematic must accompany all electric and electronic exhibits. Safety must be reviewed when working with electricity.

NATURAL RESOURCES

ENTOMOLOGY

Exhibit Suggestions:

- Projects can include but is not limited to life history displays (e.g. insect life cycle, honey production process, etc), scientific investigation (e.g. insect habitats or effects of environment factors on insects), insects in current events (e.g. pollinators, butterfly tagging, invasive species, protected or declining species), insects in our ecosystem (food source, roles in food production, behaviors, health or disease, etc)
- Live projects (e.g. bee or ant colony)
- Utilize the scientific method to learn about insects. Remember to introduce the subject, describing the process (materials and method), predicting an outcome, stating the results, and discussing any conclusions. Get involved and share what you learned through citizen science projects.
- Collections- cases can be purchased through a variety of vendors or homemade.
 - Specialty insect collection can include but is not limited to a collection of a single order (e.g. Coleoptera or Lepidoptera), a collection of immature insects, a collection of insects from a particular habitat (e.g. aquatic, forest, or prairie) or a collection of economic pests of a specific crop (e.g. insects attacking corn).
 - General collection- starter collection should have 10-20 insects, goal is to get to 50 species of adult insects representing at least 8 orders. Each year add or replace insects. A full 50 species case would be approximately 19" x 16.5" x 3" to 24" x 18" x 3".

Requirements:

- Emphasis of the project must relate to an aspect of entomology. Project must demonstrate specific knowledge of insects. Be prepared to discuss references and sources (e.g. books, magazines, internet, interviews with an expert etc.)
- Displays or booklets on entomology topics should include references and sources. Pictures, drawings, charts, tables, or other figures may be used to support understanding.
- Live projects (e.g. bee or ant colony) will be accepted if the project can be self-sustaining for up to 14 days without special care. A written report or journal should accompany the project. Pictures, drawings, charts, tables, or other figures may be used.
- Collection shall be contained in one see through enclosed case. Arrange so that the case may be displayed in a horizontal position. Place the project label on the lower right corner of the top.
 - Specimens must be collected by the exhibitor. Purchased insects are not acceptable.
 - Specimens must be properly pinned with insect pins. Small insects may need to be placed on cardboard points.
 - Specimens must be properly labeled.
 - The location, date, and collector must be included on the labels. County and state (and country, when applicable) are minimum location information that should be included. It is valuable to include the nearest town or township where the specimen was collected, the type of habitat it was collected from (e.g. on elm tree; on lake shore; indoors.), and the common name of the insect.
 - All labels should be visible so they can be read. Use a permanent ink marker, pencil or print labels from a computer.

EXPLORING THE ENVIRONMENT

Exhibit Suggestions:

- Display or video about environmental challenges, such as climate change, pollution, erosion, etc., describing the causes and their sources, its effect on people and other living things, and potential solutions. Could include news clippings and other media about an environmental issue that you care about.
- Phenology journal used to keep track of environmental changes throughout a season.
- Display showcasing your participation in an event such as a BioBlitz or naturalist program, or other citizen science project to collect data and/or raise awareness.
- Complete a community map or assessment, to observe environmental needs and community assets.
- Vlog detailing hiking, camping, paddling, backyard, and other explorations/adventures
- A display or journal of Minnesota plants, insects, animals, birds or fish. Include pictures or drawings and information on habits, foods, and shelter needs.
- Collection of wildflowers growing near where you live or a place you visit.
- Experiment related to local environmental engineering and/or technology applications: such as urban design, pocket prairies, roadside management, eco-friendly buildings, etc.
- Pros and cons regarding a specific piece of environmental policy and/or management.
- Choose one living thing in the forest, field or stream and make a display to describe its ecosystem and/or the flow of energy throughout the ecosystem.
- Investigate an invasive, threatened, or extinct species in your area. Where do invasive species come from and is it considered invasive in its native area? What threatens them and what can be done about it? Why do species go extinct and as that happened in the area where you live?

Requirement:

- Follow local or state policies for collecting, removing and/or transporting plants and other organisms

FOREST RESOURCES

Exhibit Suggestions:

- Identify the parts of a tree and what they do with a poster or collection of leaves, seeds, needles, etc.
- Display showing tree growth; annual ring cross-sections; make a seed collection.
- Prepare a report with drawings about your favorite tree--include name of tree, drawings or pictures of tree, facts and uses of the tree, and other appropriate information.
- Display showing layers of the forest; renewable versus non-renewable resources; forestry careers; leaf and twig identification; taxonomic keys; nutrient road maps.
- Display on forest ecosystem health such as succession; tree and forest measurements; fire's effect on the forest; how trees grow; forest types; harvesting methods; pathology of the forest, invasive species, human impacts on the forest.
- Photographic display or report on forest products or industries, including maple syrup production; wood products; Christmas trees or others (recreation, wildlife, etc.).
- Display on woodland management such as policies created by the U.S. Forest Service or specialized design including shelterbelts/windbreaks and urban forestry.
- A video or display about the human health benefits from trees, and what role trees play in global ecology.
- Organize or take part in a mass tree planting and calculate the amount of carbon that will be offset
- Explore the history of forestry through the lens of indigenous practices or the effects of treaties. How have these relationships impacted people and landscapes?

Requirements:

- Follow local or state policies for collecting, removing and/or transporting plants and other organisms
- Specimens should be mounted on cardboard or other sturdy material.

GEOLOGY

Exhibit Suggestions:

- Display of rocks, minerals, gemstones, a rock plate; can be displayed in an egg carton for younger youth, or in a display case as youth progresses in the project; include in the display, labels of specimen name and location collected.
- Rocks, minerals, or fossils from within Minnesota or on a definite theme such as metamorphism, weathering, quartz minerals, ores, or a theme of your own choosing.
- Polished rock specimen; include an unpolished specimen of each rock type for comparison.
- Educational exhibit showing the "science how's and why's" dealing with the principles of geology and natural earth sciences.
- Exhibit explaining the three main rock types (Igneous, Metamorphic, Sedimentary) include examples of each.
- Model of a geologic earth structure or feature such as volcano, mountain range, plate tectonics, earthquake, cave, glacier.
- Timeline of geological time scale.

WATER RESOURCES

Exhibit Suggestions:

- Demonstrate water's unique chemical/physical properties, such as how heat and salt affect water density or how a wetland ecosystem changes throughout the seasons
- Project showing how water is necessary for life, such as a display on water/wetland ecosystem services like filtration or nutrient cycles from plants
- Share how water connects earth systems like a poster displaying your local water cycle or watershed
- Research your local water body's thermoclines or nutrient cycles
- Display on how water is used by people, such as:
 - A record tracking your family's water footprint at home, or
 - A model showing stormwater runoff, or
 - A map showcasing water accessibility or insecurity in a specific region of the world
- Exhibit detailing water/wetland resource management measures like erosion control practices, and terraces, or a map of local, regional, state, or global water bodies and water quality.

Requirement:

- Follow local or state policies for collecting, removing and/or transporting plants and other organisms

NEEDLE ARTS

Exhibit suggestions:

- Any item made by the member using the techniques of knitting, crocheting, embroidery and crewel, counted cross stitch, needlepoint, hardanger, weaving, appliqué, latch hook, tatting, hand embellishments, felting, hand embroidery.
- Consumer Product Analysis: Comparison and evaluation of materials, supplies, or accessories used for a needle arts technique.
- Poster or display showing how needlework product is or could be priced, advertised and marketed.
- Poster or display comparing different techniques of a particular needle art (ex. different felting techniques, different stitches).
- Poster or display showing how to care for your project supplies (ex. storing, organizing, cleaning).
- Historical/Cultural Study: Story, poster, or display about a needle arts heirloom from your family or local history museum. Exhibit must include information about how item should be preserved.

Requirements:

- This project area is for projects created using a hand needle, hook, shuttle or loom.
- Each exhibit must include a consumer information tag, if appropriate, with the following information: pattern name and source, fiber content, and care instructions.
- Exhibitor should be prepared to discuss techniques, fiber content, care instructions, and cost. Exhibitor is encouraged to bring instructions, pattern, or other educational sources used.
- Projects must be finished and ready to display. If an item is framed, a wall hanging, or to be displayed on a wall, it should be finished and ready to hang.
- Project kits are acceptable in this project area. The project must meet all other requirements.

PERFORMING ARTS

Requirements:

- Exhibit can be either a performance or an exhibit that shows a member's involvement or interest in the performing arts.
- Entries in Performing Arts are distinct from Share-the-Fun in the intention behind the entry. Performing Arts entries will be judged based on the criteria identified below and on an individual basis, even in group performances.
- An exhibitor may submit entries in both performance and non-performance based classes (e.g. a member may perform a puppet show that they wrote as a performance based exhibit and submit the script as a non-performance based exhibit)

PERFORMANCE BASED

Exhibit Suggestions:

- Perform a short story, show scene, music selection, dance, monologue, poetry, etc.

Requirements:

- A performance in music, dance, drama, etc.
- A performance cannot last longer than 5 minutes.
- Performances may be given as a solo, duet, or a small group.
- To be eligible for State Fair, the member must be able to discuss the process of selecting, planning, performing and reflecting on their project work.
- The technique and artistry of the performance will be considered.

NON-PERFORMANCE BASED

Exhibit Suggestions:

- An educational display on some aspect of music, drama, dance, or performing.
- A journal or scrapbook (with written statements) of current performing arts experiences.
- A written piece such as poetry, sheet music, or other physical artifact intended for performance created by member.

Requirements:

- An exhibit such as a poster or display that shows a member's involvement or interest in the performing arts.
- To be eligible for State Fair, the member must be able to discuss the process of selecting, planning, creating and reflecting on their project work.
- The workmanship, general appearance and technique used to develop the exhibit will be considered.

PETS

CATS

Exhibit Suggestions:

- Educational display explaining cat care, health, nutritional needs, etc.

DOGS

Exhibit Suggestions:

- Educational display explaining dog diseases, breeding, training, caring for dogs at humane society, information about therapy dogs, etc.

PETS

Exhibit Suggestions:

- Educational display explaining pet care, health, nutritional needs, etc.

PHOTOGRAPHY (no more than 2 exhibits per category)

Requirements for BOTH Elements of Photography and Photo Manipulation:

- All photos exhibited must have been taken/produced/enhanced by the exhibitor during the current year
- The exhibitor's name, club, county and exhibit class should be clearly printed on the back of the exhibit.
- Unaltered 4"x6" photos must be attached to the back of any exhibit
- For safety, picture frames or glass are not allowed
- Exhibits with multiple photos should use 4"x6" prints
- Enlarged photos should be 5"x7" or 8"x10"
- Photos should be mounted on a mat board or poster board using neutral colors (white, tan, gray or black). Do not use construction paper, **colored paper or wrapping paper.**
- Use a 14" x 22" board for 5 or more photos in an exhibit. Cut smaller boards for enlargements
- Exhibits should reflect the appropriate size for the item designed, e.g. the photos used for an ornament, a calendar, a poster, or brochure would require different sized photographs.

Equipment:

Use any device capable of capturing a photographic image to be printed: digital or film camera, cell phone, tablet or drone. A computer, phone or tablet is required for photo manipulation.

Elements of Photography (no more than 2 exhibits)

This exhibit will focus on what makes a good photograph (composition, light, shutter speed, color, depth of field, leading lines, etc). Only select whole image edits or modifications are allowed in post-production. Post-production is any adjustment made after the photo is taken using editing software. Allowed whole image edits must be applied to the entire image and not specific areas of the photo. Allowed whole image edits include:

- cropping
- exposure correction
- color saturation
- contrast
- sharpening
- conversion to black & white

On-camera filters: a physical filter that attaches to the camera lens (neutral density, polarizer, various colors, etc) are allowed.

Exhibit Suggestions:

1. Photo Story:

- Show a town's history or a family history. This could include photos of historic buildings, old photos copied from the historical society or library, family or individual portraits, etc.
- Develop a documentary of another of yours or a friend's 4-H project or of your 4-H club's community service project

- Document environmental issues such as the plight of pollinators, pollution, soil erosion, or the steps taken to improve the environment
 - Present a day in the life of – farm or city youth, a local professional person such as a school nurse or a firefighter, law enforcement officer, or other interesting personality
 - Exhibit a series of photos on how to make or do something
2. Common Theme or subject:
 - Display a series of 3 to 7 photos of a common subject such as people, buildings, landscapes, animals, seasons, action, nature, weather, close-ups, etc.
 3. Showcase a Photographic Elements:
 - Display a series of 5 to 7 photos that illustrate some photographic element such as composition, lighting, shutter speeds, depth of field, color, contrast, cropping, etc.
 4. Panorama:
 - Show a single image created in camera or a triptych (set of 3 photos intended to be used together) of several images created by moving the camera. A triptych may consist of separate images that are variants on a theme, or may be one larger image split into three.

PHOTO MANIPULATION (no more than 2 exhibits)

This exhibit will focus on using photography to show creatively edited photos and how photography is used in everyday life. Software editing is required for this category and may include:

- layering
- all digital filters (except black and white)
- creative coloring
- removing or adding objects
- text additions
- etc.

Entries in this category must involve editing with software such as Photoshop, Lightroom, iPhoto, Picasa, Gimp, Picmonkey, Pixi, Microsoft Publisher, etc.

Suggested softwares (all can be used on Android, iPhone, and iPad): Snapseed (easy to use and does a nice job), Adobe Photoshop Express (good option for those wanting to grow into Photoshop), Pixir (2nd to 6th grades only), PicsArt Photo Studio (powerful photo and video editing app).

Please view the ["Introduction to Photo Manipulation"](#) slideshow for specific examples and explanations.

Stock photos are not allowed. A stock photo is a photo taken by another person (not yourself) who has licensed their photo for specific uses by others. All images used in photo manipulation exhibits must have been taken by the exhibitor. Examples of images not allowed include: an image of space (taken by NASA) as the background of your photo or if you want a shark inserted into your composite image, you must take a photo of a shark.

Exhibit Suggestions:

1. Composite Photo: Multiple images combined into one image
 1. Panoramas (overlapping areas of several photos and stitching them together in post-production)
 2. the same person in multiple places within the photo
 3. replacing the sky
2. Single Source Image Manipulation
 - acne removal, eye enhancement, teeth whitening, etc.
 - selective color manipulations (i.e. converting everything to black and white except items that are the same color red)
 - apply digital filters (other than black and white)
 - removing distractions in the background, etc.
3. Photo Series:
 - Make a series of 5 to 7 digitally edited photos that illustrate a common theme such as environmental issues, plight of pollinators, how to do something, etc.
4. Enlarged Photo:
 - Show a 5"x7" or 8"x10" print that has been digitally enhanced and illustrates software skills. An unaltered 4 x6" print must be attached to the back of the exhibit.
5. Publications:
 - Show calendars, brochures, posters that are created using computer software
6. Photo Novelties:
 - Display mugs, puzzles, blankets, or other media on which photos have been printed
7. Slide Show:

- Make a compilation of photos with titles, voice-over or background music. For judging, exhibitors can show their exhibit on a 14" x 22" poster board, computer or tablet.

QUILTING

Exhibit Suggestions:

- A quilted item, any finishing technique acceptable. Examples: potholder, table runner, doll quilt, bed-sized quilt
- Repair, repurposing, or re-design of a previously finished quilt. Example: an heirloom quilt with significant repairs or turned into another quilted item.
- A display on a quilting topic of your choice. Examples: the history of quilting/quilting patterns, a comparison of different fabrics or threads, different types of quilting notions and tools, piecing techniques.

Requirement:

- Attach an index card which includes: pattern name and source, fiber content of fabric & batting, and care instructions.
- Finishing techniques may be machine quilted, hand quilted or hand tied. If not quilted or tied by the 4-H'er, exhibitor must state who tied or hand/machine quilted the final project.
- Techniques used, size, and difficulty of the project should be based on the exhibitor's sewing/quilting experience level.

SAFETY

Exhibit Suggestions:

- A First Aid or Childcare Kit with explanations for the items you included.
- A Public Service Announcement and/or social media toolkit to promote a safety topic of your choice.
- List tips for being safe when home alone, such as emergency numbers to call, safety while preparing snacks, keeping doors locked, etc.
- Attend and report on a safety program such as farm/livestock/animal, fire, food, firearms, ATV, watercraft, wilderness/outdoor, traffic, bike, personal, online, sun/skincare or others.
- Interview a safety professional and showcase their advice.

Requirement:

- Abide by local, state and federal laws regarding your safety topic
- Please contact 4-H staff if your project is an oversized exhibit

SCIENCE INQUIRY

Exhibit Suggestions:

- Video of you exploring the physical properties of slime using different materials/recipes to make slime
- Display different types of birds feeders you used to determine if there is a preferred bird feeder type in your backyard
- Powerpoint showing the different types of frogs you found in a pond as you investigated the difference in the frog species in the spring and the frog species in the summer
- Display showing the different types of treats and the data you collected as you explored how your dog responds to different treats during training
- Tri Fold display board showing the results of your investigation of different types of sunscreen to see their effects on UV beads
- Slide show illustrating different water filtration systems you tested and the results you analyzed to identify which one resulted in the cleanest water
- Display the rock candy created as a result of investigating how the concentration of sugar affects crystal growth

Requirements:

- Include the question, issue, or phenomena being investigated
- Include description of how a science inquiry process was used to help understand the phenomenon being investigated or studied
- Explain each step followed during the science inquiry process.

SELF-DETERMINED

Exhibit Suggestions:

- A portfolio describing the selection, planning, and management of a service learning project and what the member learned during the experience.
- A trifold display made as part of a school assignment with the addition of an accompanying journal describing the process of developing the display and capturing reflection on learning during completion of the assignment
- A photo collage capturing the experiences and stages of development of an event planned and facilitated by the member either individually or as part of a team
- A video or digital blog capturing the "behind the scenes" work, reflection, and application of concepts done by an individual member while working as part of a team on a project or assignment A lego creation (not a kit) intended to include some deeper thinking and learning that is not encapsulated in any other project, requiring the exhibitor to create their own learning path.

Requirements:

- A self-determined project will be judged primarily on the self-guided learning experience. While the artistry and craftsmanship of the exhibit itself will be considered, emphasis will be placed on the selection and identification of the self-guided learning experience and the ability of the member to convey the experience and what was learned from it. If the member wishes to be judged on the exhibit's craftsmanship or artistry, the exhibit should be entered within the appropriate project area (e.g. a project in seed art should be submitted within Crafts and Fine Arts project area if looking to be judged on the quality of the final product and the process and learning associated with its assembly).
- Exhibits consisting of projects or assignments done for school or other organized learning environments must indicate how the member went above and beyond the requirements of the assignment/project and individualized the learning to meet their own goals and desired outcomes.
- Exhibits may be submitted by individuals or teams. A team may consist of not more than three (3) individuals. Team members will be judged collectively.
- To be eligible for State Fair, the member(s) must be able to discuss the process of selection, planning and management of a self-determined learning experience.

SHOOTING SPORTS *(For every project a 4-H'er enters under the 'Shooting Sports/Wildlife' category, youth will have an opportunity to win a prize! The more projects entered per youth, the better the chance to win a prize!)*

Exhibit Suggestions:

- Safety techniques applied to shooting activities (e.g., range commands and range safety, eye and ear protection, cleaning a firearm, dressing for safety-first aid, survival skills, etc.).
- Shooting Skills (e.g., basic safety rules, basic parts and functions of each piece of equipment, care and maintenance, accessories, position, etc.).
- Design and create shooting sports equipment (e.g., pellet stand, kneeling role, target stand, quiver, etc.)
- History and nomenclature of firearms.
- Sportsmanship: Ethical behavior and responsibility.

Requirements:

- No explosive materials are allowed. Arrow tips or broadheads should be removed for display but may be included as part of the judging experience if secured for safety.
- Exhibits including firearms & bows must be sporting varieties only. Exhibitors must include a color photo of the item to be left on display - bows and firearms will not be left on display. The photograph should be taken prior to the county fair and attached to the display.
- MN and 4-H regulations for handling and storing firearms must be followed.

TECHNOLOGY

Exhibit Suggestions:

- Robot, Edison robots, EV3, WeDo, Osmos, VEX; Have a photo of robot if you do not intend to leave robot on display
- Display the robot using diagrams of programming, photos, booklets, etc
- Video of robot in action
- Exhibit a ROV and operation; show the use in Aquatic Invasive Species (AIS) education
- Explain the foundations of computers and explore how computers work for various projects.
- Learn about cyber bullying and prevention
- Create an educational app
- Explore computer based careers
- Design computer hardware/software

Requirements:

- Include description, images/photos needed to assist with verbal or written description
- Description(s) can be verbal or written
- Computers, smart phones, ect. can be used during the judging process

VEGETABLE, FRUIT AND HERB GARDENING

FRUIT

Exhibit Suggestions:

- Fruit should be brought in an appropriate size clear container for displaying fruit.
- Display showing a comparison of several varieties of the same fruit (labeled); display using a branch to illustrate proper pruning of fruit trees and explaining the process; illustrate the many uses of fruits (fresh, jams, juices, cooking, baking, salads and recipes); illustrate the use of fruits as natural dyes.
- Educational display illustrating diseases (actual specimens) or insects (actual specimens) and methods of control.

Requirements:

- If displaying a fruit sample, exhibitor should bring 4-6 items of one variety of fruit and include an information card listing the varieties of fruit.
- The exhibit must be produced at home or by a close relative. **CANNOT BE STORE PURCHASED.**

HERB GARDENING

Exhibit Suggestions:

- Educational display showing some aspect of raising or using herbs.
- An herb container garden planted in a tub, pot, or planter.
- A dried sample of herbs you have raised, harvested, and dried (in an airtight container)
- A display using a 4-H project kit (growing a variety of herbs in a container).

POTATOES

Exhibit Suggestions:

- Display a box (fruit crate size) or clear rubbermaid container of potatoes that contains all the potatoes in that hill (all the potatoes one plant produced)
- Display a box (fruit crate size) or clear rubbermaid container of 6-10 potatoes **from one or two hills of the same variety of potato.**
- Educational display illustrating diseases and control, methods of mulching and reasons, causes and effects of sun scald.

Requirements:

- If displaying a potato box (fruit crate size) or clear rubbermaid container, you need 6-10 potatoes of the same variety or 2-3 varieties (this year's crop) similar in size with variety identified on an information card.
- Be familiar with crop input costs and the growing process.
- **The exhibit must be produced at home or by a close relative. CANNOT BE STORE PURCHASED.**

VEGETABLE GARDENING BOX

Exhibit Suggestions:

- A box (fruit crate size) or clear rubbermaid container used to display vegetables.

Requirements:

- Label vegetables with proper variety names on an information card.
- When exhibiting a collection of vegetables, the collection should include six different kinds of vegetables (For example: 1 large variety + 3 medium varieties + 2 small varieties)
- 6 different vegetable specimens for this exhibit choosing any combination of the following:
 - One large vegetable specimen (cabbage, squash, melon, pumpkin, cauliflower, etc.)
 - Three different medium sized vegetable specimens and 3 of each specimen (tomatoes, onions, peppers, cucumbers, kohlrabi, carrots, beets, turnips, etc.)
 - Two small vegetable specimens and 6-12 of each specimen (green beans, peas, lima beans, etc.)
- Potatoes may not be included (enter under the Potato project).
- **The exhibit must be produced at home or by a close relative. CANNOT BE STORE PURCHASED.**

VEGETABLE PLATE

Exhibit Suggestions:

- On a disposable plate, display an example of ONE vegetable variety.
- Examples of individual variety on a plate include:
 - Large sized vegetable specimen: 1 sample (cabbage, squash, melon, pumpkin, cauliflower, etc.)
 - Medium sized vegetable specimen: 3 of each specimen (tomatoes, potatoes, onions, peppers, cucumbers, kohlrabi, carrots, beets, turnips, asparagus, etc.)
 - Small sized vegetable specimen: 6- 12 of each specimen (green beans, peas, cherry tomatoes, jalapenos, lima beans, etc.)

Requirements:

- Label vegetables with proper variety names on an information card.
- Only have one vegetable variety (Large, Medium or Small) on the plate. (For example: Variety is Medium sized - three onions).
- **The exhibit must be produced at home or by a close relative. CANNOT BE STORE PURCHASED.**

LARGEST VEGETABLE

Exhibit Options:

- Squash
- Cabbage
- Pumpkin
- Melons
- Tallest Stalk of Field Corn

Requirements:

- Include an information card with name, plant variety and date planted.
- Stalks of Field Corn should have roots on the stalk.
- **The exhibit must be produced at home or by a close relative. CANNOT BE STORE PURCHASED.**

VETERINARY SCIENCE

Exhibit Suggestions:

- An exhibit focused on technology or industry advancements in veterinary science
- An exhibit on diseases of animals focusing on the history, management, prevention, etc.
- An exhibit on use of different medications in veterinary science focusing on dosage, records, implications of use, impact on the industry
- An exhibit focused on surgical and nonsurgical procedures used in veterinary medicine (spaying/neutering pets, embryo transfer, wellness visit, etc.).
- An exhibit focused on careers in veterinary science exploration (such as job shadowing, interviews and opportunities)
- Create a 3-D model of the skeletal system of the animal of your choice

VIDEO / FILMMAKING

Requirements:

- It is encouraged that when developing a 4-H video/filmmaking exhibit, members will develop skills beyond the classroom.
- It is recommended that the video/filmmaking exhibit be 3-5 minutes and no longer than 10 minutes.
- All video/filmmaking exhibits must be made by the exhibitor OR by a production team of which the exhibitor must be a member
- The exhibitor's name, grade, and club must be clearly printed on all exhibit pieces.
- All video/film footage exhibited must have been made/created DURING THE CURRENT 4-H YEAR. When appropriate, (i.e. historical sequences) older video clips can be used.
- The member should provide the video file even if sending it electronically.
- Video/film must be presented on DVD, USB, flash drive or data CD.
- Videos can also be delivered via Youtube, Vimeo, Frame.io or similar online based presentation sites.
- Video/film needs to be in presentation form, including a title and credits
- The video/film must be original material. Any video/film exhibit, which appears to contain copyrighted material, including music, will not be publicly displayed unless the exhibitor has written permission from the producer to use the material in the video/film. Portions and music from other sources must be documented and have a copyright release.
- A computer must be brought for viewing the video/film during the conference judging, other arrangements need to be made in advance with the 4-H staff
- Video/film must be playable on Windows, use file format including .WMV, .FLV and .MPEG, .AVI, .MOV, .AVCHD, .MPEG-1, .MPEG-4, as well as a playable DVD.
- **4-H videos must adhere to G or PG (parental guidance) standards. The 4-H Code of Conduct requires respectful behavior, so you may not depict: violence, obscene language (or naughty words) including swearing, rude interactions or insults, or use or visibility of guns or fighting, etc. Remember not only teens and pre-teens view the videos but young children and their parents. Keep this in mind when creating your video.**

Video Release form - **Use this form when including any person in your video that is NOT in 4-H.** This verifies that the subject has agreed to be in your video. Keep this signed form in a file. Here is a link to the **Photo & Video Release** form in [English](#), [Spanish](#), [Hmong](#) and [Somali](#).

Equipment: Any electronic device capable of capturing a video image video camera, digital camera, DSLR, time lapse camera or trail camera, cellphone, tablet, GoPro or drone with attached camera (operator must meet age requirements to use a drone).

Note: Supervision of the drone operator is important until they understand not only how to use a drone but also understand the etiquette and rules for using the drone. For information see: <https://www.faa.gov/uas> (unmanned aircraft systems)

*Exhibit **Suggestions:***

- Showcase various video/film techniques
- A selected subject. Include a short storyboard or outline
- A poster that illustrates how a video/film camera works, or how to care for video/film equipment, illustration of computer video/film creation, etc.
- A video/film made by blending computer technology and traditional camera created video/film.
- A video/film using data from trail camera or time lapse camera (stop action video) or drone with attached camera (see note related to drone use).
- A video/film using Claymation, **dolls, Lego** for stop action
- Document environmental issues such as the plight of pollinators, pollution, soil erosion, or the steps taken to improve the environment

- A short documentary on a family member or interesting member of your community
- A trailer for a movie or event (can be fictional)
- A story that you tell using your friends and family
- A commercial, real or fictional

WILDLIFE BIOLOGY & MANAGEMENT *(For every project a 4-H'er enters under the 'Shooting Sports/Wildlife' category, youth will have an opportunity to win a prize! The more projects entered per youth, the better the chance to win a prize!)*

Exhibit Suggestions:

- Create a guide of wild animals of Minnesota--describe habitat, diet, and shelter needs.
- A wildlife management plan--show practices related to land use and forest management for wildlife such as controlled burns, logging, planting, etc.
- Explore basic concepts of Wildlife Management (waterfowl wingboards, birdhouse trails, carrying capacity, game animal habitat requirements, history of game management, etc).
- Explain some factors that threaten or endanger animal species such as urbanization, climate change, or habitat loss. Or explore a species that went extinct and why it happened.
- Build a bird or bat house, nesting structure, hibernaculum, animal shelter or feeder and explain the history of artificial shelter structures how it can benefit a species.
- Show a photo you took, a sketch you drew or a poem or story you wrote about your favorite wildlife encounter
- Display a collection of identified wildlife scat (droppings), skulls or skins. How do they differ? Why?
- Show how wildlife can be classified into herbivores, carnivores or omnivores using skull diagrams
- Write a wildlife landscape habitat plan
- Report on animal adaptations, such as animal camouflage. How do adaptations of plants and animals match the environment they live in?
- Make a display that details a food chain/web of a particular habitat.
- Explain the life cycle of your favorite wild animal in a video, poster or display.
- Shadow or volunteer at a nature center or park and share your experience using a journal, video, or display. Learn about rules and policies in place to protect or manage certain species of wildlife.

Requirements:

- All wild game used in exhibits must be tagged appropriately according to state laws.

YOUTH LEADERSHIP

Exhibit Suggestions:

- Share your youth leadership experience. This could include your 4-H youth leadership journey, or your leadership in an organization within your school or community.
- Share what you gained and shared from a conference or retreat you attended.
- Share a personal development plan you have implemented
- Develop a (career and/or college prep) portfolio
- Develop a presentation that illustrates how you've built understanding of self, developed communication skills, learned how to work with others, developed understanding of making decisions, and/or managing and/or working in groups.
- Lesson plan you've developed
- Meeting outline or agenda developed by youth
- Scrapbook outlining participation in leadership programs. Includes personal reflection on leadership growth and development.
- Share how you have taken the lead on a service project, and what leadership skills you gained through the project.
- Share how you have served as a mentor and/or teacher to younger youth (could be with a project area, a club activity or officer role, etc)

ANIMAL SCIENCE PROJECTS

Animal need to be identified in 4Honline by;

Market Beef/Steers - Feb 15

All other animals - May 15

Information will be sent directly to families who are enrolled in the Animal Science Projects prior to the Identification deadline..

You can find additional information about the Animals Science Projects at; [MN 4-H Animal Science Info](#)

BEEF

Birth Dates

Breeding Heifer – Spring calf

January 1 – April 30, 2023

Breeding Heifer – Fall calf

September 1 – December 31, 2022

Breeding heifer – Summer Yearling	May 1 – August 31, 2022
Breeding heifer – Junior Yearling	January 1 – April 30, 2022
Breeding heifer – Senior Yearling	September 1 - December 31, 2021
Cow/calf	Calves must be born on or after January 1, 2023
Prospect market calves	January 1 – April 30, 2023
Market beef	January 1 – August 31, 2022
Dairy steers	January 1 – August 31, 2022

DAIRY

Birth Dates:

Spring Calf	March 1, 2023 - May 31, 2023
Winter calf	December 1, 2022 – February 28, 2023
Fall calf	September 1 – November 30, 2022
Summer yearling	June 1 – August 31, 2022
Spring yearling	March 1 – May 31, 2022
Winter yearling	December 1, 2021 – February 28, 2022
Fall yearling	September 1 – November 30, 2021
Milking Yearling	Born Sept 1, 2021 or later that has freshened & in milking form
Junior two year old	March 1 – August 31, 2021
Senior two year old	September 1, 2020 – February 28, 2021
Three year old cows	September 1, 2019 – August 31, 2020
Four year old cows	September 1, 2018 – August 31, 2019
Aged cow	Born before September 1, 2018
Dry cow	Dry cow of any age

DOG (classes)

DOG AGILITY
DOG RALLY
DOG OBEDIENCE
DOG SHOWMANSHIP

GOAT DAIRY

BIRTH DATES:

Junior Kid Doe	April 1 – June 30, 2023
Senior Kid Doe	January 1 – March 31, 2023
Dry Yearling Doe (never kidded)	January 1 – December 31, 2022
Milking Yearling Doe	January 1 – December 31, 2022
Milking Two Year Old Doe	January 1 – December 31, 2021
Milking Doe - 3 Years and under 5 Years	born in 2019 or 2020
Milking Doe - 5 Years and older	born before 2019

GOAT MEAT

BIRTH DATES:

Meat market goat (wether)	Dec 1, 2022 – April 30, 2023
Meat market goat (doe)	Dec 1, 2022 – April 30, 2023
Dairy market goat (wether)	Dec 1, 2022 – April 30, 2023

HORSE (classes)

ENGLISH EQUITATION
ENGLISH PLEASURE
WESTERN HORSEMANSHIP
WESTERN PLEASURE
POLE WEAVING
JUMPING FIGURE 8
KEY RACE
BARREL RACE
TRAIL CLASS
RANCH HORSE CLASS
HORSE SHOWMANSHIP
HORSE TRAINING

HORSE RELATED

Requirement:

- Must be enrolled in the Horse project to exhibit in this division
- Exhibits may be a model, poster, scrapbook, essay, and/or article. The exhibit should show or explain something the 4-H member has made, done, or learned in the project.
- Exhibits are conference judged with the exhibitor present.

HORSELESS HORSE

Requirement:

- Exhibits may be a model, poster, scrapbook, essay, and/or article. The exhibit should show or explain something the 4-H member has made, done, or learned in the project.
- Exhibits are conference judged with the exhibitor present.

LLAMA - ALPACA

LLama -Alpaca – Obstacle Course
LLama -Alpaca - Public Relations
LLama -Alpaca Showmanship

POULTRY

CHICKENS
DOVES
DUCKS
GEESE
GUINEA
PIGEONS
TURKEYS - Domestic only

RABBITS - All rabbits must be purebreds.

SMALL BREEDS

4 Class (small) rabbit breeds include Dutch, Florida White, Holland Lop, Jersey Wooly, Mini Lop, Mini Rex, Netherland Dwarf, Polish, Rex, American Fuzzy Lop, American Sable, Dwarf Hotot, English Angora, French Angora, Satin Angora, Belgian Hare, Britannia Petite, Standard Chinchilla, English Spot, Harlequin, Havana, Himalayan, Lilac, Lion Head, Rhinelander, Silver, Silver Marten, Thrianta and Tan.

LARGE BREEDS

6 Class (large) rabbit breeds include New Zealand, Satin, American Giant Angora, Bevern, Californian, Champagne Dargent, Checkered Giant, American Chinchilla, Giant Chinchilla, Cinnamon, Crème Dargent, Flemish Giant, French Lop, Hotot, English Lop, Palomino and Silver Fox.

RUNNING BREEDS

Requirements:

Breeding Rabbit requirements apply to Running Breeds
Running Breeds include Checkered Giant, English Spot, Rhinelander and Tan

MARKET RABBIT

Rabbit - Single Fryer, 3 ½ to 5 ½ pounds, not over 70 days old
Rabbit - Pen of three fryers, 3 ½ to 5 ½ pounds, not over 70 days old

SHEEP

BIRTH DATES

Fall Ewe Lamb	Born between September 1 - December 31 of previous year
January Ewe Lamb	Born in January of current Year
February Ewe Lamb	Born in February of current Year
March Ewe Lamb	Born in March of current Year
Yearling Ewe	Born on or after January 1 of previous year and must not show evidence of four permanent incisors.
Wether Dam Ewe Lamb	Born on or after January 1 of current year
Wether Dam Yearling Ewe	Born on or after January 1 of previous year and must not show evidence of four permanent incisors
Market Lamb	Born on or after December 1 of previous year

SWINE

BIRTH DATES:

January Gilt	Born in January of current year
February Gilt	Born in February of current year
March Gilt	Born in March of current year
Market Barrow	Born on or after January 1 of the current year. Recommended farrow date of February 1 or after.
Market Gilt	Born on or after January 1 of the current year. Recommended farrow date of February 1 or after.