

July 16-20, 2024

Fair book cover designed by Brianna Lopez, Jolly Workers 4-H Club

Attention 4-H Families:

ONLINE PRE-ENTRIES ARE DUE BY WEDNESDAY, JUNE 12

To pre-enter 4-H projects go to: http://4hstaffordcountyfair.fairentry.com

Pre-entries help the Extension Office determine many things to prepare for the fair.

Pre-entries do not commit a 4-H member to bringing everything they pre-enter (sometimes we have "learning opportunities") and projects won't make it to the fair. Other times we're surprised at what does work and we proudly want to bring it to the fair. 4-H members can always bring more than they pre-enter.

If you have any questions about the Fair Entry system, reach out to the Extension Office at 620.549.3502



WE APPRECIATE ALL OF OUR SUPPORTERS. THANK YOU!!!

Thank you to all our 2023 4-H Premium Auction Buyers!!!

Ag 360

Alpers Farms Animal Medical Center Beth & Scott Krehbiel **Bill & Tammy Milton Brooke Maier** BTI **BTI Ag Solutions** Countryside Vet **Dunn Swine Eddie & Bettina Devine** Edie Elder Farm Bureau Financial Services - John Falk Farmer Milton Hay Grainbelt Ag Services Kanza Coop Meyer Electrical, Inc. Mid Kansas Ag Mid Kansas Ag Seed Millard Management Prairie Bank of Kansas Prairie Bank of Kansas **Ouivira Insurance** Pratt Feeders Sandhill Farms Seibert Feeding SJN Bank of Kansas South Fork Veterinary Hospita South Wind Animal Hospital Squeaks Club Stafford County Flour Mill Susan Lewis Tyree Ag

EQUITY BANK

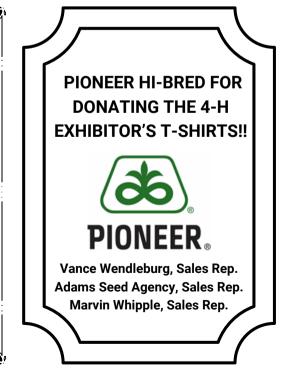
St John and Macksville Branches for donating the Hamburger for the 4-H Council Food Stand!

Money earned through the 4-H Council Food Stand helps 4-H members attend 4-H Camp, Discovery Days, and other 4-H events.

All 4-H members are required to work in the Food Stand at the county fair. This helps them to learn how to properly handle food products, food safety, serving others, counting money and other life skills. KANZA CO-OP for donating the Propane for the 4-H Council Food Stand!



PRAIRIE BANK OF KANSAS FOR DONATING THE PIES TO THE 4-H COUNCIL FOOD STAND!



4-H YOUTH DIVISION GENERAL RULES & REGULATIONS

1. ALL PROJECT EXHIBITS MUST BE PRE-ENTERED and are due to the Extension office by Wednesday, JUNE 12.

2. Only currently enrolled 4-H members, of Stafford County, are eligible for prizes or participation in the 4-H portion of the Stafford County Fair. A 4-Her may exhibit only in projects in which they are currently enrolled.

3. Contestants must be on hand to exhibit their livestock entry at the hour scheduled and failure to do so will bar them from participation in any award, unless exhibitor obtained permission from the Stafford County Fair Association prior to the event. In case the exhibitor has two entries in the same class, they may have another club member assist with any entry, provided it meets the approval of the class superintendent.

4. No exhibitor will be awarded more than two places in any one class. See general rules in each division for limitations on exhibits.

5. No article may be exhibited in more than one class or portion of more than one class.

6. All Livestock exhibits must be checked in between 8:00 am and Noon on TUESDAY, JULY 16th.

7. ALL STATIC exhibits will be judged TUESDAY, JULY 16 at the Fair Building.

8. ALL static exhibits must be entered on TUESDAY, JULY 16TH. Superintendents will be on hand beginning 30 minutes prior to judging time.

9. During livestock judging, adults must remain outside of show arenas.

10. During Consultation Judging on static exhibits, 1 adult may sit with the 4-H member in order to hear judges comments.

11. All exhibits must be work done by 4-H'er and must be completed during the current 4-H year.

EXCEPTION -- Breeding livestock and Bucket Calves may return the following year.

12. Exhibits, with the exception of food and livestock sold, following the judging, will not be released until the last day of the fair (Saturday) starting at 10:00 a.m. to Noon.

13. Champion and reserve champion ribbons shall be awarded in the project designations in which the judge considers the exhibits of such quality.

14. All 4-H'ers MUST wear their Stafford County Fair T-Shirts to exhibit in all livestock shows, consultation judging and premium auction.

15. All questions, concerns and rule clarification by the judge or others, need to be addressed with the department chair superintendent.

16. Junior Superintendents are there to assist the Superintendent in the department for which they are designated. They are not to address questions from the judge concerning a project or placing or help with any judging decisions.

17. **SUNFLOWER AWARD:** The Sunflower Award will be awarded to static (non-livestock) projects that are outstanding or unique in their division. Sunflower Award selections will not be based on the ribbon received at fair judging, but rather how each project represents Stafford County 4-H, ease of display and quality of work. Sunflower Award stickers will be placed on the ribbon the project received. Sunflower Award Winning projects will be displayed in the Extension Office until the State Fair. Following the State Fair, these projects will form our "traveling display" around Stafford County to promote Stafford County 4-H. Sunflower Award winners will be asked to write a brief description about their project on a note card to travel with the project.

18. **Livestock Learners Showmanship:** Livestock Learners gives youth who are 6 years of age or younger a chance to exhibit an animal at the Stafford County Fair. Livestock Learners will borrow an animal from an older 4-H member to exhibit. Livestock Learners is only available for the following species: Sheep, Goat, Swine, and Bucket Calf. Exhibition for Livestock Learners will take place at the beginning to that species' show. No premiums will be paid.

4-H DIVISION AGE GROUPS STATIC EXHIBITS

4-H DIVISION AGE GROUPS LIVESTOCK EXHIBITS

JUNIOR AGES 7 - 9 INTERMEDIATE AGES 10 - 13 SENIOR AGES 14+

JUNIOR AGES 7 - 12 SENIOR AGES 13+

4-H LIVESTOCK GENERAL RULES AND REGULATIONS

1. READ GENERAL RULES & REGULATIONS.

2. PRE-ENTRIES NEEDED BY WEDNESDAY, JUNE 12, 2024.

- 3. All exhibits must be the property of the exhibitor since May of the current year.
- 4. 4-H Club members, exhibiting livestock, must accompany their exhibits or provide suitable means for caring for them at all times during the fair.
- 5. All livestock entries must be shown by the exhibitor, unless otherwise approved by the 4-H agent and superintendent. In the case that the exhibitor has two entries, another club member may assist with one entry, providing it meets with the approval of the superintendent.
- 6. All adults must remain at least ten feet away while the animals are being judged.
- 7. **All market animals must be identified** with a Stafford County 4-H ear tag to be eligible for show and sell at the Fair. Animals must have met the official tagging deadlines.
- 8. No more than three animals may be entered, by one exhibitor, and shown in the market classes, 3 market steers, 3 market lambs, 3 market hogs, or meat goats groups. However, more than two may be shown in breeding classes, provided room is available.
- 9. All animals are to be handled in a humane manner. Physical abuse of any animal will not be tolerated.
- 10. Exhibitors are expected to keep their area neat, clean, and dry. This includes individual stalls, as well as the aisles.
- 11. Official Announcements at Show: Sometimes it is necessary to make a change in the Show which involves a rule change. In such cases, official announcements will be made. These announcements take precedence over written policy or procedure.
- 12. All animals are subject to examination by the exhibition staff or their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals with active lesions, ringworm, infested with mange, multiple warts, or any other infectious or contagious disease, will not be permitted to exhibit.
- 13. Please see each species section for specific rules.

Livestock Originating from Other States:

All livestock entering Kansas shall follow all KDAH import requirements. The import requirement list is available at www.agriculture.ks.gov/animalhealth or by calling KDAH at (785) 564-6601. In addition, all livestock must meet the following requirements:

- Be free of clinical signs of infectious or contagious disease. Animals with lesions of ringworm, warts, infested with mange, or any other infectious disease, as determined by exhibition staff, will not be permitted to exhibit.
- Be accompanied by a Certificate of Veterinary Inspection (CVI) issued within 30 days before exhibit. This must be available upon request, to the exhibition staff.
- All cattle, swine, sheep and goats, including steers and spayed heifers, must be individually identified by a USDA-approved ear tag (metal, 840-compliant, or premises tag), official breed registration tattoo or tag, or breed association ear notch for swine.
- All identification numbers must be individually listed on the accompanying CVI.
- If registration tattoos are used, the registration papers must be available for inspection, and both the FULL registration number and tattoo number must be written on the CVI.
- All required test must be conducted by a state-approved laboratory.
- TB testing, if required, must be conducted by a veterinarian who is licensed and accredited in the state of origin.
- All animals are subject to examination by the exhibition staff or their representatives.

PREMIUM AUCTION RULES AND REGULATIONS

Superintendents: Brian Dunn, Keith McNickle, Gary Seibert, Cody Dick, Fair Board President & Secretary.

- In no case will the committee be responsible for the death of any animal to be sold. 4-H member will be responsible for the life of sale animals until they get into the truck to go to market.4-H member will be responsible for hogs and sheep until they are completely unloaded on the market.
- In no case will the committee be responsible for the animals death or otherwise, while in route to market, during the auction, or at any other time.
- The Premium Auction Committee and Superintendents will be in charge of making the sale order. Each exhibitor may sell in two different category items. 'The categories eligible are: market steers, market hogs, market lamb, market pen of rabbits, market poultry, and Foods & Nutrition. Every 4-H member in the auction will have an opportunity to sell at least one item in the first round of the auction prior to any exhibitor selling his or her second item in the auction.
- Categories for sale order will be based on 1977 rotation plan beginning with Food, Rabbits, Sheep, Swine, Poultry, Beef.

NOTE: THIS YEAR'S ROTATION WILL BE: BEEF, FOOD, RABBITS, SHEEP, SWINE, GOAT, AND POULTRY

- The committee will do what it can to obtain the highest floor price possible, but in no case will be responsible for the floor price or the prices offered at the auction. The sale committee does, however, have the final authority in setting the floor price.
- Members of the Sale Committee are Chairman Brian Dunn, Gary Seibert, Keith McNickle, Jon Siefkes, Cody Dick, Fair Board President & Secretary.
- Any exhibitor may for any reason refuse to sell in the sale even though their animals are eligible. Their respective superintendents should be notified as soon after the judging as possible. ONCE AN ANIMAL IS IN THE SALE RING, IT WILL BE SOLD.
- The following animals meeting the following requirements will be eligible to sell in the premium auction:
 - Beef All market steers weighing over 1000 pounds.
 - Market Lambs All market lambs weighing over 75 pounds.
 - Market Goats All market goats weighing over 50 pounds.
 - Swine Market hogs that weigh at a minimum of 220 pounds but not more than 290 pounds.
 Rabbits All Meat Pens of Rabbits.
- Poultry All Market Poultry.
 The Grand and Reserve Champion of each Foods Age.
- Division (Beginner, Intermediate, Senior, Senior Advanced and Food Basket) will be sold. All food must be covered when being sold for food safety purposes.
- Exhibitors must be present at the sale if they wish to sell in Premium Auction, unless otherwise approved by the Sale Committee.
- Intent to Sell forms are due to the Extension Office 30 minutes after the Exhibitor's last show.
- For an Exhibitor to be eligible to sell their items in the premium auction, they must have completed the following requirements:
 - Attend at least five (5) regular 4-H Club Meetings between October and June of the current 4-H Year.
 - Livestock members Attend a Youth for the Quality Care of Animals (YQCA) meeting.
 - Foods & Nutrition Member Attend a Food Safety Training (FST)
 - Have completed Premium Auction Eligibility Form turned into the Extension Office by the due date.

ROUND ROBIN SHOWMANSHIP

Superintendents: Extension Agents

- Round Robin Showmanship is open only to the 4-H exhibitors in sheep, beef, swine, and market goat. The judge will select first showman of the blue ribbon winners in both Junior and Senior Divisions in each species, and they will come back on Saturday and compete for the Grand and Reserve Grand Champion Showmanship.
- It will be judged on the showmanship ability of each exhibitor showing all species.
- 4-H'ers involved in Round Robin must show the same animal in Round Robin they showed in Showmanship classes for their species, except extra swine animals will be used.
- Junior Division will be open to 4-H members 12 and younger as of January 1, current year.
- Senior Division will be open to 4-H members 13 and older as of January 1, current year.
- Judges will consider:
 - Showing of animal and personal experience
 - Control of animal by exhibitor
 - Poise and collectiveness 0
 - Skill or showing 0
 - Ability to stand, move or show the animal as requested by judge.
- Champions in each age division will receive a belt buckle when top placings are announced at the conclusion of the round robin.

HERDSMANSHIP AWARDS

All livestock and small animal exhibitors will be automatically entered into the herdsmanship contest. The herdsmanship contest provides an opportunity to recognize 4-H members for responsible behavior and quality work while taking care of their animals. As producers and members of the agriculture community, it is important to remember that herdsmanship is the first impression the public has of how we care for our animals and their well-being.

Basis of Scoring:

Cleanliness of Pens and Storage Areas

- Stalls/Pens/Cages are clean and neat.
- Bedding is dry, clean and fresh.
- Manure hauled out and deposited in proper place
- When exercising or taking your animal out of it's stall/pen/cage, clean up after them
- Tack and feed area should be kept clean and neatly arranged.
- Feed pans, extra feed, and miscellaneous gear are in the tack area provided.
- Trash is picked up and area free of clutter
- Exhibitor's share of alley way should be kept clean at all times and free of equipment.

• Appearance of animals

- Animals are clean at all times with proper grooming, bedding and care apparent.
- Animals are to be properly tied or penned, except when grooming, exercising, or exhibiting
- Animals are to have water available at all times and feed at proper times.
- Feed and water dishes are to be upright and any excess spillage cleaned up at all times.
- Feed and water animal regularly. Check on Animal periodically
- Stall cards displayed neatly and complete. Stall cards are available from the Extension Office.
- Feed troughs in front of animals only at feeding time, or are securely fastened to the fence

• Exhibitor Requirements

- Show respect- consideration- proper attitude and cooperation toward all animals, members, equipment, supplies and facilities as well as judges and spectators
- Herdsmanship duties ae the responsibility of all exhibitors and club members rather than leaders, advisors, or parents. If an exhibitor is going to be gone for any reason, it is their responsibility to ask another club member to water, feed, and care for their animals
- Exhibitor participated in pre-fair cleanup and required to participate in post fair cleanup.

Judging:

A committee independent of 4-H and the fair board will be selected to judge. Those committee members will not be disclosed to the membership as an incentive to participate at all times. Herdsmanship will be checked daily for the duration of the fair with no designated time of day each day.

Awards:

Awards will be presented at the start of the Premium Auction.

4-H BEEF



Superintendent: Tyler Alpers - Junior Superintendents: Braxton Alpers

CATTLE GUIDELINES

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- All animals are subject to examination by the exhibition staff or their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals with active lesions, ringworm, infested with mange, multiple warts, or any other infections or contagious disease will not be permitted to show.
- Kansas origin cattle require no test. Cattle originating from other states must meet the "Livestock Originating from Other States" general requirements.

BEEF STEERS

- All animals in this division must have been born after Jan. 1, current year.
- The Classifications for judging will be based upon breeds. Animals in each breed to be divided by weight deemed advisable by the superintendents so as to make two or more uniform classes.
- Entry to be made by breed only.
- Market Steers failing to meet the minimum weight of 1000 pounds will be shown in the Feeder Steer class. These animals will not be allowed to compete for champion placing, and will not be allowed to sell in the premium auction.
- If calves are wild and pose a safety hazard to the exhibitor or fellow exhibitors, the exhibitor himself will have to take the responsibility for his calf. A committee of beef superintendents will make arrangements with the judge to evaluate the calf outside the ring. Steer will not be allowed to compete for champion placings NOR will be allowed to sell in the Premium Auction.

CLASS

- 400001 Hereford
- 400002 Angus
- 400003 Shorthorn
- 400004 Crossbred and Other Breeds
- 400005 Dairy Beef
- 400006 Red
- 400007 Gelbvieh
- **400008** Feeder steers This class is for steers that cannot make the 1000 lb. Minimum weight for market steers NOTE: Dairy Beef -- Those breeds of cattle generally accepted as Dairy Cattle

4-H BEEF SHOWMANSHIP

400101 - Showmanship 12 and under 400102 - Showmanship 13 and over

CARCASS EVALUATION AND SHOW RULES

- The 4-H'er must be enrolled in the Market Beef Project.
- Only one animal per individual member can be designated for the Carcass Evaluation.
- All animals in the contest need to be officially weighed and tagged in at the Official County Weigh Date.
- All animals need to be exhibited at the County Fair in their respective classes.
- Each 4-H member and their family will be responsible for the sale, disposition, and monetary collection of their own carcass (Example: You will be responsible for finding your own buyers)
- Each member will be responsible for their animal's care following the fair and its delivery to the processing plant (Ellinwood Packing).

400201. Carcass Evaluation

4-H BREEDING BEEF

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Read the Cattle Guidelines
- Entries will be placed into classes by age with the day of judging being the base date.
- Cows and calves both will be shown at halter and the 4-H owner may utilize another 4-H member to help hold and set up the animals.
- Bull calves exhibited must be born after September 1, previous year. Bull calves must be eligible for registration.

EACH BREED WILL USE THE SAME CLASS NUMBERS, BUT ADD THE LETTER: H - Hereford; A - Angus; S - Shorthorn;

C - Crossbreed; E - Exotic; G - Gelbvieh after each Class Number.

CLASS

- 400301. Junior Heifer calf born after Jan. 1, current year
- 400302. Senior Heifer calf born September 1-December 31, previous year
- 400303. Summer Yearling Heifer born between May 1 and August 31, previous year

400304. Junior Yearling Heifer - born between January 1 - April 30, previous year

400305. Senior Yearling Heifer - born between September 1 - December 31, 2 years previous

400306. Two year old or over - BORN BEFORE September 1, 3 years previous

400307. Cow-Calf Pair - Commercial and/or Registered, with a calf dropped after January 1, current year. FEMALE MUST BE A PROJECT. Animals will be halter shown

400308. Junior Bull Calf - born after January 1, current year

400309. Senior Bull Calf - born between September 1 - December 31, previous year

4-H BUCKET CALF

- Read General Rules & Regulations and Livestock General Rules.
- Read the Cattle Guidelines
- Bucket calves must have been born between December, previous year and May 1, current year and raised by the 4-H Member on milk replacer.
- Classes will be based on Exhibitor's 4-H Age

JUDGING GUIDELINE FOR BUCKET CALVES

- 65 POINTS Knowledge Consultation: 4-H'ers will be asked questions related to care, feeding, and management of their calf and will be scored on their answers.
- 15 POINTS **Quality:** General overall health and condition of the animal along with the good beef or dairy characteristics represented by the animal
- 10 POINTS Fitting: The trimming, clipping, and grooming of the animal
- 10 POINTS Showing: Exhibiting and handling of the animal

CLASS **Bucket Calves are eligible for Livestock Learners.

401001. Jr. Bucket Calf-Exhibitor Age 7-9

401002. Sr. Bucket Calf-Exhibitor Age 10-12

4-H DAIRY CATTLE

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Read the Cattle Guidelines Entries will be placed into classes by age with the day of judging being the base date.
- Cows and calves both will be shown at halter and the 4-H owner may utilize another 4-H member to help hold and • set up the animals.
- Members exhibiting Bull Calves must be carrying a breeding cow project. Bull calves must be born after September 1, previous year. Calves must be eligible to register.

EACH BREED WILL USE THE SAME CLASS NUMBERS. BUT ADD THE LETTER: A - Avrshire: BS - Brown Swiss: G - Guernsey: HO - Holstein: J - Jersey: MS - Milking Shorthorn after each Class Number.

CLASS

402001- Bull Calf - born after September 1, previous year 402002- Heifer Calf - born after July 1, previous year 402003- Yearling Heifer Calf - born between July 1 - August 31, previous year 402004- Two year old or over - born before July 1, 3 years previous

4-H DAIRY GOATS

Superintendents: Josh & Jenny Foote - Junior Superintendent: Kaden Foote

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Entries will be placed in classes by age with the day of judging being the base date. All animals are subject to examination by the exhibition staff or their representatives, and shall be free of clinical
- All animals are subject to examination by the exhibition start of their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals with signs of sore mouth, active lesions, ringworm, infested with mange, multiple warts, or any other infections or contagious disease will not be permitted to show. Goats originating from other states, please see the "Livestock Originating from Other States" general requirements. These requirements are listed. In addition to the general requirements, goats entering Kansas must be identified with a registered tattoo or official USDA premises ID tag (Scrapie tag). Goat identified with tattoos must have legible tattoos and must have the registration papers for these available for inspection.
- All goats must be identified with a registration tattoo or an official USDA premise ID tag (Scrapie tag). Goats identified with registration tattoos must have legible tattoos and must have registration papers for these animals available for inspection.
- Exhibitors should be neatly and appropriately dressed (preferably in white) when exhibiting their animals.
- Each exhibitor is limited to a maximum of two dairy goats per class. Only does are allowed to show. •
- Purebreds and Grades will show together.
- All dairy goats exhibited must be free of horns. •
- Goats shown in dairy classes cannot be shown in meat classes and meat goats shown in the meat classes cannot • be shown in the dairy classes. Horns: it is suggested that goats be dehorned. However, if horns are left, they should be tipped and rounded.
- Animals will not be allowed to exhibit with sharp horns.
- Junior Does are animals that are not in milk or have not previously freshened. Senior Does are animals that are in milk or have previously freshened.

JUNIOR DOE CLASSES --- 24 months of age, not in milk and not previously freshened.

403001. Doe up to 6 months of age 403002. Doe 6 - 12 months of age 403003. Doe 12 - 24 months of age

SENIOR DOE CLASSES --- Any age in milk or previously freshened.

403101. Doe up to 24 months 403102. Doe 2 years or older

DAIRY GOAT SHOWMANSHIP

403201. Junior – 7-12 years of age 403102. Senior – 13 years of age and over

**Goats are eligible for Livestock Learners.

4-H MEAT GOATS



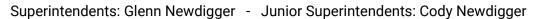
Superintendents:

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Purebreds and Grades will show together. Market goat classes will be divided by weight. For breeding classes, entries will be placed in classes by age with the day of judging being the base date.
- Market goats are bred for meat purposes. Does and wethers of any breed will be judged on merits of meat production.
- Market Meat Goats failing to meet the minimum weight of 50 pounds will show in an underweight class. These animals will not be allowed to compete for champion placing, and will not be allowed to sell in the premium auction.
- All goats must be identified with a registration tattoo or an official USDA premise ID tag (Scrapie tag). Goats identified with registration tattoos must have legible tattoos and must have registration papers for these animals available for inspection.
- All animals are subject to examination by the exhibition staff or their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals with signs of sore mouth, active lesions, ringworm, infested with mange, multiple warts, or any other infections or contagious disease will not be permitted to show.
- Goats originating from other states pleas see the "Livestock Originating from Other States" general requirements. In addition to the general requirements, goats entering Kansas must be identified with a registered tattoo or official USDA premise ID tag (Scrapie tag). Goats identified with registration tattoos must have legible tattoos and must have registration papers for these available for inspection.
- Market Goats MUST have milk teeth in place at fair weigh-in and be under 1 year of age.
- Horns: It is suggested that goats be dehorned. However, if horns are left, they should be tipped and rounded. Animals with not be allowed to exhibit with sharp horns.
- Shearing: All goats must be "slick shorn" above the knee and hock joints including the head. A maximum of 0.4 (four tenths) inch of hair is permitted on market goats. Hair on the tail switch may be left on goats.
- Showing: Exhibitors may use a collar, a collar with a short lead, or a halter when showing.
- Goats shown in meat classes cannot be shown in dairy classes and dairy goats shown in the dairy classes cannot be shown in the meat classes.
- Exhibits will be limited to three market animals..
- Wethers must be free from testicle and castration scar tissue.

CLASS

- 404001. Market Goats (Wethers and Does)
- 404101. Meat Breeding Does Under 6 months
- 404102. Meat Breeding Does 6 12 months
- 404103. Meat Breeding Does Over 12 months
- 404201. Showmanship Junior 7 12 years of age
- 404202. Showmanship Senior 13 years and over

4-H SHEEP



- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Any lamb shown in the market class cannot be shown in the breeding classes and vice versa.
- All market lambs must be born after January 1, current year.
- All Sheep including wethers must be identified with an official USDA premise ID tag (Scrapie tag).
- The classification for judging will be based upon color markings and weights. For breeding classes, entries will be placed in classes by age with the day of judging being the base date.
- At any time, sheep may be inspected by exhibition staff or their representatives for signs of sore mouth, active fungal infections (i.e. ringworm, club lamb fungus), infectious skin lesions, and general health. Any lamb found to be infected with active fungal lesions or other health problems will be asked to leave the fair grounds immediately.
- Sheep originating from other states must meet the "Livestock Originating from Other States" general requirements. In addition to the general requirements, sheep entering Kansas shall be free from any signs of sore mouth or active fungal (ringworm) infection, including club lamb fungus. Sheep must be identified with an official USDA premise ID tag (Scrapie tag).
- Wethers must be free from testicle and castration scar tissue.
- Shearing: All lambs must be "slick shorn" above the knee and hock joints, including the head. A maximum of 0.2 (two tenths) inch of wool is permitted.
- Market Lambs failing to meet the minimum weight of 75 pounds will be shown in an underweight class. These animals will not be allowed to compete for champion placing, and will not be allowed to sell in the premium auction.

NOTE: A Stafford County Bred class is being offered and a lamb shown in this class MUST be a lamb bred and owned by OR purchased from a Stafford County Sheep producer, or a lamb bred and owned by or purchased from a 4-H'er enrolled in the Stafford County Sheep Project. All lambs shown in this class will be shown together and sub classes determined by weight, not breed.

NOTE: Information on the Shepherd's Lead Class is in the Open Class Book in the Sheep Division. This class will give spectators an opportunity to view well-groomed sheep being shown in halter by attractively dressed exhibitors wearing wool outfits that are at least 60% Wool excluding accessories. The entries must be entered by the Monday of the fair week and sent to 21 Central District office in St John on an Open Class Entry Form.

4-H MARKET LAMBS

CLASS 405001. White face/Speckled 405002. Black face 405003. Stafford County Bred

4-H BREEDING SHEEP

The Classifications for judging will be based upon color markings and date of birth with the day of judging being the base date.

CLASS

405101. Ewe Lamb - born after January 1, current year 405102. Fall Born Ewe Lamb - born between September 1 - December 31, previous year 405103. Yearling Ewe - born before September 1, previous year 405104. 2 year old and older Ewe - born 3 years previous

4-H SHEEP SHOWMANSHIP

CLASS

405201. Showmanship 12 and under 405202. Showmanship 13 and over

**Sheep are eligible for Livestock Learners.





Superintendents: Derek Foote, Josh Foote, & Brent Peterson - Junior Superintendents: Easten Alpers, Eli Foote, Kaden Foote & Weston Peterson

4-H MARKET BARROWS AND GILTS

- Read General Rules & Regulations, and Livestock General Rules & Regulations. •
- All animals in this division shall have been born on or after January 1, current year.
- The classification for judging will be based upon weight. All barrows and gilts will be weighed as they are checked in opening day of Fair. Swine failing to meet the minimum weight of 220 pounds or exceeding the weight of 290 pounds will be shown in underweight or overweight classes. These animals will not be allowed to compete for champion placing, and will not be allowed to sell in the premium auction.
- All market barrows regardless of breed will show together. Champion barrow will compete with Champion gilt for
- determining Grand Champion Market Hog. All market gilts regardless of breed will show together. Champion gilt will compete with champion barrows for determining Grand Champion Market Hog.
- Kansas has obtained Stage V status in the National Pseudorabies Program, and the state is classified as free of swine brucellosis. Negative pseudorabies and brucellosis tests are not required for Kansas origin swine.
- Swine originating from other states please se the "Livestock Originating from Other States" general requirements. In addition to the general requirements all swine entering Kansas must meet one of the following: Originate from a qualified pseudorabies-free/validated brucellosis-free herd. The current qualified/validated number
- must appear on the CVI. (Hogs from monitored pseudorabies herds do not qualify under this requirement) Originate from a state of State IV or V status in the National Pseudorabies Program and originate from a Swine
- Brucellosis free state.
- Any swine not originating from Stage IV or V National Pseudorables program states, and any swine not originating from swine brucellosis free states, must show evidence on the CVI that swine have been tested negative to official tests for pseudorabies and brucellosis within 30 days before entry into Kansas, and that the herd of origin has had no positive cases of pseudorabies within the previous 12 months.
- NOTE: SWINE VACCINATED FOR PSEUDORABIES SHALL NOT BE ALLOWED INTO KANSAS FOR EXHIBITION OR ANY OTHER PURPOSE.
- The Stafford County Fair is a Ractopamine Hydrochloride (PAYLEAN) free show. Any pigs found to have been fed Ractopamine Hydrochloride will be automatically disqualified and will forfeit any awards and/or premium money.
- All animals are subject to examination by the exhibition staff or their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals with active lesions, ringworm, infested with mange, multiple warts, or any other infections or contagious disease will not be permitted to show

CLASS

406001. Market Barrow 406002. Market Gilt

**Swine is eligible for Livestock Learners.

4-H BREEDING SWINE

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Gilts must have been farrowed on or after January 1, current year. And exhibitor must be enrolled in the swine • project.
- Sows shown in this division must have been carried in breeding phase of the swine project.
- Breeding animals exhibited by 4-H'ers will be returned home at EXHIBITORS OWN RISK and the Stafford County Fair and Fair Officials will not be held responsible for the death, injury or spread of disease.
- Those 4-H'ers enrolled in swine projects who DO NOT wish to exhibit breeding animals at the County Fair will be able to display in the Educational Exhibit Section Class 428003-428203 category. In the Breeding Swine Class, each breed will use the same class numbers but add the letter Y Yorkshire; D Duroc;
- H Hampshire; C Crossbred; SP Spot; and P Poland.

CLASS

406101. Breeding Swine

4-H SWINE SHOWMANSHIP

CLASS

406201. Showmanship, 12 years and under 406202. Showmanship, 13 and over

CARCASS EVALUATION AND SHOW RULES

- One swine entry per exhibitor may be entered into the carcass contest with a reserved processing slot at Ellinwood Packing Plant. Due to limited spaces, 4-Hers with additional swine entries should reserve a processing slot at another location.
- Entries must meet fair weight requirements of 220-290 lbs to be eligible for carcass show. Underweight and overweight pigs are not eligible for placings, but the processing spot will still be reserved and data will be collected.
- Each member will be responsible for their animals' care following the fair and its delivery to Ellinwood Packing Plant by the arranged time.
- Exhibitors are responsible for all of the processing charges related to their animals and must submit cut-up instructions to EPPI at 620-564-3156.
- Swine carcasses will be judged the day of the carcass show (see fair schedule for date) with viewing by participant at 6:30 pm at the Ellinwood Packing Facility.
- Awards will be given for the first three places: 1st \$75, 2nd \$50, and 3rd \$25. Other entries will receive ribbons and ribbon premium money.

406301. Carcass Evaluation

4-H HORSES

- READ GENERAL REGULATIONS.
- Horses shall meet the general requirements. A negative Coggins test within 12 months for equine infectious anemia should be considered but it is not required. If you go on to any STATE SHOWS the Coggins test MUST accompany the health certificate.
- Horses are shown at exhibitor's risk.
- 4-H'ers participating in the show will be the only riders tolerated working with the horse the day of the show. 4-H'ers found in violation will be disqualified.
- A properly executed identification certificate, identifying exhibitor and the horse they will exhibit or ride, must be presented to the superintendent upon arrival at the fairgrounds. This certificate must be completed before May 1, current year.
- 4-H Club members exhibiting should accompany their exhibits and care for them. Exhibitors must be on hand to exhibit their entries. Horses will be released following the judging.
- The age of the horse is determined as of January 1, in the year in which it is born.
- Stallions may not be exhibited in any class.
- All exhibitors are encouraged to please refrain from allowing their horses to be ridden by any other person while at the fairgrounds, including parents and other adults.
- No animal or 4-H member may show in the same class more than one time.
- The use of protective headgear, in place of a hat, is encouraged in any and all classes, including judged, timed, and futurity.
- All horses should be properly groomed. The feet should be shod or trimmed, the mane and tail should be clean and combed, the face and ears may or may not be shaved.
- A 4-H'er may have two animals per halter class. If so, another 4-H'er must exhibit the second animal. Halter classes are numbers 407001-407003.
- 4-H'er may have only one entry per other classes. Classes 407004-407039.
- No classes are qualifying classes for the state fair.

ALL BREEDS CLASS

407001. Mares 407002. Gelding 407003. Miniature - 34" or Less

SHOWMANSHIP CLASS

407004. Showmanship, 7 - 9 years 407005. Showmanship, 10 - 13 years 407006. Showmanship, 14 and up

15 POINTS: Appointments of rider and horse 5 POINTS: Suitability of horse and rider 40 POINTS: Hands and feet 40 POINTS: Performance **CLASS** 407007. Bareback Horsemanship - 7 - 9 years 407008. Bareback Horsemanship - 10 - 13 vears 407009. Bareback Horsemanship - 14 and up 407010. Western Pleasure - 7 - 9 years 407011. Western Pleasure - 10 - 13 years 407012. Western Pleasure - 14 and up 407013. Horsemanship (riding class) - 7 - 9 years 407014. Horsemanship (riding class) - 10 - 13 years 407014. Horsemanship (riding class) - 10 - 13 yea 407015. Horsemanship (riding class) - 14 and up 407016. English Pleasure - 7 - 9 years 407017. English Pleasure - 10 - 13 years 407018. English Pleasure - 14 and up 407019. English Equitation - 7 - 9 years 407020. English Equitation - 10 - 13 years 407021. English Equitation - 14 and up 407022. Reining - 7 - 9 years 407023. Reining - 10 - 13 years 407024. Reining - 14 and up 407025. Trail Horse Class - Judged Event (Horse is judged on ability to complete course. Only 2 refusals are permitted on each obstacle). 7 - 9 years 407026. Trail Horse Class - Judged Event (Horse is judged on ability to complete course. Only 2 refusals are permitted on each obstacle.) 10 - 13 years 407027. Trail Horse Class - Judged Event (Horse is judged on ability to complete course. Only 2 refusals are permitted on each 407027. Hair Horse Class - Judged En obstacle.) 14 and up 407028. Flag Race - 7 - 9 years 407029. Flag Race - 10 - 13 years 407030. Flag Race - 14 and up 407031. Barrel Racing - 7 - 9 years 407032. Barrel Racing - 10 - 13 years 407033. Barrel Racing - 14 and up 407033. Barrei Racing - 14 and up 407034. Pole Bending - 7 - 9 years 407035. Pole Bending - 10 - 13 years 407036. Pole Bending - 14 and up 407037. Keyhole Race - 7 - 9 years 407038. Keyhole Race - 10 - 13 years 407039. Keyhole Race - 14 and up

4-H DOGS

- READ GENERAL REGULATIONS.
- Dogs at the show must be kept on leash at all times except when competing in 'off leash' competition.
- All dogs must be six months of age or older at the date of show to enter obedience and showmanship.
- 4-H Dog Show Immunization Record (only MG-34 Revised, October 2017 accepted), must be completed for each dog entered in the 4-H Dog Show. The fully completed form just be presented to the superintendent on the day of the show to be eligible to compete. Required vaccinations include: Bordetella, Distemper, Hepatitis, Parvovirus, Parainfluénza, and Rabies. The rabies vaccination must be administered by a licensed veterinarian. All vaccinations must be current. All entries are required to have trained their dog with assistance from the leader and must be currently enrolled in the Dog
- Project. Read County Dog Project requirements for details.
- Dogs will be worked individually. They will be
- judged by how well the dog is groomed and by handlers exhibition of dog.
- Any abuse of dogs on grounds, or in the ring, will result in disqualification.
- No dog in season will be allowed to show.
- Any dog fouling the ring will receive a white ribbon. Owners should collect all waste in plastic bags and put in trash.
- Baiting dogs is not allowed.
- No mobile phones and /or other electronic devices are allowed in the ring.
- The County Dog Show will follow rules as listed in the published Kansas 4-H Dog rule books: Kansas 4-H Dog Show Rule Book 4-H 1120, Revised January 2023.
- Kansas 4-H Agility Dog Show Rule Book, S-124 (Revised), March 2012; Kansas 4-H Rally Obedience Rule Book, 4H965 (Revised), March 2012. Other guidelines are: Kansas 4-H Dog Show Judge's Guidelines Showmanship/Obedience, S82 (Revised), January 2013 and March 2012; and Kansas 4-H Rally Obedience Dog Show Judge's Guide, 4H1023 March 2013.

OBEDIENCE

The purpose of Kansas 4-H Obedience is to provide 4-Hers the opportunity to demonstrate the teamwork necessary to work under a variety of conditions. In obedience, the intent is to evaluate the proficiency by which the dog and handler are able to perform various exercises as a team in much the same way as might be done in demonstrating the behavioral activities in normal life.

CLASS

408001. Pre-Novice A - A first year member with a first year dog. Total Possible Points - 160. Heel and Figure 8 on leash, Stand for examination on leash, Recall on leash, Long sit - 1 minute, Long down - 3 minutes

408002. Pre-Novice B - For a first year dog with an experienced handler or a dog and handler who did not qualify in Pre-Novice last vear. Total Possible Points - 160. Heel and Figure 8 on leash. Stand for examination on leash. Recall on leash. Long sit – 1 minute. Long down – 3 minutes

408003. Novice - For all 4-H'ers and dogs who have qualified in Sub-Novice under two different certified judges the previous year. Heel and figure 8 on leash, Stand for examination off leash, Heel off leash, Recall off leash, Long sit - 1 minute off leash, Long down - 3 minutes off leash.

408004. Graduate Novice - For all 4-H'ers and dogs who have gualified in Novice under two different certified judges the previous year. Heel on leash, Stand for examination off leash, Heel and figure 8 off leash, Drop on recall; Long sit - member out of sight 3 minutes, Long down – member out of sight 5 minutes.

408005. Open A - For all 4-H'ers and dogs who have gualified in Graduate Novice under two different certified judges the previous year. All exercises off leash. recall, Retrieve on flat, Broad jump, Long sit - member out of sight 3 minutes, Long down - member out of sight 5 minutes

408006. Open B --- For all 4-H'ers and dogs who have qualified In Open A under two different certified judges the previous year. All exercises off leash. Heel and figure 8, Drop on recall, Retrieve on flat, Retrieve over high jump, Broad jump, Long sit - member out of sight 3 minutes, Long down - member out of sight 5 minutes.

SHOWMANSHIP

The purpose of showmanship is to provide 4-H'ers the opportunity to show their dog and themselves to the best of their ability. Will be judged on fitting of dog; clean and well brushed tone and condition of coat, healthy appearance, teeth, toenails, and eves. Handler will be judged on alertness, grace, and ease, coordination with dog and reaction of dog to handler with straight and even gait and movement of dog.

CLASS

408007. Pre-Junior Showmanship (4-H'ers 8 and under) 408008. Junior Showmanship (4-H'ers who are 9 - 11yrs)

- 408009. Intermediate Showmanship (4-H'ers 12 14 yrs)
- 408010. Senior Showmanship (4-H'ers 15 and older)

AGILITY

The purpose of Kansas 4-H Dog Agility is to provide 4-H members the opportunity to demonstrate the teamwork necessary to work under a variety of conditions that challenge both the handler and dog. By teaching a series of obstacles, the 4-H'er provides the basic training and exercise that leads to a more versatile, wellconditioned dog. Different obstacles and courses present unique tests of speed, confidence, technical skills, athleticism, balance, communication, attentiveness, distance, and directional control. The task of leaders, judges, trainers, and handlers is to incorporate all these elements while maintaining a fun, safe environment for the dogs and 4-H'ers. The sport of agility provides a basis for other activities such as search and rescue. Agility is exciting for both exhibitors and spectators, as well as motivating for the dogs.

Dogs must be at least 12-months-old before competing.

In addition to Agility Class numbers, add the height division for your dog

Small dog (under 15" at the withers) Medium dog (15'' - 20'') at the withers) Large dog (over 20" at the withers)

Advancement: After receiving two qualifying scores (purple) from two different judges, an agility team must advance to the next level at the start of the next 4-H year.

CLASS

408011. Beginning Agility - On Leash - For dogs who are still working at Pre-Novice level 408012. Agility I – For dogs working at Novice level 408013. Agility II 408014. Ağility III

4-H POULTRY

- Read General Rules & Regulations, and Livestock General Rules & Regulations. Each member must provide suitable means of caring for his project at all times during the fair. Diseased or insect infected poultry will not be accepted for entry.
- All market poultry must be hatched in current calendar year.
- Judging on all classes except market poultry will be done on the basis of exhibition and production gualities. Members exhibiting well developed birds of production gualities will be credited for it even if they vary slightly from standard of perfection. Particular emphasis will be given to meat gualities in the turkey class. Market poultry will be judged on meat gualities only.
- Each 4-H member may exhibit in as many classes as he or she wishes in addition to one meat-type chicken pen of fryer size poultry. No more than 2 may be entered in any one class except Class 409101 - Meat Pen of Poultry.
- All poultry, except for waterfowl, must show proof that they are pullorum-typhoid free by one of the following: Originate from a U.S. Pullorum-Typhoid Clean Flock by an official VS form 9-3.
 - Present evidence that entries were purchased from a US Pullorum-Typhoid Clean source. ο
 - Present an official VS form 9-2 for a negative result test conducted within 90 days prior to the Fair. ☑
 - Test negative at check-in of the county fair when the county has been designated by KDA-DAH for surveillance. 0 Routine surveillance testing will be performed for each county fair a minimum of once every 5 years. All birds must be free of any evidence or disease.
- Poultry originating from other states please see the "Livestock Originating from Other States" general requirements. In addition to the general requirements, Poultry entering Kansas must show proof that they are pullorum- typhoid
 - clean by one of the following methods:
 Originate from a NPIP certified U.S. Pullorum-Typhoid clean flock as evidenced by an official VS Form 9-3, certifying all adult poultry in the flock have had a negative test for pullorum-typhoid within the past year. (Adult
 - poultry are any turkeys over 12 weeks of age any other poultry over 16 weeks of age). Be accompanied by an official VS Form 9-3 signed by the official NPIP representative in the state of origin or by a 0 health certificate that has been issued within the previous 30 days. In addition to the VS 9-3 or CVI, out-of-state poultry must have a "Permit to Ship Poultry or Hatching Eggs" issued
 - 0 by the KDAH within the previous year or permit number issued by the KDAH office within the previous 15 days.

CLASS

409001. Standard Breeds - Large Fowl - Young Pen, 1 bird of either sex

- 409002. Standard Breeds Large Fowl Old Pen, 1 bird of either sex
- 409003. Standard Breeds, Bantams Young Pen, 1 bird of either sex
- 409004. Standard Breeds Bantams Old Pen, 1 bird of either sex

409005. Production Pullets - Pen, 3 Standard bred, Crossbred or Strain cross pullets to be judged on egg production qualities only.

409006. Production Hens - Pen, 3 Standard bred, Crossbred or Strain cross hens to be judged on egg production qualities only

409101. Meat type Chickens - Pen, 3 Standard bred, Crossbred or Strain cross birds of the same sex to be judged on meat production qualities only.

- 409201. Turkeys, all breeds Pen, 1 bird of either sex. 409301. Ducks, all breeds Pen, 1 bird of either sex.
- 409401. Geese, all breeds Pen, 1 bird of either sex. 409501. Game Type Birds- Pen, 1 bird of either sex. 409601. Other Poultry- Pen, 1 bird of either sex

4-H PIGEONS

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- All entries must be single birds. ٠
- Members may not enter more than two birds per class regardless of breed. Each exhibitor is limited to eight birds •
- All pigeons must be shown with numbered band. Young birds must be shown with seamless bands, or else by judged • in the old class.
- Judging will be by comparison only.
- Be sure to designate breed on your entry.

CLASS

- 409501 Old Cock, hatched previous year
- 409502- Old Hen, hatched previous year
- 409503- Young Cock, hatched current year
- 409504- Young Hen, hatched current year

4-H RABBITS

Superintendents: Mark Popp

Each 4-H member may exhibit in as many classes as he wishes in addition to one meat pen of fryer size rabbits. Not more than 2 may be entered in any one class except Class 410101- Meat Pen of Rabbits.

- Read General Rules & Regulations, and Livestock General Rules & Regulations.
- Each rabbit is to be legibly and permanently tattooed in its left ear for identification.
- Pre junior (under 3 months) classes only available in the following breeds: Argente Braun, Beveren, Blanc de Hotot, Californian, Champagne D'Argent, Checkered Giant, American Chinchilla, Giant Chinchilla, Cinnamon, Crème D'Argent, New Zealand, and Palomino.
- Junior (under 6 months) (under 3 months of age or under for breeds other than those listed in the Pre-Junior classes: Over 3 months over age and under 6 months of age for breeds having a Pre-Junior Classes)
- Intermediate (6-8 months) classes are only available in the following breeds: American, Giant Angora, Argente Braun, Beveren, Blanc de Hotot, Californian, Champagne D'Argent, Checkered Giant, American Chinchilla, Giant Chinchilla, Cinnamon, Crème D'Argent, Flemish Giant, English Lop, French Lop, New Zealand, Palomino, Satin, and Sliver Fox.
- Senior (6 months of age or over for breeds other than those listed in the Intermediate classes 8 months of age or over for breeds having Intermediate classes)
- All rabbits will be divided into classes by ages and judged according to their breed standard as listed in the ARBA "Standard of Perfection" Only breeds approved by the ARBA may be shown, no mixed breed rabbits will be allowed.
- Meat Pen: Three (3) rabbits, all one recognized breed and variety (broken varieties must be same color). Minimum weight 3 ½ pounds each. Maximum weight 5 ½ pounds each, not over 70 days of age. Will be judged on their meat qualities, condition, uniformity, and fur.

CLASS

- 410001. Pre-Junior Doe Under 3 months of age.
- 410002. Junior Doe Under six months of age
- 410003. Intermediate Doe 6 8 months
- 410004. Senior Doe eight months of age and over
- 410005. Pre-Junior Buck Under 3 months of age
- 410006. Junior Buck Under six months of age
- 410007. Intermediate Buck 6 8 months
- 410008. Senior Buck eight months of age and over

410101. Meat Pen - Three (3) rabbits, all one recognized breed and variety (broken varieties must be same color). Minimum weight 3 1/2 pounds each. Maximum weight 5 1/2 pounds each, not over 70 days of age. Will be judged on their meat qualities, condition, uniformity, and fur.

410201. Fur Class - Fur entries must be made from rabbits that are entered in the regular breed classes 410001 through 410008.

- 410301. Showmanship 12 and under
- 410302. Showmanship 13 and over

The Kansas 4-H STEM Rocketry program is designed to allow 4-H members to explore aerospace through rockets of various sizes. Kansas 4-H has adopted the National Association of Rocketry's rules, regulations, and safety guidelines.

• READ GENERAL RULES AND REGULATIONS

Exhibit Information for ALL rocketry categories

- All revisions of all forms previously released for the division either undated or dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year. Use of old forms should result in the loss of one ribbon placing for exhibits.
- Relevant documents may be obtained from County Extension Offices or from http://rocketry.engtech4ks.com/
- NAR refers to the National Association of Rocketry and its governing board.
- Tripoli refers to the Tripoli Rocketry Association and governing board.
- All NAR documents, referenced herein can be found at <u>http://www.nar.org</u>.
- If a fire "burn ban" is in effect for any county in Kansas, exhibitors in any Kansas County are not required to launch their rocket(s). All requirements for the launching of rockets for the state fair and the documenting of the launching are suspended for the duration of the ban.
- FOR STATE FAIR: Exhibitors may create an optional video (not required) about their project and the work they have done. The video should be no longer than 8 minutes and should be placed on a USB drive, or micro/SD card drive or, if desired, uploaded as to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper. These videos may also be considered for inclusion in a running video loop in the STEM area at the state fair after review by judges, superintendent(s), and extension staff. Adult guardians must complete the video release included with the exhibit form. If the release is not completed the video will not be included in the video loop on display in the STEM area at the Fair.
- FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

Exhibit Definitions for ALL rocketry categories

- As defined by the National Association of Rocketry (NAR), a scale model is "any model rocket that is a true scale model of an existing or historical guided missile, rocket vehicle, or space vehicle, that has flown under rocket power." The intent of scale modeling is, according to the NAR, "is to produce an accurate, flying replica of a real rocket powered vehicle that is judged for craftsmanship in construction, finish, and flight performance." (NAR "Model Rocket Sporting Code" 52.1 https://www/nar.org/contest-flying/competitionguide/
- Adult supervision is defined as being under the direct supervision of someone 18 years of age or older.
- For the purposes of Kansas 4-H STEM a mid-powered rocket is defined as a rocket that uses an 'E', 'F', 'G', or equivalent engine for launch. In addition, rockets also qualify for mid-power if they meet any of the following criteria:
 - Are 2 inches or greater in diameter (not including fins) and taller than 3 feet (36 inches including fins) and do not use an engine(s) exciding 160.01 Newton seconds of total impulse (an 'H' engine equivalent or above).
 - The total impulse of all engines used in the rocket is greater than 20.01 Newton-seconds and less than 160.01 Newton-seconds.
- Newton-seconds.
 For the purposes of Kansas 4-H a high-powered rocket is defined as a rocket that meets any of the following criteria:
 - Weighs more than 3.3125 pounds (53 ounces or 1500 grams) at the time of launch;
 - Uses a 'H' engine or larger to launch

- The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
- Includes any airframes parts of ductile, metal, though, the use of ductile metal is strongly discouraged.
- Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.: Average thrust in excess of 80.01 Newtons, Contains in excess of 125 grams of propellant and are limited to only H and I motors, and Uses a hybrid motor or a motor designed to emit sparks
- High power certification is defined as having successfully completed a certification program for high-powered rocketry through the NAR or Tripoli and maintaining that certification. This applies to all membership levels in the NAR and Tripoli. Specifically, the "Formal Participation Procedure" for the "Junior HPR Level 1 Participation Program" as outlined by the NAR and the "Tripoli Mentoring Program (TMP) as outlined by Tripoli.
- NAR safety codes for launching and construction of all rockets are assumed to be used by all 4-H exhibitors and will be considered during judging.
- For the purposes of Kansas 4-H, NO rocket may be launched using engines totaling more than an 'l' impulse engine or 640 Newton-seconds of total thrust.

Exhibit Rules for ALL rocketry categories

These rules apply to how rockets are to be displayed at the state fair and what those displays should and should not contain. These rules apply to all rockets displayed in the STEM division.

- 4-H members must be currently enrolled in the 4-H Aerospace/Rocketry program to exhibit in this division.
- Each exhibitor may enter up to two rocket exhibits that have been constructed during the current year. If two rockets are entered, one rocket must be a "model rocket kit" and the second may be entered into any other applicable class. An exhibitor may not enter two rockets in the same class.
- The report that accompanies the rocket must be limited to the 4-H Rocket Exhibit Information Form which is affixed to a 10" x 13" envelope. This envelope should NOT be attached to the rocket stand or rocket. The information form should be signed by the exhibitor. This may be downloaded from <u>http://rocketry.engtech4ks.com/</u> Any rocket exhibit not including this completed envelope will receive participation ribbon.
- Plans (or a photocopy) must be placed inside the envelope:
 - This includes original design rockets.
 - If a rocket kit has been modified structurally (Which must provide all necessary details to construct an original design rocket.), notations need to be given indicating the changes made, either by notations on the Rocket Exhibit Information Form or by placing notes in the plans. Such modifications require the rocket to be swing tested and documented to show a stable flight. A different pant scheme, changes/reduction in decals, and other non-structural changes are not considered modifications and do not need to be documented.
- One or more photographs of the rocket during construction and at the launch site are required:
 - Photographs showing the rocket at the moment of ignition are preferred.
 - $\circ~$ Photographs must be mounted on one side of 8 $\ensuremath{\,^{\ensuremath{\prime}\!2}}$ x 11" page(s).
 - There must be at least 1 page of photos and no more than 5 pages of photos.
 - Include at least one photo showing rocket construction, preferably with the exhibitor included.
 - Do not include photos of members catching their rockets as they return to earth. This is an unsafe practice, and we do not recommend or condone this practice.
 - Pictures at the launch site are not required in the event of a burn ban.
- To exhibit in this division:
 - The rocket must have been flown unless a burn ban is in effect.
 - Support rods must not extend past the tip of the highest nosecone on the model. This reduces the likelihood of eye pokes. Support rods must remain in the upright position, 90 degrees to the display base, do not angle. Support rods may be angled if the rocket its self still remains in the upright position, for example if engine tubes are slanted and the best form of support for the rocket is to use an angled support post. If the rocket is not perpendicular to the display base, the judge should deduct one ribbon placings.
 - No model may be submitted on a launch pad

- Launches should not be conducted in winds above 20 mph and will constitute a disqualification of rocket exhibit.
- All rockets must have a safe method of recovery, e.g., parachute, streamer or tumble recovery. Any rocket without a recovery system will be disqualified.
- The altitude achieved by the rocket is to be determined using a method other than estimation. Examples of accepted methods include altimeter, computer software, range finders, etc. If additional space is needed to show calculations of how the altitude was achieved one additional page may be added to the rocketry information pack.
- Flight damage is to be documented by the participant on either the construction plans, an additional sheet of paper titled "flight damage" or the 4-H Rocket Exhibit Information Form.
- The judging of flight damage is to be secondary to all other aspects of the model and only then may it even be considered. However, under no circumstance may flight damage be grounds for disqualification.
- Accidental Damage Any damage to an entry while it is in the custody of the judges, assistant/superintendents, or
 extension staff must not be held against the exhibitor. For example escape towers being knocked off the top of
 rockets during transport (both the escape tower and rocket may still be judged). Such damage is to be reported and
 documented.
- Improvements Improvements may be made to the exhibit prior to the Fair to improve the overall presentation of the exhibit while maintaining the major substance of the exhibit. For example, a cooking entry of a cookie is reprepared between a county and state fair, most likely using recommendations from the first judging, it's the same recipe just with improved technique.
- Engines and igniters, under any circumstance, ARE NOT Permitted with the exhibit and constitute an immediate disqualifications
- If an engine becomes stuck, jammed, wedged, or in any other way permanently affixed in or to a rocket and cannot be removed from the rocket, the rocket will be subject to immediate disqualification. This is because it is not possible to make a full and immediate assessment of the safety of the rocket when it is being judged and safety is paramount.
- Engines may not be used as display stands hollowed out or otherwise. Engines used as a display stand will cause the exhibit to be subject to immediate disqualification.
- Rocket engines should not be used to join multi-stage rockets together.
 - Multi-stage rockets can be displayed without having the stages connected together. In that case the final stage (the one with the nose cone) should be placed on the display stand, and other stages with a loop of string to the display stand.
 - The different stages must be included to complete the rocketry exhibit, incomplete exhibits will be deducted at least one ribbon placing.
 - Use of any engines to join the stages together will be subject to immediate disqualification.

- Multi-stage rockets can be flown using just the final stage and be considered fully flown.
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's rocket, at the judges' discretion, will receive a participation ribbon. All information necessary will be given to the NAR and/or TRIPOLI for investigation and possible revocation of membership.

Construction Rules for ALL Rockets

These rules apply to how rockets are to be displayed at the fair and what those displays should and should not contain. These rules apply to all rockets displayed in the Engineering and Technology division.

- Rockets are to be properly assembled according to the assembly instructions.
- Beginner kits with prefabricated (molded plastic) fin assemblies and prefinished rockets requiring no painting are not acceptable at the Fair and will be disqualified.
- Plastic snap together fins and prefabricated fin assemblies that do not require fin alignment are not acceptable and will be disqualified.
 - This rule does not apply to plastic fins that must be manually aligned and do not utilize a fin alignment mechanism, including, but not limited to fin alignment rings or spacing blocks.
 - This rule does not apply to fiberglass, Kevlar, composite, or wood techniques that are common in larger rockets.
 - In addition, plastic parts for decorative and mechanical purposes (i.e. decorative nozzles and moving landing struts) are not considered fins and can consist of plastic. Decorative nozzles, etc. need to be securely fastened and not pose a safety hazard.
 - Fin assemblies that are printed using a 3D printer are excluded from this rule. Though detailed instructions on the creation of the fin assemblies must be provided and an additional page of photos may be included to show the creation/printing of fin assemblies.
- Angles of fins must fall within a plus or minus 2 degree variation using an approved fin alignment guide (such as KSSTAC10). An official fin guide is available from http://rocketry.engtech4ks.com/
- Fins should be rounded or streamlined according to instructions. If the other edges are rounded to reduce drag on all exposed sides, there should be no ribbon deduction, unless instructions indicate to leave flat, or instructions say to round and rounding was not done.
- Fins and body tubes are to be sealed with filler, sanding sealer, and/or primer to eliminate the appearance of body grooves and wood grain.
- Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.
- Engine mounts are to be securely attached to the body tube.
- Any seams on plastic parts are to be sanded smooth.
- Body tubes/airframes/engine mounts can be made from suitable materials, including, but not limited to: reinforced paper, cardboard, phenolic resin, specialized polymer resins, fiberglass, Kevlar, or other suitable structural materials. However, foam may not be used for external body or other external rocket parts.
- The nose cone is to fit snugly but still allow for easy removal. If the shock cord frequently becomes stuck between the nosecone and body, it should be trimmed.
- Exhibits must be uniformly painted and smoothly finished or finished as per rocket instructions, and have decals applied smoothly. The rocket should be free of "runs," "orange peel," or "crackling" in the finish.
- Non-standard surfacing (such as textured paint) may be used if directed by the instructions, this includes scratchbuilt rockets.
- Models may not be judged based on their plaint scheme (colors and placement on the rocket), with the exception of rockets that fit the definition of a 'scale model.' All other rockets do not have to follow the suggested paint scheme, allowing the 4-H'er to display maximum creativity in the finishing of their rocket. Under no circumstances is the weight given to the paint scheme to be sufficient, by itself, to move a non-scale model from one ribbon placing to another.

- "Scale models," exhibited in the scale mode class, may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.
- Scale Model Rockets, exhibited in the scale model class are to be finished and completed with a majority (greater than 70%) of decals.
- If a modification is made to the rocket, for example, adding a fin, a swing test must be conducted on the rocket, and the documentation provided. Failure to test and document flight stability following modifications will result in two ribbon placing deductions. Changes to the paint scheme, changes/reduction in decals, and other non-structural changes are not considered modifications and do not require a swing test.

Model Rocketry Specific Guidelines (Ages 9 and older)

Model rockets are generally small-to-medium sized rockets that can be purchased at hobby stores that an individual(s) builds from parts similar to those found in model rocket kits.

- Rockets classified as high or mid powered may not be entered in this category.
- Each rocket must be able to stand freely by itself or be supported by a solid base, not to exceed 4-1/4" (four and one quarter inch) thick and 8" square. The exhibitor's name, county or district, and age must be labeled on the base. Rod materials should be sturdy, and not made of flimsy materials, such as coat hangers.
- If the model rocket is greater than 4 feet tall it can be displayed without a base or displayed parallel to the ground with up to 3 notched blocks not to exceed 4" in height width and depth. The exhibitor's name, county or district, and age must be labeled on the base(s).
- All exhibitors must comply with the NAR Model Rocket Safety Code that is in effect as of October 1st of the current 4-H year. However, in the event that there is a modification in this code, the Engineering and Technology Project Partnership Team may review and implement the modified code.

Original Design Specific Rocket Guidelines (Ages 11 and older)

To allow for youth to develop their own rockets (model, mid, and high powered) in a safe manner that displays maximum craftsmanship.

- Original design rockets cannot be a modification of a pre-existing kit and must be of original design.
- Original design rockets must be designed by the exhibitor(s).
- Original design rockets must include detailed instructions, so that someone could construct the original designed rocket just like a kit purchased at a store. Instructions can be as many pages as needed to convey full and complete construction techniques.
- Original design rocket instructions should not include copies of instructions in part or in whole from existing kits without crediting the source instructions. For example, "Fin alignment template from Estes Baby Bertha."
- For a rocket entered in the original design classes, describe in the summary how the rocket was tested for stability
 prior to flying. Swing testing of the rocket is required. Other tests and calculations are strongly encouraged.
 Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a deduction of
 TWO ribbon placings.

CLASSES

DIVISION A - JUNIORS (EXHIBITORS 7-9 YEARS OF AGE) 9 YEARS + OF AGE QUALIFY FOR STATE FAIR

- 425301 Rocket made from kit. Include plans.
- **425302** Scale Model Rocket. Made from kit, includes plans.

DIVISION B - INTERMEDIATE (EXHIBITORS 10-13 YEARS OF AGE)

- **425303** Rocket made from kit. Include plans.
- **425304** Scale Model Rocket. Made from kit, includes plans.

DIVISION C - ADVANCED (EXHIBITORS 14 YEARS OF AGE AND OLDER)

- 425305 Rocket made from kit. Include plans.
- **425306** Scale Model Rocket. Made from kit, includes plans.

DIVISION D - TEAM BUILT (EXHIBITORS 7 YEARS OF AGE AND OLDER)

This class is designed to encourage teamwork among individuals and clubs to work on a rocket from the initial design to the finished product.

425307 Rocket made from kit by 2 or more exhibitors. Include plans.

Mid-power Rocketry (2x'D' to 'G' Engines) Guidelines:

Purpose: To allow for improved safety and judging of rockets that meet the requirements of 4-H mid-power rockets.

- Exhibitors must be at least 14 years of age by January 1 of the current year.
- The rules for ALL categories apply.
- In addition to the information packet completed for all rockets, a high/mid power information form is to be completed and placed inside of the information packet. This may be downloaded from <u>http://www.kansas4-H.org/</u>. Click on KSF Packet link.
- Exhibitors in this division must hold memberships in either NAR or Tripoli organizations.
- The NAR Model Rocket Safety code applies to the construction and launching of all rockets displayed in this division. As such all exhibitors must comply with the NAR Model Rocket Safety Code that is in effect as of October 1st of the current year. However, in the event that there is a modification in this code the Engineering and Technology Project Partnership Team review and implement the modified code.
- All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.
- High power rockets as defined above ('H' or 'l' engines) may not be launched in this division.
- If according to Federal Aviation Regulations Part 101, a waiver is required to fly the rocket, a copy of that waiver is to be attached to the High-Power Information Form. In the case where the launch was a public event a substitute to a copy of the waiver is the Range Safety Officers (RSO's) contact information, launch location, and date.
- Mid- Power rockets may be displayed without a supporting stand. If a supporting stand is used, it is not to exceed 4-1/4" (four and one-quarter inch) thick and 8" square. The exhibitor's name, county or district, and age must be labeled on the base.

DIVISION E - ADVANCED (EXHIBITORS 14 YEARS OF AGE AND OLDER)

425308 Mid Power Rocket made from kit. Include plans.

High Power Rocketry ('H' or 'I' engines) Guidelines

To allow for improved safety and judging of rockets that meet the requirements of 4-H high power rockets.

- Exhibitors must be at least 14 years of age by January 1 of the current year.
- The rules for ALL categories apply.
- In addition to the information packet completed for all rockets, a high-power information form is to be completed and placed inside of the information packet. This may be downloaded from http://rocketry.engtech4ks.com/.
- Exhibitors in this division must hold memberships in either NAR or Tripoli organizations.
- The NAR High Power Rocket Safety Code applies to the construction and launching of all rockets displayed in this division. As such all exhibitors must comply with the NAR High Power Rocket Safety Code that is in effect as of October 1st of the current 4-H year. However, in the event that there is a modification in this code the Engineering and Technology Project Partnership Team may review and implement the modified code.
- All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.

- For rockets launched using an engine(s) that have160.1 ('H' engine or equivalent amount of smaller engines) Newton's-seconds or larger, adult supervision must be provided by an individual having at least a level 1 high power certification. The 4-H member should also hold or be attempting to attain their level 1 high power certification and should include supporting documentation of such (a copy of Level 1 card is sufficient).
- If according to Federal Aviation Regulations Part 101, a waiver is required to fly the rocket, a copy of that waiver is to be attached to the High-Power Information Form. In the case where the launch was a public event a substitute to a copy of the waiver is the Range Safety Officers (RSO's) contact information, launch location, and date.
- High Power Rockets may be displayed without a supporting stand. If a supporting stand is used, it is not to exceed 4-1/4" (four and one-quarter inch) thick and 8" square. The exhibitor's name, county or district, and age must be labeled on the base.

DIVISION F - ADVANCED (EXHIBITORS 14 YEARS OF AGE AND OLDER)

425309 High Power Rocket made from kit. Include plans.

ENGINEERING AND TECHNOLOGY AREAS ONLY - EDUCATIONAL EXHIBITS - POSTERS, NOTEBOOKS, AND EDUCATIONAL DISPLAYS

Educational Exhibits Rules

- This section serves for all Engineering and Technology project areas, including: Aerospace/Rocketry, Ag Mechanics - Welding, Astronomy, Building Block Engineering, Computer Science, Robotics, and Uncrewed Aircraft Systems.
- READ GENERAL RULES AND REGULATIONS
- For notebooks, display boards, and posters, no additional exhibit information is required; no manila envelope is needed for these exhibits.
- Exhibits are to have a clear link to the Engineering and Technology areas of astronomy, computers, rocketry, robotics, or uncrewed aerial systems, educational exhibits outside of these Engineering and Technology areas should be displayed in the other program areas. Just because an educational exhibit relates to the broad concept of Engineering and Technology does not qualify it to be displayed in the Engineering and Technology Educational Exhibit area. Exhibits that do not clearly show a clear and direct relationship to the Engineering and Technology project areas of ag-mechanics, ABC, astronomy, computers, robotics, rocketry, or UAS as previously defined will be disqualified.
- Exhibits in posters, notebooks and display boards must contain substantial supporting educational materials.
- Educational display boards, posters and notebooks should be creative and showcase details about the knowledge learned in the project during the current 4-H year. Value is placed on youth who can demonstrate how their skills have increased while completing the project. Each exhibit will be judged on uniqueness, creativity, neatness, accuracy of material, knowledge gained, and content. An exhibit judging score sheet available at http://rocketry.engtech4ks.com/. For example, a rocket that may have crashed and/or is highly damaged may be made into an educational display or poster that tells a great story with many lessons learned.
- Follow copyright laws, citing all sources of information in a standard notation Sources of information must be cited on the front of your exhibit, including all posters and educational display boards.
- Educational displays are not to exceed a standard commercial 3' x 4' tri-fold display board. No card table exhibits will be allowed. Care should be taken to use durable materials that will withstand Fair conditions.
- "Construction Kits" that are part of Educational displays must be contained in cases (tackle boxes, sealable containers, etc.) that may not be larger than 1' x 2' x 2' and must have a latch which securely keeps all components contained in the "Construction Kits". Other components are to adhere to appropriate dimensions as stated elsewhere.
- Educational Project notebooks must be organized in a 3-ring binder.
- Any three-dimensional poster or display board exhibits may not be thicker than 2 inches.
- Engines and igniters for rockets ARE NOT permitted with the exhibit and constitute an immediate disqualification. This is for safety reasons and includes both spent and live engines.
- Exhibitor's name, Extension Unit, age, and year(s) in project must be tagged or labeled in a prominent location on the notebook, and/or "Construction Kit." For education displays and/or posters the exhibitor's name, county, or district, age, and year(s) in project must be tagged or labeled on the back of the exhibit. Exhibit cards are not sufficient as they may be removed or repositioned for display. Failure to label an exhibit may result in one ribbon placing deduction.
- Exhibits should possess the following qualities (in no particular order): A Central theme, What you want others to learn, Be designed and constructed in a manner befitting the exhibit, Be something you are interested in, Be related to Astronomy. Computer System, Robotics, Rocketry, or Uncrewed Aerial Systems
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judge's discretion, will receive a participation ribbon.
- Posters, Notebooks, and Display Boards may be checked out for use in a State Fair 4-H demonstration or illustrated talk with prior permission. For permission, check with the superintendent(s). The exhibit must be returned to display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified.

ENGINEERING AND TECHNOLOGY AREAS ONLY - EDUCATIONAL EXHIBITS - POSTERS, NOTEBOOKS, AND EDUCATIONAL DISPLAYS

CLASSES

DIVISION A - JUNIORS (EXHIBITORS 7-9 YEARS OF AGE) 9 YEARS + OF AGE QUALIFY FOR STATE FAIR 425501. Educational Display 425502. Notebook 425503. Poster

DIVISION B - INTERMEDIATE (EXHIBITORS 10-13 YEARS OF AGE)

425504. Educational Display 425505. Notebook 425506. Poster

DIVISION C - ADVANCED (EXHIBITORS 14 YEARS OF AGE AND OLDER)

425507. Educational Display 425508. Notebook 425509. Poster

4-H AGRONOMY

4-H members in the Agronomy (Field Crops) project may exhibit grain, plants, a wheat variety plot display or a weed control exhibit to prepare an educational display representing their project. The purpose of these exhibits is to provide a positive learning experience for youth, evaluating the accomplishments of the member within the project in that particular program year. The crops exhibit at the Fair demonstrate to the public the benefits from the study and application of crop, weed, range and soil sciences to solving problems in management, conservation, sustainability and environmental protection.

- READ GENERAL RULES AND REGULATIONS
- Exhibits should be as mature as possible.
- Every entry must be identified by hybrid or variety name.
- All classes calling for a gallon sample may have a 2½ 3 inch in diameter cylinder placed in a glass gallon container to reduce the amount of grain to three quarts.
- If variety is NOT stated where requested OR samples not tied where requested, ribbon placing will drop one placing.
- Eligibility Products exhibited in this division must have been grown by the 4-H member in the current year, with the exception of soybean seed and edible field bean seed.

WHEAT VARIETY PLOT DISPLAYS

The free-standing displays must not exceed the overall dimensions of 36" wide x 36" high x 18" deep (measured on the outside). Care should be taken to select durable materials that will withstand fair conditions. Displays must not require the use of electricity. If booth exceeds overall dimensions, ribbon placing will be dropped one place.

- These displays will have been planned and prepared by 4-H members enrolled in the wheat variety plot project.
- Members must include the varieties provided in the display, but may include more varieties, if desired.
- All displays will receive a purple, blue, red, or white ribbon. Purple and blue ribbon displays will be considered for additional recognition.

Basis for Awards:

Educational Value 70 %

• Is the main idea of the display specific? Was the title or theme emphasized? Is the idea presented so clearly, so simply, so forcefully, that it will stop the casual observer? If the passerby stopped, did the display give the observer additional facts in a clear, concise way? For example, varietals differences in wheat, economic gains from adoption of desirable practices, etc.

Quality of Display Material 30%

• Size, style and neatness of lettering, proportion of models and lettering balanced, workmanship, including handouts, if used, charts, models and lettering used effectively to teach ideas, colorful, artistic, neat and well balanced.

423401 WHEAT VARIETY PLOT DISPLAYS

4-H AGRONOMY

WEED CONTROL EXHIBIT

- Collect, identify, press, mount, and label a minimum of15 weeds. Try to include their roots, stems, leaves and
 flowers. Three of the weeds must be noxious weeds preferably found in your home county. A standard 9"x12"
 scrapbook may be obtained in which to permanently mount your weed specimens. Identify the scrapbook with
 your name and county on the inside front cover.
- Prepare a list of the weeds mounted, showing common name, scientific name, and where it was found. Place the list in a specially identified section of the scrapbook.
- Collect and identify weed seeds found in crop seeds. Mount them for display purposes. Place them in a specially identified section of the scrapbook.
- Write a story on "How We Control Weeds on Our Farm" if you live on a farm. Other members write "How We Control Weeds at Home". The story should be about 300 words in length. It must show definite methods used to control weeds. Place the story in a specially identified section of the scrapbook.

423501 Weed Control - Exhibit consists of the four items above. Basis for Awards: Mounted weed collection: number of mounted specimens, completeness of individual mounts, correctness of identification and information, and neatness. Include record sheet of weeds. Records 50%; Weed seed collection and exhibit 30%; Story 20%

CROPS CLASSES

- 423301 Wheat, 1 Gallon, any variety
- 423302 Barley, 1 Gallon, any variety
- 423303 Oats, 1 Gallon, any variety
- **423304** Soybeans, 1 Gallon any variety Exhibit to consist of one gallon sample of seed, most recent harvest variety must be named
- 423305 Soybeans bundle of 5 plants most recent harvest variety must be named
- **423306** Hybrid Forage Sorghum, Exhibit to consist of the entire plant; no roots, 5" bundle, tied.
- 423307 Hybrid Grain Sorghum, ten head exhibit, hybrids must be named
- **423308** Other Forage Sorghums, Exhibit to consist of the entire plant: no roots, 5" bundle, tied.
- 423309 Alfalfa Seed, 1 Gallon any sample
- **423310** Alfalfa Hay- exhibit to consist of one flake or slice from a rectangular bale or a 10 inch section cut from a round bale. The flake or slice should be approximately 6 inches in thickness and tied in two directions.
- 423311 Native Grass Hay- 10 in flake or slice, 6 inches thick, and tied in two directions
- **423312** Cool Season Grass Hay- 10 in flake or slice, 6 inches thick, and tied in two directions
- **423313** Brome Grass, 1 Gallon sample of seed.
- 423314 Other Tame Grasses, 1 Gallon sample of seed
- **423315** Corn, ten ears exhibit, white (Exhibit to consist of one-gallon sample. Variety must be named.)
- **423316** Corn, ten ears exhibit, yellow (Corn to be shown at a special date).
- **423317** Corn, white, 1 Gallon any variety– Exhibit to consist of one gallon sample of seed from most recent harvest.
- **423318** Corn, yellow, 1 Gallon any variety– Exhibit to consist of one gallon sample of seed from most recent harvest.
- **423319** Sunflowers Confectionery heads 3 heads must be submitted
- **423320** Sunflowers Confectionery seeds in jar 1 gallon jar must be submitted
- **423321** Sunflowers Oil seed heads 3 heads must be submitted
- **423322** Sunflowers Oil seeds in jar 1 gallon jar must be submitted
- **423323** Edible Field Beans, 1 Gallon Sample from most recent harvest
- **423324** Edible Field Beans, Bundle of 5 plants (with roots intact) from most recent harvest (Example- Lentils)
- **423325** Miscellaneous Crops, Exhibit to consist of 1 Gallon Sample of Seed or 10 heads produced from the current year.
- **423326** Cotton, Provide 10 open bolls, not plants. Place bolls in a bag that can breath (not sealed plastic bag), so mold doesn't develop

4-H AG MECHANICS - WELDING

The Ag Mechanics project is starting with an emphasis on welding and smithing, it will expand as the project area grows. This project allows youth to explore areas of ag mechanics and metallurgy from repairing or repurposing items to the fabrication of new items. The intent is for this program start with foundational areas, some of which youth may already have, and allow them to continue to build on this knowledge becoming more experienced.

- READ GENERAL RULES AND REGULATIONS
- 4-H members must be currently enrolled in the Kansas 4-H Ag Mechanics Welding project to exhibit in this division.
- Each exhibitor may enter one exhibit per class. Exhibits must have been constructed or repaired during the current 4-H year.
- Wheeled exhibits must utilize a braking mechanism which prevents the exhibit from freely rolling while on display.
- Exhibitors are responsible for providing sufficient braking or "chocks" for trailer exhibits to ensure that the exhibits do not move once positioned. If using a wheel "chocking" mechanism, the two individual blocks should be connected together as a pair of chocks, so they do not become separated. At least one pair of chocks should be placed on each side of the trailer to prevent movement.
- For trailer exhibits the tongue of the trailer should have a locking mechanism (e.g. padlock) to prevent the trailer from being moved by unauthorized individuals while being displayed. A key for the locking mechanism should be left with the superintendent or Extension Staff and labeled with the exhibitor's name, county, and phone number.
- For exhibits with downward swinging parts, such as tailgates, that could pose a fall/striking/crushing hazard should have a tamper resistant locking mechanism such as a "zip-tie" or a "cotter-key" through a release pin that would prevent the swinging part from being accidentally released and falling on someone.
- Each exhibit must be free-standing or sufficiently supported by an exhibitor supplied support system that is moveable and is part of the total demission's and weight of the exhibit as described previously. Exhibit display boards should have a portable and moveable base and examples should be firmly affixed to the board to ensure all parts of the display stay together. No exhibits may be staked to the ground for display.
- Top heavy items should be braced or placed in a stand sufficient to prevent it from toppling over while on display.
- Exhibits may not be bound, affixed, attached to the Fair buildings, except by the superintendent, Fair Staff, or Extension Staff.
- Painting or spot painting is not allowed on projects after arrival on fairgrounds. If wet paint is detected by judges or superintendents one ribbon placing will be deducted.
- Repair projects having adequate original finish need not be repainted.
- Cutting surfaces, such as blades, are to have a protective covering over them to prevent injury. The covering should be easily removed and reinstalled for judging. Foam "pool noodles" and multiple layers of cardboard are acceptable.
- Display cases for small exhibits are acceptable and must be easily opened so the item can be removed and examined as part of judging.
- Exhibits that include weaponry of any kind will be disqualified. Weaponry is defined as any instrument, possession, or creation, physical and/or electrical that is intended to be used to inflict damage and/or harm to individuals, animal life, and/or property.

4-H AG MECHANICS - WELDING

- Trailers and large exhibits (those larger than 5 feet in any dimension) may be displayed outside, and exhibitors with such exhibits are to contact the Extension 4-H office at pre-entry deadline date to arrange placement time and location.
- If the exhibit is powered by flammable liquids (gas, propane, kerosene, etc.) the fuel tank and lines should be drained and allowed to dry, to avoid spills and potential fires.
- Electric powered (battery, corded, solar, or alternative energy) should have a primary shutoff or disconnect switch.
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judges' discretion, will receive a deduction in ribbon placement or a participation ribbon.
- The exhibitor's name(s) and county or district must be tagged or labeled in a prominent location on the display.
- Each exhibit, except for display boards, must include an Ag Mechanics Welding information packet. Entry of just a packet without an accompanying exhibit is not a sufficient exhibit.
- Each exhibitor is required to complete the "4-H Ag Mechanics Welding Exhibit Information Form" for each exhibit, except for display boards, which is available through your local K-State Research and Extension office or at http://welding.engtech4ks.com/. This form must be attached to the outside of a 10" x 13" manila envelope. Do not tie the envelope to the exhibit. All revisions of all forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year.
- Each exhibit information packet should include the following items:
 - Bill of materials for the project with associated costs, scrap items used may be listed as having a \$0.00 cost.
 - 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state.
 - If appropriate schematics or working drawings relating to the creation or repair, this is not required for display boards.
 - If appropriate operating instructions.
- FOR STAFFORD COUNTY FAIR: Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive or micro/SD card or, if desired, uploaded as to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper. However, if consultative judging is offered, exhibitors are encouraged to participate, talking with the judge about their exhibit.

Eligibility – Each exhibitor may enter one exhibit per class. Exhibits must have been constructed or repaired during the current 4-H year.

CLASS

Level 1 (about 1 - 3 years' experience) This level is designed for youth with little to no exposure in the project area so that they can gain an understanding of basic principles and methods in the given area.

- **424901** Welding Display Board. A 3' x 3' display board with different pieces of metal attached illustrating different types of welds, each weld being labeled.
- 424902 Level 1 Welding Ag Repair. Repair of ag equipment with welding. 49
- 424903 Level 1 Welding Ag Fabrication. Creation of new ag equipment with welding.
- **424904** Level 1 Welding General Repair. Repair of non-ag equipment with welding.
- 424905 Level 1 Welding General Fabrication. Creation of non-ag equipment with welding.

4-H AG MECHANICS WELDING

- 424906 Level 1 Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.
- 424907 Level 1 Brazing Repair.
- 424908 Level 1 Brazing Fabrication.
- **424909** Smithing Display Board. A 3' x 3' display board with different pieces of forged metal attached illustrating different forms, each form being labeled.
- **424910** Level 1 Smithing. A design forged with at least one formed element (twists or spirals for example).

Experienced – Level 2 (about 4 - 6 years' experience) This level is designed for youth some experience in the project area allowing them to expand on common principles and methods in the given area.

- 424911 Level 2 Welding Ag Repair. Repair of ag equipment with welding.
- 424912 Level 2 Welding Ag Fabrication. Creation of new ag equipment with welding.
- 424913 Level 2 Welding General Repair. Repair of non-ag equipment with welding.
- 424914 Level 2 Welding General Fabrication. Creation of non-ag equipment with welding.
- 424915 Level 2 Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.
- 424916 Level 2 Brazing Repair.
- 424917 Level 2 Brazing Fabrication.
- **424918** Level 2 Smithing. A design forged with at least two different formed elements (twists and spirals for example).

Advanced – Level 3 (about 7 - 9 years' experience) This level is designed for youth with vast experience in the project area allowing them to master common principles and methods and expand on advanced techniques in the given area.

- **424919** Level 3 Welding Ag Repair. Repair of ag equipment with welding.
- **424920** Level 3 Welding Ag Fabrication. Creation of new ag equipment with welding.
- 424921 Level 3 Welding General Repair. Repair of non-ag equipment with welding.
- **424922** Level 3 Welding General Fabrication. Creation of non-ag equipment with welding.
- 424923 Level 3 Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.
- **424924** Level 3 Brazing Repair.
- 424925 Level 3 Brazing Fabrication.
- **424926** Level 3 Smithing. A design forged with at least three different formed elements (twists, spirals and bulbs for example).

Master – Level 4 (10 or more years' experience) This level is designed for youth substantial experience in the project area allowing them to master advanced techniques in the given area.

- **424927** Level 4 Welding Ag Repair. Repair of ag equipment with welding.
- 424928 Level 4 Welding Ag Fabrication. Creation of new ag equipment with welding.
- 424929 Level 4 Welding General Repair. Repair of non-ag equipment with welding.
- **424930** Level 4 Welding General Fabrication. Creation of non-ag equipment with welding.
- **424931** Level 4 Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.
- 424932 Level 4 Brazing Repair.
- 424933 Level 4 Brazing Fabrication.
- **424934** Level 4 Smithing. A design forged with at least four different elements (twists, spirals and bulbs for example).

4-H ASTRONOMY

This Engineering and Technology exhibit area is designed to provide youth with the opportunity to explore space through telescopes, research, and observation.

- The 4-H member must be currently enrolled in the 4-H Astronomy project to exhibit in this division.
- Each exhibitor may enter one exhibit per class. Exhibits must have been completed during the current 4-H year.
- Telescopes entered in this division may be built from a kit or by original design. Pre-finished telescopes, which require no construction are not acceptable exhibits.
- Telescopes are limited to no more than six feet in length. They must be placed on a stationary stand that does not allow the telescope to roll and/or fall over. The stand cannot extend past two feet in length or width.
- Each telescope exhibit must include a "4-H Astronomy Exhibit Information Form," which is available through your local K-State Research and Extension office or at http://astronomy.engtech4ks.com/. This form must be attached to the outside of a 10" x 13" manila envelope. Do not tie the envelope to the exhibit. All revisions of forms previously released for the STEM division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year. You must also include construction plans (or a photocopy) for the telescope and place it inside the manila envelope. For notebooks, display boards, and posters, no additional exhibit information is required; no manila envelope is needed for these exhibits.
- At least two photographs showing telescope construction and operation are required. Photographs should be mounted on one side of an 8 ½" x 11" page. A brief caption should accompany each photograph. Place photos in the 10" x 13" manila envelope. Up to 10 pages of pictures can be included.
- The telescope must be properly assembled and painted with a smooth and uniform finish.
- Decals, if used, should be attached smooth and tight.
- Telescopes designed by the exhibitor must be original, not a modification of an existing kit.
- Exhibitor's name, county or district, age, and year(s) in project must be tagged or labeled in a prominent location on the telescope.
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judges' discretion, will receive a participation ribbon.
- Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive or micro/SD card drive or, if desired, uploaded as to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper. However, if consultative judging is offered, exhibitors are encouraged to participate, talking with the judge about their exhibit.

CLASS

425001 Telescope made from kit.

425002 Telescope made from original design.

4-H BUILDING BLOCK ENGINEERING Formerly known as Architectural Block Construction

The BBE exhibit area focuses on using architectural blocks ("Legos") to construct dioramas. This project allows youth to explore architectural design in a three dimensional space. The intent for this program is to allow youth to explore the construct and gain knowledge through interaction with a common toy. This division is not intended for youth wishing to exhibit constructed kits. Kits and non-diorama displays should not be displayed in this division.

- 4-H members must be currently enrolled in the Kansas 4-H Building Block Engineering project to exhibit in this division.
- Each exhibitor may enter one exhibit.
- Counties are limited to FOUR exhibits to the state fair to insure sufficient space for all exhibitors.
- Total exhibit dimensions may not exceed 2 feet high, by 2 feet wide, by 2 feet deep.
- The minimum exhibit dimensions must be at least 6 inches wide and deep.
- All exhibits should be placed in a sturdy see-through enclosure with a top, bottom, and 4 sides. A 'clear' tub turned upside down with the exhibit placed on the lid would be an acceptable enclosure. It may be desirable to place a cutting board or other hard surface between the lid and base plate of the exhibit to make it more sturdy. This is to keep exhibit components from being "scattered to parts unknown" at the fair. The outer dimensions of the enclosure do not count towards the total exhibit dimensions but should not be excessive. The entire exhibit should fit in the display enclosure so the enclosure does not smash into the exhibit during movement.
- All components used in construction should be dust and hair free, clean, free of chips, scuffs, cracks, or broken blocks
- Gaps or cracks should not be visible between assembled blocks unless they fit with the story, for example an earthquake
- The primary building component should be interlocking blocks, commonly referred to by the brand name of Lego®
- Other components can be integrated into dioramas to illustrate architectural aspects that may be difficult to convey with traditional interlocking blocks, for example marbles for small round objects
- The use of existing "store bought" sets for major elements of the display is not allowed, use of figurines from sets is allowed as is using individual bricks or small sub-assemblies to create something different than the set it came from. For example a car hood or front end from a car kit could be used in a "car museum," just not the entire car. The intent of this is to ensure fairness among exhibitors and encourage maximum creativity instead of just following a set of plans.
- Dioramas should be suitably complex and have multiple elements, for example, a camp site that has a log cabin, a tree fort, and a car.
- All dioramas should have a story, which is part of the information pack, that describes what is happening in the diorama; this can be as simple (the nursery rhyme "Jack and Jill" for example) or complex as needed to explain to someone looking at the exhibit what is happening.
- Vehicles that are intended to stay in a single place should be affixed to base plates with sticky tack, hot glue, or other method
- Mechanical enhancements or motion elements that add motion to the diorama are acceptable and encouraged. For example, marry-go-rounds, doors, elevators, gears, marbles going down a channel, flapping wings, animatronics, etc. If included judges should be able to use them and instructions should be provided for operation either in the story or on a separate page.
- Artistic designs, for example recreating paintings like the "Mona Lisa" or "Stary Nights" and structures like "David" are not permitted as exhibits and one ribbon placing should be deducted, these exhibits should be displayed in Visual Arts.
- The exhibitor's name(s) and county or district must be tagged or labeled in a prominent location on the display, additionally the display case should have the exhibitor's information attached to it as well, as the top part of the case may be separated from the display.

4-H BUILDING BLOCK ENGINEERING Formerly known as Architectural Block Construction

- Each exhibit must include an Architectural Block ("Legos") Construction information packet. Entry of either a packet without an accompanying exhibit or an exhibit without a packet is not a sufficient exhibit.
- Each exhibitor is required to complete the "4-H Building Block Engineering Exhibit Information Form" which is available through your local K-State Research and Extension office or at http://blocks.engtech4ks.com/. This form must be attached to the outside of a 10" x 13" manila envelope. Do not tie the envelope to the exhibit. All revisions of forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year.
- Each exhibit information packet should include the following items: a. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state. Final pictures help in determining where a part might go in case something comes loose. b. If appropriate operating instructions for mechanical portions of the diorama.
- Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the
 work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the
 opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed
 on a USB drive or micro/SD card drive or, if desired, uploaded as to YouTube as an unlisted video and a link to that
 video included in a file titled "VideoLink" or printed on a separate sheet of paper. However, if consultative judging is
 offered, exhibitors are encouraged to participate, talking with the judge about their exhibit.

CLASS

- **425601** Introductory Level 1 Diorama about 1-3 years of experience. A diorama illustrating at least 2 architectural features beyond floors, ceilings, and walls.
- **425602** Experienced Level 2 Diorama about 4-6 years of experience. A diorama illustrating at least 4 architectural features beyond floors, ceilings, and walls, and includes 1 or more motion elements.
- **425603** Advance Level 3 Diorama about 7-9 years of experience. A diorama illustrating at least 6 architectural features beyond floors, ceilings, and walls and includes 2 or more motion elements.
- **425604** Master Level 4 Diorama 10 or more years experience. A diorama illustrating at least 8 architectural features beyond floors, ceilings, and walls and includes 3 or more motion elements.

4-H COMMUNICATIONS Formerly Known As Demostrations, Illustrated Talks & Music Presentations

(Demonstration/Illustrated Talk, Project Talk, Poetry and Prose) Youth will learn to interpret verbal and nonverbal information, develop effective public speaking skills, enhance written and spoken communication, defend a point, design a presentation, bring a reading to life and much more!

- Demonstrations or illustrated talks may be individual or team (2 people) presentations. Project Talks are individual presentations.
- Stage schedule for presentations will be made on requested date and time and subject to the number of requests and available time.
- The presentation should be of sufficient length to cover the topic adequately, three minutes minimum and 15 minutes maximum.
- Each demonstration area will be equipped with two tables, two easels, two microphones, a projector, a screen, and one 110-volt electrical power strip. 4-H members are encouraged to use technology when it enhances the presentation. Presenters should bring a computer that will work with an HDMI cord. No range, microwave or refrigerator is available in the demonstration areas. If extension cords are needed, participants need to bring them.
- The use and inclusion of specific brand names for educational purposes does not imply endorsement or refusal by the Department of 4-H Youth Development, Kansas State University Research and Extension, or the State of Kansas.
- A project talk should tell about a specific project and experience in the project. Visuals may be used. Project Talks entries are for youth ages 9-12. A demonstration shows a step-by-step procedure and explains why each step is essential to develop a particular skill or task. An illustrated talk incorporates the use of visual aids (posters, technology supplies, equipment, etc.) that describes the process of the topic being discussed. Demonstrations and Illustrated Talks entries are for Youth ages 9-18. Poetry or Prose should be a piece of literature either Dramatic, Interpretative, Humorous, or other type of reading that follows the 4-H Code of Conduct (pieces should be edited for appropriate language and content if necessary). The participant may read from a script or have the piece memorized. The title and author of the selection should be noted within the presentation. Poetry/Prose pieces are exhibition only and will not be evaluated. Poetry and Prose entries are for ages 9-18. For Music & Dance Performance, there is no class offered at the State Fair.
- Shooting Sports related entries must inform the Extension Office of entry to meet safety requirements. They should follow Kansas State Law regarding firearms listed in the General Rules section of this Fair Book.
- If you bring small animals into the fair building or other location for a demonstration, you must remove the animal when you leave the area. Animals are not allowed to be left unattended. Per Stafford County Fair rules: No dogs, cats, or other pets, except for Service Animals shall be permitted on the fairgrounds proper (inside the fence).

CLASS

- 429001 Demonstration (Individual or Team)
- 429002 Illustrated Talk (Individual or Team)
- 429101 Poetry or Prose
- **429201** Music or Dance Performance (no State Fair class offered)

4-H COMPUTER SCIENCE

The Kansas 4-H Computer Science System portion of the computer project is designed to allow 4-H members to explore how information is moved from one part of the computer to the other; how information is moved between two or more computer systems (networking); how information is stored; or how information is acted on (programming).

- Any item which IS NOT a notebook, display board, or poster displayed in this class is considered a "computer system" exhibit and MUST follow the rules set forth below.
- The actual construction of computer hardware (i.e., building a computer, electronic devices with a motherboardbased manipulation) will remain in the Energy Management division.
- 4-H members must be currently enrolled in the 4-H Computer Science project to exhibit in this division.
- Each exhibitor may enter one exhibit per class. Exhibits must have been completed during the current 4-H year.
- Exhibitor's name, county or district, 4-H age, and years(s) in project must be tagged or labeled in a prominent location on the exhibit, educational display, notebook, and/or poster.
- See the last section for full details about exhibiting posters, display boards and notebooks.
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judges' discretion, will receive a participation ribbon.
- All exhibits must be: a. Self-contained on a USB drive (thumb drive, flash drive, jump drive, or other any other name for a small USB storage device; the rules will use "USB drive"). This means that a judge can plug in the USB drive into a computer and run the exhibit as described below. b. OR System -On-A-Chip (SOC) (such as Raspberry Pi) or a MicroController (such as an Arduino or Ozobot) AND is a compact (less than 8"X 8"X 8") system, which can be programmed AND requires minimal assembly to operate (e.g. connecting power, display, and keyboard/mouse cables). Referred to as a "chip system" through the rest of the rules.
- Physical computers such as tablets, smart phones, laptops, or personal computers (PCs) will not be accepted as an exhibit.
- "Chip systems" may use/include GPIO bread boards or HATs (Hardware Attached on Top) the size of which is not included in the size of the chip system however the total size of the chip system and GPIO devices may not exceed 24"X24"X24" including any protective enclosures.
- Any attached GPIO devices are not judged for electrical construction or quality as this division is focused on the operational aspects of the system (the code). Some of these systems, with automation, can also be classified as a Robot, and the exhibitor must decide which division to exhibit in as the exhibit may not be entered in both divisions.
- For chip systems, all electric components of the system must be adequately covered or concealed with a protective enclosure. Paper is NOT considered an adequate enclosure or covering for the electrical components.
- All revisions of all forms previously released for the STEM division either undated or dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year. Use of old forms should result in the loss of one ribbon placing for exhibits.
- For all computer system entries, the following items are required as part of an exhibit packet:
 - A manila envelope with the Computer Exhibit Form, which is available through your local K-State Research and Extension office or at <u>http://computers.engtech4ks.com/</u>. This form must be attached to the outside of a 10" x 13" manila envelope. Do not tie the envelope to the exhibit.
 - A USB drive labeled with the 4-Hers name, county/district, and club; in a way that does not prevent it from being plugged into a computer.
 - For exhibits that are entered only on USB drives, one graphic should be uploaded to emailed to the 4-H agent with the exhibitor number and exhibit number by pre-entries due date. It should show the completed project (such as a screen shot/capture, slide, or similar). For county fairs it is recommended to display the manila envelope.
 - Instructions to run any part of the exhibit on the USB drive. (There should be at least two (2) items in your manila envelope: USB drive and instructions).

4-H COMPUTER SCIENCE

- Each exhibit must be accompanied by a "4-H Engineer's Journal." The engineer's journal should be typed. It can either be included electronically on the USB drive (preferred) or printed and placed in the manila envelope.
 - The "4-H Engineer's Journal" should start with a dated entry describing what the 4-H member is trying to accomplish/build.
 - The "4-H Engineer's Journal" should conclude with a dated entry describing what the 4-H member achieved in creating. (The start and end many times will be different. The judges are interested in the journey).
 - Additional entries in the "4-H Engineer's Journal" should be made as progress occur describing successes and failures; as well as the steps done and any sources of information including links used.
 - Pictures can also be included in the "4-H Engineer's Journal" but should not be more than 50% of the entries.
 - The "4-H Engineer's Journal" should contain at least one graphic.
 - The "4-H Engineer's Journal" must be at least 3 pages in length.
 - An example of a "4-H Engineer's Journal" can be found at http://computers.engtech4ks.com/.
 - The "4-H Engineer's Journal" will comprise 25% of the overall exhibit score. Failure to include a "4-H Engineer's Journal" will result in the exhibit being disqualified.
- If the exhibit is a program, application, app, web site, or requires any coding, the source code must be included on the USB drive. Failure to include a copy of the "source code" may result in up to one ribbon place deduction.
- Flow diagrams or decision trees showing the logical flow of code must be included on the USB drive for all coded exhibits. PowerPoints presentations, for example, would not require a decision tree or flow diagram.
- Since there is no conference judging at the Kansas State Fair, a set of instructions must be provided to run the computer system /application. These instructions should be printed off and included in the exhibit package and a copy should be included on the USB drive. a. FOR COUNTY FAIRS it is recommended that 4-Hers bring a computer that will run their project to the fair for judging as judges typically do not bring computers with them. Operating instructions are still required. b. Instructions should be written as though you were helping a less techy person, (like a grandparent) operate your exhibit, similar to what is described in rule 19 below. An example of instructions can be found at http://computers.engtech4ks.com/.
- Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive or micro/SD card drive or, if desired, uploaded as to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper. However, if consultative judging is offered, exhibitors are encouraged to participate, talking with the judge about their exhibit.
- Each exhibit must accomplish a specific automated task using a computer, a chip system, URL, or virtual machine (VM).
- Fair Judge(s) in the computer system division will have a physical computer with the following minimum configuration to test exhibits with and view files: Microsoft Windows® 10 or Windows® 11; Microsoft Office® 365 (Excel, Power Point, & Word); Microsoft Visual Studio®; Microsoft Edge Browser®; Mozilla Firefox® Browser; Google Chrome® Browser; Adobe Acrobat Reader®; Apache OpenOffice®; VMware Player Windows 64bit; Scratch Desktop editor (offline version)
- The Computer Science judges will have internet access at the Fair. Internet based content may be included in exhibits. Exhibitors should take great care and only go on-line with their guardian's permission. User names and passwords should not be included in exhibits. If they are required to view the content, a temporary user account and password should be created for judging at the Fair, once judging is complete the user name and password should be disabled on the account. If a separate user account is not possible, the content should be included as part of the video. YOU SHOULD NOT SHARE YOUR USER NAME OR PASSWORD WITH OTHERS.
- All licensing should be adhered to for any software used in the exhibit. Failure to do so will result in a reduction of one ribbon placing and may not be considered for best of show.
- The creation of viruses, malware, malicious applications or code, defamatory language or graphics, bullying, or any material that is "mean," "dangerous," or harmful according to the judge's opinion will result in the exhibit being disqualified.

4-H COMPUTER SCIENCE

- Pictures or still graphics created are not eligible for entry as a project in this division and should be entered in the appropriate photography division.
- Judging will be based on a score sheet which can be found at <u>http://computers.engtech4ks.com/</u>. There are four (4) areas each exhibit will be judged on. They are:
 - a. 4-H Engineers Journal (what I learned to make it work), 25% overall score
 - b. Instructions (how I help others make it work), 25% overall score
 - c. Functionality (does it work), 25% overall score
 - d. Diagrams (and code if applicable) (how I think it works), 25% overall score
- Computer exhibits may be checked out for use in a Fair 4-H demonstration or 4-H illustrated talk with prior
 permission. For permission, check with the superintendent or Extension office. The exhibit must be returned to
 display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified. Exhibitors and/or their
 designees may not remove exhibits from the fair prior to the exhibit release time on Saturday without the express
 consent of 4-H staff, any exhibit removed before release time will be disqualified.

CLASS

- **425101** Computer program, application, app, script, or coded system that is new and unique (not merely a file run in a program, such as a "word document" or a picture drawn in 'Microsoft Paint'.)
- 425102 Computer presentation (power point, web page/site, animated graphics, etc.)
- 425103 Single computer system (web server, database server, etc.) represented as a virtual machine
- 425104 Networked system consisting of two or more virtual machines
- **425105** Chip system a small (8"x 8" x 8") programmed physical device that accomplishes a specific task.

4-H ELECTRIC AND RENEWABLE ENERGY

Through the Electric/Electronics or Renewable Energy, you will have the opportunity to educate others about what youth have learned through the project or to promote the benefits of participation in those project areas.

- Only those who have met the requirements of the electric, small engine or wind energy project are eligible to exhibit in this division.
- An exhibitor may enter up to three items in this division, but only one article per class.
- Use the entry card available from your Extension Office. Record all requested information and securely attach to exhibit.
- Items that have been in use should be cleaned for exhibit.
- · A sheet of operating instructions must be furnished for any exhibit not self explanatory.
- Projects (classes 414001, 414002, and 414003) must be operable using only 110 or 120V AC or battery power. If battery power is required, batteries must be furnished.
- Any project with a complexity of size or electronics must have (a) instructions for assembly and use and (b) equipment available at the time of judging for actual testing of the exhibit.
- No hand dipped solder may be used on exhibits.
- Each exhibit must have a scorecard completed and attached securely. This scorecard is available from your Local Extension Office.

CLASS

- 414001 AC Electric: Electric projects with a 110 or 120 V alternating current (AC) power source. Some project examples are household wiring demonstrations, small appliances extension cords, trouble lights, indoor or outdoor wiring boards, or shop lights. Projects may be a restoration or original construction. The project must be operational and meet minimum safety standards. AC projects must be 110/120 V, no 240 V exhibits are allowed, and must be constructed such that the judges have wiring access to examine the quality and safety of workmanship.
- **414002** DC Electric: Electric projects with a battery or direct current power source. This class includes electric kits or original projects. This class also includes demonstration DC powered project. Examples include: wiring twoor three-way switches, difference between series/parallel lighting circuits or wiring doorbells switches. All DC electric projects must include batteries supplied by 4-H'er. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.
- **414003** Electronic: Electronic projects with a battery or direct current power source. This class includes electronic kits or original projects. Examples include radios, telephones, toy robots, light meters, security systems, etc. May be constructed using printed circuit board, wire wrap, or breadboard techniques. Include instruction/assembly manual if from a kit. Include plans if an original project. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.
- **414004** Educational Displays and Exhibits: The purpose of the educational display and exhibit is to educate the viewer about a specific area of the 4-H electrical or electronics project. The display or exhibit should illustrate one basic idea. This class includes any educational displays, exhibits or science fair type projects which DO NOT have a power source, i.e. exhibits, posters or displays of wire types, conduit types, electrical safety, tool or motor parts identification or electrical terminology. Educational displays and exhibits must be legible from a distance of four feet, using a maximum tri-fold size of 3' x 4'.

Alternative Energy (A form of energy derived from a natural source, such as the sun, geothermal, wind, tides or waves)All exhibits in this division are limited in size to standard, tri-fold, display boards (36" X 48") and items may not extend beyond 12" from the back board. All displays must be self-standing.

CLASS

EDUCATIONAL DISPLAY: Create an exhibit that addresses a focused topic related to power generated from a renewable energy source. The purpose of the exhibit is to inform and create awareness.

- 414201 Junior
- 414202 Intermediate
- 414203 Senior
- **414204** EXPERIMENT: Display an experiment addressing a problem or question related to power generated from a renewable energy source. Include hypothesis, background research, variables, a control, data, findings, conclusions and recommendations for future study.

If you've ever chased butterflies, caught a ladybug for a closer look, or planted a pollinator garden, the entomology project may be a great fit. You'll learn the anatomy of insects; the importance of pollinators, make an insect net; and possibly create an insect collection. Later, you'll study how insects move, learn about insecticides and explore insect behavior.

Insect Collection Rules:

- All entries should be submitted in an 18 x 24 x 3.5-inch wooden display box with a clear plastic top (such as Plexiglas). Boxes can be handmade or purchased as long as they are of the correct size. Box instructions and plans.
- 4-Hers may choose to use one of two taxonomies:
 - Option A: As printed in "Insects in Kansas" book, or
 - Option B: As printed on the "Insects in Kansas Book: 2016 Revised Taxonomy," which follows www.bugguide.net.
- Each exhibitor is required to identify each box with two identification labels bearing Exhibitor's name, county or district, the collection class 4-H'er is enrolled in and statement of taxonomy used. One label goes in the upper left corner of the box (inside) and the other on the lower right corner of the box (outside). Arrange specimens in the box so the box can be displayed lengthwise.
- The number of orders, specimens (and families where required) must be included on both of the exhibitor's box identification labels. Only one adult insect per species can be used in the Collection Boxes and Notebook Classes, unless labeled as male or female and correctly identified.
- Arrange specimens in groups or rows parallel to the short sides of the box. Specimens are to be arranged by Order in the box, then Family where required.
- Two labels should be centered on the pin beneath each specimen. First (closest to the specimen) is the common name label and the second label should include date/locality. Full county name and state abbreviation should be on the second label. Collector's name (or host) on the date/locality label is optional.
- The specimens should be collected by the exhibitor and should focus on Kansas insects. Insects may be collected from one county into bordering states and labeled accordingly. Please refer to "Entomology Collection Exhibit Resource" for full details on out-of-state insects in collections.
- Only specimens of the class should be included.
- Purchased insects are not to be exhibited in collections, but they may be used in educational displays.
- Specimens of soft bodied insects such as aphids, lice, termites, etc. should be exhibited in alcohol filled vials; however, the use of alcohol filled vials should be limited to only those specimens that lose their shape when pinned, since the vials pose a significant hazard to the rest of the collection if they become loose in transit.
- Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but are not limited to: incorrect display box size, missing paperwork, feet on display boxes, no special project in notebooks, etc.

Notebook Rules:

- Individual entries are to be placed for display in a three-ring notebook for competition.
- 4-Hers who have been previously enrolled in or are currently enrolled in the other phases of the Entomology project need to start with the Beginning Phase of Entomology Notebooks, not the introductory phase.
- Each exhibitor is required to identify the notebook by placing a Title Page in the front of the notebook bearing the exhibitors name, county or district and class 4-H'er is enrolled in and statement of taxonomy used:
 - Option A: "Insects in Kansas" book, or
 - Option B: "Insects in Kansas Book: 2016 Revised Taxonomy," which follows https://bugguide.net/node/view/15740 .

The number of orders, specimens and families (required in Intermediate and Advanced classes) must also be included on the Title Page.

- Specimen pages should be grouped according to order and should include one page per species. If more than one insect is in the photo, an arrow to indicate identified insect should be used.
- Date, common name, full county name and state abbreviation should be included for each species. Collector's name on the specimen page is optional.
- Specimen pages should have two different views of the insect if possible. If pictures are taken on different dates/localities, include information for both.
- A statement describing the habitat where found/host plant may be included and is encouraged and will be worth a bonus 10 points total, not per page. For Intermediate and Advanced notebooks, this is strongly encouraged.
- A divider page is to be placed in front of each order of insects with the order name printed on the tab for the page as well on the front of the divider page.
- For the Intermediate and Advanced classes, insects are also to be grouped by family behind each order divider.
- If the exhibitor has been in the same class for more than one year, a separate sheet of paper needs to be added stating how many years the exhibitor has been in this class of the project and what the exhibitor did this year to improve their notebook. Place the paper just behind the Title Page in the front of the notebook.
- A special project must be completed each year and included in the notebook. See project guideline materials for specifications.
- Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but are not limited to: incorrect display box size, missing paper work, feet on display boxes, no special project in notebooks, etc.

Educational Display Rules:

- Share with others what you learned in this project. Exhibit any activity or learning experience related to the field of entomology or the Teaming with Insects curriculum that does not fit into Entomology Collection or notebook classes above.
- Follow copyright laws as explained in the General Rules.
- The exhibit may be, but isn't limited to, original works, digital presentations (must provide printed hardcopy for exhibit purposes for duration of state fair), programs, websites, games, apps, display box, notebook, display or poster which you have made.
- If the exhibit is a wooden display box, it must be 18 X24 X 3.5 inches with a clear plastic top (such as plexiglass) and displayed horizontally. If the exhibit is a poster, it must not be larger than 22" X 28". If the exhibit is a display, maximum size is not to exceed a standard commercial 3' X 4' tri-fold display board.
- Name and county/ district must clearly be marked on educational exhibits.
- Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but
 are not limited to: incorrect display box size, missing paper work, feet on display boxes, no special project in
 notebooks, etc.

MONARCH BUTTERFLY EDUCATIONAL DISPLAY RULES:

Monarch Butterflies were officially put on the Endangered Species list on July 21, 2022. Having the specific name Danatus plexippus, this migratory butterfly is well known for its spectacular annual journey of up to 3,000 miles across the Americas. It is now threatened with extinction due to the habitat loss and climate change. 4-Hers can play a critical role in helping bring habitat back for the Monarch Butterfly. They can help educate the public on ways to establish food sanctuaries for this butterfly species and

help bring them back from the threat of extinction.

- Exhibits should teach the public about the Monarch Butterfly and/or ways to protect and conserve it. The information could show nectar sources for adult butterflies and food sources for caterpillars, Monarch tagging activities, collection of native milkweed and the packaging it to give to others to plant, a group working together to plant a Monarch friendly garden, etc.
- 4-Hers may create a poster, notebook, standard size tri-fold diorama, slide show or other visual display that shows information on Monarch Butterflies. If a slide show is created, it should be presented on a zip drive along with a printed copy of the presentation.

CLASS

- **415001** Insect Collection: This class is for the very young 4-Hers (Suggested ages: 7-9) that are just getting started making an insect collection. Participants should display 15 to 30 insects representing a minimum of 6 orders. These collections are to be exhibited in small cardboard or plastic boxes (1 or two boxes with a total display area no more than 130 square inches). Boxes can be homemade by placing a layer of polystyrene foam in the bottom of a shoe box, school box, or storage container or can be purchased from a biological supply company. For the exhibit, the boxes should have a clear plastic top. (Not eligible for Champion Entomology)
- **415002** Beginning I Entomology Collection: Display in one standard box a minimum of 50 and maximum of 125 species representing at least 7 orders. Follow the guidelines listed for Collections. Members can exhibit in this class a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first and then they are moved up a division.
- **415003** Beginning II Entomology Collection: Display in one standard box a minimum of 75 and maximum of 150 species representing at least 9 orders. Follow the general guidelines listed for Collections. Members can exhibit in this class a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first and then they are moved up a division.
- **415004** Intermediate Entomology Collection: Display a minimum of 100 and a maximum of 300 species representing at least 10 orders. Two standard boxes can be used. Follow the general guidelines listed for Collections. In addition, family identification is required for all insects in any two of the following six orders: (only two will be counted for judging) "Insects in Kansas" book Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera. or "Insects in Kansas Book: 2016 Revised Taxonomy," which follows www.bugguide.net Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera. On a piece of paper, list what you did to improve your collection during the current year. Members can exhibit in this class a maximum of 3 years. A 4-H'er will move up if they receive a purple ribbon at the Kansas State Fair.

- **415005** Senior Entomology Collection: Display a minimum of 150 and a maximum of 450 species representing at least 12 orders. Three standard boxes can be used. Follow the general guidelines listed for Collections. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. On a piece of paper list what you did to improve your collection during the current year. Examples: what insects did you add or replace; what orders and/or families you added; what Leadership you provided to this project; and/or what insects you have studied. Attach paper to the back of one of the display boxes. Members may continue to exhibit in this class at the Kansas State Fair for an unrestricted number of years as long as they remain eligible for 4-H membership.
- **415101** Introductory Entomology Notebook: Display a minimum of 10 and a maximum of 30 insect species representing at least 6 different orders. Follow the general guidelines listed for Notebooks, including the Special project. A 4-H member must be of minimum age to compete at the Fair. A 4-H member may exhibit in this class for a maximum of two years.
- **415102** Beginning Entomology Notebook: Display a minimum of 20 and a maximum of 60 insect species representing at least 7 different orders. Follow the general guidelines listed for all Notebooks, including the Special project. Members can exhibit in this class for a maximum of 3 years or until they receive a purple ribbon at the Fair.
- **415103** Intermediate Entomology Notebook: Display a minimum of 60 and a maximum of 100 species representing at least 9 orders. Follow the general guidelines listed for Notebooks, including the Special project. In addition, family identification is required for all insects in any two of the following orders: (only two will be counted for judging) "Insects in Kansas" book Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera, or "Insects in Kansas Book: 2016 Revised Taxonomy" which follows https://bugguide.net/node/view/15740 Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera Members can exhibit in this class a maximum of 3 years. A 4-H'er may move up if they receive a purple ribbon.
- **415104** Senior Entomology Notebook: Display a minimum of 100 and a maximum of 200 species representing at least 12 orders. Follow the general rules listed for Notebooks, including the Special project. Follow the general guidelines listed for Notebooks. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. Members may continue to exhibit in this class for an unrestricted number of years as long as they remain eligible for 4-H membership.
- 415201 Beginning Educational Exhibi
- 415202 Intermediate Educational Exhibit
- 415203 Senior Educational Exhibit
- 415301 Beginning Monarch Butterfly Educational Display Class
- 415302 Intermediate Monarch Butterfly Educational Display Class
- 415303 Senior Monarch Butterfly Educational Display Class

4-H FIBER ARTS

Superintendent: Joanna Mcalister - Junior Superintendent: Garrett Mcalister

Fiber arts is defined as the practical skills passed down from preceding generations that were developed to provide basic family needs, such as apparel, home furnishings or decorations.

Rules

- Fiber Arts is defined as any method of creating a unique design with fiber, fabric or yarn. This may include: making fabric (such as weaving crochet, knitting, needlepoint); or when existing fabric is changed into something quite different (such as quilting or embroidery or ethnic art.) Ethnic Fiber Arts should use a fiber, yarn or fabric to create the design exhibit. Non-textile (examples include wood, reed, straw, grass, etc.) baskets/pieces should be entered in the Visual Arts Division.
- NOTE: Kansas State Fair fiber arts exhibits cannot be used for any of the Fashion Revue classes.
- Identification Label:
 - Type or print on a 3" x 21/2 "piece of cloth: class number, county/district, and exhibitor's name.
 - Sew or safety pin this ID label on the corner of flat articles.
 - For garments, attach ID label to the front left shoulder seam, or left side of waistband, as if you were wearing the garments.
- When articles, which are normally worn as a pair, are exhibited, both articles must be shown together. Fasten articles together securely with yarn. Special consideration will be given to articles, which are of original design. Such articles should have a note attached explaining the original design.
- The exhibitor should attach an index card, no larger than 4" x 6", with the entry form to give the judge any information on what parts of the exhibit they made, processes used, or other information which the exhibitor thinks would be helpful for the judge. For all items, please indicate if item was made from a kit. For all items please indicate fiber content, and specifically if they are made of at least 90% wool. For quilted items indicate who did the quilting and binding.
- When the exhibit is a sewn garment that also includes one or more Fiber Art techniques (i.e. knitting, crochet, needle arts, or patchwork and quilting), the determination of what division (Clothing or Fiber Arts) and class in which to enter will be left with the 4-H participant.
- All exhibits which need to be hung, MUST have the appropriate saw tooth hanger, rod, wire or other mechanism attached in order to be properly displayed. If necessary, hardware is not attached, it may not be displayed.
- Fiber Arts Educational Notebook Share with others what you learned in this project about a particular Fiber Art. Exhibits should be in the form of a notebook or binder. The notebook should include a narrative section describing the fiber art. It should include a clear description of the project, technique, budget, supplies, goals, accomplishments, successes, failures, and future plans. It may include samples of techniques, how-tos, photographs of completed projects, or other ways of educating others about fiber arts. NOTE: A collection of brochures, web pages, patterns, record book forms, etc. does not constitute an educational notebook. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Name, local unit and fiber art covered must be clearly marked in the notebook.

4-H FIBER ARTS

CLASS

JUNIOR DIVISION (7-9 Years)

- 416001 Crochet, an article including felted items
- **416002** Knitting, an article made either by hand or by knitting machine including felted items.
- 416003 Needle Arts, an article created by hand using any of the following techniques: (a) embroidery and cross-stitch;(b) needlepoint; (c) candlewicking; (d) crewel; (e) lacework; and/or (f) applique
- **416004** Patchwork and Quilting, an article; It is acceptable practices for the exhibitor to create the patchwork or quilted article and have someone else quilt it.
- **416005** Rug Making, a rug; acceptable techniques include braiding, latch hook, tying, floor cloth, etc. The finished product should be an item that would be an item used in the home.
- **416006** Spinning, a skein; minimum 10 yards in length
- 416007 Weaving, a woven article
- 416008 Ethnic Arts, an article
- **416009** Macrame, an article *Notebook, Poster, Educational Display*-Any Individual Project

INTERMEDIATE DIVISION (10-13 Years)

- 416101 Crochet, an article including felted items
- **416102** Knitting, an article made either by hand or by knitting machine including felted items.
- 416103 Needle Arts, an article created by hand using any of the following techniques: (a) embroidery and cross-stitch;(b) needlepoint; (c) candlewicking; (d) crewel; (e) lacework; and/or (f) applique
- **416104** 416104. Patchwork and Quilting, an article; It is acceptable practices for the exhibitor to create the patchwork or quilted article and have someone else quilt it.
- **416105** 416105. Rug Making, a rug; acceptable techniques include braiding, latch hook, tying, floor cloth, etc. The finished product should be an item that would be an item used in the home.
- 416106 416106. Spinning, a skein; minimum of 10 yards in length
- 416107 416107. Weaving, a woven article
- 416108 416108. Ethnic Arts, an article
- 416109 416109. Macrame, an article

Notebook, Poster, Educational Display-Any Individual Project

SENIOR DIVISION (14+ Years)

- 416201 416201. Crochet, an article
- **416202** 416202. Knitting, an article made either by hand or by knitting machine including felted items.
- **416203** 416203. Needle Arts, an article created by hand using any of the following techniques: (a) embroidery and cross-stitch; (b) needlepoint; (c) candlewicking; (d) crewel; (e) lacework; and/or (f) applique
- **416204** 416204. Patchwork and Quilting, an article; It is acceptable practices for the exhibitor to create the patchwork or quilted article and have someone else quilt it.
- **416205** 416205. Rug Making, a rug; acceptable techniques include braiding, latch hook, tying, floor cloth, etc. The finished product should be an item that would be an item used in the home.
- 416206 416206. Spinning, a skein; minimum of 10 yards in length
- 416207 416207. Weaving, a woven article
- 416208 416208. Ethnic Arts, an article
- 416209 416209. Macramé, an article
 - *Notebook, Poster, Educational Display*-Any Individual Project

4-H FOOD & NUTRITION

Superintendent: Kim Fritzemeier and Kayla Peterson - Junior Superintendent: Weston Peterson and Lainey Peterson

In this project, you will have fun learning how to cook the basics and then advance to gourmet and international meals. Develop baking skills, learn about food preservation, explore the heritage of many foods, and understand consumer buying skills. Learn how to make healthy snacks and modify recipes to fit a healthy lifestyle.

- Complete recipes with ingredients and instructions must be attached with the entry, or the placing will be lowered one ribbon when judged.
- For food safety purposes, any entries with frostings and fillings must calculate the amount of sugar in the frosting/filling recipe only. Calculation must be attached to entry, or the placing will be lowered one ribbon when judged. Frosting and fillings need to contain more than 65% sugar for safety. Examples on how to calculate this percentage are included in the publication located at: https://bookstore.ksre.ksu.edu/pubs/MF3544.pdf
- For food safety purposes, any food with custard and dairy-based fillings and frostings (ex. Cream cheese) raw eggs, flavored oils, "canned" bread or cakes in a jar, cut fresh fruit or any food requiring refrigeration (ex. Bacon) or unbaked exhibit with raw flour (ex. No bake cookies) will be disqualified and not judged.
- Alcohol (ex. Wine, beer and hard liquor) is not allowed as an ingredient in food entries. Entries with alcohol will be disqualified and not be judged.
- All baked goods must be left whole and uncut. Small items, such as cookies and rolls, should be the same shape and from the same recipe. Exhibit 3 cookies, 3 muffins, 3 bread sticks, 1 loaf bread, etc.
- Under baked entries will be lowered one or more ribbon placings.
- All un-frosted cakes should be exhibited in an upright position with crust showing. The exception is for cakes made with special designs such as Bundt cakes. They should have top crust side down.
- Attach label to bottom of plate or cardboard. Label templates are available here, or make your own with the following information: Class Number, Food Product Name, 4-H member's Name, and County or District.
- Any baked product that can be removed from the pan should be placed on a plate, covered cardboard or disposable container of appropriate size for the exhibit.
- Exhibits should be in food grade plastic bags, disposable plastic containers or boxes of appropriate size for the exhibit. Only the exhibit is judged. The container is not judged.
- Attach the entry form, recipe, and evaluation form to the outside of the wrapped exhibit. Do not wrap forms in plastic.
- The exhibitor is encouraged to attach a 3" x 5" index card with the entry card to give the judge any information which the exhibitor thinks would be helpful for the judge to know.
- Educational classes: Exhibits may be in the form of a poster, notebook or display. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select materials that will withstand State Fair conditions. No card table displays are allowed. If the exhibit is a poster, it must not be larger than 22" x 28". Displays are not to exceed a standard commercial 3' x 4' tri-fold display board. Name and county or district must be clearly marked on educational exhibits. The educational exhibit evaluation form will be provided at judging time. NOTE: A collection of your favorite recipes in a recipe box or notebook does not constitute an educational exhibit.
- Foods will be sold. Proceeds from the 4-H Food Sale are used to benefit 4-H members.
- Decorated special event cakes will no longer be accepted for exhibit.
- Dried foods are to be exhibited in the Food Preservation Division.

4-H FOOD & NUTRITION

CLASS

BEGINNING FOODS (7-9 yrs)

- 417001 Cookies/Brownies in a Jar, made from one recipe
- 417002 No Bake Cookies, 3 samples, made from one recipe. (no raw flour)
- 417003 Cookies, 3 samples, made from one recipe, mix or scratch
- 417004 Muffins, 3 samples, made from one recipe, mix or scratch
- **417005** Cake single layer, batter, 1 whole product 8" or 9" round or square, unfrosted NO TOPPINGS , from a mix or from scratch
- 417006 Snack mix or granola, 1 cup
- 417007 Cupcake, 3 samples, frosted with liner, from mix or scratch
- **417008** Food Flop, Just for fun! Bread not rise, cake fell, yeast rolls resemble door stops? If so, bring it in to be evaluated! This could be your most educational exhibit—learn from your mistakes. No ribbons or premiums will be awarded.

417101 INTERMEDIATE FOODS (10-13 yrs)

- 417102 Cookies, 3 samples, made from one recipe
- 417103 Quick Bread, 1 loaf, fruit or nuts may be added
- 417104 Muffins, 3 samples, made from one recipe, fruits or nuts may be used
- 417105 Decorated Cupcake, frosted with liner, 3 samples
- 417106 Cake Single layer batter, 8" or 9" Round or square, frosted or unfrosted NO TOPPINGS
- 417107 Bundt Cake, 1 whole product

Specialty bread, 1 whole product (tea ring, 3 sweet rolls, cinnamon bread, Sourdough, 3 pretzels, 3 bread sticks, **417108** etc.)

- 417109 Coffee Cake, 1 whole product, NO YEAST
- 417110 1 loaf or 3 rolls yeast bread white
- 417111 1 loaf or 3 rolls yeast bread any grain Food Flop, Just for fun! Bread not rise, cake fell, yeast rolls resemble door stops? If so, bring it in to be evaluated! This could be your most educational exhibit—learn from your mistakes. No ribbons or premiums will be awarded.

417201

417202 ADVANCED FOODS (14+ yrs)

- 417203 Cookies, 3 samples, made from one recipe
- 417204 Muffins, 3 samples, made from one recipe, fruits or nuts may be used
- 417205 Quick Bread, 1 loaf, fruit or nuts may be added
- 417206 Cake, two layer batter, frosted, 8" or 9" round or square
- 417207 Coffee Cake, 1 whole product, NO YEAST
- 417208 1 loaf or 3 rolls Yeast Bread, White
 - 1 loaf or 3 rolls Yeast Bread, any grain
- 417209 Specialty bread, 1 whole product (tea ring, 3 sweet rolls, cinnamon bread, Sourdough, 3 pretzels, 3 bread sticks,
- 417210 etc.)
- 417211 Angel Food Cake, 1 whole product
- 417212 Yellow Sponge Cake, 1 whole product
- 417213 Chiffon Type Cake, 1 whole product
- 417214 Bundt Cake, 1 whole product

Fruit Pie - 2 crust, 1 whole product, NO CREAM PIES OR CANNED FILLINGS ACCEPTED

Food Flop, Just for fun! Bread not rise, cake fell, yeast rolls resemble door stops? If so, brink it in to be evaluated! This could be your most educational exhibit—learn from your mistakes. No ribbons or premiums will be awarded.

Notebook, Poster, Educational Display-An Individual Project

4-H FOOD & NUTRITION

SENIOR ADVANCED FOODS

- 417301 Quick Bread, 1 loaf
- 417302 Cake 2 layer batter, 1 whole product, 8" or 9" round or square, frosted
- 417303 White Yeast Bread, 1 loaf or 3 rolls, made from one recipe
- 417304 Yeast bread, 1 loaf or 3 rolls, made from one recipe, any grain
- **417305** Specialty bread, 1 whole product (tea ring, 3 sweet rolls, cinnamon bread, Sourdough, 3 pretzels, 3 bread sticks, etc.)
- 417306 Angel Food Cake, 1 whole product
- 417307 Yellow Sponge Cake, 1 whole product
- 417308 Chiffon Type Cake, 1 whole product
- 417309 Bundt Cake, 1 whole product
- 417310 Fruit Pie 2 crust, 1 whole product, NO CREAM PIES OR CANNED FILLINGS ACCEPTED
- **417311** Food Flop, Just for fun! Bread not rise, cake fell, yeast rolls resemble door stops? If so, brink it in to be evaluated! This could be your most educational exhibit—learn from your mistakes. No ribbons or premiums will be awarded.

Notebook, Poster, Educational Display-Any Individual Project

Food Gift Package. No alcoholic beverages will be accepted. A food gift package must contain at least 3 different food items (prepared for human consumption), made by the 4-H member, in a suitable container no larger than 18"x18"x18". Prepared food items must have recipes attached with the entry. Additional homemade food items beyond the 3 minimum or purchased items may also be included in the gift basket. On the back of the entry card, answer these questions: a) what is the intended use; b) what food safety precautions were taken during and after preparation. This entry will count as a non-perishable food product, not as an educational exhibit. Home canned foods must follow Food Preservation rules. Canning jars should not be used for baking per manufacturer's instructions. They could break during baking.

- 417401 Intermediate Food Gift Package
- 417402 Advanced Food Gift Package
- 417403 Senior Advanced Food Gift Package

Junior Place Setting. Plan a menu chosen appropriate for a Junior member in the foods project. Plan the menu for a snack of your choice. Menu should focus on the new My Plate guide for a nutritious diet, showing moderate use of fats, sodium and sugar. Menu should be placed on an 3 x 5 card and should correlate with decorations used. No centerpiece is required Computer generated graphics and pre printed paper are suitable for use. JUDGING GUIDE FOR PLACE SETTINGS FOR JUNIOR LEVEL 100 POINTS POSSIBLE: 25 - Menu, 25 - Correlation of appointments, 25 - Placement of appointments, & 25 - Originality

417501 Junior - Snack Menu included on a 3 x 5 card
 Intermediate, Senior & Senior Advanced Place Setting. Plan a menu chosen appropriate for Intermediate, Senior, Senior Advanced 4-H member in the foods project. Plan the menu for a meal of your choice. Menu should focus on the new My Plate guide for a nutritious diet, showing moderate use of fats, sodium and sugar. Menu should be placed on an 81/2 x 11 sheet of paper and should correlate with centerpiece and decorations used. Computer generated graphics and pre printed paper are suitable for use. JUDGING GUIDE FOR PLACE SETTINGS FOR LEVELS INTERMEDIATE, SENIOR & SENIOR ADVANCED 100 POINTS POSSIBLE: 20 - Menu, 20 - Correlation of appointments, 20 - Placement of appointments, 20 - Centerpiece, & 20 - Originality

- **417502** Intermediate Menu included on a 8.5 x 11 sheet of paper
- 417503 Senior Menu included on a 8.5 x 11 sheet of paper
- 417504 Senior Advanced Menu included on a 8.5 x 11 sheet of paper

4-H FOODS PRESERVATION

In this project, you will have fun learning how to cook the basics and then advance to gourmet and international meals. Develop baking skills, learn about food preservation, explore the heritage of many foods, and understand consumer buying skills. Learn how to make healthy snacks and modify recipes to fit a healthy lifestyle.

Rules

- Exhibits must have been preserved since the member's previous year's county fair, and not been exhibited at the previous Fair.
- Recipes and processing methods from the sources below are recommended. Recipes must be from current, tested resources listed below AND MUST BE ADJUSTED FOR ALTITUDE based on your processing location, or it will be disqualified. Processing methods that will be disqualified include: open kettle-canning, oven canning, sun canning and using electric multi-cookers. Untested recipes will be disqualified for food safety reasons. Tested recipe sources include: K-State Research and Extension Food Preservation publications; other university extension food preservation publications; USDA Complete Guide to Home Canning, @2015; So Easy to Preserve, 6th edition, The University of Georgia Cooperative Extension Service; Ball® Blue Book Guide to Preserving, Edition 37; Ball® Complete Book of Home Preserving, @2015 and @2020; Canning mixes (i.e. Mrs. Wage's, Ball®); Pectin manufacturers (i.e. SureJell, Ball®); KSRE Rapid Response Center Recipes; National Center for Home Food Preservation; Ball™ and Kerr.
- Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol will be disqualified and not be judged.
- Each exhibit must have the complete recipe and instructions attached with the entry card, or it will be disqualified. Recipe must include exhibitor name, recipe source, date of publication, and altitude, where food was processed. If using Mrs. Wage's or Ball® mixes, indicate the date the mix was purchased.
- Exhibits must be processed in clean, clear standard canning jars, with matching brand (ex: use Ball® lids on Ball® jars, or Kerr lids on Kerr jars, etc.) two-piece lids. Do not use colored jars, fancy padded lids, fabric over wraps or cozies as they interfere with the judging process. No fancy packs unless recipe states to do so (ex: Pickled asparagus). Jars must be sealed when entered. For food safety reasons, the size of jars used must not be larger than the jar size stated in the recipe (ex: Salsa is canned in pint jars only, no quarts). Note: There are 12-ounce, 24-ounce and 28-ounce canning jars available and may be used. Use pint jar process recommendations for 12-ounce jars. Use quart jar process recommendations for 24 ounce and 28-ounce jars.
- Each jar exhibited must be labeled. The label must not cover brand name of jar. The label must give: Class Number, Product, Altitude where processed, Canning Method (water bath, weighted gauge or dial gauge pressure method), Process Time, Pressure (psi), Date processed including month and year, Name, and County/District.
- Classes 418001-418006 will require one jar for each class.
- Hole punch the entry card and use a rubber band to attach the entry card and recipe around the top of the jar.
- If dried food product is not in a canning jar, it will be lowered one ribbon rating. Suggested amount: 1/3 ½ cup, or three or four pieces per exhibit. All meat jerky must be heated to an internal temperature of 160 degrees F before or after drying. This is not the drying temperature! Dried products must include the recipe, preparation steps and heating instructions. Jerky not heated to an internal temperature of 160 degrees F will be disqualified and not be judged. Heating information can be found in "Dry Meat Safely at Home."

CLASS

- **418001** Fruits, Juices, Fruit mixtures (Salsa, Pie Filling, etc.); One jar; Tomato/Tomato Products, Tomato Juice and Tomato Salsas; (Salsa in pints only, no quarts); One jar
- **418002** Sweet Spreads (Fruit and/or Vegetables), Syrups; One jar
- 418003 Low Acid Vegetables (green beans, corn, etc or vegetable mixtures.); One jar
- 418004 Pickles (Fruit or Vegetable), Fermented Foods, Relishes and Chutney; One jar
- 418005 Canned Meats; One jar
- 418006 Dried Foods: One small jar

4-H FORESTRY

Learn to identify trees, determine differences between trees and shrubs, learn about different trees and tree parts, graft a bud to a living tree, discover health benefits of trees, investigate forest changes and learn about forest health and learn forest conservation techniques.

Rules

- All leaf exhibits are to be mounted on 8½" x 11" heavy stock paper and placed in loose leaf binders. (Magnetic or adhesive filler sheets for photographic prints or sheet protectors are recommended.) Twigs and fruit collections may be exhibited in whatever manner you choose. Maximum trifold size is 3' x 4'. Resources for exhibiting are located on the Kansas 4-H forestry project webpage.
- Name, club, age, and year in project should be on front cover or in a prominent location.
- Leaves should be identified with an appropriate label located near the leaf on the same page. These labels should include (1) The proper common name as listed in the 4H334, "List of Native Kansas Forest Trees" 2) Location (city and/or county) where collected; and (3) date (day, month, year) or (month, day, year) collected.
- Divide specimens into the following two sections: Native Kansas Trees, and Non-Native Trees.
- New specimens are those specimens collected during the current 4-H year and cannot be a duplicate tree species of previously displayed specimens.
- Group specimens according to the years collected (ex. "old-previous years" and "new").
- Variations of varieties do not count as different species or specimens.
- When replacing previously displayed samples, due to degradation, improper mounting or incorrect identification, the specimen label must also be updated. Replacements do not count as new specimens. Replacements should be displayed in the "old previous" section of the display.
- If you retrieve information for your forestry exhibit, you must include a reference citation to the source.
- In all leaf collections, exhibit one complete leaf where possible. If leaf is too large, exhibit as much as possible. Sketch in reduced scale the entire leaf and illustrate where the exhibited portion is from. Note: A "leaflet" is incorrect when displayed as the complete leaf for the tree.
- All work must show originality. Leaf collections and displays should not closely resemble work done by others in the same club.

CLASS

Knowing Trees as Individuals (Leaf Collections)

Forestry Collection: (Choose either A or B) Only those exhibiting at the state fair for the first year may enter this class.

- A. Exhibit a minimum of 10 different leaves from native Kansas trees collected within the year. Exhibit can include non-native leaves in addition to the required number of leaf specimens collected from native Kansas trees.
- B. Exhibit a minimum of 5 native Kansas trees showing leaf, twig and fruit from each species collected.

Forestry Collection: (Choose either A or B) This class is open to those exhibiting either for the first or second time at the fair.

- A. Exhibit a minimum of 20 different leaves (including 10 new specimens) from native Kansas trees. Exhibit can include non-native leaves in addition to the required number of leaf specimens collected from native Kansas trees.
- B. Exhibit a minimum of 10 native Kansas trees showing leaf, twig and fruit from each species collected. This exhibit must include 5 new leaf, twig and fruit specimens.

4-H FORESTRY

Forestry Collection: (Choose either A or B) This class is open to those exhibiting either for the third or fourth time at the fair.

- A. Exhibit a minimum of 30 different leaves (including 10 new specimens) from native Kansas trees. Exhibit can include non-native leaves in addition to the required number of leaf specimens collected from native Kansas trees.
- Exhibit a minimum of 15 native Kansas trees showing leaf, twig, and fruit from each species collected. This exhibit must include 5 new leaf, twig and fruit specimens.

Forestry Collection: (Choose either A or B) This class is open to those exhibiting the fifth time or more at the fair.

- A. Exhibit a minimum of 40 different leaves (including 20 new specimens) from native Kansas trees. Exhibit can include non-native leaves in addition to the required number of leaf specimens collected from native Kansas trees.
- B. Exhibit a minimum of 20 native Kansas trees showing leaf, twig, and fruit from each species collected. This exhibit must include 10 new leaf, twig and fruit specimens.

How A Tree Grows Notebook: Entry may include a project notebook with 10 or more seeds collected with pictures showing a germination study or a mounting of a thin section of wood cut from the end of a log or top of stump labeled with information such as kind of wood and age of tree when cut or exhibits an illustration of how a tree grows.

Tree Appreciation Notebook: Entry may include research or reporting project notebook with no more than 10 pages based on the exhibitor's selected tree. Exhibit must be a different species of tree each year. This notebook may include sketches, drawings, pictures, a story, or any other things which will help tell about the tree you have selected.

Growing and Protecting Trees Display/Notebook: Entry requires a display, or project notebook, telling about project and pictures before, during, & after planting seedlings, a container tree, or a balled and burlapped tree. Maximum tri-fold size is 3' x 4'.

Tree Culture Display/Notebook: Entry requires a display, or project notebook, showing your project work and includes pictures of before, during and after wood lot improvement. Maximum tri-fold size is 3' x 4'.

How Forests Serve Us Entry may include collected wood samples (all or partial) and essay. Wood sample display to be mounted on poster board or any stiff material no larger than a 3' x 4' tri-fold. Essay should be displayed in a covered binder.

Educational/Creative Exhibit Entry must be directly related to tree identification or Forestry. Type of exhibit is open (notebook, poster, collection box, etc.) given a maximum tri-fold size of 3' x 4'. Care should be taken to use durable materials that will withstand Fair conditions. This is a good class to exhibit an unusual collection.

Notebook, Poster, Educational Display-An Individual Project

4-H GEOLOGY

In this project, you will learn the difference between rocks and minerals, learn how to identify fossils, describe and identify rocks, understand stages of the rock cycle, and use the scientific method to solve problems.

Rules

- The exhibit box should be 18" x 24" x 3½". Plexiglas covers are required. Boxes with glass covers WILL NOT be accepted. All specimens are to be arranged across the narrow (18") dimension of the exhibit box, making the exhibit 18" across the top and 24" deep exactly. If a box has a sliding Plexiglas cover, it must be removable from the top. Screws, locks, or other devices that would prevent judges from removing the cover should not be used. For Lapidary classes 419101-419105 only, the dimensions of the box should be appropriate for the display, but should not exceed 18"x24"x31/2".
- Each exhibitor is required to identify each display box by placing an identification label bearing name, county or district, and number of specimens in the upper left-hand corner of the Plexiglas cover (inside-use clear double-sided tape to adhere gummed labels), and by attaching a label with the same information on the lower right corner of the box (outside).
- Exhibitor may enter in both geology and lapidary classes. Exhibitor may show in only one of the first four geology classes (419001, 419002, 419003 or 419004). Exhibitor may also show in geology class 419101 (special exhibit), 419201 Mineralogy, 419301 Fossils, and in one lapidary class.
- Geology specimens should be labeled with the number of the specimen, date collected, specimen name or description, and locality (county only) where collected.
- For the geology classes 419001, 419002, 419003 and 419004 specimens should be mounted in the box by proper groups: rocks, minerals, fossils. Fossils must be identified to the Phylum, Class and Genus level. Genus name is to begin with a capital letter. Species name is all lower case. Genus and species names must either be italicized or underlined, not both. The words "phylum, class, genus" on labels are to be spelled out, not abbreviated. More than one specimen of the same kind of rock or mineral or species of a fossil may be exhibited if this duplication represents different geological formations. Specimen label must show this distinction (Fort Hays limestone, not just limestone; calcite from the Greenhorn Formation, not just calcite; Phylum: Brachiopoda Class: Articulata Genus: Composita from the Morrill Limestone Member, not just Phylum: Brachiopoda Class: Articulata Genus: Composita from the Morrill Limestone Member, not just Phylum: Brachiopoda Class: Articulata Genus:
- For geology classes 419001-419004 all specimens must be collected by the participant (not purchased) from locations in Kansas, with the exception of Tri-State Mining Area specimens collected from these three adjacent counties: Ottawa County, OK; Newton and Jasper Counties, MO. Other out of state specimens will not count in the minimum number for the class, nor will they be considered in the judging.

CLASS

- **419001** Geology. Display at least 15 rocks, minerals, and fossils collected during the current 4H year. Exhibitor is limited to one exhibit box. Only those exhibiting at Fair for the first time may enter this class.
- **419002** Beginning Geology. Display at least 30 different rocks, minerals, or fossils, at least 5 of each. Fifteen must be collected during the current 4H year. Exhibitor is limited to one exhibit box. This class is open to those exhibiting either first or second time at Fair.
- **419003** Intermediate Geology. Display at least 45 rocks, minerals, or fossils, at least 5 of each. Fifteen must be collected during the current 4H year. Exhibit limited to two boxes. This class is open to those exhibiting either the third or fourth time at the Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

4-H GEOLOGY

419004 Senior Geology. Display at least 60 rocks, minerals, or fossils, at least 5 of each. Fifteen must be collected during the current 4H year. Exhibit limited to two boxes. This class is open to those exhibiting the fifth time or more at the Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

Geology Educational Exhibit: Exhibit relating to everyday living; or to a mineral test, a rock formation, geological history, species of a fossil, forms of one mineral, a variation of one kind of rock, archaeological artifacts, or Indian artifacts. Digital formats are accepted. Please make arrangements for the judge to view your exhibit and have a hard copy for display. Exhibit limited to 4 feet of table space. Care should be taken to use durable materials that will withstand Fair conditions. Exhibitor may show in the class regardless of number of times he or she has exhibited at Fair or whether exhibitor has entries in classes 5200, 5201, 5202 or 5203. Exhibitor may also exhibit in lapidary class.

Mineralogy. Display a minimum of 15 mineral specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. The minerals are to be grouped by mineral class (i.e.: Carbonates, Oxides, Silicates) and at least 3 classes must be represented. The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen, date collected, name of specimen, county where collected and chemical composition (ie: CaCO3 for calcite) if known.

Fossils. Display a minimum of 15 fossil specimens collected by the participant in Kansas, at least 5 of which have been collected during the current 4-H year. The fossils are to be grouped by Phylum and Class, and at least 3 phyla must be represented (Brachiopoda, Chordata, Mollusca, etc.) The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen; date collected; county where collected; formation, member, or source; phylum, class, and genus or part; and geologic age (Cretaceous, Permian, Pennsylvanian, etc.) See #5 for additional fossil labeling expectations.

Rocks. Display a minimum of 15 rock specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. Rocks are to be grouped by the 3 rock classes (Sedimentary, Igneous, and Metamorphic). You must display at least one specimen from each of the three classes. The specimens must fit in one standard display box. Specimen labels must include a specimen number, the date collected, name of specimen, and the county where collected. All rocks must be identified by the formation and member name (Examples: Fort Hays Limestone, Member of the Niobrara Chalk Formation) or source (Examples: Rocky Mountain Outwash, glacial till)

Notebook, Poster, Educational Display-An Individual Project

LAPIDARY CLASSES

The lapidary will be judged on the following criteria: Workmanship and Content, 60 points; Presentation and Showmanship, 30 points; & Accuracy of Information, 10 points.

All lapidary specimens should be labeled with the following information:

- Specimen name
- Place of origin (country, state, or county; county required for Kansas specimens)
- Purchased or self-collected
- Date lapidary treatment began
- Date lapidary treatment completed (Treatment completed after the Fair is considered a new year specimen).

4-H GEOLOGY

- **419101** Lapidary. Display at least 5 varieties of polished (tumbled) specimens and 5 varieties of unpolished specimens that have not yet received lapidary treatment. These do not have to be an example of "before and after", nor do they have to be self-collected. Locales must be identified. Only those exhibiting lapidary at the Fair for the first time may exhibit in this class.
- **419102** Beginning Lapidary. Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumblepolished and 2 unpolished of each. There is no requirement that the 4-H'er collect any of these. Locales must be identified. Lapidary work should be done during the current 4-H year.
- **419103** Intermediate Lapidary. Display before-and-after examples of at least 6 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least two varieties should be collected from the native site by the 4-H'er, at least one of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.
- **419104** Advanced Lapidary. Display before-and-after examples of at least 9 varieties of specimens, at least 2 tumblepolished and 2 unpolished of each. At least three varieties should be collected from the native site by the 4-H'er, at least two of which comes from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.
- **419105** Lapidary Treatment. Exhibit at least 6 specimens that have not previously been exhibited, which have received lapidary treatment. Lapidary treatment may consist of polishing, and end, face, or flat lapping. Specimens must represent at least 3 different varieties and include at least three cabochons of any size or shape, only one of which may be free-formed. A cabochon is a style of cutting in which the top of the stone forms a domed or curved convex surface. Three of the specimens must be mounted into jewelry findings.

Special lapidary exhibits should be entered in class 419105. Please note that each member is limited to one entry in this class.

4-H HORTICULTURE & LANDSCAPE DESIGN

Superintendent: Carissa Hearn - Junior Superintendent: Kalla Foote

Learn when, where and what to plant; learn the difference between cool and warm season vegetables; learn plant parts and how they are used; learn how to use basic garden tools; study seed varieties and starting seeds indoors; study preventative pest controls; learn about specialty harvests and selling your produce; study plant pollinations; study food industry careers; and learn about biotechnology.

Rules

- All horticultural exhibits must be grown by the exhibitor in the current 4-H year.
- Secure entry form to disposable plate or container with string or tape. Use a sturdy disposable plate, bowl or container that will support the weight of the produce.
- A member may enter up to a total of 4 produce items, according to the number qualified at the county/district fair, each a different type of produce, from classes
- An exhibitor earning a purple ribbon at their county/district fair on an out of-season vegetable/fruit/herb (ex. Early peas) may substitute another vegetable/fruit/herb (ex. Pumpkin) in its place at the Fair.

Garden Display: Each exhibitor in this class will be limited to four square feet of space. The Garden Display must be exhibited in a tray, basket or container that can be easily moved by the fair staff. Exhibit consists of five different types of fresh vegetables or fruits. Canned products and shelled vegetables are not acceptable. Only one variety of each type of vegetable or fruit may be exhibited. The numbers of the five types of vegetables or fruits to be exhibited are as follows: Large Vegetables (One Each): Cabbage, Cantaloupe, Eggplant, Large Pumpkin, Squash, Watermelon; Medium Vegetables (Five Each): Beets, Carrots, Cucumbers, Decorative Gourds, Potatoes, Miniature Pumpkins, Okra, Onions, Peppers, Radishes, Sweet Potatoes, Tomatoes, or other similar sized vegetables; Small Vegetables (Twelve Each): Green snap beans, wax beans, English peas, or other similar sized fruits; Tree fruits (5 each): Apples, pears, peaches, or similar sized fruits; Grapes (2 bunches).

CLASS

423001 Junior Garden Display

- 423002 Intermediate Garden Display
- **423003** Senior Garden Display
- Small vegetable specimen plate (12) Ex: green snap beans, yellow wax beans, cherry tomatoes other small vegetables.
- Medium vegetable specimen plate (5) Ex: cucumbers, tomatoes, beets, white onions, yellow onions, red onions, bell peppers, other peppers, okra, parsnips, radishes, turnips, sweet potatoes, red potatoes, white or Russet potatoes, carrots, miniature pumpkin, decorative gourds, or other medium vegetables.
- Large vegetable specimen plate (1) Ex: watermelon, summer squash, winter squash, large type pumpkin, eggplant, cabbage, cantaloupe, other large vegetable.
- Fresh Culinary herbs (6) ex: parsley, basil, dill, etc. Six stems (or a comparable quantity) of one variety of fresh herbs must be exhibited in a disposable container of water. Dried herbs are not accepted.
- Small fruits (one half pint box) Ex. Strawberries, blackberries, raspberries, or other similar sized fruits. (if other, please include name of fruit on entry).
- Tree fruits (plate of 5) Ex. apples, pears, peaches, or similar sized fruits.
- Grapes (plate of 2 bunches).

4-H HORTICULTURE & LANDSCAPE DESIGN

CLASS

- 423101 Plate of 5 standard tomatoes
- **423102** Plate of 5 cherry tomatoes
- 423103 Plate of 5 onions, any variety
- 423104 Plate of 12 green or yellow wax beans any variety
- 423105 Plate of 5 cucumbers any variety
- **423106** Plate of 5 table beets
- 423107 Plate of 5 carrots
- 423108 1 Eggplant
- 423109 1 Squash any variety
- 423110 Plate of 5 peppers
- 423111 Plate of 5 okra
- 423112 1 watermelon
- 423113 1 pumpkin

423114 Other

- 423115 5 Red Potatoes (Variety should be named)
- **423116** 5 White Potatoes (Variety should be named)
- **423117** 5 Sweet Potatoes (Variety should be named)

FLORAL EXHIBITS

- A 4-H member may enter up to 4 floral exhibits plus one horticulture notebook, according to the number qualified at the county/district fair.
- Members may enter multiple entries in a single class in classes 423201-423202 provided each flower specimen is
 of a different species. EX: Class 423201 Annual Garden Flower, member may enter sunflowers, zinnias, and
 marigolds under the same class number.
- Members are encouraged to exhibit cut flowers and fresh floral arrangements in disposable containers. If a nondisposable container is used mark it plainly with your name and county/district. The Fair is not responsible for the loss or damage to any flower arrangements, vases or containers. Containers cannot be picked up until release time on the last Saturday of the Fair.
- All floral materials must be grown and/or collected by the exhibitors. Do not use purchased plant materials. Entries should not take over one square foot of table space.
- NOTE Kansas State Fair rule: Potted plants are not accepted.
- All entries must be freestanding, easily moved, and not require any special equipment to display. Hanging entries are not accepted.

CLASS

- 423201 Annual Garden flower, single stem
- 423202 Perennial Garden flower, single stem
- **423203** Fresh Flower Arrangement (any size & color vase may be used for this class. Must be grown by exhibitor, not bought)
- **423204** Dried Flower Arrangement, dried plant material, no fabric or plastic material.
- **423205** Holiday or Themed Flower Arrangement, seasonal/holiday themed
- **423206** Potted Container Up to 10 varieties; planted by exhibitor in container of choice. Please submit notecard listing varieties used and why. (no pre planted purchased containers may be exhibited/entered)
- **423207** Most Unusual Potted Container Creative use of an object as a potted container. May include but not limited to farm implements, discarded kitchen bowls, old boots, hollowed out tree stump, etc. Planted by exhibitor. Please submit notecard listing plant varieties and why they were selected.
- 423208 Houseplant, foliage or flowering

4-H HORTICULTURE & LANDSCAPE DESIGN

423209 Fairy Garden

Horticulture Notebook. Entry shall consist of a notebook or three ring binder of written narrative describing a horticulture project such as a landscape design, landscape installation, lawn renovation, water garden, flower garden, vegetable garden, lawn mowing service, landscape maintenance business, farmer's market business, or other horticultural project. 4-Hers are encouraged to include photographs, illustrations and/or landscape drawings that help explain work done by the member. Photos taken from the same location before, during and after the completion of the project are particularly helpful. Exhibitor may enter one horticulture notebook. Horticulture notebook scoring is based on the following criteria: Organization and General Appearance (neat, includes title page and table of contents, original, creative, etc.) 20%; Narrative (including goals, successes, failures, etc.) 40%; General Content (subject matter, photos, maps, knowledge gained, etc.) 40%

Notebook, Poster, Educational Display-An Individual Project

*NOTE: Some classes in the flower division may not be state fair eligible. Please check State Fair Book (at Extension Office or online) for division & class information.

4-H INTERIOR DESIGN & ARCHITECTURE

This project gives you the opportunity to examine your environment, both inside and outside of the home. Decorating a room, refreshing your porch, landscaping an area of your yard, refurbishing a family heirloom or even creating something brand new are all examples of ways to incorporate the design process in your living environment. Learning and experimenting with the elements of design (color, line, value, space, shape, form and texture) in all areas of a room or space or furniture piece are all part of this project. Being a designer (architect, furniture, landscape or interior designer, etc.) is not only about how a space looks but also how it feels. The end goal is to create a space that feels inclusive, functional, and inviting to all. The home environment project will give you the opportunity to design, create and implement what you've learned by creating a notebook, project board or item.

Rules

- An entry card must be attached to the exhibit with safety pin(s) or tape and string.
- A summary including plans, explanation of how the items was made or refinished, and how it fits into the color and design of the room. Summary could also include project inspiration, challenges, who helped you, and any other information that could be helpful to the judge. Summary should be in a plastic protective sleeve and attached to exhibit.
- Projects with missing or insufficient summary will be lowered one ribbon placing (i.e. a blue ribbon exhibit will receive a red ribbon).
- Exhibits should be of high quality (as compared to quick, simple crafts), suitable for use in the home several months throughout the year. Holiday-specific items are discouraged.

CLASS

Single Exhibit. An article (furniture, fixtures, interior or exterior, etc.) made or refinished by the 4H member for the home. Must include attached summary.

Design Board. Boards must be on foam core or a standard tri-fold display. Include: color scheme, wall treatment, floor treatment, samples, etc. and/or floor plan for a room. Must include attached summary.

Notebook - Notebooks may include floor plans, swatches, colors, stories, photographs, and project records, which detail what was accomplished this year with a given indication of long-term plans. Notebooks should also include project inspiration, challenges, who helped you, and any other information that could be helpful to the judge. Additional summary is not required.

Notebook, Poster, Educational Display-An Individual Project

4-H PHOTOGRAPHY

Superintendent: Joanna Mcalister - Junior Superintendent: Garrett Mcalister

Capture your friends, family and important events and tell the story through photography. Learn about cameras, and how to plan, compose, light and exhibit your photos. Advance into wide-angle and telephoto lenses, filters, light meters and computer enhancement. Photographs are judged on composition, technique, and eye appeal.

- Read General Rules & Regulations.
- Each exhibitor is limited to one black & white and one color entry in each class.
- Each exhibit will consist of one photo no smaller than
- 4" x 6" and no larger than 8 x10 mounted on 11 x 12.5 studio mount with I.D. form. Studio mount and ID form can be obtained from the Extension Office. (See instructions on next page for mounting photos and attaching ID form.)
- **NOTE**: State fair exhibits require photos be no smaller than 7 x 9 after trimming and no lager than 8 x 10.
- Photography entries must be mounted according to state fair rules. (See instructions for mounting on following page)
- A full coverage permanent mount (spray adhesive recommended or heat mount) must be made. Each photo is handled numerous times (up to 25) throughout the judging, sorting, and display process. NO glue dots, rubber cement or double stick tape allowed.
- No lettering, including dates, is will be permitted on the front of the mount or on the photograph. No underlays or borders are to be used. No contact prints on front of mount.
- Remove any white border from the photo print before mounting.
- Photographs exhibited shall be the result of the current year's project work. Photo images must be taken by the 4-H member. (exhibitor)
- Both color photographs and black & white photographs are eligible for Overall Championships.
- For exhibiting purposes and to protect photos, exhibitors must use the plastic bags that can be purchased at the Extension Office for .10 cents/bag. Do not seal the bag until judging is complete.
- On the back of the mount, write or print out and tape: Exhibitor name, address, county, photo class, and location where the photograph was taken.
- Improperly mounted photos, oversize or undersize photos, or photos with white borders not removed or lettering (including dates) will be awarded a ribbon one placing lower than the placing determined by the official judges.
- Appropriate photo subject matter: Photographic subject matter is expected to follow 4-H standards. For a sense of prohibited subject matter, review the Kansas 4-H member Code of Conduct; in general, if it is not allowable at a 4-H event, it is not allowable in a 4-H photograph at the County or State Fair.
- Photos with live subject(s) on railroad right of way or taken from railroad right of way property will not be displayed in Kansas 4-H photography and will be disqualified and not judged.
- Copyright protections must be observed.
- Photographs taken with a digital camera and having no more adjustments than exposure, color intensity or correction, one click filter effects, red eye removal, cropping, dodging and burning should be entered in the standard classes. HDR photos are to be entered in the standard photo class.
- Digital Composite Image: Finished photo must be created from two or more original images photographed by exhibitor. HDR photos do not qualify for this class. Photos will be judged on photographic merit as well as manipulation technique and process. Ribbon placement will be determined by combining the score of each judging section.
- The black and white classes are for black and white prints only. Monochromatic prints, including sepia prints are considered color photos and must be entered in the appropriate color photo class.

4-H PHOTOGRAPHY

INSTRUCTIONS FOR MOUNTING:

Photos are to be mounted across the narrow (11") dimension of a 11 x 12.5" sheet of white or cream studio mount (provided by Extension Office), \$1.75 a board. The top edge of the print must be 1" below the top of the mount (board is always oriented narrow side up); with the sides of the print equal distance from the two sides of the mount. A full coverage permanent mount (spray adhesive recommended or heat mount) must be made Each photo is handled numerous times (up to 25) throughout the judging, sorting, and display process.

I.D. FORM:

Fill out the 4-H photography ID form (provided by Extension Office) and attach to the photo mount board. Use 1" wide masking tape - fold I.D. form around edges of mount and tape to the back. Do not stick tape to front of mount. Write your name, address, county, photo class and location where picture was taken on the back of the mount board. See example diagrams.

CLASS

BEGINNING PHOTOGRAPHY (AGES 7-9)

- 422001 People
- 422002 Animals
- 422003 Scenic/Landscape
- 422004 Action
- 422005 Nature
- 422006 Human Interest
- **422007** Photo Series a series of 4x6 photos mounted on studio mount, foam core, matte board or poster board no larger than 11 x 14. Must tell a story or cover an event. Photos should be all color or all black & white. No state fair class exists for this exhibit, county fair only.
- **422008** Miscellaneous for work deemed presentable but without a category.

EXPLORING PHOTOGRAPHY (AGES 10-13)

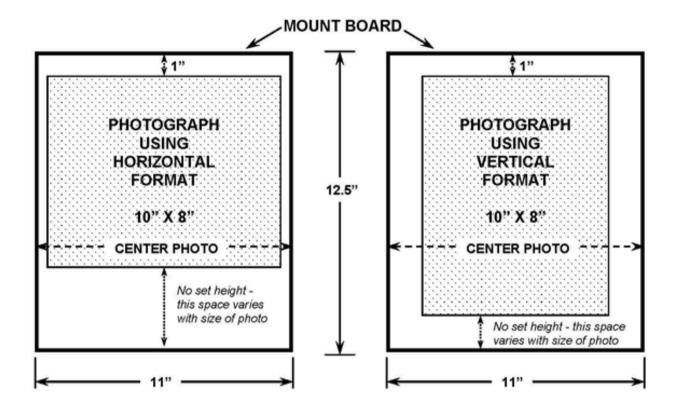
- 422101 People
- 422102 Animals, wild
- 422103 Animals, domestic
- 422104 Scenic/Landscape
- 422105 Action
- 422106 Nature
- 422107 Human Interest
- 422108 Agriculture
- 422109 Plants, Flowers
- 422110 Architecture
- 422111 Miscellaneous for work deemed presentable but without a category; will also include slides.
- **422112** Photo Series a series of 3.5" x 5 or larger photos mounted on studio mount, foam core, matte board or poster board no larger than 11 x 14. Must tell a story or cover an event. Photos should be all color or all black & white. No state fair class exists for this exhibit, county fair only.
- **422113** Digital Composite Image Photo must be created from two or more originals taken by the exhibitor. Exhibitor must include a second 11 X 12-1/2 matte board (Explanation Board) mounted with standard size prints of the original photos, 3x5 card(s) explaining what manipulation was done and a standard size print of the final photo. Optional, may include prints of editing steps. Photos showing editing steps. Photos showing editing

4-H PHOTOGRAPHY

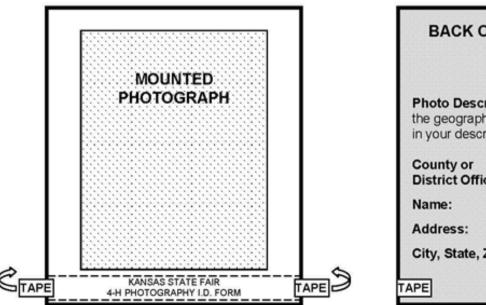
ADVANCED PHOTOGRAPHY (AGES 14 & UP)

- 422201 People
- 422202 Animals; wild
- 422203 Animals; domestic
- 422204 Scenic/Landscapes
- 422205 Action
- 422206 Nature
- 422207 Human Interest
- 422208 Agriculture
- 422209 Plants/Flowers
- 422210 Architecture
- 422211 Kansas Landscape
- 422212 Still Life
- **422213** Miscellaneous for work deemed presentable but without a category; will also include slides.
- **422214** Photo series a series of 3.5" x 5 or larger photos mounted on studio mount, foam core, matte board or poster board no larger than 11 x 14. Must tell a story or cover an event. Photos should be all color or all black & white. No state fair class exists for this exhibit, county fair only.
- **422215** Growth Portfolio a 4-H member is eligible for this class beginning with the third year of enrollment in project.
 - Exhibit will consist of one photo for each year of enrollment. Each photo must have been created in a different year and must be labeled with the year taken/project enrollment year. A maximum of 5 photos may be included, if the member has 5 or more years of enrollment. Photos are not required to be in a consecutive order. For example, a nine-year-old with three years enrollment in photography is eligible to enter a growth portfolio. The portfolio in this example should have one photo from the seven-year-olds year, one photo from the eight-year-old's year, and one photo from the nine-year-old's year. The growth portfolio class may start at any time in the member's photography career. For an older member, the growth portfolio would represent any five years in the project, for example, years 1,3,5,7 and 9 for a member having project enrollment totaling 9 years.
 - Photos must be 8" x 10" and may be color or black and white and must be unmounted.
 - An information sheet must accompany each photo giving brand and model of camera used to create the photo. The settings for focal length, aperture, mode and shutter speed must also be listed.
 - Skill set used to create the photo must be given and explained. Main goal for each year should be listed.
 - Begin with photo 2, member description of GROWTH in project skill must be included on information sheet.
 - Exhibit will consist of photos arranged in chronological order of enrollment, information sheet on each photo, and all information listed in the last two bullet points. A portfolio book will be required to exhibit.
- **422216** Career Portfolio- Member must have been enrolled in Photography for 5 (five) or more years OR member must be age 15 -19 and been enrolled in photography for at least two (2) years.
 - Exhibit will consist of ten (10) 8 x 10 photos showing skill development in one of the following photography areas: Portraiture, Special Effects (not done with computer), Landscape, Photojournalism, Black and White, Nature/Wildlife or Graphic Design (computer skills with photos). Photos may have been created over multiple project years.
 - Photos may be color except if Black and White option is chosen and must be unmounted.
 - An information sheet must accompany each photo giving brand and model of camera used to create the photo. The settings for focal length, aperture, mode and shutter speed must also be listed.
 - Include a one-page summary in the portfolio stating the photography goal, skills learned, and acknowledging mentors. Option of career exploration is possible.
 - Notebook designed for portfolio review with pages for required information from the previous two bullet points.

PHOTO DISPLAY INSTRUCTIONS



NOTE: Use only adhesives designed for permanent photography mounting. Do not use rubber cement or other household glues (white glue, etc.).



BACK OF MOUNT BOARD	
Photo Description: (Please indicate the geographical location of the photo in your description)	
County or District Office Name and County:	
Name:	
Address:	
City, State, Zip:	
TAPE	APE

4-H ROBOTICS

The Kansas 4-H Robotics program is designed to allow 4-H members to explore robotics through robots of various designs.

Rules

- 4-H members must be currently enrolled in the Kansas 4-H Robotics project to exhibit in this division.
- Each exhibitor may enter one robot per class. Exhibits must have been constructed and/or completed during the current 4-H year.
- Each robot must be free-standing, without the need for additional supports in order to be moved or exhibited. Each exhibit must include a robot, information packets are not a sufficient exhibit.
- Robots must have automated articulated structures (arms, wheels, grippers, etc.). Game consoles that display on a screen are not considered robots and should either be entered in the computer sciences system division or energy management project. Robots requiring no assembly, just programming, such as Ozobots, are considered computer system projects as the skill is focused on the programming not on the construction of the robot.
- Robot dimensions should not exceed 2 feet high, by 2 feet wide, by 2 feet deep. Weight may not exceed 15 pounds. If displayed in a case (not required or encouraged for the state fair, but strongly encouraged for county fairs) the outside case dimensions may not be more than 26 inches in height, width, or depth.
- Materials including but not limited to obstacles, spare batteries, and mats for testing the robot may be placed in a separate container, which is not included in the robots' dimensions, that container may not be larger than 576 cubic inches as measured along the outside of the container (Examples: 4" x 4" x 36" or 4" x 8" x 18" or 6" x 6" x 16"). The container, if used, and/or any large objects (such as mats or obstacles) should be labeled with the exhibitor's name(s) and county or district as they will be stored separately from the exhibit.
- All electric components of the robot must be adequately covered or concealed with a protective enclosure. Paper is NOT considered an adequate enclosure or covering for electrical components.
- Robots may be powered by an electrical, battery, water, air, or solar source only. Junk drawer robots may be powered by a non-traditional power source. Robots powered by fossil fuels/flammable liquids will be disqualified. Robots that include weaponry of any kind will be disqualified. Weaponry is defined as any instrument, possession, or creation, physical and/or electrical that is intended to inflict damage and/or harm to individuals, animal life, and/or property.
- Remote controlled robots are allowed under certain conditions provided that the robot is not drivable. Robots programmed on phones/tablets need to have a specific program created, using motion controls to move the robot are not acceptable, for example "press forward on the screen to make the robot go forward." Robotic arms (hydraulic or electric) are allowed. A remote is allowed, provided more than a single action happens when a single button is pressed on the remote, for example "a motor spins for 3 seconds, at which point an actuator is triggered, then the motor spins for 3 more seconds." Remote controlled cars, boats, planes and/or action figures, etc. are not allowed.
- Each robot must be in working condition. The judges will operate each robot to evaluate its workmanship and its ability to complete its intended task. In the event the robot uses a phone, tablet, or similar device for both programming AND control of the robot a video will be used to evaluate the working condition of the robot. It should follow the instructions provided for operation so that the judge can follow along with the provided instructions. However, if consultative judging is offered, exhibitors are encouraged to participate, talking with the judge about their exhibit.

4-H ROBOTICS

- Each exhibitor is required to complete the "4-H Robotics Exhibit Information Form" which is available through your local K-State Research and Extension office or at http://robotics.engtech4ks.com/
- This form must be attached to the outside of a 10" \times 13" manila envelope. All revisions of all forms previously released for the Robotics division either undated or dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year. Use of old forms should result in the loss of one ribbon placing for exhibits.
- The exhibit must include written instructions for operation (the instructions should be written as if they were to tell a grandparent or elderly person how to operate the robot), construction plans, a video, and one to five pages of project photographs. For robots that can be programmed, robot programming information must be included, this information should be placed inside the 10" x 13" manila envelope mentioned above. Robot programming information can be, but not limited to, source code, block diagrams, screen captures of the coding window, and other images that show the programming logic used. The exhibitor may enter their electronic project listed under the energy management program if the exhibitor so chooses. No exhibitor will be allowed to set up their robot in person at the Stafford County Fair.
- In the event that the robot uses a device like a phone, iPad, or tablet for programming AND operation, DO NOT include the device (phone, tablet, etc.). The device's safety cannot be insured. Instead record a video demonstrating the instructions included for your robot. It should show, setting up the robot, starting the robot, the robot executing its task, and powering off the robot, just like the instructions are written.
- Additionally, exhibitors may create an optional video (not required) about their project showing its operation and the work they have done. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive or micro/SD card drive or, if desired, uploaded as to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper. However, if consultative judging is
- offered, exhibitors are encouraged to participate, talking with the judge about their exhibit. Creativity, workmanship, and functionality will be strong criteria in judging the "Robot designed by Exhibitor" classes. All robots should have a purpose or intended function, examples include, but are not limited to following a line, sweeping the floor, solving a Rubix Cube, sorting colors, or climbing stairs.
- Exhibitor's name(s) and county or district must be tagged or labeled on the robot such as on the bottom of the robot, exhibit cards are not an acceptable form of labeling. There are no county or district boundaries that must be adhered to in order to form a Kansas 4-H Robotics team.
- However, as mentioned in #1, each team member must be currently enrolled in the Kansas 4-H Engineering & Technology project.

CLASS

NOVICE AGES 7-9 YEARS OLD 9 YEARS + OF AGE OUALIFY FOR STATE FAIR

- 425201
- 425202
- 425203
- Robot made from a commercial (purchased) kit (no programming, just assembly). Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan. Programmable robot made from a commercial (purchased) kit. Robot designed and constructed by exhibitor or from a commercial kit, that is operated by a remote-controlled 425204 device.
- 425205 Junk Drawer Robotics.

INTERMEDIATE AGES 10 – 13 YEARS OLD

- Robot made from a commercial (purchased) kit (no programming, just assembly). 425206
- Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan. Programmable robot made from a commercial (purchased) kit. 425207
- 425208
- Robot designed and constructed by exhibitor or from a commercial kit, that is operated by a remote-controlled 425209 device.
- Junk Drawer Robotics. 425210

PROFESSIONAL AGE 14 YEARS AND OLDER

- Robot made from a commercial (purchased) kit (no programming just assembly). 425211
- Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan. Programmable robot made from a commercial (purchased) kit. 425212
- 425213
- Robot designed and constructed by exhibitor or from a commercial kit, that is operated by a remote-controlled 425214
- device. Junk Drawer Robotics. 425215

TEAM ROBOTICS PROJECT

Robot designed and constructed by two or more 4-H project members. The robot must not be a mere 425216 modification of an existing robot kit or plan. The robot may be a programmable type that is made from a commercial (purchased) kit. This division is designed to encourage teamwork and cooperation among fellow 4-H members. As with many high-tech projects today, no one person designs and builds a robot alone. It takes the brainstorming, planning, problem solving, and cooperation of an entire team to complete a given robotics project.

4-H SEWING & TEXTILE DESIGN FORMERLY KNOWN AS CLOTHING & TEXTILES - CONSTRUCTION

Superintendent: Joanna Mcalister - Junior Superintendent: Lilly Mcalister

This project will teach you the basics, such as sewing a pillowcase or shirt, learning different stitches or putting in a zipper. Learn to create and sew your own clothing and accessories while exploring the world of fashion and how to take the design of your choice and customize it for the perfect look, color and fit.

- Read General Rules & Regulations
- All exhibitors must be enrolled in Sewing and Textile Design.
- Items exhibited must be the result of current year's project work by 4-Her.
- All entries in this project, Sewing & Textile and Style Fashion Revue will be judged on the Wednesday one week prior to fair week at the Stafford County Annex in St John.
- Participants are encouraged to contact the Extension office to set up a practice session at the Annex building prior to judging.
- All clothing exhibits are to be brought to the Stafford County Fair for display on the Tuesday of fair week by NOON.
- The Public Style Revue will be held on WEDNESDAY one week prior to fair time at 7:00 p.m. at the Stafford County Annex in St. John.
- Judging: the exhibitor will first sit through consultation judging and will then be required to model the garment/outfit after the consultation judging to display how the garment/outfit fits.
- Kansas State Fair Rule: No exhibits will be released for any other use. Garments entered in this division cannot be used in the Shopping in Style Fashion Revue.
- Articles, garments, outfits may have been used/worn but should be carefully laundered or cleaned before being exhibited. Exhibits may be placed in clear plastic bags for protection to and from Fair. Bags will be removed for clothing display purposes. Items should be hung on swivel or wire hangers.
- Identification Labels (sew or use a safety pin, no straight pins may be used to attach these items)
 - Type or print on 3" x 21/2" piece of cloth: Class Number, County or District, Name.
 - Attach labels on inside of garment (back of neck, center back of waistband, or left end of apron band). Label each piece.
 - Place entry form and score card on front left shoulder seam of garment or to the left side of waistband with hanger opening facing to the left, as if you were wearing the garment, so that the hanger opening faces the attached entry form.
- Pre-cut kits are acceptable for all clothing classes. All articles/garments must be finished for use.
- The exhibitor is encouraged to attach an index card or photo, no larger than 4" x 6" with the entry form to give the judge any information which the exhibitor thinks would be helpful for the judge to know and could include care information. If your exhibit qualifies for the Wool Award, please indicate you would like your exhibit considered and share wool percentage on the card
- Educational Exhibit Classes Share with others what you learned in the Sewing and Textile Exhibits may be in the form of a poster, notebook or display. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials that will withstand State Fair conditions. No card table displays are allowed. If the exhibit is a poster, it must not be larger than 22"x 28". If the exhibit is a display, maximum size is not to exceed a standard commercial 3' x 4' tri-fold display board. Name and county/district must be clearly marked on educational exhibits.
- Recycled Clothing Project An item made of at least 50% recycled material (recycled means reusing an existing
 item in a new way). Could be remaking/ redesigning a garment, re-purposing a clothing item for a new use, etc. Must
 include sewing of some kind. An index card (no larger than 4"x6") MUST accompany entry describing the recycled
 materials and how they were used in the item.

FAIR DISPLAY

Place garment on hanger with hook toward right shoulder of garment. Secure skirt to hanger so it will stay attached. (Safety pins, clips etc.) Exhibits may be placed in clear plastic bags for protection to and from the fair, bags may be removed for display purposes. Accessories to complete the exhibit should be in a zipper type bag, attach bag to the hanger.

KANSAS STATE FAIR CONTESTANTS:

Each County may enter two contestants per class. Young men and young women are eligible to participate; however, each member may compete in only one class. Participants must be 10, but not yet 19, before January 1 of current year. Contestants must have been declared a winner of the county or district level. Alternates may participate if winners cannot attend. Paperwork will be placed in award packet at the County Fair Public Style Review.

4-H SEWING & TEXTILE DESIGN FORMERLY KNOWN AS CLOTHING & TEXTILES - CONSTRUCTION

Style Revue Guidelines for Sewing & Textiles Garments

- To understand and demonstrate a wardrobe plan.
- To understand how selected garments and accessories enhance their personal/public presentation.
- To understand the value of this garment/outfit and how it fits into the family's clothing budget.
- To be able to describe how they have accepted personal responsibility in caring for their garment/outfit.
- To visually demonstrate personal fitness, grooming, clothing/accessories, comfort and safety.
- To be able to describe how they cared for the garment/outfit and how it has proved to fit into their wardrobe plan.

CLASS

BEGINNING SEWING & TEXTILE (CONSTRUCTION) Ages 7-9

- 412001 Assembled sewing kit
- 412002 Article (See definition box)
- **412003** Garment (This class is a beginning class so it shouldn't include things such as zippers, button holes and buttons, set-in sleeves etc.)
- **412004** Recycled Article (Example: a purse made from old jeans)
- 412005 Recycled Garment (Example: Jeans made into capris and embellished with trim.)
- 412006 Other
- **412301** Sewing & Textile (Constructed) Style Revue Note: Does NOT qualify for the Kansas State Fair *Notebook, Poster, Educational Display*-Any Individual Project

INTERMEDIATE SEWING & TEXTILE (CONSTRUCTION) Ages 10-13

- 412101 Assembled sewing kit
- 412102 Article (See definition box)
- **412103** Garment (This class is a beginning class so it shouldn't include things such as zippers, button holes and buttons, set-in sleeves etc)
- 412104 2 piece coordinated outfit
- 412105 Recycled Article (Example: a purse made from old jeans)
- 412106 Recycled Garment (Example: Jeans made into capris and embellished with trim.)
- 412107 Other
- **412302** Sewing & Textile (Constructed) Style Revue Note: Does NOT qualify for the Kansas State Fair *Notebook, Poster, Educational Display*-Any Individual Project

SENIOR SEWING & TEXTILE (CONSTRUCTION) Ages 14 & up

- 412201 Garment
- 412202 Article
- 412203 2-piece coordinated outfit
- 412204 3-piece coordinated outfit
- 412205 Recycled Article (Example: a purse made from old jeans)
- **412206** Recycled Garment (Example: Jeans made into capris and embellished with trim.)
- 412207 Formal
- 412208 Suit
- 412209 Coat
- 412210 Other
- **412303** Sewing & Textile (Constructed) Style Revue Note: Does NOT qualify for the Kansas State Fair *Notebook, Poster, Educational Display*-Any Individual Project

DEFINITIONS

ARTICLE is a simple item constructed as a clothing project such as a laundry bag, garment bag, backpack, apron, shorts, slacks, shirt or blouse, pillow, scarf or articles suggested in the project material. Can be hand or machine sewn, and could include applique or machine embroidering on items they have made.

2-PIECE COORDINATED OUTFIT is 2 pieces that can be worn together at the same time, but not necessarily a complete outfit. (I.e. vest and skirt).

GARMENT can be a skirt, vest, simple dress, a coat, a jumper, a jump suit, elasticized shorts, or slacks or a pull over top, etc.

3-PIECE COORDINATED OUTFIT - is 3 pieces with at least 2 of the pieces can be worn together at the same time. The third piece could be worn with one or both, but not necessarily at the same time. Does not have to be a complete outfit. (I.e. 3 pieces not worn at the same time - a skirt, a blouse, and pants, or 1 skirt and 2 blouses). All three must be made by the exhibitor - do not exhibit purchased items.

RECYCLED CLOTHING PROJECT—(Also a Kansas State Fair Class) An item made of at least 50% recycled material (recycled means reusing an existing item in a new way) Could be remaking/redesigning a garment, re-purposing a clothing item for a new use, etc. Must include sewing of some kind. An index card (no larger than 4"X6") MUST accompany the entry describing the recycled materials and how they were used in the item

4-H SHOOTING SPORTS

The Shooting Sports project helps youth thrive and develop life skills while teaching shooting safety, care and safety of shooting sports equipment, hunting practices, and provides an opportunity to test your skills. The fair classes are designed to provide an opportunity for youth to educate others about what they have learned through the project or to promote the benefits of participation.

- Exhibits in this division are open to educational displays, promotional posters, or experiential displays. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials to withstand Fair conditions.
- The exhibit size rule will be strictly enforced. Exhibits exceeding the size guidelines will be penalized one ribbon color.
- Educational Display: must be the standard tri-fold board ONLY, must not exceed standard tri-fold: 3'x4' unless there is a topper that sits on top of the board and does not take up additional table space; no additional table space available for promotional brochures or display items; content not to exceed display board borders.
- Promotional Posters: must be flat and no larger than 22"x30"; content not to exceed display board borders. Exhibits may be displayed on wall.
- Notebooks: no larger than 8 ½" x 11".
- Exhibitors must comply with state and federal laws and Fair Management.
- No "live" ammunition containing propellant or explosive powders may be used in any display. An inert substitution must be used in lieu of powder and "live" ammunition, the substitution must be clearly described on the back of the poster, display or in a notebook.
- The Stafford County Fair nor the department of 4-H Youth Development, KSRE are liable for the loss or damage of any personal property included as part of your poster, display or notebook.
- Name, county or district, age and year in project should be on the front of the poster, display or notebook unless special arrangements are made because of declination of publicity release.
- Exhibit topics regarding firearm care, handling, and shooting will only be accepted from Extension Units with 4-H Certified Shooting Sports Programs.
- Exhibits will not be accepted if they are related to reloads.

CLASS

Educational/Promotional

424001 Educational Display - must be directly related to the 4-H Shooting Sports project (standard tri-fold boards only) **424002** Promotional Poster - must promote 4-H Shooting Sports project

424003 Notebook - contents must pertain to some phase, results, story or information about 4-H Shooting Sports

424101 Experiential OPTION B

Shooting Aid or Accessory - (SF253) - Any item the 4-Her makes which helps the shooter/hunter better perform their sport, examples: rifle sling, kneeling roll, arm guard, shotgun vest, target boxes, shooting stick, etc. Include your design, or plans you adapted, what the item is and used for.

Storage Case - (SF254) - Any item the 4-Her makes with the purpose to safely hold a firearm, bow, ammunition, and/or arrows. Examples: soft sided shotgun case, quivers, firearm safe, include your design, or plans you adapted. Explain how the storage case is used.

Practice Game or Activity - (SF255) - Invent or adapt an activity to practice or teach a project skill. Include pictures of youth playing the game, testimonials of 4-H members who played the game, what skill is being worked on, and directions for the game. Explain how you came up with the game or adapted it to fit the needs of your group members.

4-H SHOPPING IN STYLE FORMERLY KNOWN AS CLOTHING & TEXTILES - BUYMANSHIP

4-H members will learn what clothing styles look best on them while they also gain skills in building a versatile wardrobe and staving within their budget. Each year enrolled in Shopping in Style should build on previous year's learning experience. Exhibit one of the following options that align with the 4-H member's Shopping in Style level.

Rules

- Posters can be flat poster board or foam board, no larger than 22" x 28."
- Tri-fold educational displays must be free standing and no larger than 36" x 48."
- Photos of 4-H member in purchased outfit must demonstrate criteria as outlined on scoresheet. Consider multiple angles, good light and highlight details so that the judge may accurately evaluate the exhibit.
- Exhibits should include actual photos of 4-H member in garments, and may also also include pictures from magazines or the internet

NOTE: USE 4-H NOTEBOOKS, POSTERS, AND EDUCATIONAL **DISPLAYS CLASS NUMBERS**

Shopping in Style: Junior (age 9) Choose one of the following activities from Unit 1 or Unit 2 of the curriculum project manuals. Exhibit should consist of poster that showcases:

- a garment you purchased that reflects your personal style and explains how this garment reflects your
- style and how it influences what others think of you; OR a garment you purchased and explains how your personal style either aligns or contradicts what is considered to be "in style" today. OR a garment you purchased and explains or illustrates how this garment is a modern version of a fad or
- fashion from an earlier decade; OR
- a garment you purchased and explains how this garment reflects a different ethnic or cultural influence;
- a garment you purchased and includes a color discussion that provides an overview of how different 0 colors complement different hair colors and skin tones and how that influenced garment selection.

Shopping in Style: Intermediate (age 10-13) – Choose one of the following activities from Unit 3 or Unit 4 of the curriculum project manuals. Exhibit should consist of a display that showcases:

- an outfit you purchased to wear with a clothing item that was already in your wardrobe that still fit but you didn't wear anymore. Explains why the clothing item was not being worn and what you did to transform it into a wearable garment again. OR
 a top and bottom that you purchased, as well as at least three pieces of clothing in your existing
- wardrobe that you can mix and match with the new items to create multiple outfits. Includes a clothing inventory and explain what you have learned by completing this activity. OR
 an outfit you purchased and explain why you selected the garment you did, your shopping budget, and
- cost per wear; OR
- an outfit you purchased and explain how advertising influences clothing purchases making a distinction between wants and needs. Include your shopping budget and cost per wear. OR E. an outfit you purchased along with a cost comparison between garments/accessories purchased vs. sewing/constructing the outfit. Comparison should include variety of shopping options and/or price tracking at stores over a period of time.

Shopping in Style: Senior (age 14-18) - Choose one of the following activities from Unit 5 or Unit 6 of the curriculum project manuals. Exhibit should consist of a display that showcases:

- an outfit you purchased and care requirements not only for this garment but also for garments made of other natural and synthetic fibers. Display should also include a care cost analysis for garments of different fibers; OR
- an outfit you purchased which you have repaired or altered. Include a clothing inventory list which includes cost savings for repaired items as compared to purchasing replacement garments; OR
- an outfit you purchased along with plans and commentary for a fashion show that that would capture the attention of an audience. Plans should identify target audience, venue, theme, budget, and logistical plan for the fashion show; OR
- D. an outfit you purchased and explain 3 methods of clothing repair that you have learned, i.e. torn seam, torn hem, replacing a button, etc. Display should also include photos and list of your assembled clothing first aid kit. Include itemized expenses; OR
- E. An outfit you purchased, and feature any other completed activity from the Shopping In Style 0 curriculum of your choosing that isn't listed above.

4-H SHOPPING IN STYLE FORMERLY KNOWN AS CLOTHING & TEXTILES - BUYMANSHIP

Shopping in Style Fashion Revue

- Read General Rules & Regulations
- All exhibitors must be enrolled in Shopping in Style.
- Items exhibited must be the result of current year's project work by 4-Her. All entries in this project, Shopping in Style, & Shopping in Style Fashion Revue will be judged on the Wednesday one week prior to fair week at the Stafford County Annex in St John.
- Participants are encouraged to contact the Extension office to set up a practice session at the Annex building prior to judging.
- All clothing exhibits are to be brought to the Stafford County Fair for display on the Tuesday of fair week by NOON. The Public Style Revue will be held on WEDNESDAY one week prior to fair time at 7:00 p.m. at the Stafford County
- Annex in St. John.
- Judging: the exhibitor will first sit through consultation judging and will then be required to model the garment/outfit
- Judging: the exhibitor will first sit through consultation judging and will then be required to model the garment/outfit after the consultation judging to display how the garment/outfit fits.
 In Shopping in Style Fashion Revue, a majority of the outfit must be purchased (not borrowed) and modeled by the 4-H member or made by another individual for the 4-H member, if the fabric and pattern were chosen by the 4-H member and constructed by another person (vest, jacket, dress, skirt, pants, coats, etc.)
 Fashion Revue outfits must be pre-entered by date specified. A description of each outfit and accessories is also requires. Some descriptors may include fabric, colors, accessories, where you will wear the outfit, what you like best, etc. The forms are available online at www.21central.ksu.edu.
 Intermediate and Senior 4-H members should also complete the Cost Per Wear Form.
 Grand Champion and Reserve Grand Champions in Intermediates and Seniors are the only ones allowed to compete at the Kansas State Fair's 4-H Shopping in Style Fashion Revue.
 Participants may model only what can be worn. Garments cannot be carried.
 Contestants should use good sense in choosing items that are appropriate to model in public.
 No live animals may accompany participant in public Shopping in Style Fashion Revue; exception needed service animals.

- animals.

OUTFIT DESCRIPTIONS:

Formal Wear - short, mid-length or long length;

Dress wear- outfit suitable for special occasions, job interviews or church functions.

School/Casual Wear - Chinos, Khakis, jeans, shorts, sweaters, separates, layered tops;

Active Sports Wear – Sports attire, sneakers, dance outfits, tennis, running, basketball shorts etc.

Western Wear – Jeans, boots, western shirts, western accessories (belt, hat, jewelry);

Other outfit – Miscellaneous category for any extra outfit.

BEGINNING SHOPPING IN STYLE (7-9 yrs.)

- 413001. Formal Wear
- 413002. Casual wear
- 413003. Dress wear
- 413004. Active Sports wear
- 413005. Western wear
- 413006. Other outfit

INTERMEDIATE SHOPPING IN STYLE (10-13 yrs)

413101. Formal Wear

- 413102. Casual wear
- 413103. Dress wear
- 413104. Active Sports wear
- 413105. Western wear
- 413106. Other outfit

SENIOR SHOPPING IN STYLE (14 & up)

- 413201. Formal Wear
- 413202. Casual wear
- 413203. Dress wear
- 413204. Active Sports wear
- 413205. Western wear
- 413206. Other outfit

4-H SMALL ENGINES Used to be a subdivision of Energy Management (known as Electric and Renewable Energy)

Through Small Engines, you will have the opportunity to educate others about what youth have learned through the project or to promote the benefits of participation in those project areas.

All exhibits should involve engines smaller than 20 horsepower for class 414103. Engine should contain no fuel in tank or carburetor. Displays are limited to 4' wide and 4' deep - both upright and floor displays.

Rules

- Only those who have met the requirements of the small engine project are eligible to exhibit in this division.
- An exhibitor may enter up to three items in this division, but only one article per class. Use the entry card available from your Extension Office. Record all requested information and securely attach to exhibit.
- Items that have been in use should be cleaned for exhibit.
- A sheet of operating instructions must be furnished for any exhibit not self explanatory.
- Each exhibit must have a scorecard completed and attached securely. This scorecard is available from your Local Extension Office.

CLASS

- **414101** Display: Exhibit a display, selecting one of the following options: 1) a display identifying different engine or lawn and garden equipment parts or a display showing the function of the various engine or lawn and garden equipment parts; OR 2) a display identifying and explaining the function(s) of different special tools needed for small engine work; OR 3) a display illustrating and providing the results of any one of experiments that are included in the project books. No complete engines, lawn tractors, tillers, chainsaws are permitted for display. Maximum tri-fold size is 3' x 4'.
- **414102** Maintenance: Exhibit a display that illustrates either: 1) Routine maintenance procedures OR 2) Diagnosing and troubleshooting specific problems in an engine. No complete engines, lawn tractors, tillers, chainsaws, etc. are permitted for display, using a maximum tri-fold size of 3' x 4'.
- **414103** Operation: Exhibit an operable small engine (no more than 20 HP) overhauled or rebuilt by the member. Include maintenance schedule for the engine and a brief description of steps taken by the member overhauling or rebuilding the engine. Maximum tri-fold size is 3' x 4'. Engine should contain no fuel in tank or carburetor. Alternative ENERGY (A form of energy derived from a natural source, such as the sun, geothermal, wind, tides or waves). All exhibits in this division are limited in size to standard, tri-fold, display boards (36" X 48") and items may not extend beyond 12" from the back board. All displays must be self-standing.
- 414104 Notebook Junior (No class available for this project at Kansas State Fair, Stafford Co. Fair only)
- 414105 Notebook- Intermediate (No class available for this project at Kansas State Fair, Stafford Co. Fair only)
- 414106 Notebook Senior (No class available for this project at Kansas State Fair, Stafford Co. Fair only)

4-H UNCREW AERIAL SYSTEM

The 4-H uncrewed aerial system or UAS project explores the world from above the trees and discovers new frontiers with UASs. UASs are commonly known as Uncrewed Aerial Vehicles (UAVs) or drones. Members explore the uses and applications of uncrewed aerial system including how UASs link to other projects such as geology, robotics, electronics, crop science and many more.

Rules

- The 4-H members must be currently enrolled in the 4-H project to exhibit in this division.
- Each exhibitor may enter one exhibit per class. Exhibits must have been completed during the current 4-H year.
- The information that accompanies the UAS must be limited to the 4-H UAS Exhibit Information Form which is affixed • to a 10" x 13" envelope. This envelope should NOT be attached to the UAS. This may be downloaded from http://uas.engtech4ks.com/. Any UAS exhibit not including this completed envelope will receive an automatic
- Participation ribbon. All revisions of forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year.
 Each exhibit MUST include a video of the youth operating their UAS. This allows judges to get a better understanding of the exhibit and allows the youth the opportunity to fully demonstrate their exhibit. The video should be no longer than 8 minutes and should be placed on a USB drive or micro/SD card or, if desired, uploaded to YouTube as an unlisted video and a link to that video included in a file titled "VideoLink" or printed on a separate sheet of paper.
- Uncrewed aerial system exhibits may be checked out for use in a Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the superintendent. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be disqualified.
- Exhibitor's name, county or district, age, and years(s) in project must be tagged or labeled in a prominent location on the exhibit, educational display, notebook, and/or poster.
- Uncrewed Aerial System that include or depict weaponry of any kind will be disqualified.
- See the last section for full details about exhibiting posters, display boards and notebooks.
- For scratch built UAS kits, if modifications are made to the exhibit, a page should be attached noting those modifications.
- If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judges' discretion, will receive a participation ribbon.
- For practical application entries, the UAS is not required to be displayed as part of the exhibit, only the supporting material.
- The same UAS may be used by multiple exhibitors for different practical application entries.

CLASS

- Junior Division (Ages 7 9 years) Uncrewed Aerial System designed and constructed by exhibitor that is operated by a remote-controlled 425401 device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.
- 425402 Practical application of an Uncrewed Aerial System constructed from a commercial (purchased) kit. This includes one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

Intermediate Division (Ages 10 – 13 years)

- 425403 Uncrewed Aerial System designed and constructed by exhibitor that is operated by a remote-controlled device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.
- **425404** Practical application of an Uncrewed Aerial System constructed from a commercial (purchased) kit. This includes one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

Senior Division (Ages 14 and older)

- **425405** Uncrewed Aerial System designed and constructed by exhibitor that is operated by a remote-controlled device. The UAS must not be a mere modification of an existing kit or plan. You may not exhibit a UAS that is purchased off the shelf in this class.
- **425406** Practical application of an Uncrewed Aerial System constructed from a commercial (purchased) kit. This includes one or more of the following: video, notebook, poster, display board, etc. This class is separate from educational exhibits. A tangible use would be mapping Russian olive trees, eroded soils, and bindweed in fields, etc. There are also many other non-agricultural UAS uses that would be appropriate for this class.

4-H VETERINARY SCIENCE

The purpose of the 4-H Veterinary Science project is to provide a way for young people who care for animals and may want to follow a career in veterinary medicine to explore the topic. In this project, members will learn about animal health, behavior, and visit with veterinarians. 4-H member in the Veterinary Science project may develop an exhibit to demonstrate the knowledge and skills learned about a common health problem in animals, a veterinary science principle or public health/zoonotic diseases.

Rules

- A Veterinary Science exhibit may consist of a poster, notebook or project display. The exhibit may represent material from any of the Veterinary Science projects including entry level exhibits from Unit I.
- If photographs are to be part of the exhibit, remember that they will be viewed by the public. Make sure that the
 photographs are in good taste and will not be offensive to anyone. Graphic photographs of excessive bleeding,
 trauma or painful procedures are not appropriate. For exhibits related to veterinary surgical procedures, aseptic
 techniques need to be shown, for example, use of drapes, use of sterile procedures, wearing of gloves and other
 appropriate veterinary medical practices.
- First-Aid Kits: Because of public safety concerns and risk of theft of first-aid kit contents (veterinary drugs/equipment) with perceived potential for drug abuse, animal first aid kits containing any drugs or medications will be immediately disqualified and not displayed. First Aid kits wishing to include medication information should instead utilize written descriptions, photographs, drawings, computer generated print-outs or empty packaging of pharmaceuticals.
- Veterinary Science Posters This exhibit presents the viewer with a design that is simple and direct, unlike a display that usually presents more information. A poster should not exceed 22" x 30" and may be either vertical or horizontal.
- Veterinary Science Displays A display may include but is not limited to: a 3- dimensional exhibit, a scale model, the actual product (for example: skeleton; teeth; samples of leather, fur, or dried skin damaged by disease or parasites) or a notebook. A display is not a poster. A display may be mounted on poster board not to exceed 22" x 28" or on 1/4" plywood or equivalent that does not exceed 24" high or 32" wide or in a three ring binder or another bound notebook format.
- Veterinary Science Notebooks: Individual entries are to be place for display in a three-ring notebook for competition. Notebooks may not be larger than 8 1/2' x 11".
- Neither the Kansas State Fair nor the department of 4-H Youth Development, KSRE are liable for the loss or damage of any personal property included as part of your poster, display or notebook.
- Name, county/district, age and year in project should be on the front of the poster, display or notebook.
- Appropriate topics include: Maintaining Health, Specific disease information, Photographic display of normal and abnormal characteristics, Animal health or safety, Public health or safety, Proper animal management to ensure food safety and quality, Efficient and safe livestock working facilities, A topic of the exhibitor's choosing related to veterinary medicine or veterinary science.
- Because these are science displays, all references and information must be properly cited. Proper sources include but are not limited to: Professional journals and publications, professional AVMA accredited websites, interviews with veterinarians and excerpts from Veterinary Educational Literature. Plagiarism will result in a disqualification. Please study your topic and present the information to your audience in your own words.

NOTE: USE 4-H NOTEBOOKS, POSTERS, AND EDUCATIONAL DISPLAYS CLASS NUMBERS

4-H VISUAL ARTS

Superintendent: Meagan Feril

The visual arts project teaches artistic skills and the elements and principles of design. 4-H members explore techniques, study art history, culture, and discover their talents. Be creative; draw, paint and work with different mediums.

Rules

- Read General Rules and Regulations
- Articles exhibited must be an original design created by the exhibitor in the current year.
- All visual arts exhibits are evaluated using a visual arts rubric, which takes into account correct use of design elements, craftsmanship, and creativity through consultative judging.
- A "tag" or sticker (available from the Extension Office) will need to be adhered to the object for proper identification. Please use ink or type information on tag.
- Exhibitors may have two (2) entries per class.
- Items produced at School, Church, camp, etc ARE eligible.
- Large art items will not be accepted. Exhibits must be of manageable size and be easily transported and displayed by one person.
- All exhibits which need to be hung (including all fine arts) must have a wire or saw tooth hanger attached (no string or tape). If necessary, hardware is not attached, it will be deducted a ribbon and will not be displayed.
- Multi-piece items should be marked accordingly.
- 4-H members should exhibit in the project in which they are enrolled. The Fiber Arts Project offers classes for quilting, embroidery, counted-cross stitch, etc.
- No plants or plant materials needing watering can be entered as an art display or item.
- All exhibits are entered at your own risk.
- Up to 5 exhibits will be selected to participate at the Kansas State Fair. A project will be selected from each of the five categories (Fine Arts, Clay and Ceramics, Leather and Jewelry, Three-Dimensional, and General Crafts) to move on to the State Fair. A member may display only one visual arts item.

COPYRIGHT

Kits and preformed molds are not considered original and are not acceptable in any Visual Arts Class. Combining parts of different patterns (pictures, photographs, images from the internet or a magazine) with the member's own ideas can result in an original design, but simply changing the color, pattern, and/or size of a pattern does not make the design original. If you create a replica of what you see somewhere else (i.e. Pinterest), it is not your original design. If a photo, sketch, or other idea source was used, submit it with your entry, firmly attached to your exhibit.

4-H VISUAL ARTS

CLASS

JUNIOR DIVISION (AGE 7-9)

CRAFTS

411001	Ceramics - free form	411101	Ceramics - poured or painted form
411002	Drawing and Sketching	411102	Article made from recycled material
411003	Painting/Freehand	411103	Article made from new material
411004	Painting/Transfer	411104	Article made from items found
411005	Sculpture		in nature - (Pine cones, leaves, etc.)
411006	Leather	411105	Seasonal Crafts (holiday, wreaths, etc.)
411007	Computer generated art	411106	Cutting and Pasting (Scrapbooking, collage, etc.)
411008	Other	411107	3-D Construction (puzzles, Lego sets, etc.)
		411108	Jewelry
		411109	Other

INTERMEDIATE DIVISION (AGE 10-13)

411201 FINE ART

CRAFTS

411203 411204 411205 411206 411207 411208	Ceramics - free form Drawing and Sketching Painting/Freehand Painting/Transfer Sculpture Leather Carving Computer generated art Other	411301 411302 411303 411304 411305 411306 411307 411308 411309	Ceramics - poured or pained form Article made from recycled material Article made from new material Article made from items found in nature - (Pine cones, leaves, etc.) Seasonal Crafts (holiday, wreaths, etc.) Cutting and Pasting (Scrapbooking, collage, etc.) 3-D Construction (puzzles, Lego sets, etc.) Jewelry Other
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SENIOR DIVISION (AGE 14 & UP)

	FINE ART		CRAFTS
411401	Ceramics - free form	411501	Ceramics - poured or painted form
411402	Drawing and Sketching	411502	Article made from recycled material
411403	Painting/Freehand	411503	Article made from new material
411404	Painting/Transfer	411504	Article made from items found
411405	Sculpture		in nature - (Pine cones, leaves, etc.)
411406	Leather	411505	Seasonal Crafts (holiday, wreaths, etc.)
411407	Carving	411506	Cutting and Pasting (Scrapbooking, collage, etc.)
411408	Computer generated art	411507	3-D Construction (puzzles, Lego sets, etc.)
411409	Other	411508	Jewelry
		411509	Other

4- H WILDLIFE

This project is for all youth, whether living in the city, the country, or in between. Wildlife are an important part of our state heritage and environment, ranging from buffalo to birds to fish to deer and more. In this project you will learn about wildlife behavior, habitat requirements, how wildlife species fit into nature's scheme, how they are managed, and how they relate to humans.

Rules

- Type of exhibit in this division is open to notebooks, posters, picture story, display boards, etc. Maximum exhibit size is 3' x 4' (notebooks may be a journal showing habitat development, bird watching tips, information on endangered species or any in-depth, study in the wildlife area. The display might include different flies the exhibitor has, or different fish found in the exhibitors county, etc.)
- Name, club, age and year in project should be in a prominent location on the exhibit.
- Care should be taken to select durable materials that will withstand county fair conditions. KSRE, 4-H Youth Development and the Fair are not responsible for damage during the exhibition period.
- Exhibitors MUST comply with State and Federal laws. It is illegal to possess threatened or endangered wildlife, or the feathers, nests or eggs of non game birds. Game birds and game animals taken legally during an open season may be used. The use of live wild animals in educational exhibits is prohibited.

Notebooks and Educational Displays will be judged on the following points: TOTAL 110 points: Stopping Power (1); Is the main idea specific? Is the idea presented clearly, simply, forcefully? Interest, Holding Power (15); Does the exhibit give the observer additional facts in a clear, concise, informative way? 4-H Project application (15); Is the subject matter an effective showcase? Mechanical Power (15); Correct letter size, pleasing color combination, appropriate symbols, and models Personal Growth (25); How much knowledge was gained by exhibitor? Was enthusiasm shown? Educational Value 9(25); Knowledge Shared. Note: Credit all citations, websites or other resources used in creating your exhibit.

Posters will be judged on the following points: TOTAL 100 points; General Appearance (30); Information (50); Organization (20)

Wildlife Display & Notebook Classes

- **426001** Project Poster must relate to something learned in the Wildlife Project (flat poster board or foam board no larger than 22" x 28"), i.e., types of traps, track identification, habitats of species, type of fishing lures, etc.
- **426002** Notebook contents pertain to some phase, results, story or information about the wildlife project.
- **426003** Educational Display must be related to something learned in the wildlife project (i.e., life cycle of species, animal adaptations, food sources of Kansas wildlife, food chain illustrations, etc.)

426101 Wildlife Experiential/Other Classes

Fish Harvesting Equipment (SF168) - on a board display equipment used in fish harvesting. Examples: fishing knots, hooks (with corks over ends for safety), lures. Label all items displayed. Include in your exhibit the following information: the purpose of each item, when or where each item is used.

Build a Fishing Rod (SF169) - a fishing rod educational exhibit may not exceed 96-inches in length. Exhibit must be mounted on a board. Include with the exhibit. Explanation of cost of materials/components and how many hours required for construction. Label all parts. Necessary components which must be included are grip, line guides (based on manufacturers specifications), guide wraps, and hook keeper. Reel seat needs to be aligned with guides and guides aligned accurately down rod. Guide wraps of size A to D, nylon or silk thread. The exhibit will be judged on workmanship, labeling of parts, information and neatness.

Casting Target (SF170) - make a casting target for exhibit and use. Target must be under 48" x 48". The bullseyes must be 2-feet, outer band must be 1-foot in diameter and can have up to 3 rings. The exhibit must be easy to store, durable, and weather resistant. Include the purpose and rules of using your casting target.

4- H WILDLIFE

Wildlife Harvesting Equipment (SF171) - on a board display equipment used in harvesting wildlife. Examples: expended ammunition casing (no live ammunition permitted), steel traps, hide stretchers, fleshers, etc. For displays of shotguns, rifles, or bows, use drawings or pictures. Label all items displayed: the purpose of each item, when or where it is used and personal experiences with the item.

Inventing Wildlife/Fish Harvesting Equipment, Aid or Accessories (SF168) - use engineering principles to invent or adapt equipment that helps you harvest fish or wildlife. This could include wildlife calls, adapted fishing pole for shallow water, a blind, decoys, etc. Share your drawing (or adapted plans), how the equipment works, how you tested it, and the results of testing your prototype, and any adjustments you made.

Tanned Hides (SF172) - exhibit of a wild animal hide properly processed by the member. If not mounted, it must be in a clear clothing bag with a hanger. Include the animal's name and the following: information about the exhibitor's personal field experiences, study, OR observations that relate to the exhibit.

Taxidermy (SF172) - any legal fish, bird, or other wild animal properly processed by the member. No requirement as to mounting. Include the animal's name and the following: information about the exhibitor's personal field experiences, study, OR observations that relate to the exhibit.

Wildlife Tracks (SF158) - a board or diorama-type box exhibit. Make a display of animal tracks using Plaster-of-Paris casts. There are 3 options. For all options, include a brief description of your experiences in making the tracks so the judges better understand what you did and learned. Positive casts (impressions as they would be in nature) are preferred.

- Option 1 Show Plaster-of Paris tracks of five or more kinds of wildlife along with a picture or illustration of each kind of animal; OR
- Option 2 Show two or more Plaster-of-Paris tracks of one specific kind of wildlife and should include a
 picture or illustration of the animal; OR
- Option 3 Show two tracks and include the animal's habitat needs including preferred food, shelter, water and space in addition to picture of illustration of the animal.

Wildlife Knowledge Check (SF159) - use electrical circuits, picture or other methods of teaching wildlife identification or other wildlife conservation or shooting sports-related knowledge. Plan size and shape to fit display area of 24" x 24" (maximum).

Houses (SF165) - make a house for wildlife. Examples: bird house (bluebird, purple martin, wood duck, kestrel, barn owl, etc.) or bat house; no insect houses. Make the house functional so that dimensions, hole size etc. are appropriate to fit the intended species' needs. Include the following information: 1) the kinds of animal(s) for which the house is intended, 2) where and how the house should be located for best use, 3) any seasonal maintenance needed, and 4) any evidence of your personal observations or experiences.

Feeders/Waterers (SF166) - make a bird bath or feeder. Examples: seed, suet or nectar feeders. Squirrel feeder allowed; no insect feeders. Include the following information: 1) the kinds of animal(s) for which the waterer/feeder is intended, 2) where and how the waterer/feeder should be located for best use, 3) any seasonal maintenance needed, 4) any evidence of your personal observations or experiences.

4-H WOOD WORKING

The Wood Science project allows youth to exhibit a wide variety of items they made working with wood, using tools. Learn to create and read plans to build projects for the farm, shop, household or other areas.

Rules

- Read General Rules & Regulations.
- No exhibitor may enter more than two articles in each class. Designate on entry if article is original or kit construction.
- The plan from which it was constructed must be with the article exhibited. The plan may be a photocopy, the actual pattern, or a scale drawing. It must be complete and accurate to the extent that a duplicate article could be built using the plan as a guide. Please note: a set of step by step instructions is not a plan.
- Projects with missing or insufficient plans will be lowered one ribbon placing (i.e. a blue ribbon exhibit will receive a red ribbon).
- The use of materials other than wood should be kept to a minimum.
- Projects that have unsecured glass, i.e., glass shelves, glass top of a coffee table, etc., should not be brought to the fair. Glass that is secured in the project, i.e., glass front of a gun case or cabinet, etc., is permissible since it cannot be easily removed.
- The entry card, plans and all other paperwork should be enclosed in a zip top plastic bag with a hole punched through it and tied or otherwise secured to the project in some manner. Tape is usually not adequate to accomplish this.
- Refinished/ repaired furniture should be exhibited in Home Environment Class 420102.
- Projects made from pre-cut kits are not allowed.
- In judging woodwork articles, consideration will be given to: Workmanship, including accuracy to the plan; Design; Choice of wood; Suitability and quality of finish; and Usefulness.
- Firearms and weapons are not to be entered or exhibited at the Fair in the Kansas 4-H Youth Development Department.
- Label each article showing intended use. Must be work done during the current club year.

CLASS

HAND TOOLS ONLY - (Woodworking Projects made with Hand tools)

- 427001 Article for farm or shop use.
- 427002 Furniture for household or lawn.
- **427003** Other woodwork articles not included in above classes. (Bird feeders, bird houses, household equipment such as knife racks, bread boards, door stops, etc.)

POWER TOOLS ONLY - (Woodworking Projects made with Power Tools)

- 427101 Article for farm or shop use.
- **427102** Furniture for household or lawn.
- 427103 Other woodwork articles not included above classes. (Same as Hand Tool Class)

4-H NOTEBOOKS, POSTERS, and EDUCATIONAL DISPLAYS

Superintendent: Extension Agents

- Read General Rules & Regulations.
- This department is for project areas where no other department exists.
- Please designate on the "tag" or sticker what project you are enrolled in for this division.
- Exhibitor may construct a poster, notebook or display for any project they are enrolled in.
- Exhibitors should avoid using copyrighted and/or trademarked materials whenever possible by originating his/her own work.
- Classes will be divided following the close of entries with a minimum of three entries in the same project making a class.
- STEM, Shooting Sports, and Wildlife all have specific rules for exhibiting in these divisions. Please see the appropriate section for more information on exhibiting in these divisions.

4-H PROJECTS THAT DISPLAY WELL IN THIS DEPARTMENT:

Self-Determined - Leadership - Citizenship - Computer Technology - Communications - Family Studies - Forestry - Health & Wellness - Reading - Wildlife - Horseless Horse - Performing Arts - Collections - Models - Hobbies - Sewing & Textiles

NOTEBOOKS

- Each exhibit must be the work of the exhibitor.
- Records should be complete up to July of current year.
- Notebooks should include an introduction, goals set and accomplished, activities planned and what you learned.
- Pictures pertaining to the project are also encouraged.
- Notebooks judging criteria: Introduction, Content, Organization, Summary.
- Notebooks in classes 1339-1341 can be current year Kansas Award Application that is current up to July.

CLASS

428001. Club Officer (Secretary, Reporter, Treasurer)

428002. Club Service

- 428003. Any Individual Project Junior
- 428004. Any Individual Project Intermediate
- 428005. Any Individual Project Senior

428006. Other

POSTERS

- Purpose: 4-H Project Promotional Poster promotes one project in which the 4-Her is enrolled. 4-H Project Educational Poster: Educates the public about a subject related to one project in which the 4-Her is enrolled. 4-H Slogan Poster: Promotes 4-H in general. May relate to any part of 4-H Club work and/or 4-H activities.
- Each exhibit must be the work of the exhibitor.
- Posters should not exceed the standard size of 22" x 28"
- Posters must be able to be attached to the wall/or unit for display, this may require them to be stapled. Please
 make sure all items on poster are secure and will not fall off. DO NOT USE FOAM BOARD. If foam board is used,
 exhibit will be lowered one ribbon placing.
- Poster judging criteria: Concept/Idea, Design & Lettering, Construction.

CLASS

428101. Any Individual Project - Junior 428102. Any Individual Project - Intermediate 428103. Any Individual Project - Senior

EDUCATIONAL DISPLAY

- This division is designed as a display for project accomplishments that are not easily displayed by a poster. The educational display must be the standard tri-fold board, header is optional. Must not exceed 3' wide x 4' tall. Headers are allowed if needed.
- Individual card tables are not permitted. Educational Displays will be displayed on a designated table in the 4-H Building.
- All Educational exhibits must include a 4x6 note card with an explanation of what the exhibitor accomplished in the project or could improve on. This can be handwritten or typed.
- Educational Display judging criteria: Concept/Idea,
 Design & Lettering Construction
- Design & Lettering, Construction.

CLASS

428201. Any Individual Project - Junior 428202. Any Individual Project - Intermediate 428203. Any Individual Project - Senior

4-H CLUB BANNERS

Superintendents: Community Club Leaders

- READ GENERAL REGULATIONS.
- All Banners must be in place by Noon on Wednesday of fair week
- Description Of Banners:
 - Each banner should illustrate a phase of 4-H work which is being practiced by youth in 4-H or promote 4-H generally.
 - The club display should avoid using copyrighted materials whenever possible by originating their own work. Copyrighted and/or trademarked materials utilized in banners for endorsement or promotion instead of educational purposes will be disqualified and will not be displayed.
 - Banners are a two dimensional display, depicting one idea. Three dimensional objects may not be attached to the banner.
 - The theme guidelines are the same for booths.
 - Banners should be made out of flame-resistant material.
 - Dimensions are to be no less than 12 and no more than 16 square feet, with a minimum of 3 feet on one side.
 - Banners must be hung on a wooden dowel stick strong enough to support the banner. On each end of the dowel rod, there must be a chain 6" long. On the other end of the 6" chain, attach an "S" hook which will permit the banner to be suspended by the chains on the wire.
 - Banners should be made of materials that permit the banner to be folded or rolled without damaging the display.
 - A label is to be attached to the front lower left-hand corner of the banner giving the name of the club, county, and year. Names of members is optional. Letters should be 2" in height.

CLASS

430001. 4-H Club Banner

Kansas State Fair Banner Entry:

As of 2015—Banner Exhibits will no longer be displayed at the 4-H Centennial Hall. Fans are being installed in the building and will not allow banners to be displayed.

NOTES

2024 STAFFORD SCHEDULE OF EVENTS

WEDNESDAY, JULY 10

9:00 AM 4-H Shopping in Style, 4-H Sewing & Textile Design, & 4-H Fiber Arts Judaina

7:00 PM Public Style Review Stafford County Annex Building, Community Room, St John

PUBLIC ENCOURAGED TO ATTEND!

All Judging for Shopping in Style and Sewing & Textile Design takes place at the Stafford County Annex Community Room & Extension Office meeting room.

THURSDAY, JULY 11

5:30 PM Fair Ground Clean-up

TUESDAY, JULY 16

ALL JUDGING WILL BE AT THE FAIRBUILDING!

- 8:00-Noon Check-in & Weigh-in Livestock Check-in Rabbit & Poultry 8:00-10:00 AM Open Class Exhibit Check-in 10:30 AM Open Class Judging Begins 12:30 PM Vet Check of Livestock 1:00 PM 4-H Static Judging Begins 6:00 PM Hudson Cream Flour BAKEFEST
 - PARTICIPANTS & PUBLIC INVITED!

WEDNESDAY, JULY 17

- 8:00 AM 4-H & Open Class Swine Show
- 3:00 PM Poultry & Rabbit Judging
 - 5:00 PM 4-H Dog Show

FARM BUREAU. FAMILY, & FRIENDS NIGHT

- 1:00-9:00 PM Water Slides
- 5:00-7:00 PM Hamburger & Watermelon Feed
 - 6:30 PM Community Fair Building Ribbon Cutting
 - 7:00 PM Pedal Pull

THURSDAY, JULY 18

8:00 AM	4-H & Open Class Sheep & Goat Show
4:30-5:30 PM	Open Class Beef/Bucket Calf Check In
5:30 PM	4-H & Open Class Bucket Calf Show
7:30 PM	4-H & Open Class Beef Show

FRIDAY, JULY 19

9:00 AM	Round Robin
1:00 PM	Barnyard Olympics
6:30 PM	Ice Cream Social -Sponsored by SJNB
7:00 PM	Premium Auction
8:00 PM	Community Night -Goat Roping hosted by Stafford Saddle Club -Cornhole hosted by Stafford Recreation -Concert by Hunter Hathcoat

SATURDAY, JULY 20

10:00 - Noon Check Out all Exhibits

FRIDAY, JULY 26

6:30 PM Swine Carcass Show, Ellinwood

SUNDAY, JULY 28

5:00 PM Beef Carcass Show, Ellinwood

FRIDAY, AUGUST 2

6:30 PM Swine Carcass Show, Ellinwood



*****PLEASE NOTE THAT THE SCHEDULE IS SUBJECT TO CHANGE**