2020

Kansas State Fair

4-H Exhibitor Handbook

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Schedule of 4-H Events

Saturday, September 5

9:00am ……………………………………….State Fair 4-H Dog Show, Expo Center

Friday, September 11

8:00 am... 4-H Centennial Hall Opens to Receive Exhibits
8:30 am... 4-H/FFA Crops Check In, Crops Building
10:00 am.. Judging of 4-H Home Environment Exhibits begins, 4-H Centennial Hall
10:00 am.. Judging of 4-H Foods and Nutrition Exhibits begins, 4-H Centennial Hall
10:00 am.. Judging of 4-H Horticulture Exhibits begins, 4-H Centennial Hall
10:00 am .... Judging of 4-H Forestry Exhibits begins, 4-H Centennial Hall
10:30 am.. Judging of 4-H Clothing Exhibits begins, 4-H Centennial Hall
10:30 am.. Judging of 4-H Fiber Arts Exhibits begins, 4-H Centennial Hall
11:00 am.. Judging of 4-H Geology and Lapidary Exhibits begins, 4-H Centennial Hall
1:00 pm.. Judging of 4-H Entomology Exhibits begins, 4-H Centennial Hall
1:00 pm.. Judging of 4-H Aerospace Exhibits begins, 4-H Centennial Hall
1:00 pm .... Judging of 4-H Wildlife Exhibits begins, 4-H Centennial Hall
1:00 pm.. Judging of 4-H Energy Management Exhibits begins, 4-H Centennial Hall
1:00 pm.. Judging of 4-H Shooting Sports, 4-H Centennial Hall
1:00 pm.. 4-H/FFA Poultry Check In begins, Poultry Building
2:00 pm.. Judging of 4-H Woodworking Exhibits begins, 4-H Centennial Hall
3:00 pm.. Judging of 4-H/FFA Crops Exhibits begins, Showcase Building
5:00 pm.. 4-H Exhibit Entries close, 4-H Centennial Hall
5:00 pm.. 4-H Spacetech Review, 4-H Centennial Hall – Judge's Comments
5:15 pm.. IFYE 4-H Food Sale, 4-H Centennial Hall
8:00 pm.. 4-H/FFA Poultry entries close, Poultry Building
8:00 pm.. 4-H Centennial Hall Closes

Saturday, September 12

8:00 am.. 4-H Centennial Hall Opens
9:00 am.. Judging of 4-H Food Preservation Exhibits begins, 4-H Centennial Hall
9:00 am.. Judging of 4-H Photography Exhibits begins, 4-H Centennial Hall - Public Observation
10:00 am...4-H Presentations, 4-H Centennial Hall
11:30 am.. 4-H Wheat Variety plot Display Awards, Showcase Building
1:00 pm.. 4-H Crops Identification Contest, Encampment Building
1:00 pm.. 4-H/FFA Poultry Show, Poultry Building
3 to 5 pm.. 4-H/FFA Holstein and Jersey Dairy Cattle check-in, Prairie Pavilion
6:00 pm.. Grand Drive, Grand Gala will follow, Prairie Pavilion
8:00 pm.. 4-H Centennial Hall Closes

Sunday, September 13

8:00 am.. 4-H Centennial Hall Opens
10:00 am...4-H Presentations, 4-H Centennial Hall
10:30 am.. 4-H Photography Judging Contest, Encampment Building
2:00 pm.. Agriculture Challenge of Champions Contest, Encampment Building
2:45 pm.. 4-H Photography Judging Contest Awards, Encampment Building
8:00 pm.. 4-H Centennial Hall Closes

Monday, September 14

8:00 am.. 4-H Centennial Hall Opens
9:00 am.. 4-H/FFA Jersey, Holstein Dairy Cattle Show, Prairie Pavilion
3:00 pm.. 4-H/FFA Jersey and Holstein Dairy Cattle Released, Prairie Pavilion
8:00 pm.. 4-H/FFA Jersey and Holstein Dairy Cattle must be vacated, Prairie Pavilion
8:00 pm.. 4-H Centennial Hall Closes

Tuesday, September 15
9:00 am.. 4-H Centennial Hall Opens
9:00 pm.. 4-H Centennial Hall Closes

Wednesday, September 16
8:00 am.. 4-H Centennial Hall Opens
8:00 pm.. 4-H Centennial Hall Closes

Thursday, September 17
8:00am.. 4-H/FFA Ayrshire, Brown Swiss, Milking Shorthorn Dairy Cattle Check-in, Prairie Pavilion
8:00 am.. 4-H Centennial Hall Opens
Noon – 9:00pm.. 4-H/FFA Rabbit check – in Rabbit Building
10:00 am... 4-H Horses arrive
TBD.. 4-H Horses Check In
2:00 pm... 4-H Horse Halter Class, Expo Center
8:00 pm... 4-H Centennial Hall Closes

Friday, September 18
8am - noon... 4-H/FFA Rabbit check – in, Rabbit Building
8:00 am... 4-H/FFA Horse Show Begins, Expo Center
8:00 am... 4-H Centennial Hall Opens
10:00 am... 4-H/FFA Dairy Goat Check-in Opens; Sheep, Swine and Goat Building
12:00 pm... 4-H/FFA Brown Swiss, Dairy Cattle Show, Prairie Pavilion
3:30 pm... 4-H/FFA Ayrshire Dairy Cattle Show, Prairie Pavilion
6:00 pm... Judging of 4-H/FFA Rabbit Fur Classes, Rabbit Building
7:00 pm... 4-H/FFA Milking Shorthorn Dairy Cattle Show, Prairie Pavilion
8:00 pm... 4-H/FFA Dairy Goat Exhibitor Meeting
8:00 pm... 4-H Centennial Hall Closes
10:00 pm... 4-H/FFA Dairy Goat check-in closes; Sheep, Swine and Goat Building

Saturday, September 19
Times Assigned .... Judging of 4-H Fashion Revue, Stringer Fine Arts Center, Hutchinson Community College
8:00 am... 4-H Horse Show, Expo Center
8:00 am... 4-H/FFA Dairy Goat Show; Sheep, Swine and Goat Building
8:00 am... 4-H Dog Show Check-In, Bison Arena
8:00 am... Judging of 4-H/FFA Rabbits, Rabbit Building
8:00 am... 4-H Centennial Hall Opens
9:00 am... 4-H Dog Show Begins, Bison Arena
9:00 am – 12:00 pm .... FCS Judging Check In, Encampment Building
9:00 am – 2:00 pm... FCS Judging, Encampment Building
10:00 am...4-H Presentations, Centennial Hall
10:30 am... 4-H Poultry Judging Contest, Encampment Building, Dillon Hall
3:00 pm... 4-H Poultry Judging Contest Results & Awards, Encampment Building, Dillon Hall
4:00 pm .... 4-H Construction Fashion Revue, Encampment Building, Hansen Auditorium
5:00 pm... 4-H Buymanship Fashion Revue, Encampment Building, Hansen Auditorium
8:00 pm... 4-H Centennial Hall Closes

Sunday, September 20
8:00 am... 4-H/FFA Rabbit Showmanship and Judging Contests, Rabbit Building
8:00 am... 4-H Centennial Hall Opens
10:00 am...4-H Presentations, Centennial Hall
3:00 pm... 4-H/FFA Dairy Goats Released, Sheep, Swine and Goat Building
5:00 pm...4-H/FFA Crops Released, Showcase Building

6:00 pm.. 4-H Exhibits Released
9:00 pm.. 4-H Centennial Hall Closes
Monday, September 21
8 to 11 am .... 4-H Centennial Hall open to pick up entries.

4-H Rules

Special Rules are published in any department where necessary. If there is a conflict between the Special Rules and the General Rules, Kansas State Fair Board will govern the final ruling.

Exhibitors are expected to comply with all rules. Those failing to comply with the rules are subject to premium and award cancellations and disqualification from future participation in the Kansas State Fair 4-H shows and/or exhibits.

See Kansas State Fair General Rules for more details at www.kansasstatefair.com

Accessibility Information: The Department of 4-H Youth Development, K-State Research and Extension, Kansas FFA, and the Kansas State Fair are committed to making their services, activities, and programs accessible to all participants. If you have special requirements because of physical, mental, learning, vision, hearing or other impairment, please contact the chair of your division or the Kansas State Fair office.

Copyright Laws: Exhibitors should avoid using copyrighted materials whenever possible by originating his/her own work. Exhibitors should use with caution a copyrighted and/or trademarked product or service (a brand name, label or product). The intent of using the copyright or trademark materials for educational purposes such as an exhibit, educational poster/display or public presentation is acceptable under the "Fair Use" (legal use) provision. "Fair Use" is a provision of the current copyright law that allows reproduction without payment or permission of limited portions of a copyrighted work for educational and other public interest purposes. Regardless of the "Fair Use" provision, the inference that a specific name brand product is good or bad inherently or through comparison must be done cautiously, using acceptable research/comparison methods and have a disclaimer that the conclusions are those of the participant and not those of K-State Research and Extension. A copyright and trademark are legal methods used by writers, artists, corporations and others to protect their original work. Protected items may range from books to music, logos to computer graphics. Copyrighted and/or trademarked materials used in banners, displays, demonstrations, posters or other activities for endorsement or promotion instead of educational purposes will be disqualified and will not be displayed or receive ribbons or premium. 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 Agriculture Experiment Station and Cooperative Extension Service or the State of Kansas.

Eligibility: Current Kansas 4-H members meeting the membership criteria below are eligible to exhibit in the Kansas State Fair joint areas.

4-H membership: Enrolled in a local 4-H program. Members must be 9 years of age before January 1 of the current year and must not have passed their 19th birthday before January 1 of the current year.

Only purple award or State Fair blue exhibits selected in a previously designated competition may be exhibited in the 4-H division. All contestants must have qualified through county, district or other competitive events or be approved by the local K-State Research and Extension Office. Beef, sheep, swine, meat goat and rabbit entries must be of blue ribbon quality.

All exhibitors check with their Local Extension Unit about county/district requirements that are in place to enter exhibits at the Kansas State Fair in the following areas: dairy cattle, dairy goats, poultry, crops, horticulture, and rabbits.

Entries: Pre-Entries will be accepted no later than August 15 or within 5 working days of the completion of the county fair for those counties having fairs after August 10 except for beef, sheep, swine and meat goat entries. All entries must be processed through the Extension Office. All non-livestock entries must be processed through the Local Extension Unit Office. It is the responsibility of the individual 4-H member to pre-enter non-livestock exhibits with the Extension Office by the local deadline. The www.kansasstatefair.fairentry.com web site pre-entry system will be used for all exhibits except beef, sheep, swine and meat goat. If the exhibit requires an entry card, the form will be printed from the web site pre-entries and mailed to local Extension offices. Pre entries for the State 4-H Horse Show must be made on the www.kansasstatefair.fairentry.com web site on or before August 1. To complete the entry, a fee of $5 per class must be sent to the State 4-H Office before August 1 to cover show expenses.

4-H Beef, sheep, swine and meat goat entries are due July 15! Grand Drive entries must be signed by the appropriate Extension Agent. Entries are online this year, you can access this by going to www.kansasstatefair.com.

In order to enter and exhibit 4-H market livestock, breeding does or commercial breeding animal, the member must have nominated the animal. During the project year, 4-H members are expected to participate in a prior competition (i.e. county fair, spring show, breed competition) within the same species and project exhibit type (example: market beef). A different animal than the one exhibited may be shown at the State Fair, provided it has been carried in the same project. It shall be the responsibility of the County/District Extension Agent to see that only State Fair quality livestock (blue or purple quality) are entered in the 4-H Livestock section of the Kansas State Fair. This will be necessary when the qualifying competitions fall after the entry deadline for the Kansas State Fair. For 2020 it is required that all exhibitors have a YQCA certification.

Exhibits: No clothing or fiber arts exhibits will be removed for Fashion Revue Judging, the Public Fashion Revue, or any other contest. Firearms and weapons are not allowed to be entered or exhibited at the Kansas State Fair in the Kansas 4-H Youth Development Department.

Exhibitor: The exhibits must be the handiwork of the exhibitor; the grower, where agricultural exhibits are shown; and the owner and feeder, where livestock is entered. Exhibits must be the result of the current year's 4-H work. This rule shall be rigidly enforced to maintain the integrity of the youth programs. Exhibitors who are found by officials or elected local Boards of K-State Research and Extension to have left their livestock to the majority care of others, especially professional feeders/groomers, will be disqualified from the current Kansas State Fair, and be banned from future exhibition in the 4-H divisions of the Kansas State Fair.

In Place and Release Times: All 4-H exhibits shall be checked in beginning at 9:00 am and must be in place by 5:00 pm, on the first Friday of the fair, unless exceptions are given in the specific division's rules like beef, sheep and swine. All exhibits in the 4-H Centennial Hall must remain in place until 6:00 pm on the second Sunday of the fair. Exhibitors will forfeit premium if exhibits are removed early. At the close of the fair, all exhibits are to be claimed by the exhibitors or parties representing the exhibitors. Those in charge assume no responsibility for exhibits left on the fairgrounds after the close of the fair.

Liability: Exhibits at the Kansas State Fair are entered and displayed at the risk of the exhibitor. The Kansas State Fair or 4-H Youth Development accepts exhibits and will exercise due care to protect them. 4-H members who have exhibits of great sentimental and/or monetary value should carefully consider whether such exhibits should be exposed to the hazards of the fair.

Prizes: No exhibitor will be awarded more than one prize in any one class except in the livestock divisions. The group system of awards will be followed in all divisions except beef, sheep, swine, meat goats and horses. Four ribbon groups may be awarded: purple, blue, red, and white. Premiums will be paid only to the purple, blue, and red groups. The amount of the premium money apportioned will vary with the classes. Horses will be placed one through ten in each class. The premium funds listed in each division of this fair represent the funds available. In case there are fewer entries than anticipated, only as much of the premium as is needed will be apportioned among the exhibitors.

4-H YOUTH DEVELOPMENT PROGRAM
K-State Research & Extension, 4-H Youth Development, Manhattan, Kansas

Please read the General State Fair rules in the Kansas State Fair Exhibitor Handbook and the 4-H and FFA Rules.

All exhibits in the 4-H division are open to 9-18 year old 4-H members. Age classification is based on the age a 4-H member was before January 1, current year.

All exhibits in the 4-H Centennial Hall, except Visual Arts, will be placed in one of four award groups by the judges. Premiums will be paid on those exhibits receiving a purple, blue or red ribbon award. 4-H Visual Arts exhibits will not be judged competitively and will be awarded a participation ribbon with no premium money being paid.

Judging Contest Age Categories

	Intermediate Age	Senior Age
Crops Identification Contest	9 through 13	14 through 18
Family & Consumer Sciences Judging Contest	9 through 13	14-18
Fashion Revue		14 through 18
Photography Judging Contest	9 through 13	14 through 18
Poultry Judging Contest	9 through 13	14 through 18 Intermediate age can participate, if necessary, to complete a senior team, but an individual cannot participate in both the senior and intermediate contests.
Rabbit Judging Contest	Separate Classes for 9 & 10 year olds, 11 & 12 year olds, 13 & 14 year olds, and 15 years and older	

4-H CLOTHING AND TEXTILES

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Karla Hightower, Marais de Cygnes District Extension Agent
Display Chair: Christy Reel, Harper County Extension Agent
Beth Hinshaw, K-State Research & Extension, 4-H Youth Development

1. No exhibits will be released for any other use. Garments entered in this division cannot be used in the Fashion Revue.
2. 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 State Fair. Bags will be removed for clothing display purposes. Items should be hung on swivel or wire hangers.
3. Identification Labels (no straight pins may be used to attach these items)
    a) Type or print on 3" x 2½" piece of cloth: Class Number, County or District, Name.
    b) Sew labels on inside of garment (back of neck, center back of waistband, or left end of apron band). Label each piece.
    c) 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.
4. 4 H members enrolled in clothing and textiles may enter a maximum of two exhibits in this division. If two exhibits are entered, they must be in two different classes: constructed piece(s), educational exhibit or recycled clothing project.
5. Due to limited exhibit space, the management reserves the right to display only representative exhibits in the ribbon placing.
6. Pre-cut kits are acceptable for all clothing classes. All articles/garments must be finished for use.
7. Since care labels are not always available, NO care label will be required; however, 4 H members should know how to care for fabrics they purchase.
8. Educational Exhibit Classes. Share with others what you learned in this project. 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.
9. 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.**
10. 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.

4000   An article, garment, or outfit constructed by a 9 -11 year old exhibitor
4001   Educational exhibit prepared by a 9 -11 exhibitor
4002   An article, garment or outfit constructed by a 12-14 exhibitor
4003   Educational exhibit prepared by a 12-14 exhibitor
4004   An article, garment or outfit constructed by a 15-18 exhibitor
4005   Educational exhibit prepared by a 15 to 18 year old exhibitor
4006   Recycled Clothing Project

Kansas Sheep Association, c/o Deb Simon, Executive Director, 2598 County Road 78, Quinter, KS 67752, will award $25 to the exhibitor of the top purple article in Clothing and Textiles. A note from the exhibitors is required stating that the item is made of 60% or more wool to be eligible for the wool award.

2020 4-H CROPS IDENTIFICATION CONTEST

Location: ENCAMPMENT BUILDING
Event Date: Saturday, September 12, 2020
Co-Chairs: Bernadette Trieb, Wabaunsee County Extension Agent,
Shannon Blocker, Pottawatomie County Extension Agent
Contest Conducted by K-State Extension Agronomy Department, Kevin Donnelly, Crops Professor

2020 A $5 Entry Fee per 4-H Exhibitor will be due to the Kansas State 4-H Office with entry by August 15ᵗʰ.

1. **Schedule for the Day:**
   12:30pm   Registration begins, Kansas Fairs Association Hall, Encampment Building
   1:00pm   Contest begins
   3:45pm   Awards Ceremony
2. Rules: In keeping with National 4 H rules, contestants who have participated in post-high school course work or training for post-high school competition in the subject area of this contest are not eligible to compete. College freshmen who are enrolled in agronomy coursework and/or who are on a collegiate agronomy team of any type are not eligible to participate in the contest. The official Kansas State Fair Contest guidelines are provided in the K-State publication 4-H 713 (Revised, 2014) "4-H Crops and Weeds Contest"
3. Eligibility: There are Intermediate and Senior Divisions in this contest. Each County Extension Council may enter one team of four regularly enrolled 4 H members in each division. Each District Extension Council may enter teams of four regularly enrolled 4 H members equal to the number of counties comprising the Extension District in each division. The score of the three highest team members being totaled for the team score. An individual may compete for individual awards if less than three persons are available to form a team.
4. .   All teams and team members must be pre-entered. Enter county/district teams in class 5940 or 5942, and team members in class 5941 or 5943. Substitutions may be made at check-in.
5.   Plant Identification: 50 pressed plant samples mounted on cardstock will be identified. Participants earn 1 point for correct identification of each specimen, for a total of 50 points.
6.   Seed Identification 50 seed samples will be identified. Participants earn 1 point for correct identification of each seed sample, for a total of 50 points.

5940   Senior Crops Identification Co/Dist. Team Name
5941   Senior Crops Identification Contestant Name
5942   Intermediate Crops Identification Co/Dist. Team Name
5943   Intermediate Crops Identification Contestant Name

The Kansas State Fair will provide judging medals to the three highest scoring individuals in the Senior Divisions of this contest, rosettes to members of the first place team in the Intermediate and Senior Divisions of this contest and will sponsor up to $200 for an educational trip for the first place senior team. Plans for the trip must be approved by the State 4-H Office. Funds will be awarded after the trip has been taken. The Kansas County Weed Directors Association will award plaques to the three high individuals in the Senior Division and first and second place medallions for the Senior and Intermediate Division. The Eric and Jackie Chandler Family, Neodesha, KS will sponsor award plaques to the three high individuals in the Intermediate Division, and the first and second place team plaques for the Senior Division and Intermediate Division.

4-H DOG SHOW
Location: EXPO CENTER
Event Date: Saturday, September 5, 2020 8:00 am
Chair: Karen Riedmiller, Sedgwick County Volunteer
Shane Potter, K-State Research & Extension 4-H Youth Development

A $5 Entry Fee per class with a maximum of $30 per 4-H member
will be due to the Kansas State 4-H Office with entry by August 15!

Purpose: To provide an opportunity for Kansas 4-H members to demonstrate the proficiencies of the dogs they have personally trained and groomed through their 4-H project.

1.   Check in for all classes is at 8:00 am
2.   All teams, comprising of 4-H members who are 9-18 years of age and their dog, who have met county or district annual qualifications receiving a qualifying blue or purple in showmanship, obedience, agility or rally obedience can compete in the State 4-H Dog Show.
3.   4-H Dog Show Immunization Record (only MG-34 Revised, October 2017 accepted) must be completed for each dog entered at the State 4-H Dog Show. The record may be printed on any color paper. Originals or photocopies are acceptable. The fully completed form must be

presented to the veterinarian at health check on the day of the show to be eligible to compete. Teams without the immunization record will not be allowed to show. Required vaccinations include: Bordetella, Distemper, Hepatitis, Parvovirus, Parainfluenza, and Rabies. The rabies vaccination must be administered by a licensed veterinarian. All vaccinations must be current. Dogs must be at least 6 months of age at time of show.

4. Any abuse of dogs on grounds, or in the ring, will result in disqualification.
5. No dog in season will be allowed to show.
6. A well-fitting collar of leather, chain, or fabric is to be used for obedience and Rally Obedience; for Agility, a buckle or snap collar; for Showmanship, a show lead that serves as both collar and lead or a fine link chain collar, a "snake" chain or a fabric slip collar with a narrow, lightweight fabric or leather lead. No spiked, pinch, special training collars, and hanging objects from collars are allowed.
7. Any dog fouling the ring will receive a white ribbon. Owners should collect all dog waste in plastic bags and put in trash.
8. Baiting dogs is not allowed.
9. No mobile phones and/or other electronic devices are allowed in the ring.
10. **DOGS ARE NOT ALLOWED TO RUN AT LARGE OR ACCOMPANY OWNER ANYWHERE ON FAIRGROUNDS AT ANY TIME.**
11. The Kansas State Fair Dog Show will follow rules as listed in the published Kansas 4-H Dog rule books: Kansas 4-H Dog Show Rule Book(S-46 (Revised), April 2012; Kansas 4-H Agility Dog Show Rule Book, S-124 (Revised), March 2012; and Kansas 4-H Rally Obedience Rule Book, 4H965 (Revised), March 2012.   Other guidelines used are: Kansas 4-H Dog Show Judge's Guidelines Showmanship/Obedience, S82 (Revised), January 2013 and Kansas 4-H Rally Obedience Dog Show Judge's Guide, 4H1023, March 2013.
12. For time constraints, teams receiving a non-qualifying score may be excused from the ring at the show committee's discretion for long performance times (more than 5 minutes) AND repeated failures at obstacles.
13. Score sheets are available at http://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/docs/dog/State_Fair_Dog_Show_Score_Sheets.pdf or through your local Extension Office for showmanship and obedience.

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Showmanship Competition
Time: 9:00 am

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Entries will be judged on fitting of the dog: clean and well brushed, tone and condition of coat, healthy appearance, teeth, toenails, and eyes. 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.

3600   Junior Showmanship, 4-H members 9 - 11 years old
3602   Intermediate Showmanship, 4-H members 12 - 14 years old
3605   Senior Showmanship, 4-H members 15 and older

Ribbon groups: Purple.....95-100 points   Blue........90-94.5 points
                  Red.........80-89.5 points   White .....79.5 points or less

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Obedience Competition
Time: Immediately after Showmanship

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A 4-H member may enter only one dog per class. See rule 2 to enter the proper class. A score of 170 points or greater (blue or purple) is a qualifying score, with at least 50% in each exercise. In case of tie, a run-off on the heel free exercise will be held with one team performing at a time. Pre-Novice is offered only at the local level.

3610   Novice
3615   Graduate Novice
3620   Open A
3625   Open B
3630   Utility A
3635   Utility B

Ribbon groups: Purple.....190-200 points   Blue........170-189.5 points
                  Red.........150-169.5 points   White .....149.5 points or less

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

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

Divisions for all Agility classes are:

1. Small dogs -- under 15" at the withers
2. Medium dogs – 15-20" at the withers.
3. Large dogs – more than 20" at the withers

Note: Pre-Agility or Agility 1 on lead is for local shows only.

3640   Agility I
3641   Agility II
3642   Agility III

Ribbon Groups for all Agility classes are:

Purple	190 - 200 points	Blue	170 - 189.5 points
Red	150 - 169.5 points	White	149.5 points or less

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.

Rally Obedience Competition
Time: Immediately follows Obedience.

Note: Rally Level I is on lead and for local shows only

3645   Rally Level II
3646   Rally Level III

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

Awards Sponsored by:

   Cares, Inc., Concordia, KS 66901 offers awards for the champions and reserve champions who receive at least a blue in each class.

4-H ENERGY MANAGEMENT

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Keith VanSkike, Twin Creeks District Agent
Anissa Jepsen, K-State Research and Extension 4-H Youth Development

1.   Exhibits must be entered before 5:00 pm first Friday of the fair.
2.   Only those who have met the requirements of the electric, small engine or wind energy project are eligible to exhibit in this division.
3.   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.
4.   Items that have been in use should be cleaned for exhibit.
5.   A sheet of operating instructions must be furnished for any exhibit not self-explanatory.
6.   Projects (classes 4600, 4601 and 4602) must be operable using only 110 or 120V AC or battery power. If battery power is required, batteries must be furnished.
7.   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.
8.   No hand dipped solder may be used on exhibits.
9.   Each exhibit must have a scorecard completed and attached securely. This scorecard is available from your Local Extension Office.

ELECTRICAL AND ELECTRONICS

4600   AC Electric Projects. 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.

4601   DC Electric Projects. 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 two or 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.

4602   Electronic Projects. Electronic Projects. 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.

4603   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'.

SMALL ENGINES

All exhibits should involve engines smaller than 20 horsepower for classes 4610-4612

Displays are limited to 4' wide and 4' deep - both upright and floor displays.

4610   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'.

4611   MAINTENANCE - Exhibit a display that illustrates either 1) Routine maintenance procedures OR 2) Diagnosing and trouble shooting 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'.

4612   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.

4620   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.

4621   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.

4-H ENTOMOLOGY

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Dale Weishaar, Sumner County Volunteer
Amy Sollock, K-State Research and Extension 4-H Youth Development

A 4-H member enrolled in the Entomology Project may exhibit in the ENTOMOLOGY COLLECTION, ENTOMOLOGY NOTEBOOK and/or EDUCATIONAL DISPLAY categories. Within each category, there are classes in Beginning, Intermediate or Advanced phases in which they

enroll. The Notebook category also has an Introductory class that 4-Hers may exhibit in the State Fair as long as they meet age requirements and County Fair ribbon placing requirements. An Introductory Entomology Collection Class exhibit is encouraged for county fairs (first year members only), but these may not be exhibited at the State fair. See class descriptions within categories for requirements.

Resources for exhibiting can be found on the Kansas 4-H Entomology project page

COLLECTION CLASSES

1. 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. Please visit the website listed above for box instructions and plans.
2. 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
3. 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.
4. 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.
5. 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.
6. 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.
7. 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.
8. Only specimens of the class Insecta should be included.
9. Purchased insects are not to be exhibited in collections, but they may be used in educational displays.
10. 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.

4900 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 ~~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.

4901 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.

4903 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)
   a) "Insects in Kansas" book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or
   b) "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 may move up if they receive a purple ribbon.

4905 ADVANCED 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 in 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.

NOTEBOOK CLASSES

1. Individual entries are to be placed for display in a three-ring notebook for competition.
2. 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
3. 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.
4. Each exhibitor is require 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 www.bugguide.net
   The number of orders, specimens and families (required in Intermediate and Advanced classes) must also be included on the Title Page.
5. 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.
6. Date, common name, full county name and state abbreviation should be included for each species. Collector's name on the specimen page is optional.
7. Specimen pages should have two different views of the insect if possible. If pictures are taken on different dates/localities, include information for both.
8. 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.
9. 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.
10. For the Intermediate and Advanced classes, insects are also to be grouped by family behind each order divider.
11. 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.
12. A special project must be completed each year and included in the notebook. See project guideline materials for specifications.
13. Refer to the publication "Entomology Collection Notebook Guidelines" on the Kansas 4-H Entomology web page for more detailed rules for exhibiting.

4907   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 Kansas State Fair. A 4-H member may exhibit in this class for a maximum of two years.

4908   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 a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first.

4909   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 six orders: (Only two will be counted for judging)

   a.   "Insects in Kansas" book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or
   b.   "Insects in Kansas Book: 2016 Revised Taxonomy " which follows www.bugguide.net - 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.

4910   ADVANCED 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.

EDUCATIONAL DISPLAYS

1. 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.
2. Follow copyright laws as explained in the General Rules.
3. 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.
4. 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.
5. Name and county/ district must clearly be marked on educational exhibits.

4902 BEGINNING EDUCATIONAL EXHIBIT
Class for individuals that are exhibiting in the Beginning I and II Collection or Beginning Notebook Classes. If only exhibiting in this category, then ages 9-12.

4904 INTERMEDIATE EDUCATIONAL EXHIBIT
Class for individuals that are exhibiting in the Intermediate Collection or Intermediate Notebook Classes. If only exhibiting in this category, then ages 11-14.

4906 ADVANCED EDUCATIONAL EXHIBIT
Class for individuals that are exhibiting in the Advanced Collection or Advanced Notebook Classes. If only exhibiting in this category, then ages 13 or older.

4-H Intermediate & Senior Family and Consumer Sciences Judging

Location: 4-H ENCAMPMENT BUILDING
Event Date: Saturday, September 19, 2020 9AM – 2PM
Awards: 3:30PM

Committee: Sukesh Kamesh, Kingman County; Becky Reid, Cowley County; Clarissa Sents, Coffey County; Ashley Svaty, Post Rock District Shandi Adres, Flint Hills District;
TBD, K-State Research & Extension, 4-H Youth Development

1. Youth ages 9-13, as of January 1 of the current year, are eligible to participate in the Intermediate division. Youth ages 14-19 as of January 1 of the current year, are eligible to participate in the Senior Division.
2. Participants can only register as a team. Individuals are not permitted to enter this contest.
3. Each team must have at least 2 members and no more than 4 members.
4. All eligible teams and participating team members must be pre-entered by August 15.
5. An entry fee of $15 per team (2-4 people) will be due with the August 15 pre-entry date.
6. Local Units MUST select their team(s) contest participation time when pre-entry information is submitted.
7. All participating team members must check in and be prepared to start the contest at the same time. Please have one adult check in with the team. Adults and team members will be separated after the orientation session. 4-H members will be escorted to and from the various contest components. Adults are encouraged to volunteer to assist with various contest aspects.
8. There will be three components to complete as part of the contest:
   a. Class judging and reasons for selected classes (Individual)
   b. A hands-on immersion activity (Team)
   c. A presentation inviting the team's perspective in response to the situation presented on the day of competition
9. Teams will deliver their presentation before a judge. Spectators will not be allowed in the presentation room
10. All cell phones and other communication devices must be turned off while participating in the contest.
11. Rosettes will be presented to the top two teams in each age division. The first-place team in each age division will be eligible to take an educational FCS related trip, for reimbursement, up to $200.
12. Additional prizes may be awarded.
13. Efforts will be made to accommodate participants in multiple State Fair 4-H events.

14. Scores and contest winners will be shared at 3:30 p.m. in the Encampment Building Auditorium. Contest packets will be returned to present teams after the results are announced.

5960 Intermediate FCS Judging Team
5965 Senior FCS Judging Team

4-H FASHION REVUE

Location: STRINGER FINE ARTS CENTER
Event Date: Saturday, September 19, 2020
Judging: Stringer Fine Arts Center, Hutchinson Community College
Public Revue: Hansen Auditorium, Encampment Building
Chairs: Rhonda Gordon, Lyon County Extension Agent, Anne Pitts, 4-H & Human Development, Rebecca McFarland, Family & Child
Development agent in the Frontier District
Amy Sollock, K-State Research & Extension, 4-H Youth Development

1. The following forms and fees must be post marked and submitted to the State 4-H Office by August 15
   a. Completed Cost per Wear & Evaluation Score Card Form
   b. $5 entry fee, make checks payable to: Kansas 4-H Foundation – non-refundable
2. Participants should communicate judging time preference to their Extension Agent. When offices complete the state fair entry online, approximate judging times will be selected and filled on a first come basis.
3. Participants should provide a written script to their Extension Agent so that the office may submit it as part of the fair entry process. Scripts should be 4-6 sentences in length. Write it exactly as you want it read during the public revue. Include member's name and local unit somewhere in the first sentence. Some descriptors may include: fabric, colors, patterns, where you will wear the outfit, what you like best, etc. Feel free to include hobbies and other info about yourself.
4. Young men and young women are eligible to participate; however, each member may compete in only one class. Each County Extension Council may enter two contestants per class. Each District Extension Council may enter contestants equal to the number of counties comprising the district times 2.
5. Participants must be 14, but not yet 19, before January 1 of the current year. No younger children can model in the senior classes. No live animals may accompany participant; exception needed service animals.
6. State Fair clothing, fiber arts or visual arts exhibits cannot be used in any of the three fashion revue classes.
7. Participants must have been declared a winner of the county or district level. Alternates may participate if winners cannot attend.
8. Participant may model only what can be worn. Garments cannot be carried. Contestants should use good sense in choosing items that are appropriate to be modeled publicly.
9. Youth must participate and be present at the Public Fashion Revue to receive recognition or awards. Ribbons and prize money will be withheld if participants do not participate in the Public Revue.
10. Judging will take place at Hutchinson Community College Stringer Fine Arts Center, on 11th Ave, just east of the Kansas Cosmosphere. The judging schedule will be available on the web and at Local Extension Offices before the Fair.

The Public Fashion Revue will be held in Hansen Auditorium in the Encampment Building. The Constructed Garment Fashion Revue will be held at 4:00 pm and the Buymanship Fashion Revue will be at 5:00 pm.

Constructed Garments Revue: Majority of the outfit must be constructed and modeled by the 4-H member who made the garment/outfit. **Everything which is commonly considered an outer garment must be constructed** (vest, jacket, dress, skirt, pants, coat, etc.). A sweater, blouse or shirt that is worn underneath another constructed garment can be purchased or made.

6000   Construction presentation for 4-H members enrolled in the Clothing & Textile Project.

Buymanship Revue: 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. Everything which is commonly considered an outer garment must be purchased by the 4-H member or constructed by another person (vest, jacket, dress, skirt, pants, coat, etc.).
6010   For young women enrolled in the Clothing and Textiles project.
6020   For young men enrolled in the Clothing and Textiles project.

All members will receive a purple, blue, red or white ribbon. Champions and Reserve Champions will be named in all three classes and will receive special awards from The Kansas State Fair and The College of Human Ecology; Kansas State University will provide $250 scholarships in each division for the champion and reserve winners who enroll in the college.

4-H FIBER ARTS
Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Co-Chairs: Robin Eubank-Callis, Barber County Agent, and Andrea Wood, Kingman County Agent
Beth Hinshaw, K-State Research & Extension, 4-H Youth Development

1. 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.**
2. No exhibit will be released for any other use. State Fair fiber arts exhibits cannot be used for any of the Fashion Revue classes.
3. Identification Label:
   a) Type or print on a 3" x 21/2 "piece of cloth: class number, county or district, and exhibitor's name.
   b) Sew or safety pin this ID label on the corner of flat articles;
   c) For garments, attach ID label to the front left shoulder seam, or left side of waistband, as if you were wearing the garments.
4. A member may enter only one exhibit in each class, with a total of up to 3 Fiber Arts Exhibits. All articles/garments must be finished for use.
5. When articles, which are normally worn as a pair, are exhibited, both articles must be shown together. Fasten articles together securely with yarn.
6. Special consideration will be given to articles, which are of original design. Such articles should have a note attached explaining the original design.
7. 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.
8. Exhibitors are expected to be enrolled in the Fiber Art project in which they are entered. 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.
9. 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.
10. 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.
11. There are no age specific classes in fiber arts.

4111   Crochet, an article including felted items. (See #7 above)
4112   Knitting, an article made either by hand or by knitting machine including felted items.(See #7 above)
4113   Needle Arts, an article created by hand using any of the following techniques:
            a) Embroidery and cross-stitch
            b) Needlepoint
            c) Candle wicking
            d) Crewel
            e) Lacework

f) Appliqué.

4114   Patchwork or Quilted article - It is acceptable practices for the exhibitor to create the patchwork or quilted article and have someone else quilt it. (See #7 above)

4115   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.

4116   Spinning, a skein - minimum 10 yards in length

4117   Weaving, a woven article - Members should attach information about the type of loom or process used. (See #7 above) Woven wood reed basket, should be exhibited in Visual Arts

4118   Ethnic Arts, an article: This is defined as a Fiber Art/Textile technique that is associated with a specific country or culture. It is a practical skill that was developed to provide basic family needs such as apparel, home furnishings or decorations. It is also defined as a method that has been maintained throughout history and passed on to others, often by observation and by example, such as batik, Swedish huck towel weaving, mud cloth, bobbin weaving, tatting, felted items that are not knitted or crocheted, etc. Members should attach information on the history of the ethnic fiber art, where it was used, by whom, how it was used, short description of the technique, etc. (See #7 above)

4119   Macramé, an article

4120   Fiber Arts Educational Notebook

Kansas Sheep Association, c/o Deb Simon, Executive Director, 2598 County Road 78, Quinter, KS 67752 will award $25 to the exhibitor of the top purple article in Fiber Arts. A note from the exhibitor is required stating that the item is made of 60% or more wool to be eligible for the wool award.

The Kansas Alliance of Spinners and Weavers, c/o Barbara Say, 2055 Road M, Emporia, KS 66801 will award $25 to the exhibitor of the top exhibit in class #4116 Spinning and #4117 Weaving.

Jean Clarkson- Frisbie Memorial Best of Show Quilt Award, given by the Friends of Jean Clarkson-Frisbie, c/o Jodi Drake, Pratt County Extension Office, 824 W. First Street, Pratt, KS 67124.

4-H FOODS – NUTRITION

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair:
Diane Mack, K-State Research & Extension, 4-H Youth Development

1. A member may make only one entry in a non-perishable class and one entry in an educational class in this division. Complete recipes with ingredients and instructions must be attached with the entry, or the placing will be lowered one ribbon when judged.

2. 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. Refer to K-State Research and Extension publication, 4-H888, Judge's Guide for Food and Nutrition Exhibits, for information to help you make informed, safe food exhibit decisions.

3. Alcohol (ex. Wine, beer and hard liquor) is not allowed as an ingredient in food entries. Entries with alcohol in the recipe will be disqualified and not be judged.

4. 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.

5. Under baked entries will be lowered one or more ribbon placings.

6. 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.

7. Attach gummed label to bottom of plate or cardboard. Label templates are available at http://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/docs/foods-and-nutrition/Foods_Label.pdf or make your own with the following information: Class Number, Food Product Name, 4-H member's Name, and County or District.

8. 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.

9. Exhibits should be in food grade plastic bags, disposable plastic containers or boxes of appropriate size for the exhibit. Foods will be judged Friday and sold on Friday and Saturday so food will need to be quickly re-wrapped for overnight. Only the exhibit is judged. The container is not judged.

10. Carefully secure the entry form, recipe and evaluation form to the outside of the wrapped exhibit. Do not wrap forms in plastic.

11. 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.
12. 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.
13. Because of a shortage of exhibit space, a limited sample of food product entries will be displayed. The remainder of the foods will be sold. Proceeds from the 4-H Food Sale are used to benefit Kansas 4-H members who participate in the International 4-H Youth Exchange Program.
14. Decorated special event cakes will no longer be accepted for exhibit.
15. Dried foods are to be exhibited in the Food Preservation Division.

4300   For age 9 -11, non-perishable food product.
4301   Educational exhibit prepared by 9, 10 or 11 year old.
4302   For age 12-14, non-perishable food product.
4303   Educational exhibit prepared by 12, 13 or 14 year old.
4304   For age 15-18, non-perishable food product
4305   Educational exhibit prepared by 15-18 year old.
4306   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.

4-H FOOD PRESERVATION

Location: 4-H CENTENNIAL HALL
Judging Date: Saturday, September 12, 2020
Chair: Robyn Prickett, Central Kansas Extension District
Diane Mack, K-State Research & Extension, 4-H Youth Development

1.   Exhibits must have been preserved since the member's previous year's county fair, and not been exhibited at the previous State Fair. Example: For fair date August 15, 2018, items canned following that date can be exhibited at this year's State Fair.
2.   Recipes and processing methods from the sources below are recommended. Recipes must be from 1995-Present 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, over canning, sun canning and using electric multi-cookers. For more information on electric multi-cookers, see http://nchfp.uga.edu/publications/nchfp/factsheets/electric_cookers.html. Untested recipes will be disqualified for food safety reasons. Tested recipe resources include

Recipe Resources include:
- K-State Research and Extension Food Preservation publications
- Other University Extension Food Preservation publications
- USDA Complete Guide to Home Canning
- So Easy to Preserve, 6th edition, The University of Georgia Cooperative Extension Service
- Ball Blue Book Guide to Preserving
- Ball Complete Book of Home Preserving
- All New Ball Book of Canning and Preserving
- Canning mixes (i.e. Mrs. Wage's, Ball)
- Pectin manufacturers (i.e. SureJell, Ball)
- http://www.rrc.k-state.edu/preservation/recipes.html

Refer to following K-State Research and Extension publications for more information:

4H712, Food Safety Recommendations for Food Preservation Exhibits (http://www.ksre.ksu.edu/bookstore/pubs/4H712.pdf)

MF3170 "10 Tips for Safe Home-Canned Food (http://www.ksre.ksu.edu/bookstore/pubs/MF3170.pdf)

MF3171 "Sassy Safe Salsa at Home" (http://www.ksre.ksu.edu/bookstore/pubs/MF3171.pdf)

MF3172 "What's Your Elevation?" (http://www.ksre.ksu.edu/bookstore/pubs/MF3172.pdf)

MF3241 "How to Guide to Water Bath Canning and Steam Canning (http://www.bookstore.ksre.ksu.edu/pubs/MF3241.pdf)

MF3242 "How to Guide to Pressure Canning (http://www.bookstore.ksre.ksu.edu/pubs/MF3242.pdf)

3. Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol in the recipe will be disqualified and not be judged.

4. Each member may enter up to two exhibits in this division, but only one entry per class.

5. 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.

6. Exhibits must be sealed 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. Do not add 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. 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.

7. Each jar exhibited must be labeled. The label must not cover brand name of jar. The label must give: Class No, 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. Templates to make adhesive labels can be found at:

https://www.kansas4-h.org/events-activities/fairs/kansas-state-fair/docs/foods-and-nutrition/Foods_Label.pdf

8. Classes 4350-4355 will require one jar for each class.

9. Hole punch the entry card and use a rubber band to attach the entry card and recipe around the top of the jar.

10. 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" www.ksre.ksu.edu/bookstore/pubs/MF3173.pdf

4350	Sweet Spreads (Fruit and/or Vegetables), Syrups; One jar
4351	Fruits, Juices, Fruit mixtures (Salsa, Pie Filling, etc.); One jar
4352	Low Acid Vegetables (green beans, corn, etc or vegetable mixtures.); One jar
4353	Pickles (Fruit or Vegetable), Fermented Foods and Relishes and Chutney; One jar
4354	Tomato/Tomato Products, Tomato Juice and Tomato Salsas; One jar
4355	Canned Meats; One jar
4356	Dried Foods: One Small Jar.

4-H FORESTRY

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair:
Diane Mack and Shannon Rogge, K-State Research and Extension 4-H Youth Development

1. Each member may enter up to two exhibits in 4-H Forestry but only one entry per class. Participants can exhibit in a collection phase and one other class, 5104-5109, or they may exhibit in any two non-collection classes, 5104-5109.

2. 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 tri fold size is 3' x 4'. Resources for exhibiting are located on the Kansas 4-H forestry project page: https://www.kansas4-h.org/projects/agriculture-and-natural-resources/plant-sciences/forestry.html

3. Name, club, age, and year in project should be on front cover or in a prominent location.

4. 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 " (https://www.bookstore.ksre.ksu.edu/pubs/4H334.pdf); (2) Location (city and/or county) where collected; and (3) date (day, month, year) or (month, day, year) collected.

5. Divide specimens into the following two sections: Native Kansas Trees, and Non-Native Trees. (https://www.bookstore.ksre.ksu.edu/pubs/4H334.pdf)

6. New specimens are those specimens collected during the current 4-H year and cannot be a duplicate tree species of previously displayed specimens.

7. Group specimens according to the years collected (ex. "old-previous years" and "new").

8. Variations of varieties do not count as different species or specimens.

9. 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.

10. If you retrieve information for your forestry exhibit, you must include a reference citation to the source.

11. 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.

12. All work must show originality. Leaf collections and displays should not closely resemble work done by others in the same club.

Knowing Trees as Individuals (Leaf Collections**)

5100   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.

5101   Forestry Collection: (Choose either A or B) This class is open to those exhibiting either for the first or second time at the state 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.

5102   Forestry Collection: (Choose either A or B) This class is open to those exhibiting either for the third or fourth time at the state 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.
    B. 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.

5103   Forestry Collection: (Choose either A or B) This class is open to those exhibiting the fifth time or more at the state 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

5104   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

5105   Notebook: Entry may include a 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

5106   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'.

5107   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

5108   Entry may include collected wood samples (all or partial) and 2 page 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

5109   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 State Fair conditions. This is a good class to exhibit an unusual collection.

4-H GEOLOGY and LAPIDARY

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Alan Meinholdt, Lyon County Volunteer
Shane Potter, K-State Research and Extension 4-H Youth Development

1. 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 5300-5304 only, the dimensions of the box should be appropriate for the display, but should not exceed 18"x24"x31/2".

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).

3. Exhibitor may enter in both geology and lapidary classes. Exhibitor may show in only one of the first four geology classes (5200, 5201, 5202 or 5203). Exhibitor may also show in geology class 5204 (special exhibit), 5205 Mineralogy, 5206 Fossils, and in one lapidary class.

4. Geology specimens should be labeled with the number of the specimen, date collected, specimen name or description, and locality (county only) where collected.

5. For the geology classes 5200, 5201, 5202 and 5203, 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).

6. For geology classes 5200, 5201, 5202, 5203, 5305, and 5206 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.

7. Exhibitors may have a consultation review of their work by visiting with a member of the judging committee. Someone will be available from 3:00 to 6:00 pm on the first Friday of the fair in the Geology exhibit area.

5200   Geology. Display at least 15 rocks, minerals, and fossils collected during the current 4-H year. Exhibitor is limited to one exhibit box. Only those exhibiting at State Fair for the first time may enter this class.

5201   Geology. Display at least 30 different rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year**. Exhibitor is limited to one exhibit box. This class is open to those exhibiting either first or second time at State Fair.

5202   Geology. Display at least 45 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year.** Exhibit limited to two boxes. This class is open to those exhibiting either the third or fourth time at the State Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

5203   Geology. Display at least 60 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year.** Exhibit limited to two boxes. This class is open to those exhibiting the fifth time or more at the State Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

5204 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 State Fair conditions**. Exhibitor may show in the class regardless of number of times he or she has exhibited at State Fair or whether exhibitor has entries in classes 5200, 5201, 5202 or 5203. Exhibitor may also exhibit in lapidary class.

5205 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 (ie: 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: $CaCO_3$ for calcite) if known.

5206 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.

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 State Fair is considered a new year specimen).

5300 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 State Fair for the first time may exhibit in this class..

5301 Lapidary. Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumble-polished 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.

5302 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.

5303 Lapidary. Display before-and-after examples of at least 9 varieties of specimens, at least 2 tumble-polished 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.

5304 Lapidary. 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 5304. Please note that each member is limited to one entry in this class.

4-H HOME ENVIRONMENT

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair:
Aliah Mestrovich Seay, K-State Research & Extension, 4-H Youth Development

1. An entry card must be attached to the exhibit with safety pin(s) or tape and string

2. A member may make only one exhibit in this division.
3. 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.
4. Projects with missing or insufficient summary will be lowered one ribbon placing (i.e. a blue ribbon exhibit will receive a red ribbon).
5. 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.

4400   Single Exhibit. An article (furniture, fixtures, interior or exterior, etc.) made or refinished by the 4-H member for the home Must include attached summary.
4401   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.
4402   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 for Notebook exhibits.

4-H HORSE SHOW

Location: EXPO CENTER
Event Dates: Thursday, September 17, Friday, September 18, and Saturday, September 19, 2020
Chair: Becky Dillon, McPherson County Volunteer
State 4-H Horse Events Coordinator: Christa Obermeyer
Anissa Jepsen, K-State Research and Extension 4-H Youth Development

1. **To be eligible to enter the State 4-H Horse Show at the Kansas State Fair, a 4-H member must be between the ages of 9 and 18** before January 1 riders must have successfully met the requirements of all three sections of Achievement Level I. Showmanship and Halter class participants must pass the first two sections of Achievement I plus Ground Work portion of skill test prior to their District qualifying 4-H Horse Show entry deadline.
2. **Level ll Horsemanship Class 3010**– To be eligible, a 4-H member must have met the requirements of all three sections of Achievement Level l and ll prior to the State 4-H Horse Show entry deadline of August 1. After advancing to Level lll Horsemanship, an exhibitor is no longer eligible to enter Level ll (Class 3012)
3. **Level III Horsemanship Class 3011**– To be eligible, a 4-H member must have met the requirements of all three sections of Achievement Level I, II and III prior to the State 4-H Horse Show entry deadline of August 1. After advancing to Level IV Horsemanship, an exhibitor is no longer eligible to enter Level III (Class 3013).
4. **Level IV Horsemanship Class 3016**– To be eligible, a 4-H member must have met the requirements of all three sections of Achievement Level I, II, III and IV prior to the State 4-H Horse Show entry deadline of August 1.
5. **Entry and fee must be postmarked August 1** at the State 4-H Office. 4-H member must pre-enter horse with their Extension Office by the local deadline.
6. **District qualified horses may only be entered and shown in the same class at the State 4-H Horse Show, no substitutions!**
7. **Refunds available – for classes only from August 1 until August 15** after contacting the State 4-H Office 785-532-5800. 4-H member is responsible to contact the State 4-H Office. **No refunds after August 15.**
8. Horse stall and jump out reservations are available at the Kansas State Fair web site https://www.kansasstatefair.com/p/about/817. Reservation and payment done online only. Horse stalls will be confirmed before arriving at State Fair. Stall fee $15 per night or $5 jump out fee if not stalled. One horse per stall. Tack stalls can be purchased only if available upon arrival; cannot be reserved in advance. All bedding must be purchased from the State Fair. Bedding is $7 per bale of chips/shavings and $5 per straw bale. All stalls must be bedded. Gate admission tickets available for purchase on stall form. **No refunds once submitted.**
9. 4-H Horses may arrive on fairground at 8 a.m. Thursday, September 17. Stalls will NOT be available until 8 a.m. Thursday morning. Check-in begins at 10 a.m., Thursday, September 17. 4-H member must have current **4-H Horse ID papers** present at check-in to pick up show packet. Horses must be checked in by class time each day.
10. **Check in times are as follows:**
    Thursdays, September 17: 10 a.m. through 7 p.m.
    Friday, September 18: 7 a.m. through 9 a.m., 11 a.m. through 1 p.m., and 5 p.m. through 7 p.m.
    Saturday, September 19: 7 a.m. through 9 a.m., 11 a.m. through 1 p.m.
11. Exhibitors may show only three horses at the State Fair, regardless of how many horses qualified at District.

12. Only one halter horse can be exhibited by a 4-H Member at the State Fair.
13. The age of a horse is determined as of January 1, of the year in which it is born.
14. Stallions cannot be exhibited in any class.
15. Show Management has the right to determine age and check bits on any horse being shown.
16. No animal or 4-H member may show in the same class more than one time.
17. The use of protective headgear, in place of a hat, is encouraged in any and all classes, including judged, timed and futurity classes.
18. 4-H Jumping Classes must complete the safety check before the classes; however, if during the safety check a) horse refuses to jump three times; b) 4-H members falls off horse during the practice course or c) the horse cannot complete both jumps, the 4-H member will be disqualified from the class.
19. Pleasure Pairs can be two riders from a designated 4-H District Horse Show that competed and qualified at the district level.
20. The Horse Show Management Team has the authority to combine classes. Classes of less than five will be reviewed. Extension Offices will be notified after entry deadline if a class is not held
21. Lunging is allowed in designated areas. Designated areas will be posted.
22. Ribbons given to 1 through 10 placings. No premium money given.
23. High point award will be given to one 14-18 year old 4-H exhibitor and one 9-13 year old exhibitor. Qualifications based on one horse and one rider.
24. Stall Decorating Contest based on attractiveness and educational value with posters and pictures. **NO STAPLES!!**
25. Exhibitors wanting to declare an unauthorized entry or rule violation etc. must follow the Protest Procedure as outlined by the Kansas 4-H Horse Show Rule Book and Kansas State Fair General Rules found at www.kanasstatefair.com

LIVESTOCK HEALTH REQUIREMENTS: By the State Animal Health Commissioner
General Requirements (Kansas Origin):

1. All required tests must be conducted by a state-approved laboratory.
2. All animals are subject to examination by officials of the Kansas Animal Health Department or those designated by the exhibition staff, and will be free of clinical signs of infectious or contagious disease.
3. Animals with lesions of ringworm, warts or infested with mange as determined by officials of the Kansas Animal Health Department or exhibition staff will not be permitted to exhibit.
4. All animals (cattle, bison, swine, goats and horses), except steers, spayed heifers and sheep, must be accompanied by a health certificate issued within 30 days of exhibit and must be available, upon request, to the officials of the KAHD or exhibition staff.

Horses, Donkeys & Mules:
Please refer to the Kansas State Fair website at https://www.kansasstatefair.com/p/participate/livestock-exhibitor-information for health requirements.

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Halter Classes
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All halter horses must qualify by receiving a purple or blue ribbon at their District 4-H Horse Show. An exhibitor may show in only one halter class. No weanlings will be shown. The term "stock-type" includes, but is not limited to, Appaloosa, Buckskin, Paint, Palomino and Quarter Horse. The term "non-stock-type" includes, but is not limited to, Arabian, Morgan, Thoroughbred, American Saddlebred, and mules. For additional Halter Class rules, check Kansas 4-H Horse Show Rule Book.

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Class Qualification
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Youth must qualify by receiving a purple or blue ribbon in the respective class at the District 4-H Horse Show to be eligible for all state fair classes EXCEPT for the following:
Level ll Horsemanship
Level lll Horsemanship   Three-Year-Old Project
                Stall Decoration Contest

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Additional Requirements
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Three-Year-Old-class – To exhibit at the State 4-H Horse Show, a 4-H member must have properly submitted a horse identification certificate, nomination form, and nomination fee to the State 4-H Office **before May 1**. They must also have met all requirements for Achievement Level I and enter the State Fair 4-H Horse Show **before August 1.** Interviews for the Three-Year-Old Class will be held on Friday.

Hunter Hack– 4-H members wanting to participate in the classes 3033- and 3034 must complete the safety check at 7:30 am, Saturday of the show. Show begins at 8 a.m.

TENTATIVE CLASS SCHEDULE
*Direct entry to state show (class number must be included on entry form); no district qualifying.

Thursday, September 17, 2:00 p.m., Expo Center with Expo II (Warm-up area)

Halter Classes:

3001 Stock Type Geldings (any age)

3002 Non-stock Type, Miniatures and Pony Geldings (any age)

Grand and Reserve Geldings (selected from above classes)

3003 Stock Type Mares (any age)

3004 Non-stock Type, Miniatures and Pony Mares (any age)

Grand and Reserve Mares (selected from above classes)

3005 Showmanship 14-18

3006 Showmanship 9-13

Showmanship Finals 14-18 and Showmanship Finals 9-13 (at judge's discretion)

3007 Trail 14-18

3008 Trail 9-13

Friday, September 18, 8:00 a.m., Expo Center with Expo II (Warm-up area)

3009 *3 Year Old Snaffle Bit, Phase 1(Rail)

3010 *Level II Horsemanship

3011   *Level III Horsemanship

3012   Pleasure Pairs

3013 Western Pleasure 14-18

3014 Western Pleasure 9-13

3015 Non-stock/Pony Western Pleasure

3016 *Level IV Horsemanship

3017 Horsemanship 14-18

3018 Horsemanship 9-13

Horsemanship Finals 14-18 and Horsemanship Finals 9-13 (at judge's discretion)

3019 Reining 14-18

3020 Reining 9-13

3021 Ranch Horse Rail 14-18

3022 Ranch Horse Rail 9-13

3023 Ranch Horse Pattern 14-18

3024 Ranch Horse Pattern 9-13

3025 Ranch Horse Trail 14-18

3026 Ranch Horse Trail 9-13

3027   *3 Year Old Snaffle Bit, Phase 2 (Interview, Time TBA)

Saturday, September 19, 8:00 am, Expo Center with Expo II (Warm-up area)

7:30 a.m. – Safety Check for Hunter Hack

3028 Hunter Hack 14-18

3029 Hunter Hack 9-13

3030 English Pleasure 14-18

3031 English Pleasure 9-13

3032 English Equitation 14-18

3033 English Equitation 9-13

English Equitation Finals 14-18 and English Equitation Finals 9-13 (at judge's discretion)

3034- *3-Year Old Snaffle Bit, Phase 3 (Pattern)

3035- Barrel Racing 14-18

3036 Barrel Racing 9-13

3037 Flag Race 14-18
3038 Flag Race 9-13
3039 Pole Bending 14-18
3040 Pole Bending 9-13
3041 * Stall Decorating (Judging Time TBA)
*Non-district qualifying class

The Kansas State Fair has provided $1,000 for awards. This amount will be used to purchase awards and ribbons. The first and second place winners in each class will receive appropriate recognition.

Class listing is working schedule order

4-H PHOTOGRAPHY
Location: 4-H CENTENNIAL HALL
Judging Dates: Entry Day, Friday, September 11 and Photography Exhibit Judging, Saturday, September 12, 2020
Chair: Pansy Fryman, Finney County
Shane Potter, K-State Research and Extension 4-H Youth Development

1. Photo exhibits must be entered by 5:00 pm on the first Friday of the fair. Judging of exhibits will be at 9 am on the first Saturday of the fair.
2. Only members who are 9 years of age but not yet 19 years of age before January 1 of the current year are eligible to enter.
3. Black and white prints and color photographic prints may be exhibited. Prints must be exhibited in the same format in which they were exhibited at the local fair (ex: If a print was exhibited as a color print at the local fair it must be exhibited as a color print at the state fair. The same applies for black and white prints).
4. Exhibitors, first through seventh year in photography project, may enter one (only) photo print per exhibitor. Exhibitors in their eighth (plus) year in the photography project may enter two prints as long as the prints are in different classes (4802, 4805 & 4806), for a total of two entries per exhibitor.
5. Photographs entered must be the result of the current year's project work by the 4-H member. Photo images must be taken by the 4-H Member (exhibitor).
6. Remove white border from the photo print before mounting.
7. All photos must be no larger than 8" x 10" and no smaller than 7"x 9", after trimming.
8. Photos are to be mounted across the narrow (11") dimension of an 11" x 12.5" sheet of white or cream studio matte board. Photos mounted on poster board will not be displayed. Your local Extension office may purchase matte boards from the K-State Research and Extension Distribution office.
9. Photos must be mounted with the top edge of the print 1" below the top of the mount (board is always oriented narrow side up).The sides of the print must be equal distance from the two sides of the mount.
10. 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.
11. The Kansas State Fair 4-H Photography ID Form (available from your Extension Office and online) must be used and mounted correctly on the bottom front of the matte board. This will be illustrated in a letter from the State 4-H Office to the Local Extension Office and on Kansas4-H.org.
12. No lettering, including dates, is permitted on the front of the mount or on the photo. Only the Kansas State Fair 4-H   Photography ID Form is to have lettering on it. No underlay or borders are to be used.
13. To protect exhibits from dust and moisture, place mounted photo in protective plastic bag.
14. On the back of the mount, write; the exhibitor's name, photo class, and the Extension Unit (county/district). If in a district, please use full district name and add county name.
15. Photos entered in any class of the 4-H Photography Division at the State Fair may be used in State Fair 4-H Photography judging contest. Entry of a photo in the 4-H Photography Division contest grants permission to use the photo in the 4-H Photography Judging Contest.
16. Improperly mounted photos, oversize or undersize photos or photos with the white borders not removed or lettering (including dates) on the photo, will be awarded a ribbon one placing lower than the placing determined by the official judges.

17. 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 color or black and white classes. HDR photos are to be entered in the standard photo class.
18. 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.
19. 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.
20. 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 State Fair.
21. Photos with live subject(s) on railroad right away or taken from railroad right of way property will not be displayed in Kansas 4-H Photography and will be disqualified and not judged.
22. Copyright protections must be observed.
23. Decisions as to display and/or penalties will be made by the Photography Department Superintendent and the 4-H Specialist responsible for the photography department.

4800   Color photos taken by a 4-H member with 3 years or less in the project.
4801   Color photos taken by a 4-H member with 4 – 7 years in the project.
4802   Color photos taken by a 4-H member with 8 or more years in the project
4803   Black and white photos-taken by a 4-H member with 3 years or less in the project. (Black and white prints only).
4804   Black and white photos – taken by a 4-H member with 4-7 years in the project. (Black and white prints only).
4805   Black and white photos-taken by a 4-H member with 8 or more years in the project (Black and white prints only).
4806   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, 3 x 5 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 may be layered. Please put name and Extension Unit on the front of the second board. Explanation Boards will be displayed along with the finished board. Place both matte boards in the same protective plastic bag. **Note: See Rule 18 above class for definition.**

Portfolio Classes

4807 – Growth Portfolio
1. Member must have been enrolled in Photography project for five (5) years or more.
2. Exhibit will consist of 5 (five) photos - one from each of the past 5 years of enrollment. Each photo must have been created in a different year and must be labeled with year taken and which year of enrollment it represents.
3. Photos must be 8" x 10" and may be color or black and white.
4. 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.
5. Skill set used to create the photo must be given and explained. Main goal for each year should be listed.
6. Beginning with photo 2, member description of GROWTH in project skill must be included on information sheet.
7. Exhibit will consist of photos arranged in chronological order of enrollment, information sheet on each photo, and all information listed in #6 and #7. A portfolio book will be required.

4808 – Career Portfolio
1. 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.
2. 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, Photo Journalism, Black and White, Nature/Wildlife or Graphic Design (computer skills with photos). Photos may have been created over multiple project years.
3. Photos may be color except if Black and White option is chosen.
4. 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.
5. A one page summary should accompany the portfolio listing the goal for pursuing this area of photography and what skills were learned while doing so. Mentors should be acknowledged. Career exploration can also be described.

6.   Exhibit will be presented in a notebook designed for portfolio review with pages for required information from #4 and #5.

NOTE: A member may enter only one portfolio each year. Portfolio must have qualified at the County/District Level beginning with 4-H year 2021-2022. For State Fair 2020 and 2021 no County/District is required.

Special Recognition: Some photos may be selected for special recognition by the Photography Action Team and/or the Kansas 4-H Foundation. These photos may be used for special displays, 4-H promotional purposes and/or training opportunities. The number of photos selected may vary and will be at the discretion of the Photography Action Team.

Photos chosen by the Photography Action Team from the Purple Ribbon Selections may include photos selected for display in governmental offices, at Kansas State University or at the Rock Springs 4-H Center. Additional photos may be selected from all photography exhibits, including the Kansas 4-H Foundation selections. The Sunflower Awards will be awarded for outstanding use of elements of photography composition. The Gordon Parks Photo will be awarded for the best black and white photo.

Photographs selected will be marked with special display stickers. Extension Offices of the exhibitors of selected photos will be notified by e-mail of these selections. Photos that are to be retained for display or for training opportunities held after the fair will be collected the last day of the Kansas State Fair. Selected photos will be returned at the end of the 2020 Kansas State Fair or at the conclusion of the established display period.

4-H PHOTOGRAPHY JUDGING CONTEST
Location: ENCAMPMENT BUILDING
Event Date: Sunday, September 13, 2020
Co-Chair: Christy Befort, Ellis County Volunteer and Eric Otte, Sedgwick County Volunteer
Shane Potter, K-State Research and Extension 4-H Youth Development

1.   Enter county/district teams in class 5980 (Senior Team) or 5985 (Intermediate Team),
2.   Enter team members in class 5981 (senior team member) or 5986 (Intermediate team member).
3.   Intermediates must be 9-13 as of January 1 of the current year. Seniors must be 14-18 as of January 1 of the current year.
4.   Substitutions should be made by 5:00 pm the first Friday of the fair at the Photography check-in area in the 4-H Centennial Hall.
5.   Each County Extension Council may enter a team of three or four regularly enrolled 4-H members in each division (Intermediate and Senior). Each District Extension Board may enter, in each division, teams of three or four regularly enrolled 4 H members equal to the number of counties comprising the Extension District. Counties or Districts may not enter a team plus individuals in a division. An individual may compete for individual awards if less than three persons are available to form a team. Intermediates may participate in the Senior Division to complete a team, but may not be on two teams in the same year. Seniors may not participate in the Intermediate Division.
6.   In keeping with national 4-H rules, contestants who have participated in post-secondary course work or training for post-secondary competition in the subject area of this contest are not eligible to compete.
7.   Schedule for the Day: All activities will be in the encampment Building
     10:30-11:00am……………………………   Check-in Encampment Building,
                                              (check-in by one representative per county/district)
     11 am………………………………………   Orientation (Hansen Auditorium, Encampment Building)
     11 am - 1:00 pm…………………………   Contest (Dillon Hall, Encampment Building)
     1:00-2:00 pm ………………………………..   Open to non-participants
     2:45 pm …………………………………………   Awards Assembly (Hansen Auditorium - Encampment Building)

8.   Place: Dillon Hall in Encampment Building.
9.   Each contestant is expected to bring a clipboard or writing board and one or more #2 pencils to the contest.
10. The contest shall consist of photographs to judge, photographic problems, and a written exam. The written exam will consist of multiple choice, and/or matching questions. Each photo judging class, problem class, and exam will be valued at 50 points for a perfect score. Color or black and white photographs will be used in judging classes.
11. The team score will be the total of highest three individual scores of the team members. Individual scores will also be recognized.

NOTE: Cost will be $10 per team or $5 per individual per Extension Unit. Payment due to the State 4-H Office by August 15.

5980   Senior Photography Judging Co/Dist. Team Name
5981   Senior Photography Judging Contestant Name

5985   Intermediate Photography Judging Co/Dist. Team Name
5986   Intermediate Photography Judging Contestant Name

The Kansas State Fair will provide medals to members of the first place team in each division and the top three individuals in each division.

4-H PRESENTATIONS

Location: 4-H CENTENNIAL HALL
Event Dates: Saturday, September 12, Sunday, September 13
Saturday, September 19, Sunday, September 20, 2020
Chair: Michelle Beran, Midway District 4-H Agent
Aliah Mestrovich Seay, K-State Research & Extension, 4-H Youth Development

1. Any demonstration illustrated or project talk receiving a superior rating in a county or district contest may be entered unless it has previously been entered in this contest or does not meet the guidelines.
2. Any poetry or prose receiving a superior rating in a county or district contest may be entered unless it has previously been entered in this contest or does not meet the guidelines.
3. Counties or districts are not limited to the number of demonstrations illustrated or project talks, or poetry or prose, given on any topic.
4. Demonstrations illustrated or project talks may be individual or team (2 people) presentations.
5. Stage schedule for presentations will be made on requested date and time and subject to the number of requests and available time.
6. The presentation should be of sufficient length to cover the topic adequately, three minutes minimum and 20 minutes maximum.
7. The schedule for all presentations will be available by September 1.
8. The following scoring breakdown will be used:
     1. Introduction 10
     2. Appearance 10
     3. Presentation 30
     4. Subject Matter 30
     5. Visual and/or equipment 10
     6. Summary 10
9. All Demonstrations, Illustrated and Project Talks will be on one of two stages in Centennial Hall during the first and second Saturday and Sunday.
10. All poetry and prose will be performed in a designated spot in Centennial Hall during the first and second Saturday and Sunday. One microphone will be provided.
11. Each demonstration area will be equipped with two tables, two easels, two microphones, and one 110-volt electrical power strip. 4-H members are encouraged to use technology when it enhances the presentation, however, computers and/or projection units (LCD) will not be provided when technology is used in a presentation (a screen will be available). No range, microwave or refrigerator is available in the demonstration areas. If extension cords are needed, participants need to bring them.
12. Check in at the Information Desk in 4 H Centennial Hall for directions to your stage. Participants are encouraged to arrive 15 minutes before their presentation.
13. 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.
14. A demonstration shows a step by step procedure and explains why each step is essential to develop a particular skill or task.
     The Illustrated Talk incorporates the use of visual aids (posters, technology supplies, equipment, etc.) that describes the process of the topic being discussed.
     A project talk should tell about a specific project and the experience in the project. Visuals may be used.

     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.

15. *Shooting sports related entries must inform State 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.*
16. Dog obedience related Demonstrations will be restricted to second weekend.
17. If you bring animals into Centennial Hall for a demonstration you must remove the animal when you leave the building. Animals are not allowed to be left unattended.

5800   Demonstration, Illustrated or Project Talk by an individual

5801   Demonstration, Illustrated or Project Talk (limited to 2 people).

5802   Poetry or Prose **(THIS CLASS IS NOT EVALUATED/JUDGED)**

4-H SHOOTING SPORTS

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Wendy Hughes, Rice County Extension Agent
Anissa Jepsen, K-State Research & Extension, 4-H Program Coordinator

1. Exhibits in this division are open to educational displays or promotional posters. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials to withstand State Fair conditions. Entries will prominently incorporate the 4-H Clover with KSRE co-branding and should include the Kansas 4-H Shooting Sports emblem. Failure to do so will penalize entry one ribbon color

2. **Educational Display**: must be the standard tri-fold board ONLY, must not exceed standard tri-fold: 3'x4'; no additional table space available for promotional brochures or display items; content not to exceed display board borders. Failure to follow size limitations will penalize entry one ribbon color.

3. **Promotional Posters**: must be flat and no larger than 22"x30"; content not to exceed display board borders; Failure to follow size limitations will penalize entry one ribbon color. Posters will be displayed on wall.

4. **Notebooks**: no larger than 8 ½ x 11

THE EXHIBIT SIZE RULE WILL BE STRICTLY ENFORCED! Exhibits exceeding the size guidelines will be penalized one ribbon color.

5. EXHIBITORS MUST COMPLY WITH STATE AND FEDERAL LAWS AND KANSAS STATE FAIR MANAGEMENT POLICIES. 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. Please remember that neither the Kansas State Fair
nor the department of 4-H Youth Development, Kansas State University Research and Extension are liable for the loss or
damage of any personal property included as part of your poster, display or notebook.

6. Name, county or district, age and year in project should be on the front of the poster, display or notebook.

7. Exhibits will only be accepted from Extension Units with 4-H Certified Shooting Sports Programs.

8. Exhibits will not be accepted if they are related to reloads.

9. **Educational Displays** will be judged on the following points:

        Stopping Power 15
        Interest, Holding Power.. 15
        4-H Project application.. 15
        Mechanical Power 5
        Personal Growth... .25
        Educational Value .... .25
    Total.. .100

10. Posters will be judged on the following points:

        Stopping Power 30
        Interest, Holding Power 30
        4-H Project Application 25
        Mechanical Power... 15
        TOTAL 100

6200   Educational Display- Must be directly related to the 4-H Shooting Sports Project (standard tri-fold boards only, no larger than 3'x4').

6201   Promotional Poster- Must promote **4-H Shooting Sports**

2020 4-H SPACETECH – ASTRONOMY

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Kansas 4-H STEM and Central Kansas District- Salina and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

1. The 4-H member must be currently enrolled in the 4-H SPACETECH project to exhibit in this division.
2. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year and have been selected at the county level for entry at the State Fair level. Counties or districts should select only top blue or purple ribbon Astronomy exhibits which meet State Fair guidelines.
3. Telescopes entered in this division may be built from a kit or by original design. Pre-finished telescopes, which require no construction or painting are not acceptable exhibits.
4. 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.
5. Each State Fair telescope exhibit must include a "4-H Astronomy Exhibit Information Form," which should be attached to the outside of a 10" x 13" manila envelope. 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.
6. See the last section for full details about exhibiting posters, display boards and notebooks.
7. 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.
8. The telescope must be properly assembled and painted with a smooth and uniform finish. Decals, if used, should be attached smooth and tight.
9. 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.
10. SPACETECH-Superintendent(s) will be present on the first Friday of the fair at 5:00 pm to convey judging criteria and to answer questions for exhibitors. Consultation/Interview judging is not available during judging on Friday.
11. Astronomy exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be <u>disqualified</u>
12. 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.

5500   Telescope made from kit
5501   Telescope made from original design

4-H SPACETECH - COMPUTERS

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Kansas 4-H STEM and Central Kansas District - Salina and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

1. The 4-H computer project teaches concepts related to computers, hardware knowledge, software programming and applications, internet safety, the building, maintenance and repair of computers and future career opportunities. Please note that the actual construction of computer hardware (i.e., building a computer, electronic devices with a mother-board based manipulation) will remain in the Energy Management division.
2. The 4-H members must be currently enrolled in the 4-H SPACETECH project to exhibit in this division.
3. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year and have been selected at the county level for entry at the State Fair level. Counties or district should select only top blue or purple ribbon computer exhibits which meet State Fair guidelines.
4. Computer exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be disqualified.

5. 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.
6. See the last section for full details about exhibiting posters, display boards and notebooks.
7. SPACETECH superintendent(s) will be present on the first Friday of the State Fair at 5 p.m. to convey judging criteria and to answer questions for exhibitors. Consultation/interview judging is not available during judging on Friday.
8. 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.

Computer Systems

The Kansas 4-H SPACETECH Computer 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 system (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 <u>MUST</u> follow the rules set forth below.

1. 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 be able to run the exhibit as described below.
      OR
   b. System -On-A-Chip (SOC) (such as Raspberry Pi) or a Micro-Controller (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.
2. Physical computers such as tablets, smart phones, laptops, or personal computers (PCs) will not be accepted as an exhibit.
3. "Chip system" 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.
4. Any attached GPIO devices are not judged for electrical construction or quality as this division is focused on the operational aspects of the system that have automated articulated structures (arms, wheels, grippers, etc.) <u>which the exhibitor constructed,</u> 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 the both divisions.
5. For chip system, 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.
6. All revisions of all forms previously released for the SPACETECH 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. <u>Use of old forms will result in the loss of one ribbon placing for exhibits.</u>
7. For all computer system entries the following items are required as part of an exhibit packet:
   a. A manila envelope with the Computer Exhibit Form attached to the front, this form can be downloaded at www.KansasSPACETECH.com.
   b. 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.
   c. For exhibits that are entered on USB drives, at least one (1) graphic (picture, screen shot/capture, slide, etc.) of the project must be printed out on an 8.5" X 11" sheet of standard computer paper, **placed in a plastic sheet protector**, to allow for proper display and recognition at the Kansas State Fair. <u>This is what will be displayed during the fair, all other materials will be sent back to the county/district office.</u> On the back side of the graphic the 4-Her's name, county/district, and club should be listed.
   d. Instructions to run any part of the exhibit on the USB drive.
      (There should be at least three (3) items in your manila envelope: USB drive, graphic and instructions).
8. 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.
   a. The "4-H Engineer's Journal" should start with a dated entry describing what the 4-H member is trying to accomplish/build.
   b. 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).
   c. 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.
   d. Pictures can also be included in the "4-H Engineer's Journal" but should not be more than 50% of the entries.
   e. The "4-H Engineer's Journal" should contain at least one graphic.
   f. The "4-H Engineer's Journal" must be at least 3 pages in length.
   g. An example of a "4-H Engineer's Journal" can be found at www.KansasSPACETECH.com.
   h. The "4-H Engineer's Journal" will comprise 50% of the overall exhibit score. <u>Failure to include a "4-H Engineer's Journal" will result in the exhibit being disqualified.</u>
9. If the exhibit is a program, application, app, web site, or requires any coding, the source code must be included on the USB drive. <u>Failure to include a copy of the "source code" may result in up to one ribbon place deduction.</u>
10. Diagrams or decision trees showing the logical flow of the system must be included on the USB drive for all exhibits.
11. 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) use the USB drive with a computer similar to what is described in rule 9 below. An example of instructions can be found at www.KansasSPACETECH.com.

12. Each exhibit <u>MUST</u> include a video of the youth following their instructions for operation. 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 the USB drive. 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 Kansas State Fair.

13. Each exhibit must accomplish a specific automated task using a computer, a chip system, or virtual machine (VM).

14. Kanas State 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:

   a. Microsoft Windows® 10
   b. Microsoft Office® Home 2010 (Excel, Power Point, & Word)
   c. Microsoft Internet Explorer®
   d. Mozilla Firefox® Browser
   e. Google Chrome® Browser
   f. Adobe Acrobat Reader®
   g. Apache OpenOffice®
   h. VMware Player Windows 64bit
   i. Scratch Desktop editor (offline version)

15. The SPACETECH judges will have internet access at the Kansas State 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 Kansas State 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.

16. Kansas 4-H SPACETECH has made available Linux Virtual Machines (VMs) that can be downloaded and used to create projects on such as web servers, networking, and many other projects. For more information on how these VMs can be leveraged or to download them visit www.KansasSPACETECH.com. 4-Hers are not required to use the VMs in their projects. They are optional.

17. All licensing should be adhered to for any software used in the exhibit. <u>Failure to do so will result in a reduction of one ribbon placing and may not be considered for best of show.</u>

18. 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 <u>will result in the exhibit being disqualified.</u>

19. 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.

20. Judging will be based on a score sheet which can be found at www.KansasSPACETECH.com. 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), 50% overall score
   b. Instructions (how I help others make it work), 25% overall score
   c. Functionality (does it work), 12% overall score
   d. Diagrams (and code if applicable) (how I think it works), 13% overall score

21. SPACETECH chair(s) will be present on the first Friday of the fair, at 5 p.m. to convey judging criteria and to answer questions for exhibitors. Consultation/interview judging is not available during judging on Friday.

Division Computer System
5590 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.')
5591 Computer presentation (power point, web page/site, animated graphics, etc.)
5592 Single computer system (web server, database server, etc.)
5593 Networked system consisting of two or more computers
5594 Chip system - a small (8"X8"X8") programmed physical device that accomplishes a specific task

4-H SPACETECH-ROBOTICS

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Kansas 4-H STEM Superintendent and Central Kansas District- Saline and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

1. 4-H members must be currently enrolled in the Kansas 4-H SPACETECH project to exhibit in this division.

2. Each exhibitor may enter one robot per class. Exhibit must have been constructed and/or completed during the current 4-H year. The robot must have been selected at the county level for entry at the State Fair. Counties or districts should select only top blue or purple ribbon robot exhibits which meet State Fair guidelines.

3. 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.

4. 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 computer 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.

5. 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) the outside case dimensions may not be more than 26 inches in height, width, or depth.

6. 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"X4"X36" or 4"X8"X18" or 6"X6"X16) The container, if used, and/or any large objects (such as mats or obstacles) should be labeled with the exhibitors name(s) and county or district.

7. 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.

8. 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 could be used to inflict damage and/or harm to individuals, animal life, and/or property.

9. Remote controlled robots are allowed under certain conditions provided that the robot is not drivable. 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.

10. Each robot must be in working condition.   The judges will operate each robot to evaluate its workmanship and its ability to complete year its intended task. In the event the robot uses a phone, tablet, or similar device for programming AND control of the robot a video will be used to evaluate the working condition of the robot.

11. Each exhibitor is required to complete the "4-H SPACETECH Robotics Exhibit Information Form" which is available through your local K-State Research and Extension office. This form must be attached to the outside of a 10" x 13" manila envelope

12. 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, and one to three pages of project photographs. In addition a 5 minute video presentation placed on a CD, DVD, USB drive, or similar removable storage device, if applicable. 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. The exhibitor may enter their electronic project listed under the electric program as under the SPACETECH robotics project if the exhibitor so chooses. No exhibitor will be allowed to set up their robot in person.

13. 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.

14. Each exhibit MUST include a video of the youth following their instructions for operation. 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 the CD, DVD, USB drive, or similar. These videos may also be considered for inclusion in a running video loop in the SPACETECH 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 SPACETECH area at the Kansas State Fair.

15. 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.

16. Exhibitor's name(s) and county or district must be tagged or labeled in a prominent location on the robot,

17. There are no county or district boundaries that must be adhered to in order to form a Kansas 4-H SPACETECH Robotics team. However, as mentioned in #1, each team member must be currently enrolled in the Kansas 4-H SPACETECH project.

18. STEM SPACETECH Superintendent(s) will be present on the first Friday of the fair at 5:00 pm to convey judging criteria and to answer questions for exhibitors. Consultation/interview judging is not available during judging on Friday.

19. Robotics exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be disqualified.

20. See the last section for full details about exhibiting posters, display boards and notebooks.

5509   Robot made from a commercial (purchased) kit. (No Programming just assembly)
5510   Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.
5511   Programmable robot made from a commercial (purchased) kit.
5546   Robot designed and constructed by exhibitor or from a commercial kit, that is operated by a remote controlled device.
5544   Junk Drawer Robotics

Senior Division Ages 14 and up

5513   Robot made from a commercial (purchased) kit (No programming just assembly)
5514   Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.
5515   Programmable robot made from a commercial (purchased) kit.
5547   Robot designed and constructed by exhibitor or from a commercial kit, that is operated by a remote controlled device.
5545   Junk Drawer Robotics

Division D – Team Robotics Project

5517   Robot designed and constructed by two or more 4-H SPACETECH project members. The robot must not be a mere 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 SPACETECH 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 SPACETECH – ROCKETRY

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Central Kansas District #3 -Salina and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

The Kansas 4-H SPACETECH 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.

A.   **Exhibit <u>Information</u> for ALL rocketry categories:**
1.   SPACETECH superintendent(s) will be present on the first Friday of the fair at 5:00 p.m. to convey judging criteria and to answer questions for exhibitors. Consultation/interview judging is not available during judging on Friday.
2.   All revisions of all forms previously released for the SPACETECH 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 will result in the loss of one ribbon placing for exhibits.
3.   Relevant documents may be obtained from County Extension Offices or from <u>www.Kansas-SPACETECH.com</u>
4.   Rocketry exhibits may be checked out for use in the Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be disqualified.
5.   NAR refers to the National Association of Rocketry and its governing board.
6.   Tripoli refers to the Tripoli Rocketry Association and governing board.
7.   All NAR documents, with the exception of the "pink book," referenced herein can be found at <u>http://www.nar.org</u>.
8.   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.
9.   See the last section for full details about exhibiting posters, display boards and notebooks.

B.   **Exhibit <u>Definitions</u> for ALL rocketry categories:**
1.   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." The intent of scale modeling is, according to the NAR, "to

produce an accurate, flying replica of a real rocket vehicle that exhibits maximum craftsmanship in construction, finish, and flight performance." (NAR "Pink Book" 50.1 4-1)

2. Adult supervision is defined as being under the direct supervision of someone 18 years of age or older.
3. For the purposes of Kansas 4-H SPACETECH a <u>mid-powered</u> 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:
   a. Is 2 inches or greater in diameter (not including fins) <u>and</u> 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).
   b. The total impulse of all engines used in the rocket is greater than 20.01 Newton-seconds and less than 160.01 Newton-seconds.
4. For the purposes of Kansas 4-H SPACETECH a high-powered rocket is defined as a rocket that meets any of the following criteria:
   a. Weighs more than 3.3125 pounds (53 ounces or 1500 grams) at the time of launch;
   b. Uses a 'H' engine or larger to launch
   c. The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
   d. Includes any airframes parts of ductile, metal, though, the use of ductile metal is strongly discouraged.
   e. Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.:
      i. Average thrust in excess of 80.01 Newtons
      ii. Contains in excess of 125 grams of propellant and are limited to only H and I motors.
      iii. Uses a hybrid motor or a motor designed to emit sparks

1. 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.
2. NAR rules for launching and construction of all rockets are assumed to be used by all 4-H SPACETECH exhibitors and will be considered during judging.
3. For the purposes of Kansas 4-H SPACETECH, NO rocket may be launched using engines totaling more than an 'I' impulse engine or 640 Newton-seconds of total thrust.

C. **Exhibit <u>Rules</u> for ALL rocketry categories:**
   Purpose: 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 SPACETECH division.
   1. 4-H members must be currently enrolled in the 4-H SPACETECH-Rocketry program to exhibit in this division.
   2. Entries must have been selected at the county level for entry at the State Fair. Counties/Districts should select top blue or purple ribbon rocketry exhibits which meet Kansas State Fair guidelines.
   3. 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" or the second may be entered into any other applicable class. An exhibitor may not enter two rockets in the same class.
   4. The report that accompanies the rocket must be limited to the 4-H SPACETECH 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 www.KansasSPACETECH.com Any rocket exhibit not including this completed envelope will receive an automatic participation ribbon.
   5. Plans (or a photocopy) must be placed inside the envelope.
      a. This includes original design rockets.
      b. 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.
   6. One or more photographs of the rocket during construction and at the launch site are <u>required</u>.
      a. Photographs showing the rocket at the moment of ignition are preferred.
      b. Photographs must be mounted on one side of 8 ½" x 11" page(s).
      c. There must be at least 1 page of photos and no more than 5 pages of photos.
      d. Include at least one photo showing rocket construction, preferably with the exhibitor included.
      e. 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.
      f. Pictures at the launch site are not required in the event of a burn ban.
   7. To exhibit in this division:

a. The rocket must have been flown, unless a burn ban is in effect.

b. Support rods must not extend past the tip of the highest nosecone on the model.

c. Support rods must remain in the upright position, 90 degrees to the display base, do not angle. If support rods are not perpendicular to the base, the judge should deduct two ribbon placings.

d. No model may be submitted on a launch pad.

8. Launches should not be conducted in winds above 20 mph, and will constitute a disqualification of rocket exhibit.

9. 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.

10. 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.

11. Flight damage is to be documented by the participant on either the construction plans or the 4-H SPACETECH Rocket Exhibit Information Form.

12. 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.

13. Engines and igniters, under any circumstance, ARE NOT permitted with the exhibit and constitute an **immediate** disqualification.

14. 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.

15. Engines may not be used as display stands hollowed out or otherwise. This is a significant change from previous year's rules. Engines used as a display stand will be subject to immediate disqualification.

16. Rocket engines should not be used to join multi-stage rockets together.

a. 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.

b. The different stages must be included to complete the rocketry exhibit, incomplete exhibits will be deducted at least one ribbon placing.

c. Use of any engines to join the stages together will be subject to immediate disqualification.

17. Multi-stage rockets can be flown using just the final stage and be considered fully flown.

18. 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.

D. Construction Rule for All Rockets

Purpose: These rules apply to the construction of all rockets displayed in the SPACETECH division.

1. Rockets are to be properly assembled according to the assembly instructions.

2. Beginner kits with prefabricated fin assemblies and pre-finished rockets requiring no painting are not acceptable, and will be disqualified.

3. Plastic snap together fins and prefabricated fin assemblies that **do not** require fin alignment are not acceptable, and will be disqualified.

a. 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.

b. This rule does not apply to fiberglass, Kevlar, extruded foam, composite, or wood fins; especially when used for "through-the-wall" fin attachment techniques that are common in larger rockets.

c. 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.

d. Fin assemblies that are printed using a 3D printer are excluded from this rule. Through 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.

4. 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 www.KansasSPACETECH.com.

5. 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.

6. Fins and body tubes are to be sealed with sanding sealer and/or primer to eliminate the appearance of body grooves and wood grain.

7. Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.

8. Engine mounts are to be securely attached to the body tube.

9. Any seams on plastic parts are to be sanded smooth.

10. 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 my not be used for external body or other external rocket parts.
11. The nose cone is to fit snugly but still allow for easy removal.
12. Exhibits must be <u>uniformly</u> painted and <u>smoothly</u> finished or <u>finished</u> as per rocket instructions, and have decals applied smoothly.
13. Non-standard surfacing (such as textured paint) may be used if directed by the instructions, this includes scratch built rockets.
14. 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 enough, by itself, to move the model from one ribbon placing to another.
15. "Scale models" may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.
16. Scale Model Rockets are to be finished and completed with ta majority (greater than 70%) of decals.
17. 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 <u>two ribbon placing deductions.</u>

E.   Model Rocketry Specific Guidelines (ages 9 and up):
Purpose: 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.
1.   Rockets classified as high or mid powered may not be entered in this category.
2.   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 ~~top of the~~ base. Rod materials should be sturdy, and not made of flimsy materials, such as coat hangers.
3.   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).
4.   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 SPACETECH Action Team may review and implement the modified code.

F.   Original Design Specific Rocket Guidelines (ages 11 and up):
Purpose: To allow for youth to develop their own rockets (model, mid, and high powered) in a safe manner that displays maximum craftsmanship.
1.   Original design rockets cannot be a modification of a pre-existing kit and must be of original design.
2.   Original design rockets must be designed by the exhibitor(s).
3 .   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.
4.   Original design rocket instructions should not include copies of instructions in part or in whole from existing kits.
5.   For a rocket entered in the original design classes, describe in the summary how the rocket was tested for stability prior to flying. <u>Swing testing of the rocket is required.</u> Other tests and calculations are encouraged. Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a <u>deduction of TWO ribbon placings.</u>
6.   A minimum of one additional page must be added to the rocketry information pack detailing the test(s) performed to insure stability. 4-Her's are strongly encouraged to provide as much detail as possible. Failure to provide adequate written documentation will result in a disqualification.

Division A -Exhibitors 9 through 13 years old
5520 Rocket made from kit. Include plans.

Division B -Exhibitors 11 through 13 years old (9-10 year olds may not enter in this class)
5521 Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.

Division C -Exhibitors 14 years and older
5525 Rocket made from kit. Include plans.
5526 Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.
5527 Rocket designed by exhibitor: that uses alternative skins; not merely a modification of an existing kit. Include original plans.

Division D -Exhibitors 11 years 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.

5530 Rocket designed by 2 or more exhibitors: not merely a modification of an existing kit. Include original 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.

1. Exhibitors must be at least 14 years of age by January 1 of the current year.
2. The rules for ALL categories apply.
3. 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 http://www.kansas4-H.org/. Click on KSF Packet link.
4. Exhibitors in this division must hold memberships in either NAR or Tripoli organizations.
5. 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 SPACETECH Action Team may review and implement the modified code.
6. All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.
7. High power rockets as defined above ('H' or 'I' engines) may not be launched in this division.
8. 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.
9. 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- Exhibitors 14 years and older

5536 Mid-power rocket made from kit or original design.

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

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

1. Exhibitors must be at least 14 years of age by January 1 of the current year.
2. The rules for ALL categories apply.
3. 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://www.Kansas4-H.org/. Click on KSF Packet link.
4. Exhibitors in this division must hold memberships in either NAR or Tripoli organizations.
5. 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 SPACETECH Action Team may review and implement the modified code.
6. All rockets in this division are to be launched under adult supervision by the 4-H member who constructed the rocket.
7. 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).
7. 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.
8. 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 -Exhibitors 14 years and older

5535 High power rocket made from kit or original design.

<div align="center">

Recommended County Fair rules for Rocketry

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This is a reduced set of rules for use at county fairs. The use of these rules is optional and left to the discretion of the county fairs. These are more simplistic rules that cover the most common scenarios that are likely to appear a county fairs. Youth who are eligible for the Kansas State Fair should read the Kansas State Fair rules for this division as the State Fair rules expect more from youth and set a higher bar as it is a state wide event exhibiting the best from across the State of Kansas.

1. 4-H members must be currently enrolled in the 4-H Rocketry program to exhibit in this division.
2. All rockets displayed in this division must be constructed during the current 4-H year
3. If a rocket qualified for the Kansas State Fair, exhibitors should read the State Fair rules for the Rocketry division as they may be different from those at the county fair.
4. 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" or the second may be entered into any other applicable class. An exhibitor may not enter two rockets in the same class.
5. 4-Hers are to complete and sign the rocketry information form, available from www.KansasSPACETECH.com or your local extension office, and attach it to a 10"X13" "manila" envelope. The envelope should contain:
   - Instructions on how to construct the rocket
   - Up to 5 pages of pictures from both construction and launch
   - Documentation of any flight damage that occurred
   - Any modifications made to the rocket
   - An additional page for altitude calculations if the space on the form is not enough.
   Additionally for original design rockets, also known as "scratch built" rockets:
   - 5 additional pages of photos are allowed
   - Documentation of how the rocket was tested for stability.
6. 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.
7. Rockets are to be displayed upright on a display stand with a sturdy rod that does not extend past the top of the rocket or stand unassisted, unless the rocket is taller than 4 feet in which case no display stand is required and the rocket may be displayed on its side, rockets are not to be displayed on launch pads to save space and prevent someone from being poked in the eye.
8. Rockets ARE NOT to be displayed with used or unused rocket engines either in the rocket or as part of the stand, if rocket engines are included in the exhibit the judge may disqualify the exhibit.
9. Rockets should be flown, unless there is an active burn ban in the county or conditions are too dangerous to safely launch the rocket. Just flying the last stage (the part with the nose cone) of a multi-stage rocket is acceptable.
10. All rockets, except those in the JR division, are not to be "beginner kits" or use prefabricated fin assemblies or pre-finished rockets requiring no painting, these are not acceptable outside the JR division, and should be disqualified
11. 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 www.KansasSPACETECH.com.
12. Fins and body tubes, except those in the except those in the introductory division, are to be filled and sealed with sanding sealer and/or primer or other suitable filler to eliminate the appearance of body grooves and wood grain.
13. Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.
14. Engine mounts are to be securely attached to the body tube.
15. Any seams on plastic parts are to be sanded smooth.
16. The recovery system (typically a parachute or streamer) should be attached according to the instructions
17. The nose cone is to fit snugly but still allow for easy removal.
18. Exhibits must be uniformly painted and smoothly finished or finished as per rocket instructions, and have decals applied smoothly.
19. 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 enough, by itself, to move the model from one ribbon placing to another.
20. "Scale models*" may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.
21. "Scale Model*" Rockets are to be finished and completed with a majority (greater than 70%) of decals.
22. Original design rockets cannot be a modification of a pre-existing kit and must be of original design.
23. Original design rockets must be designed by the exhibitor(s).
24. Exhibitor(s) must be 11 years of age (4-H age) or older to enter an original design rocket.
25. 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.
26. 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 encouraged. Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a deduction of TWO ribbon placings.
27. A minimum of one additional page must be added to the rocketry information pack detailing the test(s) performed to insure stability. 4-Her's are strongly encouraged to provide as much detail as possible. Failure to provide adequate written documentation will result in a disqualification.

28. Rockets that use more than one 'D' engine or equivalent are consider mid or high power rockets in 4-H.
29. Mid and High Power exhibitors must be at least 14 years of age by January 1 of the current year.
30. 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 www.KansasSPACETECH.com
31. Exhibitors in the mid and high power divisions must hold memberships in either NAR or Tripoli organizations.
32. The NAR High Power Rocket Safety Code applies to the construction and launching of all rockets displayed in this division. As such all mid and high power rocketry 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.
33. All rockets in the mid and high power divisions are to be launched under adult supervision by the 4-H member who constructed the rocket.
34. 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 if launching on this large of an engine.

* 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." The intent of scale modeling is, according to the NAR, "to produce an accurate, flying replica of a real rocket vehicle that exhibits maximum craftsmanship in construction, finish, and flight performance." (NAR "Pink Book" 50.1 4-1)

Division JR - Exhibitors 7 and 8 years old
5520a Rocket made from kit, _**without**_ pre-assembled fin units. Include plans.
5520b Rocket made from "beginners kit." Include plans. Rockets in this class may have pre-assembled fin units. (This class is for first and second year 4-H members to explore the rocketry project.)

Division A - Exhibitors 9 through 13 years old
5520 Rocket made from kit. Include plans.

Division B - Exhibitors 11 through 13 years old (9-10 year olds may not enter in this class)
5521 Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.

Division C - Exhibitors 14 years and older
5525 Rocket made from kit. Include plans.
5526 Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans.

Division D - Exhibitors 11 years 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.
5530 Rocket designed by 2 or more exhibitors: not merely a modification of an existing kit. Include original plans.

Division E- Exhibitors 14 years and older
5536 Mid or high power rocket made from kit or original design.

4-H SPACETECH – UNMANNED AERIAL SYSTEM
Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Central Kansas District - Salina and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

Purpose: The 4-H unmanned aerial system or UAS project explores the world from above the trees and discovers new frontiers with UASs. UASs are commonly known as Unmanned Aerial Vehicles (UAVs) or drones. Members explore the uses and applications of unmanned aerial system including how UASs link to other projects such as geology, robotics, electronics, crop science and many more.
1. The 4-H members must be currently enrolled in the 4-H SPACETECH project to exhibit in this division.
2. Each exhibitor may enter one exhibit per class. Exhibit must have been completed during the current 4-H year and have been selected at the county level for entry at the State Fair level. Counties or district should select only top blue or purple ribbon exhibits which meet State Fair guidelines.

3. The information that accompanies the UAS must be limited to the 4-H SPACETECH 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 www.KansasSPACETECH.com . Any UAS exhibit not including this completed envelope will receive an automatic participation ribbon.
4. 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 the CD, DVD, USB drive, or similar. 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, chair(s) and extension staff. Adult guardians must complete 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 of the Kansas State Fair.
5. Unmanned aerial system exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk or the exhibit will be disqualified.
6. 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.
7. Unmanned Aerial System that include or depict weaponry of any kind will be disqualified.
8. See the last section for full details about exhibiting posters, display boards and notebooks.
9. If modifications are made to the exhibit a page should be attached noting those modifications.
10. 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.

Intermediate Division –9-13 years old

5701   Unmanned 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.
5702   Practical application of an Unmanned Aerial System constructed from a commercial (purchased) kit. This includes the UAS, plus 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 –14 years and older

5706   Unmanned 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.
5707   Practical application of an Unmanned Aerial System constructed from a commercial (purchased) kit. This includes the UAS, plus 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 SPACETECH EDUCATIONAL EXHIBITS – POSTERS, NOTEBOOKS AND DISPLAY BOARDS

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Tony Foster, Central Kansas District - Salina and Wabaunsee County Volunteer
Anissa Jepsen, K-State Research & Extension, 4-H Youth Development

Purpose: To allow 4-Hers to explore SPACETECH outside the bounds of traditional projects for rockets, robotics, astronomy, computers and unmanned aerial system. All posters, notebooks and display boards are listed in this section and have been removed from the individual sections to save space.
1. The General Exhibit rules for ALL categories apply.
2. Entries must have been selected at the county level for entry at the Kansas State Fair. Counties/Districts should select top blue or purple ribbon Educational Rocketry Exhibits which meet State Fair guidelines.
3. For notebooks, display boards, and posters, no additional exhibit information is required; no manila envelope is needed for these exhibits.
4. Exhibits in posters, notebooks and display boards must contain substantial supporting educational materials.
5. 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 www. KansasSpaceTech.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.

6. 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.

7. 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 Kansas State Fair conditions.

8. "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.

9. Educational Project notebooks must be organized in a 3-ring binder.

10. Any three dimensional display exhibits may not be thicker than 1".

11. 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.

12. Exhibitor's name, county or district, 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.

13. Exhibits should possess the following qualities (in no particular order):

a.   A Central theme

b.   What you want others to learn

c.   Be designed and constructed in a manner befitting the exhibit

d.   Be something you are interested in

e.   Be related to Astronomy. Computer System, Robotics, Rocketry, or Unmanned Aerial System

f.   As well as those characteristics described above.

14. 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.

15. Posters, Notebooks, and Display Boards may be checked out for use in a Kansas State Fair 4-H demonstration or illustrated talk with prior permission. For permission, check with the chair or Anissa Jepsen. The exhibit must be returned to display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified.

Astronomy -Intermediate Division – 9-13 years old

5731   Junior Astronomy Educational Display

5732   Junior Astronomy Educational Notebook

5733   Junior Astronomy Educational Poster

Astronomy- Senior Division – 14 years and older

5736   Senior Astronomy Educational Display

5737   Senior Astronomy Educational Notebook

5738   Senior Astronomy Educational Poster

Rocketry Intermediate Division 9 through 13 years old

5741   Rocketry Educational Display

5742   Rocketry Notebook

5743   Rocketry Poster Board

Rocketry Senior Division 14 years and older

5746   Rocketry Educational Display

5747   Rocketry Notebook

5748   Rocketry Poster Board

Robotics - Intermediate Division – 9-13 years old

5756   Robotics Educational Display

5757   Robotics Educational Notebook

5758   Robotics Educational Poster

Robotics - Senior Division – 14 years and older

5761   Robotics Educational Display
5762   Robotics Educational Notebook
5763   Robotics Educational Poster

Robotics Team Robotics Project
5766   Team Robotics Educational Display
5767   Team Robotics Educational Notebook
5768   Team Robotics Educational Poster

Computers – Intermediate Division – 9-13 years old
5771   Junior Computer Educational Poster
5772   Junior Computer Display Board
5773   Junior Computer Notebook

Computers - Senior Division – 14 years and older
5776   Senior Computer Educational Poster
5777   Senior Computer Display Board
5778   Senior Computer Notebook

Unmanned Aerial System – Intermediate Division – 9-13 years old
5781   Junior Unmanned Aerial System Educational Poster
5782   Junior Unmanned Aerial System Display Board
5783   Junior Unmanned Aerial System Notebook

Unmanned Aerial System - Senior Division – 14 years and older
5786   Senior Unmanned Aerial System Educational Poster
5787   Senior Unmanned Aerial System Display Board
5788   Senior Unmanned Aerial System Notebook

4-H VISUAL ARTS DISPLAY

Location: 4-H CENTENNIAL HALL
Entry Date: Friday, September 11, 2020
Chairs: Allison Lecklider, Central Kansas District Volunteer,
Judy Reed, Edwards County Volunteer, Robyn Deines, Walnut Creek District 4-H Youth Development Agent
Aliah Mestrovich Seay, K-State Research & Extension, 4-H Youth Development

1. **A member may display only one visual arts item.**
2. All exhibits which need to be hung MUST have a wire or saw tooth hanger attached (no string or tape) in order to be properly displayed. If necessary hardware is not attached, it may not be displayed.
3. Multi-piece items should be marked accordingly.
4. **Exhibit quotas for each county/district will be listed in the State Fair packet. Display Cards as well, so they can be completed prior to display day.**
5. 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.
6. No plants or plant materials needing watering can be entered as an art display or item.
7. Art Release Form covers items while on display at Rock Springs.
8. All exhibits are entered at your own risk. Art Release Form covers items while on display at Rock Springs.
9. Art Release Form must accompany art exhibit to be considered for Rock Springs display.

4500 4-H Visual Art

These exhibits will receive participation ribbons for being on display. They are not judged competitively as they demonstrate individual creativity, free expression, and developmental levels of the exhibitor. Some artwork will be selected to be on display at Rock Springs 4-H Center during 2020-2021. 4-H members should include an Art Release Form available from their Extension Office with their exhibit indicating their willingness to have their art displayed at Rock Springs for a year. The release form will be removed at check-in and filed by county/district to expedite the selection process. Participation ribbons for all visual art displays will be put in county/district packets to be picked up by agents at the close of the Fair. Previous Rock Springs display items will be returned to Extension Units upon the conclusion of the State Fair.

4-H WILDLIFE

Location: 4-H CENTENNIAL HALL
Judging Date: Friday, September 11, 2020
Chair: Keith Van Skike, Twin Creek District Extension Agent
Anissa Jepsen, K-State Research and Extension, 4-H Youth Development

1. A member may make only one entry in this division.
2. **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.
3. KSRE, 4-H Youth Development and the Kansas State Fair are not responsible for damage during the exhibition period.
4. Name, county or district, age and year in project should be in a prominent location on the exhibit.
5. Notebooks and Educational Displays will be judged on the following points:
   Stopping Power.. 15
   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... 25
   Knowledge Shared. Note: Credit all citations, websites or other resources used in creating your exhibit.
6. Posters will be judged on the following points:
   General Appearance.. 30
   Information... 50
   Organization... 20

5400   Notebook. Contents pertain to some phase, results, story or information about the wildlife project
5401   Promotional Poster. Must be related to something learned in the wildlife project. (Flat poster board or foam board no larger than 22" x 28")!
5402   Educational Display. Must be directly related to the wildlife project.   Maximum tri-fold size is 3' x 4'.
5403   Taxidermy/Tanning Exhibit. Should include an attachment that shows the work in progress through photos with captions, or a detailed journaling of the process.

4-H WOOD SCIENCE

Location: 4-H CENTENNIAL HALL

Judging Date: Friday, September 11, 2020

Co-Chairs: Ginger Kopfer, Geary County Agent and Sarah Maass, Central Kansas District Agent
Anissa Jepsen, K-State Research and Extension 4-H Youth Development

1. Each exhibitor is limited to one exhibit in this division.
2. 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.
3. Projects with missing or insufficient plans will be lowered one ribbon placing (i.e. a blue ribbon exhibit will receive a red ribbon).
4. The use of materials other than wood should be kept to a minimum.
5. 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.
6. The entry card, plans and all other paperwork should be secured to the project in some manner. Tape is usually not adequate to accomplish this. It is recommended to use a zip top plastic bag with a hole punched through it and using string to tie this to the exhibit.
7. Refinished/ repaired furniture should be exhibited in Home Environment Class 4400 - Single Exhibit.
8. Projects made from pre-cut kits are not allowed.
9. 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.
10. Firearms and weapons are not to be entered or exhibited at the Kansas State Fair in the Kansas 4-H Youth Development Department.

4700   Article for farm or shop use

4701   Furniture for household or lawn use

4702   Other woodwork. Articles not included in above classes. Examples: bird houses, bird feeders, household equipment such as knife racks, bread boards, door stops, etc.