



98th Annual Montgomery County 4-H Fair 2019



Riverside Park, 4-H Buildings
Independence, KS

Montgomery County 4-H Fair Association Board of Directors

President..... Craig Newby Vice-President..... Jeff Culver

Secretary..... Sharon Ward Treasurer..... Jackie Chandler

Other Members.....Joel Keene, Tony Henry, Liz Schwatken, Ashley Pippin,
Nancy Evans, Travis Lee, Amy Taylor, Darrell DeTar

4-H Council Representatives: Ashley Chandler, Sarah Schwatken, Lillie Taylor

SCHEDULED EVENTS

Saturday	June 8	Dog Show @ Fredonia Fairgrounds 8 a.m.
Friday	June 19	Poultry Testing – 4:00-6:00 p.m. @ 4-H Poultry Barn
Saturday	June 22	Horse Show, Show - 9:00 a.m. Pippin Arena, Check-in 8:00 - 8:30 a.m.
Tuesday	July 16	Clothing Judging, 8:30 a.m. - Civic Center All sewing projects will be judged this day only.
Tuesday	July 23	7 p.m. - King & Queen Coronation and Public Style Revue – Civic Center Dance to follow!
Wednesday	July 24	8 a.m. Setup Enclosed 4-H Building 6 p.m. Setup 4-H Livestock Buildings 9 p.m. Individual set-up may begin
Thursday	July 25	7 p.m. - Rabbit Show Livestock Entries: 6 p.m. - 9 p.m. Also 8 a.m. - Noon, Friday <i>Meat Goats, Sheep and Hogs weighed on arrival.</i> Steers weigh at 12:00, NOON, on Friday.
Friday	July 26	8 a.m. <i>Donuts sponsored by Frontier Farm Credit.</i> Entry of ALL INSIDE (non-animal) Exhibits – <i>ALL entries must be in place by 11:30 a.m.</i> 8:00 a.m. - 11:30 a.m.: Conference Judging of ALL Foods and Photography Exhibits. 11 a.m. - Conference Judging Electric & Woodwork NOON - All Animal Exhibits in place. Steers Weigh. 1 p.m. - Judging of Some inside Exhibits & Poultry

5:30 p.m. - **Presentation of Inside Awards**

6 p.m. - **4-H Fair Food Auction**

7:30 p.m. - **Swine Show**

10 p.m. - **4-H Exhibit Building closes**

Saturday July 27

8 a.m. – Breakfast Sponsored by Labette Health

8 a.m. - **Dairy Goat Show**

9 a.m. - **Bucket Calf Exhibitor Interviews**

9 a.m. - **Dairy Cattle Show**

8:30 a.m. - 11:00 a.m. - **Conference Judging for
Arts and Crafts**

2:00 p.m. – **Barnyard Olympics**, west of 4-H building

6:45 p.m. – **Arts and Crafts Awards** at Show Ring

7:00 p.m. – **Sheep Show** followed by
Meat Goat Show

10 p.m. - **4-H Exhibit Building closes**

Sunday July 28

8 a.m. - **Exhibit Building Opens.**

Biscuits & Gravy

Sponsored by Community National Bank & Trust

9 a.m. - **Inspirational Celebration at the Show Ring**

10:00 a.m. – **Sweepstakes Contest Registration**
4-H Exhibit Building

3 p.m. - **Kiddie Tractor Pull**

Sponsored by:

Montgomery County Farm Bureau

7 p.m. - **Bucket Calf Showmanship** followed by
Beef Show

8 p.m. - 10 p.m. - **Dismiss EXHIBITS and non-sale
ANIMALS**

10 p.m. - **4-H Exhibit Building closes**

Monday July 29

8 a.m. - **Clean-up and sale setup**

5:30 p.m. – **Buyers' Supper** - Fairgrounds

6:45 p.m. - **Presentation of Awards @ Sale Ring**

7 p.m. - **Livestock Premium Sale** - Top two
animals in each species sell first

Following Sale - Final Clean-up and Pen Tear Down

Understanding Ribbon Awards

Exhibition of projects is a part of the 4-H educational experience. The Danish ribbon system of awarding ribbons by group is used to recognize equal or near equal quality 4-H exhibits. Until the selection of the champions, exhibits are evaluated against a standard rather than in comparison to other exhibits.

Purple Ribbon: Outstanding on all standards! Qualifies exhibits for state fair if other requirements are met.

Blue Ribbon: Exceeds min. standard; may have minor flaws where improvements can be made.

Red Ribbon: Meets min. standards; may be visible signs of needed improvements

White Ribbon: Fails to meet minimum standards

Green Ribbon: Not qualified according to show rules. No premium paid.

Grand and Reserve Champion Rosettes: One each given per project area. Awarded to the one best and second best overall exhibit.

*Ribbons are awarded at the judges' discretion. Other than grand champions and reserve champions there are no set numbers. **The judges' decisions are final.***

General Rules

1. All bonafide 4-H members of Montgomery County are eligible to exhibit at this fair. ***Members must be 7 before January 1 of current 4-H year but cannot have passed their 19th birthday before January 1 of current 4-H year.*** Members may exhibit only in projects in which they are enrolled. The Montgomery County 4-H Fair is the official state fair qualifying show for Montgomery County 4-H members.
2. Every exhibit on the fairgrounds will be under the control of fair management. While every precaution will be taken for their safekeeping, neither the management, fair board members, or Extension agents will be responsible for any loss, damage, or accident that may occur.
3. **The right to interpret all rules in a manner which will be to the best interest of the show and the exhibitors is reserved by Montgomery County 4-H Fair Board.**
4. **Any complaint regarding eligibility or adherence to the rules must be made in writing and submitted to the Montgomery County 4-H Fair Board.**
5. Each exhibit, in every class, will be placed in either purple, blue, red, white or green award groups and appropriate ribbons awarded. In addition, available prize money will be distributed by the fair committee based on the ribbon awards.
6. **No ribbon premium** money will be paid to the exhibitor until **the member's 4-H record book is turned into the Extension Office.**
7. No more than one exhibit (unless department rules differ) may be shown in the same class under any one exhibitor's name except livestock, where two animals may be shown (only one bucket calf). No duplicate samples shall

be taken from the field, bin, baking, or batch to be shown by the same or different exhibitors as their product.

8. ***All exhibits must be grown, made or produced by the club member during 2019 and must be representative of their 2019 projects.*** (The one exception will be the soybean exhibit which may be from last year's crop provided that exhibitor was enrolled in crops last year as well as the current year.)
9. Exhibitors must comply with state and federal laws. It is illegal to possess threatened/endangered wildlife, or the feathers, nest or eggs of non-game birds. Game birds and game animals taken legally during open season may be used. The use of live wild animals in educational exhibits is prohibited. Superintendents are in charge of their department, and have absolute authority in their department. Superintendents' rulings will be final.

10. Exhibits to be displayed at the fair will be accepted only during **ENTRY HOURS OF:**

Livestock: 6:00 p.m. to 9:00 p.m. on Thursday, July 25, 2019

8:00 a.m. to NOON on Friday, July 26, 2019

Building: 8:00 a.m. to **11:30 a.m.** on Friday, July 26, 2019

Exhibits must be claimed by owners from 8:00 p.m. to 10:00 p.m. on Sunday, July 28, 2019. ***Exhibits removed prior to this will forfeit ribbon and premiums.*** All inside exhibits, poultry, and rabbits must be removed by 8:00 a.m., Monday, July 29, 2019.

11. Only 4-H fair exhibitors, 4-H parents, and leaders (21 years of age) may stay overnight. At least one parent or adult leader from the 4-H Club must stay overnight before any members from the club may stay overnight.

NOTE: all persons camping at the fairgrounds must register with the Extension office by July 19, 2019.

12. ****No stock trailers or camping trailers are to be parked on the streets south of the 4-H Buildings.*** Trailer parking is available north of the football stadium in the zoo pasture.
13. The Montgomery County 4-H Fair Board requests no alcoholic beverages be present on the grounds. A midnight curfew for minors is enforced in Independence.
14. *Asterisks (stars) identify classes that do not correspond to the State Fair and therefore, cannot exhibit at the State Fair. To exhibit at state the exhibitor must meet age requirement (9 before January 1, 2019) and received a purple or blue ribbon at county fair. Check the State Fair Book for additional regulations and requirements.
15. Use of **copyrighted and/or trademarked materials.** Avoid legal action by doing your own work and avoid using copyrighted and/or trademarked materials. The letter "c" with a circle around it means the owner of the material holds copyright. Similarly, all rights to use trademarks are protected by "TM" or letter "r" with a circle around it. If you feel need to use copyrighted materials, contact the original source, explain how material will be used, and request written permission to use materials in good faith. Written permission to use copyrighted and/or trademarked material must be attached to the exhibit/displayed.

Copyrighted and/or trademarked materials utilized in any fair exhibit for endorsement or promotion instead of educational purposes will be disqualified, not be displayed, or receive ribbons or premiums.

Livestock and Dairy Classes

1. 4-H members exhibiting livestock shall accompany their exhibits and care for them. **Livestock exhibitors must be on-hand to exhibit their entries.** If an exhibitor has two entries in the same class, another 4-H member may assist with one entry provided it meets with the approval of the superintendent of that department.
2. *Livestock superintendents will act as the Livestock Committee. This committee’s rulings on any question dealing with livestock will be final.*
3. **No intact males will be allowed** (except for rabbits and poultry). If an animal is deemed uncontrollable or unhealthy by either the superintendent or the livestock committee, such animal must be removed from the fairgrounds.
4. All livestock must remain within the livestock/stadium area. Exhibitors may exercise and tie out. No animals will be allowed in or around: zoo, tennis courts, water park, playgrounds, track/stadium, or golf course.
5. **All livestock must be pre-entered by July 1** via the online fair entry system or white cards. This includes:

Beef	Bucket Calves	Dairy Cattle	Dairy Goats	
Meat Goats	Poultry	Rabbits	Sheep	Swine

- Mailed white card entries must be postmarked July 1 or before.**
6. All exhibitors must comply with legal withdrawal times in the use of approved chemical substances for animal health, growth promotants or other livestock management practices. Violation of approved usage of these substances may be prosecuted. The Montgomery County 4-H Fair Association and its officers/management will not be held legally responsible.
 7. To show by breeds the animal does not need to be registered but should be purebred and exhibit breed characteristics.
 8. All livestock exhibitors must furnish bedding. Only wood chips will be allowed in the east livestock building (dairy goats, meat goats/sheep/swine).
 9. For safety purposes, **all electrical fans and cords must be kept out of reach of animals and fastened to non-conductive materials.** All plugs and cords must be UL Approved (3 prongs).
 10. No butt or face fans (fans on floor stands) are allowed in the beef barn.
 11. No stock trailers or camping trailers are to be parked south of the 4-H Buildings. Trailers are encouraged to use the open field north of the zoo.
 12. Herdsman awards – will be awarded on a family basis by species at the decision of the Fair Board Livestock Committee.

Showmanship

Showmanship will be the last event of each animal show. No special entry required. 4-H members will be judged on their ability to present their animal. Showmanship exhibitors must exhibit their own animals which have previously been entered in an animal evaluation class.

A Champion and Reserve Champion will be selected in each species and each age division: Beef, Dairy, Goats, Horse, Sheep, Swine, Rabbits, and Poultry.

Pre-4-H Division.....5 to 6 year olds before January 1 of the current year.

Animal shown must be housed at the fair but not necessarily be the entrant's exhibit. Beef pre-4-H showmanship is limited to Bucket Calves. There is only one class for Pre-4-H, strictly a showmanship class, in which all participants receive a participation ribbon only.

Junior Division.....7 to 9 year olds before January 1 of current year.

Intermediate Division.....10 to 13 year olds before January 1 of current year.

Senior Division.....14 to 18 year olds before January 1 of current year

2019 Health Requirements for Kansas County Fairs

All animals are subject to examination by exhibition staff or their representatives, and shall be free of clinical signs of infectious or contagious disease. Animals determined by exhibition staff to have not met listed requirements will not be permitted to exhibit. A certificate of veterinary inspection (health paper) issued by a licensed and accredited veterinarian in the state of origin within 30 days before the exhibition and any additional requirements shall be county options.

(Health papers are required for Montgomery County Fair!)

CATTLE AND BISON

The Kansas Department of Agriculture Division of Animal Health (KDAH) requires no tests on cattle and bison of Kansas origin. Cattle determined by exhibition staff to have lesions of ringworm, warts or infested with mange will not be permitted to exhibit.

SWINE

Swine originating in Kansas must meet the general requirements. Kansas has obtained Stage V status in the National Pseudorabies Program, and the state is classified free of swine brucellosis. Negative pseudorabies and brucellosis tests are not required for Kansas origin swine.

SHEEP

In addition to the general requirements, all sheep shall:

- Be free of any signs of sore mouth
- Be free of signs of active fungal (ringworm) infection, including club lamb fungus
- Be identified with an official USDA premises identification tag (Scrapie tag.)

GOATS

In addition to the general requirements, all goats shall:

- Be free of any signs of sore mouth
- Be free of signs of lesions of ringworm, warts or infestation of mange



- Be identified with a registered tattoo or an official USDA premises ID tag (Scrapie tag.) Goats identified with registration tattoos must have legible tattoos and must have registration papers for these animals available for inspection.

HORSES

Horses shall meet the general requirements. A negative test for equine infectious anemia (Coggins Test) within 12 months prior to exhibition is recommended but is not required by the KDAH. *Counties also may want to consider recommending a comprehensive vaccination protocol, but this is also not required by KDAH.*

POULTRY

All poultry, except waterfowl, must show proof that they are pullorum-typhoid clean by one of the following methods:

- Originate from a U.S. Pullorum-Typhoid clean flock, as evidenced by
 - ☐☐an official VS Form 9-2, certifying all birds in the flock over four months of age have had a negative test for pullorum-typhoid within the past year, or
 - a certificate from KDAH certifying the flock is a current NPIP flock in Kansas.
- Present evidence entries were purchased from a U.S. Pullorum-Typhoid clean source and have been the only poultry on the premises (*Presentation of a VS 9-3 Form received when poultry were purchased*).
- **Present an official VS 9-2 Form, signed by an official testing agent showing the entries have had a negative pullorum-typhoid test within the proceeding 90 days. *Provided June 19th at Free Testing Day!***
- If an official tester is on-site at the county fair, entries may be tested prior to entry into the facility. A VS 9- 2 Form must be completed for each entry. If any birds in an entry test positive for pullorum-typhoid, the entire entry and all birds from the same premises will be refused.

There are additional requirements for livestock originating in a different state. Call the Extension office for details.

All livestock must be pre-entered by July 1 via online fair entry system or white cards. White cards that are mailed must be postmarked by July 1 or before. No entries postmarked after July 1 will be accepted.

Livestock Premium Sale

Sale Policy:

- 1) This is a premium sale only. No livestock will be sold. No base bids will be provided by the 4-H Fair Association. Exhibitors are responsible for animal removal after the sale.
- 2) Only bonafide 4-H members who have attended five (5) regularly scheduled 4-H club meetings from October 1 of the previous year until June 30 of the present year and completed a 4-H Online profile before January 31st (May 1st for new members) are eligible to participate in the livestock

premium sale. Only first year members and high school graduates who are attending college full time are exempt from the five meetings rule, the enrollment deadlines apply to everyone.

- 3) Any market animal in the Swine, Beef, Sheep, and Meat Goat division receiving a BLUE, RED, or WHITE and meeting all other sale requirements is eligible for sale. Judge placing of the selected sale animal will determine the exhibitor's sale order.
- 4) Each 4-H member may sell only once.

- 5) Sale weights: (Not show weight requirements but are SALE requirements.)

Swine.....220 pound minimum
Steers.....1,000 pound minimum
Sheep.....90 pound minimum
Meat Goat.....50 pound minimum

(One weigh - no re-weighs)

- a. **Eligible animals may be entered in the premium auction at the exhibitor's option by filling out a sale sheet at the announcers table before deadlines announced during the fair.** No exhibitor is required to sell.
- b. Animals not meeting weight limits are eligible to win their class but ineligible to show for overall champion.
- c. In order for Livestock Sale to benefit the total 4-H Fair, 10% of the premium bid will be deducted and used in the general fund of the 4-H Fair for premium money and other fair expenses.
- d. Exhibitors must be present at the sale.
- e. **Exhibitor Sale order for 2019 -Swine, Steer, Sheep, Meat Goat.** Two top sale animals of each species will sell first, followed by blue, red, and white ribbon placings. *Top two sale animals for each species will be determined from the top two placings of each weight division (i.e. lightweight, middleweight, heavyweight).*
- f. **Any 4-H animal sold** at public auction, or privately, whether for immediate or future delivery, **cannot, from the time of such sale, be shown by the seller in any subsequent 4-H fair/exposition/show.** *This policy also applies to those animals which have gone through a premium auction, whether or not ownership has changed.*
- g. **All premium sale animals must enter the sale ring with same appearance as entering the show ring – No decorating allowed.**

Department A - Beef

Pre-entries are required before July 1. See pages 1 – 7.

Superintendents: Dr. Warren Newby, Craig Newby



Steers will be shown by weight.

Heifers will be shown according to age. No breed classes.

Dairy steers will be shown with beef steers in their appropriate weight class.

During the fitting of **BEEF STEERS** and **HEIFERS**, no artificial coloring above the flank will be allowed.

Exhibitor may enter two animals per class.

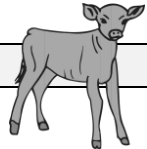
BEEF

1. Market Steers (born after January 1 of preceding year)
 2. Junior Heifer Calves (born after January 1 of current year)
 3. Senior or Winter Heifer Calves (born Sept. 1 - Dec. 31, 2018)
 4. Summer Yearling Heifer (born May 1 - Aug. 31, 2018)
 5. Junior and Spring Yearling Heifer (born Jan. 1 - April 30, 2018)
 6. Senior Yearling Heifer (born Sept. 1 - Dec. 31, 2017)
- Showmanship (Sign up during show)

Department B - *Bucket Calves

Pre-entries are required before July 1. See pages 1 – 7.

Superintendent:



1. Exhibitors should learn the parts of the calf.
2. 4-H bucket calf project is for members 7-12 years of age, before January 1. Those who had their 13th birthday before January 1 of the current year are not eligible.
3. A bucket calf is an orphan or new born calf; male or female; dairy, beef, or cross; fed on a bucket or bottle. No nurse cows. Calves must be born between January 1 and May 1 of the current year. They must have been purchased within two weeks of birth. **No intact males.**
4. Individual identification is required (tag or tattoo).
5. Only **one bucket calf per 4-H'er** may be shown in the bucket calf class. Calves shown in bucket calf class are ineligible to be shown in any other class at fair. Health requirements should be reviewed in the fair catalog.
6. If numbers warrant, classes may be split according to the ages of the
7. Bucket calves will not be sold in the livestock premium sale. Members may keep the calf for breeding heifer or market steer project or sale at the sale barn or private treaty.
8. 50% of bucket calf class will be judged by conference method (personal interview) based on:
 - What 4-H'er has learned about caring for and raising the calf
 - General health and knowledge gained by 4-H'er in health-related areas.
 - Fit and show according to either beef or dairy guidelines, with emphasis on how much the 4-H'er learned and can do without help. However, parental guidance is encouraged.

- Dairy or beef quality (conformation) of the calf will not be considered since purchase is not made on that basis.

Bucket Calf Score Card

Knowledge (bullets outlined above) - 50%

Showmanship - Eye contact, Attitude, Control of animal, show stick use if applicable - 30%

Fitting - Cleanliness of ears, tail and body, Clipped, Body Condition - 10%

Showing Etiquette - Courtesy of Others, Attentiveness - 10%

Bucket Calf Classes

7. Youth 7-8 years old 8. Youth 9-10 years old 9. Youth 11-12 years old

Department C - Dairy Cattle

Pre-entries are required before July 1. See pages 1 – 7.

Superintendent: Nancy Evans

Animals exhibited in these classes are not required to be registered but must be high quality stock. Exhibitor may enter two animals per class.

Must have at least 3 of the same breed to have a breed show.



10. Heifer calves born after September 1, 2018
11. Junior Yearling Heifers born between March 1 & August 31, 2018
12. Senior Yearling Heifer born between Sept. 1, 2016 & February 28, 2018
13. Heifers or cows born before August 31, 2017
Showmanship (Sign up during show)

Department D - Dairy Goats

Pre-entries are required before July 1. See pages 1 – 7.

Superintendent: Emmalee Hoggatt



Entries will be placed in classes by age with the day of the judging being the base date. Each exhibitor is limited to a maximum of two (2) dairy goats per class. Only does are allowed to show. All breeding does must be clipped and fitted for show. Must have at least 3 of the same breed to have a breed show.

Dairy goats are encouraged to show without horns. If an animal has horns, they should be blunt or rounded to reduce the chance of injury to exhibitor.

14. Junior Doe – birth to under 5 months
15. Junior Doe – 5 mo. to under 8 mo. (not in milk & not previously freshened)
16. Junior Doe – under 24 months (not in milk and not previously freshened)
17. Senior Doe – up to 24 months (in milk or previously freshened)
18. Senior Doe – 2-3 years old (in milk or previously freshened)
Showmanship (Sign up during show)

Department E - Poultry

Pre-entries are required before July 1. See pages 1 – 6.

Superintendents: Trisha Snyder

Members may enter up to three (3) pens/exhibits. Exhibits may be in the same class. It is the exhibitors' responsibility to care for their birds and to keep the pens/area clean. All exhibits, except classes 24, 29 & 30, receiving a blue ribbon or better are eligible for state fair entry.

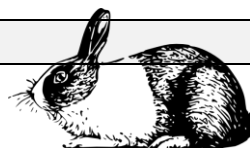
All poultry, except waterfowl and pigeons, must show proof they are Pullorum-Typhoid free, one way to do this is to get tested at the free testing day listed on fair schedule. See page 6. All poultry must have a permanent identification band, which can be obtained at the free testing day.

19. Young Large Fowl - 1 bird per pen, pullet or cockerel, standard breeds only
20. Old Large Fowl - 1 bird per pen, hen or cock, standard breeds only
21. Young Bantam - 1 bird per pen, pullet or cockerel, standard breeds only
22. Old Bantam - 1 bird per pen, hen or cock, standard breed only
23. Turkeys - 1 bird per pen, hen or tom, all breeds
24. Ducks - 1 bird per pen, duck or drake, all breeds
25. Geese - 1 bird per pen, goose or gander, all breeds
26. Pigeons - 1 bird per pen, hen or cock, all breeds
27. Dual Purpose Pullet Pen - 3 pullets per pen, standard breeds only
28. Dual Purpose Hen Pen - 3 hens per pen, standard breeds only
29. Production Pullet Pen - 3 pullets per pen, may be standard or crossbred
30. Production Hen Pen - 3 hens per pen, may be standard or crossbred
31. Meat Production Pen - 3 same age/sex birds per pen, standard or cross
32. County-Wide Meat Bird Project
Showmanship (Sign up during show)



Judging of classes 1-24 will be done on basis of exhibition qualities as described in the current edition of *The American Standard of Perfection*, (American Poultry Association). Disqualifications will bar competition in these classes. Judging of classes 25-30 will be done on basis of production qualities only. Similar classes may be combined if entries are low.

Department F - Rabbit



Pre-entries are required before July 1.

Superintendent: Susan Lasco and Lisa Hayes

Rabbits must be legibly and permanently tattooed in its left ear. Only breeds recognized by ARBA may be shown. Rabbits will be judged according to breed standard as in the “*ARBA Standard of Perfection.*” **This will be a carry in show; however, pre-entries are required.** Exhibitors are responsible for bedding and keeping exhibit area clean and neat. Exhibitor may enter two animals per class.

33. Junior Doe - under 6 months

34. Junior Buck - under 6 months

35. Intermediate Doe - 6 to 8 months only for the following breeds:

American, Giant Angora, Argente Braun, Beveren, Blanc de Hotot, Californian, Champagne D’Argent, Checkered Giant, American Chinchilla, Giant Chinchilla, Cinnamon, Crème D’Argent, Flemish Giant, English Lop, French Lop, New Zealand, Palomino, Satin and Silver Fox.

36. Intermediate Buck – See Intermediate rules in class 36

37. Senior Doe – 6 months or older for breeds not listed in Intermediate. OR 8 months and older for breeds listed in Intermediate.

38. Senior Buck – See senior rules in class 37

39. Meat Class - 3 rabbits, one breed – max. 5 lbs. each, judged on meat quality, condition and uniformity.

40. *Hand Pet - Non-Meat Class.

Showmanship (Sign up during show)

Department G - Sheep

Pre-entries are required before July 1.

Superintendents: Jeff Culver, Sharon Ward, Barry Dixon

Market Lambs will be shown by weight. **At check-in, all market lambs must be slick shorn** with an even length of wool covering above the hock and knee (head and belly excluded) **prior to check-in time.** Wool length should not exceed **.2 of an inch.** Lambs must be shorn with the same type of comb over the entire body. **Market lambs must be wethers or ewes.**

Ewe lambs may be shown either in market or breeding but not both. Ewes should be shown in short fleece. **During the judge’s inspection or handling, all four feet of the animal are to be in contact with the ground.**

Breeding Sheep will be shown by breeds and should exhibit appropriate breed characteristics. Must be 3 head in a breed to have a show. Overall champion ewe will be selected.

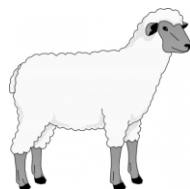
Only market lambs are eligible for premium auction. Exhibitor may enter two animals per class.

41. Ewe Lambs (born after January 1 of this year)

42. Yearling Ewes (born January 1 - December 31, 2017)

43. Market Lambs (born after January 1 of current year)

Showmanship (Sign up during show)



Department H - Meat Goat

Pre-entries are required before July 1.

Superintendent: Sharon Ward, Jeff Culver, Barry Dixon

Each exhibitor is limited to a maximum of two meat goats per class.

Market goats must be "slick shorn" with an equal amount of hair above the knee and hock (head and belly excluded) **prior to check-in time.** A maximum of 3/8" hair length is permitted.

Does may be shown either in market or breeding but not both.

All market goats must be checked in and weighed on arrival.

All market goats must have milk teeth only, no permanent teeth visible.

Market meat goats may be wethers or does and will be judged on market characteristics only. Paint or adhesives are not permitted for use on goats.

If an animal has horns they should be blunt or rounded to reduce injury to show person.

Goats can be braced and must be shown with all four feet on the ground.

Animals must be shown with a chain, collar, or halter used only to control the animal. Exhibitor can only briefly touch their animal with their body and cannot use the chain/collar to make the animal tense their muscles.

Classes will be broken by weight at the show; classes may include, but will not be limited to light weight, medium weight, and heavy weight.

Doe entries will be placed in classes by age with the day of the judging being the base date.

44. Junior Doe, Birth to under 5 months

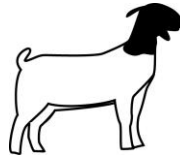
45. Junior Doe, 5 to under 8 months

46. Junior Doe, 8 to under 12 months

47. Yearling, 12 to 24 months

48. Market Meat Goat

Showmanship (Sign up during show)



Department I - Swine

Pre-entries are required before July 1. See pages 1 – 7.

Superintendents: Joel Keene, Travis Lee, Justin Wintjen

No powder or oil allowed.

All swine exhibits must be checked in and weighed on arrival.

ALL MARKET HOGS will show by weight only. No breeds in the market show.

All Gilts will be shown according to weight.

Gilts may be shown either in market or breeding but not both.

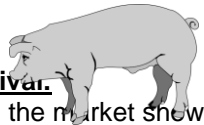
Only market hogs are eligible for premium auction.

Exhibitor may enter two animals per class.

49. Breeding Gilts (born after January 1 of current year)

50. Market Hogs (born after January 1 of current year). Barrows must be surgically castrated. **No intact males.**

Showmanship (Sign up during show)



Department J - Horses

Superintendents: Liz Schwatken, Ashley Pippin

Pre-Entries are due June 1st.

- Negative Coggins test within 12 months for equine infectious anemia is required.
- To be eligible for show, members must be enrolled in 4-H Horse Project and submitted 4-H Horse Identification papers **before May 1**.
- Horse ownership, leasing, sharing and dress must meet state guidelines as printed in the latest Kansas 4-H Horse Show Rule Book.
4-H t-shirt (county or club) or short-sleeve show shirt will be acceptable to wear during barrel racing, pole bending, and flag racing. The t-shirt must have sleeves and cannot be tied up. Superintendent has the final decision.
- Unless otherwise stated, the latest Kansas 4-H Horse Show Rule Book will be the official show manual.
- The Superintendent (s) will be the show manager. Decisions may be appealed to the show rules committee consisting of three (3) leaders or parents. This committee will be required to have a basic understanding of the Kansas 4-H Horse program.
- Spectator coaching is prohibited and will result in ribbon group docking.
- When making entries, please provide complete information including exhibitor's 4-H age (before January 1st of the current year):

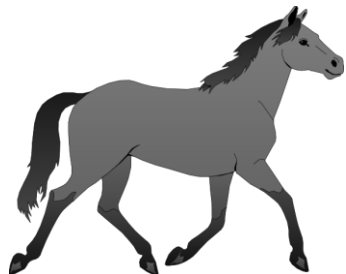
Junior Division – 7 to 9

Intermediate Division – 10 to 13

Senior Division – 14 and older

There will be three age divisions in each of the following classes with the exception of halter classes. (**Horses can be shown 1 time in Halter classes.**)

1. Showmanship-At-Halter
2. Halter - Aged Gelding, 4 years & older, stock type
3. Halter - Aged Gelding, 4 years & older, non-stock type and ponies
4. Halter - Aged Mare, 4 years & older, stock type
5. Halter - Aged Mare, 4 years & older, non-stock type and ponies
6. English Equitation
7. English Pleasure
8. Trail
9. Western Horsemanship
10. Western Pleasure
11. Reining
12. Working Ranch Horse Pattern
13. Working Ranch Horse Rail
14. Working Ranch Horse Trail
15. Barrel Racing
16. Pole Bending
17. Flag Race



High Point:

Grand or trophy winner - 5 pts; **Reserve** - 4 pts.; **Purple** ribbon group - 3 pts.; **Blue** ribbon group - 2 pts.; **Red** ribbon group - 1 pt.; **White or green** - no pts.

This is not a first, second, third place but is awarded by ribbon groups. If a class has a trophy, it will be treated as the same as grand. In the event of a tie - the exhibitor with the most superior placings (top ribbons) will receive the high point award. Ex. - One exhibitor does not compete in as many events but receives three purples. The other exhibitor competes in everything but top ribbons are blue. The purple winner will be awarded high point.

Halter Classes do not count towards the All-Around.

Department K - Visual Arts and Crafts

Superintendent: Janet Reichenbach and Trish Lewis

*Arts and crafts exhibits **must be entered Friday from 8 a.m. to 11:00 a.m.** Exhibits will be **judged consultatively Saturday, 8:30 a.m. till 11:00 a.m.***

Exhibitors must be present during judging to present their exhibits and visit with the judge **OR** have a representative (parent or leader) with a written description of project no longer than one (1) typed, double spaced page per project prepared by 4-H'er.

Exhibits must be entered according to exhibitor's age as of January 1 of current year. Each exhibitor may enter up to 4 exhibits (his or her choice).

Please describe exhibit on entry card. Example: Hand Made Ceramic-Underglazed.

4500A* Junior Division – ages 7 through 9 years

4500B Intermediate Division - ages 10 through 13 years

4500C Senior Division – ages 14 through 18 years



Only Grand and Reserve Grand Champions in the Intermediate and Senior Divisions are eligible to be displayed at the Kansas State Fair.

Department L - Fiber Arts

Superintendent: Janet Reichenbach and Trish Lewis

Exhibits in this department cannot be shown in any other department.

Exhibits in this department include:

- **Crochet**, an article including felted items
- **Knitting**, an article made either by hand or machine, including felted items
- **Needle Arts**, article created by hand using any of the following techniques:

embroidery and cross-stitch	needlepoint	candlewicking
crewel	lace work	and/or applique.
- **Patchwork and Quilting**, an article

- **Rug making**, acceptable techniques include braiding, latch hook, tying, floor cloth, etc. Finished product should be an item used in the home.
- **Spinning**, a skein - minimum 10 yards in length
- **Weaving**, Members should attach information about the type of loom or process used. Woven wood reed basket, should be exhibited in Visual Arts.
- **Ethnic Arts**, an article - Defined as a fiber art technique associated with specific country or culture. Practical skill developed to provide basic family needs such as apparel, home furnishings or decorations. Also defined as a method maintained throughout history and passed on to others, often by observation and example, such as batik, Swedish huck towel weaving, mud cloth, bobbin weaving, tatting, felted items that are not knitted or crocheted, etc. Attach information on history of the ethnic fiber art, where it was used, by whom, how it was used, short description of the technique, etc.
- **Macramé**, an article

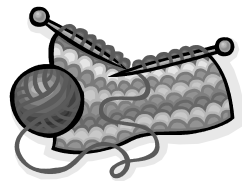
-Fiber Arts Educational Notebook, Share with others what you learned.

Exhibits should be a notebook or binder. Should include a narrative section describing the fiber art, 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. A collection of brochures, web pages, patterns, record book forms, etc. does not constitute an educational notebook. Name, local unit and fiber art covered must be clearly marked in the notebook.

- When the exhibit is a sewed garment that also includes one or more Heritage Fiber Art techniques the determination of what department (Clothing or Fiber Arts) and class to enter will be the 4-H participant's decision. Exhibits may only be shown in one department.
- Special consideration will be given to articles of original design. Such articles should have a note attached explaining the original design.
- Attach an index card, no larger than 4" x 6", to give the judge information on parts of the exhibit they made, processes used, or other information. Please indicate if item was made from a kit, fiber content, and if they are made of at least 90% wool. For quilted items indicate who did the quilting and binding.
- Exhibits must have an attached identification label with: *name, age, district, and class number*. Sew or safety pin label on corner of flat articles. For garments, attach ID label to the front left shoulder seam, or left side of waistband, as if you were wearing the garments.
- Exhibits must be entered according to exhibitor's age as of January 1 of the current year. Each exhibitor may **enter up to 4 exhibits** (his or her choice).

Describe exhibit on entry card. Example: Machine Knitted Sweater. Exhibits with at least 90% wool material should be noted on entry card. Include fiber content for all entries.

- 52. Junior Division - 7 through 9 years
- 53. Intermediate Division - 10 through 13 years
- 54. Senior Division - 14 through 18 years



Department M - *Banners

Superintendent: SueAnn White

55. *Banners

Each club may exhibit one club banner. Banner must tell or relate to some aspect of 4-H; promotional or informative in a general or specific nature.

Judging criteria for banners:

Educational value.....	40%
Appearance.....	20%
Interest & originality.....	20%
Quality of display material.....	20%

Guidelines for Banners:

- 1) Banners are a two-dimensional display, depicting one idea.
- 2) Banners should be made out of flame-resistant material.
- 3) Dimensions are 3 ft. x 4 ft. **or** 3 ft. x 5 ft.
- 4) Banners must be hung on a rod. On each end of the banner rod, there should be a wire or chain six inches long. One end of the wire will be fastened to the end of the rod. The other end will be connected to an “S” hook which will permit the banner to be hung.
- 5) Banners should be made of materials that permit the banner to be folded or rolled without damaging display. Three-dimensional objects may not be attached to the banner.
- 6) A label is to be attached to the front lower left-hand corner of the banner giving the: *name of the club, county, and year*. Waterproof ink prevents smearing and is recommended for the label.
- 7) Copyrighted and/or trademarked materials utilized for endorsement or promotion instead of educational purposes will be disqualified. See pg.2.

Department O - Clothing and Textiles Construction

Superintendent: Amy Taylor and Debbie Reilly

Tuesday, July 16, 2019

ICC West, Independence

Conference judging for all sewing projects starts following the completion of modeling judging. All clothing construction projects are judged this day and then brought to the 4-H Fair for ribbons and exhibition.

All items in these classes must be made by the 4-H member/exhibitor. Each member may enter up to 4 articles, garments or outfits and one educational exhibit.

Identification Labels: All clothing articles or garments must be labeled for identification purposes. Type or print on 3" x 2 ½" piece of cloth: Class Number, County/District, and exhibitor's name. Sew (Do not pin) labels on inside of all garments (back of neck, center back of waistband, or left end of apron band). Label each piece. Care label not required but youth should know the information

3997 Articles, garments or outfits constructed by a 7-8 year old exhibitor

3998 Educational exhibit prepared by a 7-8 year old exhibitor

3998a. Recycled Clothing Project by 7-8 year old



4000 Articles, garments or outfits constructed by a 9-11 year old exhibitor

4001 Educational exhibit prepared by a 9-11 year old exhibitor

4001a Recycled Clothing Project by 9-11 year old

4002 Articles, garments or outfits constructed by a 12-14 year old exhibitor

4003 Educational exhibit prepared by 12-14 year old exhibitor

4003a Recycled Clothing Project by 12-14 year old

4004 Articles, garments or outfits constructed by 15-18 year old exhibitor

4005 Educational exhibit prepared by 15-18 year old exhibitor

4006 Recycled Clothing Project by 15-18 year old

Educational Exhibit - Share with others what you have learned. Exhibits may be in the form of a poster, notebook, or display. Follow copyright rules. Take care to select durable materials that will withstand fair conditions. No card table displays. If exhibit is a poster, it must not be larger than 22"x28". If the exhibit is a display, maximum size is a 3' x 4' tri-fold board. Name and county must be clearly marked on educational exhibits.

*** Recycled Clothing Project** - 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. A 4"x6" index card must accompany entry describing the recycled materials and how they were used in the item.

Department N - Clothing Modeling

Superintendents—

Judging: Debra Reilly, Amy Taylor

Public Style Revue: Amy Taylor, Jackie Chandler

All clothing projects (modeling and construction) will be judged Tuesday, July 16. Judging will take place at ICC West, Independence, KS.

Each exhibitor may model two purchased outfits and/or two constructed outfits for evaluation. Participants may model only what can be worn. Garments cannot be carried. Contestants should use good judgment in choosing items that are appropriate for public modeling.

Up to two (2) outfits total may be modeled in the Public Style Revue on July 23rd at the Civic Center, Independence, KS.

4-H Modeling Score Card

Standards for the Exhibitor

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

Scorecard:

- | | |
|--|-----|
| I. General appearance..... | 70% |
| A. Posture, poise | |
| B. Personal grooming | |
| C. Fit of garment | |
| D. Modeling skills | |
| E. Garment condition | |
| F. Knowledge of wardrobe plan | |
| G. Accessories used to create a total look | |
| | |
| II. Construction Appearance and Lifestyle Knowledge..... | 30% |
| A. Plan for clothing care and life cycle | |
| B. Quality of construction. | |
| C. Appropriate finishing techniques used. | |
| D. Able to calculate value per wear | |



Buymanship Modeling - Each member may model up to two (2) entries per class. 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.) Suggested garments are athletic wear, school clothes, western wear, casual wear, and formal wear.

The 4-H age as of January 1 of the current year: cannot model in older age div.

6010 young women ages 7-8

6011 young women ages 9-11

6012 young women ages 12-14

6013 young women ages 15-18

6020 young men ages 7-8

6021 young men ages 9-11

6022 young men ages 12-14

6023 young men ages 15-18

Constructed Garments Modeling - Each member may model up to two (2) entries per class.

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 not worn as an outer garment can be purchased or made.

6000 For members ages 7-8

6001 For members ages 9-11

6002 For members ages 12-14

6003 For members ages 15-18

Department P - Energy Management

Superintendent: Dede Metcalf



NOTE – *Electric exhibits will be **judged consultatively Friday, July 26th** starting at 11:00 a.m. Exhibitors must be present during the judging to present their exhibits and visit with the judge.*

No exhibitor may enter more than *2 articles and **one educational activity project.

Label each article giving: *Owner's name, name of article, class number*

Items should be cleaned before exhibiting if it has been used. A sheet of operation instructions should be furnished for any exhibit not self-explanatory. Exhibit must be operable using 110 or 120V or battery power. If battery power is required, batteries should be furnished. Any project with a complexity of size or electronics must have (a) instructions for assembly and use and (b) equipment available at the time of judging for actual testing of the exhibit.

No hand dipped solder may be used on exhibits.

Electrical and Electronics

- AC Electric Projects. Electric projects with a 110 or 120 V alternating current (AC) power source. Some project examples are household wiring demonstrations, small appliance 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 quality and safety of workmanship.
- 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 demonstrations DC powered projects. Examples include: wiring two or three way switches, difference between series/parallel lighting circuits or wiring doorbell switches. All DC electric projects must include batteries supplied by 4-Her. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.
- Electronic Projects. Electronics 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 workmanship.
- 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.

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

- 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.
 2. A display identifying and explaining the function(s) of different special tools needed for small engine work.
 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'.

- **Maintenance** - Exhibit a display that illustrates either:
 1. Routine maintenance procedures
 2. Diagnosing and troubleshooting specific problems in an engine. No complete engines, lawn tractors, tillers, chainsaws, etc. are permitted for display, using a maximum tri-fold size of 3' x 4'.
- **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 of 3' x 4'. Engine should contain no fuel in tank or carburetor.

Alternative Energy

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.

- **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.
- **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.

80. Electrical/Electronic exhibits built by 7-9 year old member

81. Electrical/Electronic exhibits built by 10 - 13 year old member

82. Electrical/Electronic exhibits built by 14-18 year old member

Department Q - Entomology



Superintendent: Nicole Small

4-H member may exhibit in the collection, notebook and/or educational display categories within each category there are classes in Beginning, Intermediate or Advanced phases. See class descriptions within categories for requirements.

Resources for exhibiting can be found on the Kansas 4-H Ento Project Page: <http://www.kansas4-h.org/projects/agriculture-and-natural-resources/entomology.html>

COLLECTION CLASSES

- All entries should be submitted in an 18 x 24 x 3.5 inch wooden display box with a clear plastic top (such as plexiglass). Boxes can be handmade or purchased as long as they are the correct size and do not have a glass top. Website above has instructions and plans.
- 4-Hers may choose one of two taxonomies:
 - a) "Insects in Kansas" book

b) As printed on the "Insects in Kansas Book: 2016 Revised Taxonomy" which follows www.bugguide.net.

- Each exhibitor is required to identify each box with (2) identification labels bearing exhibitor's name, county/district, the class, collection class enrolled in, and 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 it can be displayed lengthwise.
- The number of orders, specimens (and families where required) must be included on both of the exhibitor's box identification label. Arrangement of specimens: The preferred method is to arrange the insects in groups or rows parallel to the short sides of the box. Specimens are to be arranged by Order in the box, then family where required.
- Two labels should be centered on the pin beneath each specimen. First (closest to the specimen) is the common name label and the second label should include date/locality. Full county name, state abbreviation and collector name on the second label. Collector's name (or host) on the date/locality label is optional.
- Specimens should be collected by the exhibitor and should focus on Kansas insects. Insects may be collected from one county into bordering states and labeled accordingly. Please refer to "Entomology Collection Exhibit Resource" for full details on out-of-state insects in collections.
- Only specimens of the class Insecta should be included. Purchases insects are not to be exhibited in collections, but they may be used in educational displays.
- Specimens of soft bodied insects such as aphids, lice, termites, etc. should be exhibited in alcohol filled vials; however, the use of alcohol filled vials should be limited to only the 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 a 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

- a. Display in one standard box a minimum of 75 and a 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

- a. Display a minimum of 100 and a maximum of 300 species representing 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)

- i. "Insects in Kansas" book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or
- ii. "Insect 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. 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 *front* of one of the display boxes. 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

- a. 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

- Individual entries are to be placed for display in a three-ring notebook for competition.
- 4-Hers may choose to use one of two taxonomies:
 - As printed in "Insects in Kansas" book or
 - As printed on the "Insects in Kansas Book: 2016 Revised Taxonomy" which follows www.bugguide.net.
- 4-Her's who have previously enrolled in or are currently enrolled in the other phases of the Entomology project need to start with the Beginning Phase of Entomology Notebook, not the Introductory phase.
- Each exhibitor is required to identify the notebook by placing a Title Page in the front of the notebook bearing the exhibitor's name, county or district and class 4-Her is enrolled in and statement of taxonomy used.
 - "Insects in Kansas"
 - "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.

- Specimen pages should be grouped according to order and should include one page per species. If more than one insect is in the photo, an arrow to indicate identified insect should be used.
- Date, common name, full county name, state abbreviation and collector name should be included for each species. Collector's Name on the specimen page is optional.
- Specimen pages should have two different of the insect if possible. If pictures are taken on different dates/localities, include information for both.
- A statement describing the habitat where found/host plant may be included and is encouraged and will be worth bonus 10 points total, not per page. For intermediate and Advanced notebooks, this is strongly encouraged.
- A divider page is to be placed in front of each order of insects with the order name printed on the tab for the page and also on the front of the divider page.
- For the Intermediate and Advanced classes, insects are also to be grouped by family behind each order divider.
- If the exhibitor has been in the same class for more than one year, a separate sheet of paper needs to be added stating how many years the exhibitor has been in this class of the project and what the exhibitor did this year to improve their notebook. Place the paper just behind the Title Page in the front of the notebook.
- A special project must be completed each year and included in the notebook. See project guideline materials for specifications.

4907 Introductory Entomology Notebook

- a. 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-Her may exhibit in this class for a maximum of two years.

4908 Beginning Entomology Notebook

- a. Display a minimum of 20 and a maximum of 60 insect species representing at least 7 different orders. Follow the general guidelines listed for Notebooks, including the Special Project. A 4-Her may exhibit in this class for a maximum of three years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first.

4909 Intermediate Entomology Notebook

- a. Display a minimum of 60 and a maximum of 100 species representing at least 9 different 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)
 - i. "Insects in Kansas" book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera or

- ii. "Insect in Kansas Book: 2016 Revised Taxonomy", which follows www.bugguide.net - Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera

A 4-Her may exhibit in this class for a maximum of three years. A 4-Her may move up if they receive a purple ribbon.

4910 Advanced Entomology Notebook

- a. Display a minimum of 100 and a maximum of 200 species representing at least 12 different orders. Follow the general guidelines listed for Notebooks, including the special project. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above 6 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

- Share with others what you learned in this project. Exhibit any activity or learning experience related to the field of entomology or the Teaming with Insects curriculum that does not fit into Entomology Collection or notebook classes above.
- Follow copyright laws as explained in the General Rules.
- The exhibit may be, but isn't limited to, original works, digital presentations (must provide printed hardcopy for exhibit purposes for duration of state fair), programs, websites, games, apps, display box, notebook, display or poster which you have made.
- If the exhibit is a wooden display box, it must be 18 X24 X 3.5 inches with a clear plastic top (such as plexiglass) and displayed horizontally. If the exhibit is a poster, it must not be larger than 22" X 28". If the exhibit is a display, maximum size is not to exceed a standard commercial 3' X 4' tri-fold display board.
- Name and county/ district must clearly be marked on educational exhibits.

4902 BEGINNING EDUCATIONAL EXHIBIT

Class for individuals 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 exhibiting in Intermediate Collection or Intermediate Notebook Classes. If only exhibiting in this category, then ages 11-14.

4906 ADVANCED EDUCATIONAL EXHIBIT

Class for individuals exhibiting in the Advanced Collection or Advanced Notebook Classes. If only exhibiting in this category, then ages 13 or older.

Department R - Field Crops

Superintendent: SueAnn White

The variety or hybrid must be listed for exhibits. Exhibits should be mature as possible.

Seed exhibits should be cleaned.

NOTE: All classes calling for a gallon sample may have a 2 ½ - 3 inch in diameter cylinder placed in a glass gallon container to reduce the amount of grain to about three quarts. Those classes include:

Wheat	Oats	Barley	Soybeans
Alfalfa	Brome Grass	Fescue	Sunflower Seed

- 2400** 10 ears White Corn
- 2401** 10 ears Yellow Corn
- 2402** 10 heads Grain Sorghum - hybrid must be named
- 2403** 10 stalks Forage Sorghum - hybrid must be named
- 2405** 1 gallon Wheat – variety or hybrid must be named
- 2408** 3 heads Confectionery Sunflowers
- 2409** 1 gallon Confectionery Sunflower Seed
- 2410** 3 heads of Oil Seed Sunflowers
- 2411** 1 gallon Sunflower Oil Seeds
- 2412** 1 gallon Oats
- 2413** 1 gallon Barley
- 2414** 1 gallon Alfalfa
- 2417** 1 gallon Brome Grass
- 2418** 1 gallon Other Tame Grasses
- 2419** 1 gallon Soybeans (most recent harvest). 4-H'er must have been enrolled in soybean project the previous year.
- 2420** Soybeans – bundle of 5 plants with clean roots intact
- 2425** 1 gallon Corn
- 2423** Miscellaneous Crops - exhibit to consist of 1 gallon sample of seed or 10 heads produced from current project.



NOTE: Hay – Exhibit to consist of one flake **or** slice from a rectangular bale **or** 10-inch section cut from a round bale. The flake or slice should be approximately 6 inches in thickness and tied in two directions.

- 2415** Alfalfa hay
- 2416** Native Grass hay
- 2426** Cool Season Grass Hay (fescue or brome)
- 2430** Wheat variety exhibit
- 2440** Weed Control Exhibit

1. Collect, identify, press, mount, and label a minimum of 15 weeds. Try to include their roots, stems, leaves and flowers. Three of the weeds must be noxious weeds preferably found in your home county. A standard 9"x12" scrapbook may be obtained in which to permanently mount your weed

specimens. Identify the scrapbook with your name and county on the inside front cover.

2. Prepare a list of the weeds mounted, showing common name, scientific name, and where it was found. Place the list in a specially identified section of the scrapbook.
3. Collect and identify weed seeds found in crop seeds. Mount them for display purposes. Place them in a specially identified section of the scrapbook.
4. Write a story on "How We Control Weeds on Our Farm" if you live on a farm. Other members write "How We Control Weeds at Home". The story should be about 300 words in length. It must show definite methods used to control weeds. Place the story in a specially identified section of the scrapbook.

Basis for Awards:

Mounted weed collection: number of mounted specimens, completeness of individual mounts, correctness of identification and information, and neatness. Include record sheet of weeds. Records - 50% - Weed seed collection and exhibit - 30%

Story: "How We Control Weeds on Our Farm" or "How We Control Weeds at Home" 20%

Department S - Food Preparation

Superintendents: Amy Taylor, Jackie Chandler

Foods will be entered and conference judged on Friday, July 26 from 8:00 a.m. - 11:30 a.m.

Note: *Exhibitors must be present during the judging to present their exhibits and visit with the judge.*

1. 4-H members may exhibit **one entry per class.**
2. **To qualify for the 4-H Fair Food Auction, the food item must earn a purple ribbon**, with the exception of Class #145 Decorated Food Items. For Class #145, items earning purple or blue ribbons will qualify for the auction. **A maximum of two items will sell per exhibitor. The exhibitor will receive 50% of their highest selling item.** If an exhibitor qualifies more than two items for the auction, superintendents decide which two items sell.
3. **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 will be disqualified and not judged.** Refer to K-State Research and Extension Publication, 4H488, Judge's Guide for Food and Nutrition Exhibits, or call the Extension for more information. **Further Clarification: If cream cheese or sour cream (or anything considered a dairy product) is mixed into the entire batter and baked sufficiently, it does not require refrigeration will be allowed. If the dairy product (cream cheese, etc.) is in a filling, then it is not considered baked in with the dry ingredients and remains moister, therefore requiring refrigeration and will NOT be allowed.**

4. 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 judged.
5. Recipes are required for all food product exhibits including box mixes. Products without recipes will be discounted one ribbon group.
6. Food exhibits should be in food grade plastic bags, disposable plastic containers or boxes and placed on paper or foam plates or foil covered cardboard. Container will not be judged.
7. Attach gummed label to bottom of plate or cardboard. Labels are available at the Extension Office. **Please do this prior to arriving at the fair.**
8. All un-frosted cakes should be exhibited in an upright position with crust showing, except for cakes made with special designs such as Bundt cakes. They should have top crust side down.
9. Educational classes: Exhibits may be in the form of a poster, notebook or display. Follow copyright laws. Select materials that will withstand fair conditions. No card table displays. If the exhibit is a poster, it must not be larger than 22" x 28". If a display, maximum size is a 3' x 4' tri-fold display board. Name and district must be clearly marked on educational exhibit.
NOTE: Collection of favorite recipes in a box or notebook doesn't constitute an educational exhibit.

Classes for 7-8 year old exhibitors

117. *Five baked or no-bake cookies
118. *Five muffins
119. *One serving of a walking snack
120. *Favorite recipes box with a minimum of five recipes
121. *Educational exhibit
122. *Modified non-perishable food product. Product must be modified from original recipe to nutritionally enhance the food product. Attach one - 8 ½ X 11 inch page (front and back) that includes Original Recipe, Modified Recipe, and Narrative to describe modifications made, why modifications were made and lessons learned such as nutritive value, or changes in appearance, doneness, aroma, flavor, tenderness and/or texture.
 Example: a standard blueberry muffin recipe that is modified to make it gluten free. Suggested resources: Altering Recipes for Better Health Purdue University: <http://www.extension.purdue.edu/extmedia/cfs/cfs-157-w.pdf>
 Altering Recipes for Good Health Texas A&M University
<http://gillespie.agrilife.org/files/2013/02/Altering-Recipes-for-Good-Hea1.pdf>



Classes for 9-11 year old exhibitors

123. One quick bread exhibit. May be five muffins, one loaf or one coffee cake
124. Five bar cookies (recommended size 2" x 2" each).
125. One microwave product. May be five cookies, one cake or one loaf of bread.
126. One single layer frosted cake.
127. *Favorite recipes box with a minimum of 10 recipes.
128. Educational exhibit
129. Modified non-perishable food product. (See rules in junior division)



Classes for 12-14 year old exhibitors

- 130. Five baked cookies
- 131. One loaf quick bread. The use of whole grain, fruits and/or nuts is encouraged.
- 132. One unfrosted angel food or chiffon cake
- 133. Five yeast rolls
- 134. One loaf of yeast bread
- 135. One specialty bread (i.e. five pretzels, five bread sticks, a fruit bread or tea ring)
- 136. One microwave product. May be five cookies, one cake, or one loaf of bread.
- 137. *Favorite recipes box with a minimum of 15 recipes.
- 138. Educational exhibit.
- 139. Modified non-perishable food product. (See rules in junior division)

Classes for 15-18 year old exhibitors

- 140. One cake, frosted or unfrosted.
- 141. One microwave baked product. (May be five cookies, one cake, or one loaf of bread.)
- 142. Five yeast rolls
- 143. One loaf of yeast bread
- 144. One specialty bread exhibit (i.e. five pretzels, five bread sticks, a fruit bread or tea ring)
- 145. One two-crust fruit pie
- 146. *Favorite recipes box with a minimum of 20 recipes
- 147. Educational exhibit
- 4307. Modified non-perishable food product. (See rules in junior division)

Classes for all exhibitors

- 148.*One decorated food item. Open to all ages
- 4306. One food gift package. Open to all ages. No alcoholic beverages. Package must contain at least 3 different items (prepared for human consumption), made by the 4-H member, in suitable container no larger than 18" x 18" x 18". 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. **Food items in the gift basket will NOT be tasted. The gift package will be judged based on recipes, appearance and usefulness.**
On 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? c)
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.



NOTE: Unless the exhibitor declares at judging, they do not want to sell, purple award gift packages will be sold with 50% of the sale receipts going to the Montgomery County 4-H Council.

Department T - Food Preservation

Food Preservation exhibits will be entered and conference judged on Friday, July 26 from 8:00 a.m. - 11:30 a.m.

Note: Exhibitors must be present during the judging to present their exhibits and visit with the judge.

1. All exhibits must have been preserved since the previous year's county fair.
 2. Recommended recipes and processing methods must be used. Recipes must be from 1995-present and be adjusted for altitude based on processing location or it will be disqualified. Processing methods that will be disqualified include: open kettle canning, oven canning, and sun canning. Untested recipes will be disqualified for food safety reasons. Tested 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 K-State Research and Extension publications for more information:
- 4H712, Food Safety Recommendations for Food Preservation.
 - MF3170 "10 Tips for Safe Home-Canned Food"
 - MF3171 "Sassy Safe Salsa at Home"
 - MF3172 "What's Your Elevation?"
 - MF3241 "How to Guide to Water Bath Canning and Steam Canning"
 - MF3242 "How to Guide to Pressure Canning"
3. Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol in the recipe will be disqualified and not judged.
 4. **4-H member may exhibit one entry in each class.**
 5. Each exhibit must have the complete recipe and instructions attached with the entry card, or it will be lowered one ribbon placing. Recipe must include exhibitor name, recipe source, date of publication and altitude where food was processed.
 6. Exhibits must be 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 add fancy padded lids, fabric over wraps or cozies as they interfere with the judging process. 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 and 24-ounce canning jars available. Use pint jar process recommendations for 12 ounce jars. Use quart jar recommendations for 24 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. Labels are available at the Extension Office.
8. If dried food product is not in a canning jar, it will be lowered one ribbon. Suggested amount: 1/3 – ½ cup, or 3 to 4 pieces per exhibit. 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. 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 veg. mixtures); one jar
4353 Pickles (Fruit or Vegetable) Fermented Foods and Relishes and Chutney; one jar
4354 Tomato/Tomato Products Tomato Juice and Tomato Salsa; one jar
4355 Meats; one jar
4356 Dried Foods; One small jar

Department U - Forestry

Superintendent: Nicole Small



Exhibit only in phase enrolled.

- 1) All exhibits are to be mounted on 8 ½ x 11 inch heavy stock paper and placed in loose leaf binders. (Magnetic or adhesive filler sheets for photographic prints are recommended.) Twigs and fruit collections maybe exhibited in whatever manner you choose (maximum size 2'x 3')
- 2) **Name, club, age, and year in project** should be on the front cover or in a prominent location
- 3) 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 Publication, “List of Native Kansas Forest Trees”; (2) location (city and/or county) where collected; and (3) day, month, year (or month, day, year) collected.
- 4) Divide specimens into the following two sections: Native Kansas trees and Non-Native trees.
- 5) New specimens are those specimens collected during the current 4-H year and cannot be a duplicate tree species of previously displayed specimens.
- 6) Have samples grouped according to the year collected.
- 7) Variations of varieties do not count as different species or specimens.
- 8) When replacing previously displayed samples, due to degradation, improper mounting or incorrect identification, the specimen label must be

updated. Replacements do not count as new specimens. Replacements should be displayed according to the year originally collected.

- 9) If you retrieve information for your forestry exhibit, you must include a reference citation to the source.
- 10) 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.
- 11) 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 Beginning (Choose either A or B)

- 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 Intermediate (Choose either A or B)

- c) 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.
- d) 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 Senior (Choose either A or B)

- 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 Advanced (Choose either A or B)

- 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.

OR

- 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** Display: May include a project notebook with 10 or more seeds collected with pictures showing 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 Display: May include a research or reporting notebook with no more than 10 pages based on the exhibitor's selected tree. This notebook may include sketches, drawings, pictures, a story, or any other things which will help tell about the tree you have selected.

Senior 4-H Forester

Growing and Protecting Tree

5106 Display: Requires project notebook telling about project and pictures before, during, and after planting seedlings. Maximum tri-fold size is 3' x 4'.

Tree Culture

5107 Display: Requires project notebook showing your project work and include pictures of before, during, and after wood lot improvement. Maximum tri-fold size is 3' x 4'.

How Forests Serve Us

5108 Display: May include collected wood samples (all or partial) and 500 word essay. Wood sample display to be mounted on poster board or any stiff mounting material no larger than 3' x 4' tri-fold. Essay should be displayed in a covered binder.

Educational/Creative Exhibit

5109 Display: 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 to withstand fair conditions. This is a good class to exhibit an unusual collection.

Department V - Geology and Lapidary

Superintendent: Nicole Small



- 1) The exhibit box should be 18" x 24" x 3 ½". **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 devices that would prevent judges from removing glass cover should not be used. For Lapidary classes 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:

4-H'ers Name

County/District

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 4 geology classes**. Exhibitor may also show in geology class (special exhibit) and in one lapidary class.
- 4) Geology specimens should be labeled with the number of the specimens, date collected, specimen name or description, and locality (county only) where collected.
- 5) For geology classes 5200-5203, 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 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: Compsita).
- 6) For geology classes 5200-5203 and 5205, all specimens must be collected 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. Out-of-state specimens will not count in the minimum number for the class, nor will they be considered in the judging.

- 5200** Geology. Display at least 15 different rocks, minerals, or fossils collected during the current 4-H year. Limited to 1 exhibit box. Only those exhibiting at county or state fair for the **first** time may enter this class.
- 5201** Geology. Display at least 30 different rocks, minerals, or fossils and at least 5 of each. **Fifteen must be collected during the current 4-H year.** Limited to 1 exhibit box. This class is open to those exhibiting either first or second time at county or state fair.
- 5202** Geology. Display at least 45 rocks, minerals, or fossils and at least 5 of each. **Fifteen must be collected during the current 4-H year.** Exhibit limited to two display boxes. This class is open to those exhibiting either the third or fourth time at the county or 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 is **limited to 2 boxes**. This class is open to those exhibiting the fifth

time or more at the county and 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, Indian artifacts, a variation of one kind of rock or archeological artifacts, or Indian artifacts. Digital formats are accepted. Please make arrangements for the judge to view your exhibit and have a hard copy for display. Exhibit limited to 4 feet of table space. Care should be taken to use durable materials that will withstand fair conditions.

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. 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.

Lapidary Classes

The lapidary classes 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 (county, 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 County 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-Her 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-Her, 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-Her, 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 not previously exhibited, which have received lapidary treatment. Lapidary treatment may consist of polishing, an end, face, or flat lapping. Specimens must represent at least 3 different varieties and include at least 3 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.

Department W - Home Environment

Superintendent: Dede Metcalf

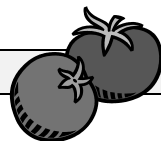


- 4400 Single Exhibit.** An article made or refinished by the 4-H member for the home. Attach a 3" x 5" index card explaining how the item was made or refinished, costs involved and how it fits into the color and design of the room.
- 4401 Educational Poster or Display.** Posters must be no larger than 22" x 28" poster board. Displays are not to exceed a standard commercial 3' x 4' tri-fold display board.
- 4402 Notebook**

Educational poster or display or notebook may include swatches, colors, stories, photographs, and project records which detail what was accomplished this year with a given indication of long-term plans.

Department X - Horticulture

Superintendents: Liz Schwatken



Information about exhibiting produce is available online in the publication "Exhibiting Fruits and Vegetables" available at <http://www.bookstore.ksre.ksu.edu/pubs/c405.pdf>

May enter 1 garden display and 4 different vegetable or fruit exhibits.

- 2500 Garden Display** –Limited to 4 square feet of space. The Garden Display must be exhibited in a tray, basket or container that can be easily moved by staff. Exhibit consists of 5 different fresh vegetables or fruits. Canned products and shelled vegetables are not acceptable. Only one variety of each type of vegetable or fruit may be exhibited. The numbers of the 5 vegetables or fruits to be exhibited are as follows:
Large Vegetables (One Each): Cabbage, Cantaloupe, Eggplant, Large Pumpkin, Squash, Watermelon.
Medium Vegetables (Five Each): Beets, Carrots, Cucumbers, Decorative Gourds, Potatoes, Miniature Pumpkins, Okra, Onions, Peppers, Radishes, Sweet Potatoes, Tomatoes, or other similar sized vegetable.
Small Vegetables (Twelve Each): Green snap beans, wax beans, English peas, radishes or other similar sized vegetables.
Small Fruits (one half pint box): Strawberries, blackberries, raspberries, or other similar sized fruits. (if other, please include name of fruit on entry)
Tree Fruits (5 each): Apples, pears, peaches or similar sized fruits.
Grapes (2 bunches)
- 2501** Small Vegetable specimen plate (12) Ex: green snap beans, yellow wax beans, radishes, other small vegetables.
- 2502** Medium Vegetable specimen plate (5) Ex: cucumbers, cherry tomatoes, tomatoes, beets, white onions, yellow onions, red onions, bell peppers, other peppers, okra, parsnips, turnips, radishes, sweet potatoes, red potatoes, white or Russet potatoes, carrots, miniature pumpkin, decorative gourds, or other medium sized vegetables
- 2503** Large Vegetable specimen plate (1) Ex: watermelon, summer squash, winter squash, large type pumpkin, eggplant, cabbage, cantaloupe, other large vegetable.
- 2504** Fresh Culinary herbs (6) Ex: parsley, basil, dill, etc. Six stems (or a comparable quantity) of ONE VARIETY of fresh herbs exhibited in a disposable container of water. Dried herbs are not accepted.
- 2505** Small fruits (one half pint box) Ex. Strawberries, blackberries, raspberries, or other similar sized fruits. If other, please include name of fruit on entry.
- 2506** Tree Fruits (plate of 5) Ex. apples, pears, peaches, or similar sized fruits.
- 2507** Grapes (plate of 2 bunches).
*A county fair exhibitor earning a purple ribbon for a particular type of vegetable (i.e. early peas) is eligible to exhibit another vegetable (i.e. late pumpkins) at the State Fair.

Department Y - Floriculture

Superintendents: Liz Schwatken

1. **A 4-H member may enter up to 4 floral exhibits.** Each cut flower specimen must be of a different species.
2. Potted plants are not accepted.
3. All materials should be grown and collected rather than purchased. Entries should not take over one square foot of table space.
4. Display should be exhibited in a disposable container that is easily moved by the fair staff. The fair association is not responsible for the loss or damage of any vases or containers. Container will not be judged.
5. Information about exhibiting flowers can be found online in the publication "Preparing Cut Flowers for Exhibit", available at <http://www.bookstore.ksre.ksu.edu/pubs/4H826.pdf>



- 5600** Annual Garden Flower, cut specimen, single stem
5601 Perennial Garden Flower, cut specimen, single stem
5602 Fresh Flower Arrangement. Flower materials must be grown and/or collected by exhibitor, not purchased.
5603 Dried Flower Arrangement, no fabric or plastic material allowed
5604 Horticulture Notebook – or three ring binder of written narrative describing a horticulture project such as: landscape design, landscape installation, lawn renovation, water garden, flower garden, vegetable garden, lawn mowing service, landscape maintenance business, farmer's market business, or other horticulture project. Encouraged to include photographs, illustrations and/or landscape drawings that help explain work done by the member. Photos taken from the same location before, during and after the completion of the project are helpful. Exhibitor may enter two different horticulture notebooks. Horticulture notebook scoring is as follows: Organization and General Appearance (neat, includes title page and table of contents, original, creative, etc.) 20%; Narrative (including goals, successes, failures, etc.) 40%; General Content (subject matter, photos, maps, knowledge gained, etc.) 40%.

Department AA - Photography

Superintendents: Julie Newby, Sharon Ward

*Photography exhibits will be **judged consultatively Friday, July 26, 8:00 a.m. to 11:30 a.m.** Exhibitors must be present during the judging to present their exhibits and visit with the judge **OR** have a representative preferably a guardian or leader with a written description of project no longer than one (1) typed, double spaced page per project prepared by the 4-H member.*

1. Photographs exhibited must be the result of the current year's project work by the club member. All photos **except 4 picture exhibit** must be no larger than 8" x 10" and no smaller than 7" x 9".
2. Photos are to be mounted across the narrow (11inch) dimension of an 11" x 12.5" sheet of matte board (board available at Extension office \$1.25) with the top edge of the print 1 inch below the top of the mount. A permanent mount should be made, using photographic adhesive such as a permanent spray adhesive. Do not use double sided tape or rubber cement. Remove the white border from the enlargement before mounting. The sides of the print must be equal distance from the sides of the mount. Improperly mounted photos will be penalized. Visual instructions available at Extension office.
3. Photo should be protected with clear bags available (.25) at Extension office or with two-gallon Ziploc bag.
4. No lettering (including dates) will be permitted on the front of the mount or on the pictures. No underlay or borders are to be used.
5. Each exhibitor's *name, photo class, and extension district (Wildcat) plus county*, should be written on the back of the mount.
6. 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 (High-Dynamic-Range) photos are to be entered in the standard photo class.
7. 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.
8. Photos with live subject(s) on railroad right away or taken from railroad right of way property will not be displayed and will be disqualified.
9. Copyright protections must be observed.
10. Each exhibitor will be **limited to 6 entries, no more than 2 per class.**

Classes for 7-8 year old exhibitors

191. *4-picture exhibit. Four pictures (3 ½" x 5" or 4' x 6") untouched, not enlarged, mounted on 11" x 12 ½" matte board. Must include one picture of a building, one of a person, one landscape shot and one picture of an animal.
192. Color photo taken by 4-H member.
193. Black and white photo taken by 4-H member
194. *Digital Composite Image

Classes for 9-11 year old exhibitors

196. Color photo taken by 4-H member.
197. Black and white photo taken by 4-H member
198. Digital Composite Image



Classes for 12-14 year old exhibitors

- 200. Color photo taken by 4-H member.
- 201. Black and white photo taken by 4-H member
- 202. Digital Composite Image

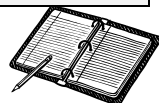
Classes for 15-18 year old exhibitors

- 204. Color photo taken by 4-H member.
- 205. Black and white photo taken by 4-H member
- 206. Digital Composite Image

*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. 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.

Department BB - *Project Notebooks/Displays

Superintendent: SueAnn White



Limit of 1 entry per class.

This class is for projects that do not have exhibit classes in the fair.

PET division was added to the Project Notebooks/Displays. Any of the classes below may be done over a pet project.

This class is for 4-H projects which do not lend themselves easily to fair exhibition. Educational project notebooks and displays are exhibited for a 4-H member to tell about something they learned in a 4-H project. It is important that notebooks and displays contain pertinent, easy to read information.

The following criteria will be considered when judging notebooks and displays:

General Appearance (30 Points)

- Neat, clean
- Printing or lettering well done
- Readability
- Sufficient space (margins) allowed around the edges and between lettering to read easily.
- Any additional art work added to the notebook or display.



Information (50 Points)

- Accurate
- Correct spelling
- Brief
- Central idea clear to reader

Organization (20 Points)

-Easy to understand

-Logical

208. *Project Notebook

209. *Educational Display

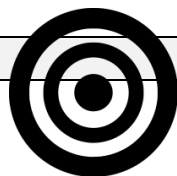
- must be the standard tri-fold board only
- must not exceed standard tri-fold: 3' wide x 4' tall

210. *Educational Poster

- Must be flat and no larger than 22" x 28"

Department CC - 4-H Shooting Sports

Superintendent: SueAnn White



Limit two (2) entries per exhibitor.

- Exhibits in this department are open to educational displays or promotional posters. Exhibits must follow copyright and game laws, see general rules.
- Entries will **prominently incorporate the 4-H Clover with KSRE branding and should include the Kansas 4-H Shooting Sports emblem**. Failure to do so will penalize entry one ribbon color (co-brand and emblem found on Mg. county website in the right hand grey column)
- Exhibits exceeding the size guidelines will be penalized one ribbon color.
- Exhibitors must comply with all state and federal laws and fair policies. No "live" ammunition containing propellant or explosive powders may be used in display! Artistic substitutes must be used in lieu of powder and live ammunition - **label artistic substitutes on back for clarification**. The substitution must be clearly described on the back of the poster, display or in a notebook.
- Exhibits will not be accepted if they are related to reloads
- The fair association, directors or agents are not liable for any loss or damage to displays.

Name, district/county, age and year in project should be in a prominent location on the FRONT of exhibit along with branding logos outline above. Educational displays will be judged on the following points:

Stopping Power.....	15
Is the idea presented clearly, simply, forcefully?	
Interest, Holding Power.....	15
Give the facts in a clear, concise informative way?	
4-H Project Application.....	15
Is the subject matter an effective showcase?	
Mechanical Power.....	5
Correct letter size, pleasing color combination, Appropriate symbols, and models?	
Personal Growth.....	25

How much knowledge was gained by the Exhibitor? Enthusiasm?
Educational Value..... 25

Posters will be judged on:

Stopping Power – 30%; Interest/Holding Power – 30%
4-H Project Application – 25%; Mechanical Power – 15%

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 the 4-H Shooting Sports project (flat poster no larger than 22" x 30")

6202 Notebook – Contents pertain to some phase, story/information about 4-H Shooting Sports. Must be or larger than 8.5x11

Department DD - 4-H Spacetech

Superintendent: SueAnn White



ASTRONOMY

- a. Each exhibitor may **enter one (1) exhibit per class**. Exhibits must have been completed during the current year.
- b. Telescopes entered in this division may be a kit or original design. Beginner kits & pre-finished telescopes requiring no painting not acceptable.
- c. 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.
- d. Telescope exhibit must include a "4-H Astronomy Exhibit Information Form," which should be rubber cemented onto the outside of a 10" x 13" manila envelope. You must also include construction plans (or a photocopy) of the telescope and place it inside the manila envelope.
- e. Two photographs showing telescope construction and operation are required. Photographs should be mounted on one side of an 8 1/2" x 11" page. A brief caption should accompany each photograph. Place photos in the 10" x 13" manila envelope.
- f. The telescope must be properly assembled and painted with a smooth and uniform finish. Decals, if used, should be attached smooth and tight.
- g. Telescopes designed by exhibitor must be original, not a modification of an existing kit.
- h. Exhibitor's name, county, age, and year(s) in project must be tagged or labeled in a prominent location on the telescope stand, educational display, notebook, and/or poster.

5500 Telescope made from kit.

5501 Telescope made from original design

COMPUTER SYSTEMS

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

Any item which is not a notebook, display board, or poster displayed in this class is considered a "computer system" exhibit and MUST follow the rules set forth below.

1. **A.** All exhibits must be self-contained on a USB drive (thumb drive, flash drive, jump drive, or 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.
2. **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 4"X4"X4") 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.
3. Physical computers (tablets, smart phones, laptops) will not be accepted
4. Any attached GPIO devices are not judged for electrical construction or quality. This division is focused on operational aspects of systems that have automated reticulated structures (arms, wheels, grippers, etc.) which the exhibitor constructed, can 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 systems, all electric components of the system must be covered or concealed. Paper is NOT considered an adequate enclosure/covering for electrical components.
6. All revisions of all forms previously released for the SpaceTech division, either undated or dated prior to 2015, are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year. Use of old forms will result in the loss of one ribbon placing for exhibits.
7. For all computer system entries (those entries not covered by the rules above) the following items are required as part of an exhibit packet:
 - A manila envelope with Computer Exhibit Form attached to the front. This form can be downloaded at www.kansasspacetech.com.
 - A USB drive labeled with name, county/district, and club; in a way that does not prevent it from being plugged into a computer.
 - At least (1) graphic (picture, screenshot/capture, slide, etc.) of the project must be printed on an 8.5"x11" sheet of standard computer paper, placed in a plastic sheet protector, to allow for proper display and recognition. On the back side of the graphic name, county/district, and club should be listed.

- Instructions to run any part of the exhibit on the USB drive.
(There should be at least (3) items in your manila envelope: USB drive, graphic and instructions.)
4. Each exhibit must be accompanied by a “4-H Engineer’s Journal.” The engineer’s journal should be typed. It can either be included electronically on the USB drive (preferred) or printed and placed in the manila envelope.
 - The “4-H Engineer’s Journal” should start with a dated entry describing what the 4-H member is trying to accomplish/build.
 - The “4-H Engineer’s Journal” should conclude with a dated entry describing what the 4-H member achieved in creating. (The start and end many times will be different. The judges are interested in the journey.)
 - Additional entries in the “4-H Engineer’s Journal” should be made as progress occur describing successes and failures; as well as the steps done and any sources of information including links used.
 - Pictures can also be included in the “4-H Engineer’s Journal” but not be more than 50% of entries.
 - The “4-H Engineer’s Journal” should contain at least one graphic.
 - he “4-H Engineer’s Journal” must be at least 3 pages in length.
 - An example of a “4-H Engineer’s Journal” can be found at www.kansasspacetech.com.
 - The “4-H Engineer’s Journal” will comprise 50% of the overall exhibit score. Failure to include a “4-H Engineer’s Journal” will result in the exhibit being disqualified.
 5. If the exhibit is a program, application, app, website, or requires any coding, the source code must be included on the USB drive.
 6. Diagrams or decision trees showing the logical flow of the system must be included on the USB drive for all exhibits.
 7. 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.
 - Instructions should be written as though you were helping a less techy person, (like a grandparent) use the USB drive with a basic computer.
 8. Each exhibit must accomplish a specific automated task using a computer or virtual machine (VM).
 9. **Members will need to supply their own computer that will run their project for the day of the judging.**
 10. 4-Hers should not assume that computers have Internet connectivity and that any parts of the exhibit that require Internet access will not work. It is strongly recommended that 4-Hers test exhibits on a computer with Internet connectivity disabled.
 11. 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.

12. All licensing should be adhered to for any software used in the exhibit.
Failure to do so will result in a reduction of one ribbon placing.
 13. The creation of viruses, malware, malicious applications or code, defamatory language or graphics, bullying, or any material that is “mean,” “dangerous,” or harmful according to the judge’s opinion will result in the exhibit being disqualified.
 14. 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.
 15. 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:

• 4-H Engineer’s Journal (what I learned to make it work)	50%
• Instructions (how I help others make it work)	25%
• Functionality (does it work)	12%
• Diagrams (and code if applicable) (how I think it works)	13%
- 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 (PowerPoint, Web page/site, animated graphics, etc.)
- 5592** Single Computer System (web server, database server, etc.)
- 5593** Networked system consisting on two or more computers
- 5594** Chip system- (4”X4”X4”) programmed physical device that accomplishes a specific task

UNMANNED AERIAL SYSTEMS

Purpose: The 4-H unmanned aerial systems or UAS project explores the world from above the trees and discovers new frontiers with UASs. Members explore the uses and applications of unmanned aerial systems 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 computer exhibits which meet State Fair guidelines.
3. 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.
4. Unmanned Aerial Systems that include or depict weaponry of any kind will be disqualified.
5. See the last section for full details about exhibiting posters, display boards and notebooks.

5701 Practical application of an Unmanned Aerial System constructed from (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 non-agricultural UAS uses appropriate for this class.

5702 Unmanned Aerial Systems designed and constructed by exhibitor and 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.

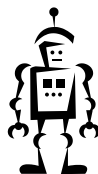
ROBOTICS

- a. 4-H members must be currently enrolled in the 4-H SpaceTech project to exhibit in this division.
- b. Each exhibitor may **enter one (1) robot** that has been constructed/completed during the current year.
- c. Each robot must be able to stand or sit freely by itself without additional supports.
- d. The robots dimensions must not exceed 2 feet wide by 2 feet deep by 2 feet high. Weight may not exceed 15 pounds.
- e. 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.
- f. Robots may be powered by an electrical, battery, water, or solar source only. 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.
- g. Remote controlled robots are allowed under certain conditions provided that the robot is not drivable. Remote controlled cars, boats, planes, and/or action figures, etc. are not allowed.
- h. Each robot must be in operable working condition. The judges will operate each robot to evaluate its workmanship and its ability to complete the required tasks for this current 4-H year.
- i. Each exhibitor is required to complete the "4-H SpaceTech Robotics Exhibit Information Form", which is available from your local Extension office. This completed form must be attached to the outside of a 10" x 13" manila envelope.
- j. The exhibit must include written instructions for operation, construction plans, one to three pages of project photographs or a 5 minute CD, DVD, or video presentation, and robot programming information, if applicable. This information should be placed inside the 10" x 13" manila envelope mentioned above.

- k. Creativity, workmanship, and functionality will be strong criteria in judging the "Robot designed by Exhibitor" classes.
- l. Exhibitor's name(s) and county must be tagged or labeled in a prominent location on the robot, educational display, notebook and/or poster board. Sources of scientific information must be cited on the front of your exhibit, including all posters and educational display boards.
- m. Educational posters/displays must be no larger than 20" x 30" or limited to one 3' x 4' display board. No card table exhibits will be allowed. Care should be taken to use durable materials that will withstand fair conditions. No electricity will be provided.
- n. Team project notebooks must be organized in a 3-ring binder and should highlight information/roles of each team member, drawings, charts, photographs, goals and objectives of your robotics project, and all robotic competitions your team has completed in during the current 4-H year.

Division A - Novice - One to Two Years in Robotics Project

- 5505** Robot made from a commercial (purchased) kit
- 5506** Robot designed and constructed by exhibitor. May not be mere modifications of an existing robot kit or plan.
- 5507** Programmable robot made from a commercial (purchased) kit
- 5519** Robot designed and constructed by exhibitor, that is operated by a remote controlled device.
- 5543** Junk Drawer Robotics-based curriculum robot



Division B - Intermediate - Three to Four Years in Robotics Project

- 5509** Robot made from a commercial (purchased) kit.
- 5510** Robot designed by exhibitor. May not be 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, that is operated by a remote controlled device.
- 5544** Junk Drawer Robotics-based curriculum robot

Division C - Professional - More Than Four Years in Robotics Project

- 5513** Robot made from a commercial (purchased) kit.
- 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, that is operated by a remote controlled device.
- 5545** Junk Drawer Robotics-based curriculum robot

Division D - Team Robotics Project.

- 5517** Robot designed and constructed by 2 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.

ROCKETRY

Exhibit Information 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 www.KansasSpaceTech.com
4. NAR refers to the National Association of Rocketry and its governing board. Tripoli refers to Tripoli Rocketry Association & governing board.
5. All NAR documents, with the exception of the "pink book," referenced herein can be found at <http://www.nar.org>.
6. 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.
7. See the last section for full details about exhibiting posters, display boards and notebooks.

B. Exhibit Definitions 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 mid-powered rocket is defined as a rocket that uses an 'E', 'F', 'G', or equivalent engine for launch. In addition, rockets also qualify for mid-power if they meet any of the following criteria:

- a. Is 2 inches or greater in diameter (not including fins) and taller than 3 feet (36 inches including fins) and do not use an engine(s) exciding 160.01 Newton seconds of total impulse (an 'H' engine equivalent or above).
 - 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
- b. The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
- c. Includes any airframes parts of ductile, metal, though, the use of ductile metal is strongly discouraged.
- d. 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 Rules 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 ~~either a "model rocket kit" or a "rocketry educational exhibit"~~ and 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 required.
 - 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 may 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 uniformly painted and smoothly finished or finished 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 paint 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 a 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 two ribbon placing deductions.

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. 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.

6. Up to 4 additional pages can be added to the rocketry information pack detailing the test(s) performed to insure stability. 4-Hers 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 have 160.1 ('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.

4-H SPACETECH EDUCATIONAL EXHIBITS – POSTERS, NOTEBOOKS AND DISPLAY BOARDS

Purpose: To allow 4-Hers to explore SpaceTech outside the bounds of traditional projects for rockets, robotics, astronomy, computers and unmanned aerial systems. 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 may not be just a static project, but must contain substantial supporting educational materials in the form of posters, notebooks, or display boards, etc.
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 will be available at www.kansasspacetech.com. For example, a rocket may have crashed and/or is highly damaged that can't be launched again 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 on the "4-H Educational Rocketry Exhibit Information Form." Additional pages can be added inside the Information Packet and should be labeled "Citations." Sources of scientific 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 board 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. Educational posters must be no larger than a 20" X 30" poster board. Exhibitors are encouraged to laminate all posters and diagrams or cover them with clear plastic film. Any three dimensional display exhibits may not be thicker than 1".
11. Engines and igniters in 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," ~~and/or poster.~~ 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. 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 Computer systems, Robotics, Rocketry, or Unmanned Aerial Systems
 - f. And those characteristics described above.

Astronomy - Junior Division – 7-13 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 Division F – Exhibitors 7 through 13 years old

- 5741 Rocketry Educational Display
- 5742 Rocketry Notebook
- 5743 Rocketry Poster Board

Rocketry Division G – Exhibitors 14 years and older

- 5746 Rocketry Educational Display
- 5747 Rocketry Notebook
- 5748 Rocketry Poster Board

Robotics Division A - Novice – One to Two Years in Robotics Project

- 5751 Robotics Educational Display
- 5752 Robotics Educational Notebook

5753 Robotics Educational Poster

Robotics Division B – Intermediate – Three to Four Years in Robotics Project

5756 Robotics Educational Display

5757 Robotics Educational Notebook

5758 Robotics Educational Poster

Robotics Division C – Professional – Five or More Years in Robotics Project

5761 Robotics Educational Display

5762 Robotics Educational Notebook

5763 Robotics Educational Poster

Robotics Division D – Team Robotics Project

5766 Team Robotics Educational Display

5767 Team Robotics Educational Notebook

5768 Team Robotics Educational Poster

Computers - Junior Division – 7-13 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 Systems - Junior Division – 7-13 years old

5781 Junior Unmanned Aerial Systems Educational Poster

5782 Junior Unmanned Aerial Systems Display Board

5783 Junior Unmanned Aerial Systems Notebook

Unmanned Aerial Systems - Senior Division – 14 years and older

5786 Senior Unmanned Aerial Systems Educational Poster

5787 Senior Unmanned Aerial Systems Display Board

5788 Senior Unmanned Aerial Systems Notebook

Department EE - Wildlife

Superintendent: SueAnn White



1. A member may make only one entry in this division.
2. Types of exhibits in this division are open to educational or creative displays, educational posters or notebooks. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials to withstand fair conditions. *No card table exhibits are allowed.*
3. **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.
4. Name, county/district, age and year in project should be in a prominent location on the exhibit.
5. Notebooks and 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?	
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. Maximum size is a 3' x 4' tri-fold display board. Must be directly related to the wildlife project.
- 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.

Department FF - Woodworking



Superintendent: Dede Metcalf

NOTE – Woodwork exhibits will be **judged consultatively Friday, July 27 starting at 11:00 a.m.** Exhibitors must be present during the judging to present their exhibits and visit with judge.

Each exhibitor may enter up to two woodworking articles.

1. **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.
2. Projects with missing or insufficient plans will be lowered one ribbon group. (I.e. blue exhibit will receive a red ribbon.)
3. 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.
4. 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 self-sealing plastic bag with a hole punched through it and use string to tie this to the exhibit.
5. Refinished/repainted furniture should be exhibited in Home Environment - Single Exhibit.
6. Projects made from pre-cut kits are not allowed.
7. 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.
8. Firearms and weapons are not to be entered or displayed.

279. Article made by 7 to 9 year old member

280. Article made by 10 to 13 year old member

281. Article made by 14 to 18 year old member

KANSAS STATE FAIR

The Montgomery County 4-H Fair is the qualifying show for the Kansas State Fair, September 6-15, 2019, at Hutchinson, Kansas.

4-H members 9 through 18 years old with purple award inside exhibits or properly nominated livestock are eligible to exhibit at the State Fair.

NOTE – Market animals must have been nominated (June 15th) with an official 4-H tag in place and pre-entered before July 15th. Horse entry deadline is August 1st, had to qualify at district show.

The Kansas State Fair premium book will be available on the Kansas State Fair website: www.kansasstatefair.com

Entry forms will be available at the 4-H Fair or the Extension Office. It is the responsibility of the individual 4-H member to pre-enter exhibits with the Extension Office by the local deadline.

Kansas State Fair - Pre-Entries

- Transportation for **small**, non-livestock 4-H exhibits may be provided by the Wildcat Extension District, as long as space is available. Due to limited space, large exhibits (exhibits larger than what one person can easily handle) cannot be transported.
- Inside exhibits must have received a purple award at the 4-H Fair, Independence, to be eligible for State Fair competition. ***Exhibits are limited to one per project area except plant science. Arts and Crafts are limited to Grand and Reserve Grand Champion in the Intermediate and Senior Division of the Montgomery County 4-H Fair.***
- All small, non-livestock 4-H exhibits must be pre-entered by e-mail from the County Extension Office before August 12. Entry information will be available at the 4-H Fair.
- ***Note: 4-H'ers who have exhibits of great sentimental and/or monetary value should seriously consider whether such exhibits should be exposed to the hazards of the fair and transportation to and from the fair.***
- Check for other due dates at the County Extension Office. All exhibits, contest participants and contest teams must be pre-entered.
- Pre-entries for Dog Show and Fashion Revue **must be postmarked and mailed before August 15.**
- Entries for most other exhibits, including those in the 4-H Exhibit Building, Plant Science Building and Showcase Building, dog show and poultry **must be entered before August 15.**

4-H State Fair Encampment

4-H members, leaders, and agents may stay at the 4-H Encampment on the State Fairgrounds during the fair. Bed space is available for contestants in 4-H events, 4-H exhibitors, Extension Agents, and adult leaders. Space is not available for non-4-H youth (youth under 7 years of age). Reservations should be made as soon as possible **before August 15.** Contact the Extension Office for more information.

Kansas State Fair Parking and Admissions

Only exhibiting members or official volunteers are entitled to use a vehicle hang tag to enter the fairgrounds. A daily parking fee is required. Free parking is available in public lots outside the fairgrounds. An admission ticket is required for all entering the fairgrounds. For further information, contact the Extension Office.

THANK YOU TO OUR FAIR SPONSORS!

2018 Donors' List

*duffle/garment bag

Grand Champion

*Clothing	Phil & Debbie Reilly
Clothing construction 7-8, 9-11, 12-14 divisions	CJ Theads
Clothing modeling 7-8, 9-11, 12-14 divisions	Grassroots Design Group
Buymanship female 7-8, 9-11, 12-14 divisions	Eric and Jackie Chandler
Buymanship female 15-18 division	Chuck & Linda McFate
Bymanship male 7-8, 9-11, 12-14 divisions	Tom and Cheryl Fentress
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Entomology	Andrew Metcalf
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Food Preparation 9-11 Age Division	Adam & Kristi Ewing
Food Preparation 12-14 Age Division	Eric & Jackie Chandler
Food Preparation 15-18 Age Division	Randy & Nicole Small
Food Preservation	Marty & Amy Reichenberger
Forestry	Mg. Co. Farm Bureau Assn.
Geology	Eleanor Messner Memorial
Home Environment	TLC Nursery & Outdoor Living
Horticulture	First Oak Bank
Photography 7-8 Age Division	Paul & Sharon Vaughn
Photography 9-11 Age Division	Mg. Co. Farm Bureau Assn.
Photography 12-14 Age Division	Craig & Julie Newby Family
Photography 15-18 Age Division	Van & Sharon Ward
Poultry	Gail & Donna Leyda
*Poultry	Montgomery County Chronicle
	Beachner Grain, Indy
	O'Sheilds Septic Tank Cleaning

*Rabbit

SpaceTech	Jeff Culver Family
Shooting Sports	David & Marla Larimore Family
Visual Arts & Crafts	Mg. Co. Farm Bureau Assn.
Wildlife	Mg. Co. Farm Bureau Assn.
Woodworking	Kirk L. Wright Insurance
Fair Queen	Woods Lumber Company
Fair King	Joe & Beverly Smith
	Mg. Co. Farm Bureau Assn.

Beef

Champion Heifer
Champion Heifer
Champion Heifer
Champion Heifer
Champion Other Breeds Heifer
*Supreme Heifer
Reserve Supreme Heifer
Champion Bucket Calf
Champion Bucket Calf
Champion Bucket Calf
Lightweight Champion Steer

Middleweight Champion Steer
Heavyweight Champion Steer
*Grand Champion Market Steer
Reserve Grand Champion Market Steer

Dairy Cattle

Champion Dairy Cow

Dairy Goats

*Senior Doe Champion
Junior Doe Champion

Meat Goat

*Gr. Ch. Meat Goat Overall
Res. Gr. Ch. Meat Goat Overall
Grand Champion Doe
Reserve Grand Champion Doe
Ch. Lightweight Meat Goat
Ch. Middleweight Meat Goat
Ch. Heavyweight Meat Goat

Sheep

Lightweight Champion Market Lamb
Middleweight Champion Market Lamb
Heavyweight Champion Market Lamb
*Grand Champion Market Lamb
Reserve Grand Champion Market Lamb
Supreme Ewe
*Supreme Ewe

Swine

Lightweight Champion Market Hog
Middleweight Champion Market Hog
Heavyweight Champion Market Hog

Tom & Cheryl Fentress
Gordon Family Trust
Crum Angus
Newby Family Livestock
Sherwin Farms
Coffeyville Livestock Market
Tom and Cheryl Fentress
Doug Ott Family
Gordon Family Trust
Sherwin Farms
Rocky Top Beef –
Phil/Anita/Levi Clubine
Newby Veterinary Clinic
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Community National Bank & Trust, Ind.
Adam & Kristi Ewing

First Oak Bank

Paul & Terry Voth
Paul & Terry Voth

Keith & Lori Hofstrom
Kristi and Adam Ewing
Hayleigh Passauer/HPG
Jerry and Stephanie Hall
Jerica Hall
Darrell & Cindy DeTar
Jodi & Jordan Cushenbery

Muller Construction
Larry & Earlene Smith
Larry & Earlene Smith
Donna Gartner & Family
Evans Family
Mid-States Wool, Gary Cotterill
Hewlett Club Lamb

Gail & Donna Leyda
Dean & Sherry Mitchell
Muller Construction

*Grand Champion Market Hog
Reserve Grand Champion Market Hog
*Supreme Gilt
Reserve Supreme Gilt

Mg. Co. Farm Bureau Assn.
Joe & Beverly Smith
Richard and Shirley Felts
Claude Messner Memorial

Showmanship Medallions

Beef – Jr., Int. and Sr. divisions
Dairy Cattle Jr., Int. and Sr. divisions
Dairy Goat Jr., Int. and Sr. divisions

Martin & Cindi Weaver Family
Tom & Cheryl Fentress
Sizzboom Fireworks Coffeyville/
Fireworks by Donnie
Carl & Nancy Hamilton
Tom & Cheryl Fentress

Sheep– Jr., Int. and Sr. divisions
Swine – Jr., Int. and Sr. divisions

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G&G Dozer Company LLC
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Independence Daily Reporter
Jack Daniels Memorial/MG Co
4-H Foundation
Jack's Place
Jamie Clubine & Nancy
Clubine
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