**GENERAL RULES & REGULATIONS**

**FOR 4-H DIVISION**

1. Two weeks before the fair pre-entries are required for Fashion Revue, Horse Show & All Livestock. Exhibitors are responsible for entering their exhibits with their entry cards available from the Extension Office or through Fair Entry <https://fairentry.com/Public/FindYourFair>. Exhibits must be labeled as stated in each division.
2. Pen assignments will be posted on pens, after animal count forms are returned. It is your responsibility to reply back with the number of stalls you will need and for what type of animal. This is due to the Extension Office two weeks before the fair.
3. Entries must be current 4-H year project work.
4. Exhibits in each class will be placed by Judges into blue, red, white, or green ribbon groups.
5. Only bona fide 4-H members in good standing will be eligible to compete for prizes or participate in the program. 4-H’er must be enrolled in a Gray County 4-H club (to be a bona fide member you must have completed the Online 4-H enrollment by May 1 of the current year.) Eligibility shall be determined by local Agents and 4-H club leaders.
6. There shall be no commercial advertising on animals or in the barn.
7. At the close of the fair, all exhibits must be claimed at once by exhibitors or by parties representing the exhibitors. Those in charge will assume **NO** responsibility for exhibits. Horses and pets are to be on the grounds only for the horse and pet shows.
8. Exhibitors must be on hand to exhibit their livestock and pet show entries, and failure on the part of the contestant to exhibit the entry will bar him/or her from participating in any awards. In case an exhibitor has two entries in the same class, he/she may have another Gray County 4-H Club member assist with one entry, provided it meets with the approval of the superintendent of the department.
9. Only exhibitors receiving purple ribbons or state fair stickers will be eligible to show at the State Fair; an exception to this rule is livestock exhibits. 4-H members must be age 9 or older by January 1 of the current year to show at the State Fair.
10. Exhibitors are limited to three entries per class unless otherwise stated under special rules of each division.
11. Blue ribbon winners will compete for champion and reserve champion in each section. Section champions will compete for the grand champion in each division. The remaining champions and reserve champion of the overall grand champion section will compete for reserve grand champion.
12. **GRAY COUNTY FAIR ASSOCIATION IS NOT RESPONSIBLE FOR ACCIDENTS. All 4-H MEMBERS ARE REQUIRED TO HELP WITH SET UP AND CLEAN UP OF THE FAIR OR RIBBON PREMIUM WILL BE WITHHELD. IF YOU CANNOT HELP WITH SET UP AND CLEAN UP, ABSENCE MUST BE APPROVED BY THE FAIR BOARD BY July 1st SO ALTERNATE DUTIES CAN BE ASSIGNED. NO RIBBON PREMIUM WILL BE PAID TO LIVESTOCK EXHIBITORS UNLESS THEY HAVE KEPT THEIR STALLS CLEAN DURING THE ENTIRE FAIR AND THOROUGHLY CLEAN AFTER LIVESTOCK IS REMOVED.**
13. All thank you notes written by 4-H’ers for livestock sale, premium money add-ons, trophies, sweepstakes, etc. must be taken to the Recreation Center Office Drop Box WITH postage  and return address included to be checked off that they have been completed. **PREMIUM AND SWEEPSTAKES CHECKS WILL BE HELD UNTIL THANK YOU NOTES ARE RECEIVED BY 4-HERS. The deadline for thank you notes to be received is September 30th.**
14. All protests must be made and must be submitted one hour before scheduled judging to the Superintendent of division. The superintendent, both parties to the protest, and chairperson of the Fair Board will meet. If parties cannot come to an agreement a written protest must be submitted to the Gray County Fair Secretary by noon Thursday. The final decision will be made by a majority of the Gray County Fair Board.
15. Ribbon premiums will be withheld for any exhibits removed before release time unless prior arrangements have been made.
16. Classes are broken by age 12 and under for Junior, 13 and up for Senior, unless specified in the division.
17. Only Champion ribbons will be given at the fair; colored stickers will be attached to entry cards, designating order of placement. If an exhibitor wishes for a ribbon, they must show an entry card to the office.
18. **NO** animals except service animals in buildings during fair or fair related activities.
19. The Gray County Fair Board will meet on Monday evening  and then if needed after that Tuesday - Thursday.
20. Exhibits too large to fit in display cases can be entered and taken home after being judged. Pictures will be taken and displayed.
21. Dry camping is allowed if all regular slots are filled. If you are camping with a generator it has to be turned off by 11:00 p.m. every night.
22. **NO RECREATIONAL TRANSPORTATION All four wheelers, side-by-side ATV’S, golf carts, motorcycles, bicycles, and other mobile transportation will not be allowed on the fairgrounds**.

**4-H LIVESTOCK RULES**

**Read General Rules**

1. Division Superintendents will assign pens and stalls at no charge to exhibitors. Exhibitors will be responsible for their own stall bedding.
2. Each livestock exhibitor is to furnish his own feed. All livestock must be fed and watered out of buckets. No feed is to be dumped in the pens or stalls.
3. Only first and second place blue ribbon winners are eligible to compete for Champion and Reserve Champion honors in each class.
4. Grand champion ribbons will be awarded to both breeding and market animals if the judge deems they are worthy. Only those animals that make weight will be eligible for Grand and Reserve Champion ribbons.
5. Exhibitors may tag a total of five animals per species. Only bring 2 market animals per species and up to 3 breeding animals per species to the fair.
6. Division superintendent is authorized to refuse livestock showing signs of disease or for other reasons dangerous to other animals being exhibited. A Licensed Veterinarian may inspect all entries and the vet’s order shall be final.
7. Animals are not eligible to be shown in both breeding and market classes.
8. All livestock exhibitors are encouraged to participate in the Showmanship Class. Entrants must exhibit his/her own animal in their class.
9. All livestock must be shown by the 4-H member only. The only exception to this rule is personal injury, death in the family or the 4-H member has two animals in the same class. A Gray County 4-H’er may show the animal for them. **The only people allowed in the show ring will be the judge, superintendent, and the ring steward. No parents will be allowed in the show ring.**
10. Market animals (beef, swine, sheep, and goats) must be in pens and entered by 11:00 a.m. on Monday of the fair. 4-H Bucket calf entries can be entered on either **Mon.** 8:00-11:00 a.m. or **Tues.** 5:00-6:00 pm. Open class bucket calves are to be entered from 5:00-6:00 pm on **Tues.** and are to be taken home the same day after the show. Breeding beef is to be entered between 5:00-6:00 pm. on the day of the show. Breeding Beef will be taken home after their respective show without forfeiture of ribbon premium. All animals not going through the premium sale may be released after 8:00 am Thursday, excluding poultry and rabbits.
11. All livestock will be weighed in one time only for final weight. **PROTESTS MUST BE MADE IMMEDIATELY**. **RE-WEIGHS MUST BE IMMEDIATELY AFTER PROTEST**. All animals must be clean, no excess mud, and sheep must have been sheared to 1” of wool or shorter. Rope halters will be allowed, but **NO** lead ropes, clips, blankets, or covers on livestock.
12. **Only Gray County 4-H’ers, superintendents, parents, project leaders, and other eligible youth livestock exhibitors may assist in grooming of the animals, and 4-H’ers who own the animal must be present and help groom.**
13. Exhibitors are required to maintain livestock areas and their animals. **Animals are to be fed, watered and area to be maintained in a clean and professional manner. Exhibitors failing to comply will forfeit all premiums, including the opportunity to participate in the premium auction.**
14. Animals must meet the following minimum weights:  Market Beef 950 lbs., Sheep 90 lbs., Swine 220 lbs., Goats 60 lbs., or they will be given a white ribbon. **A 2 lb. allowance will be granted to all underweight animals to help meet the minimum requirement.** If they do not make weight, they can still participate in showmanship. Market animals must meet minimum weight requirements to be eligible for rate of gain contest. (Swine cannot be over 300 lbs. for Rate of Gain.
15. All livestock exhibitors must wear long pants and T-shirts furnished by the Fair Board while showing animals. No open-toed footwear in the arena.
16. **LIVESTOCK COMMITTEE consists of the superintendent of that species, 2 members of the fair board, and the County Ag Agent to make final decisions in the event of a protest.**
17. If the temperature is over 100 degrees the Fair Board will decide as to whether to dismiss bucket calves, poultry, rabbits, and anything else they feel would be better off to be released early.
18. An Exhibitor showing market beef, breeding beef or dairy cattle will not be eligible to show a first-year bucket calf.
19. Exhibitors with animals in the livestock project **MUST** let the Extension Office know if the animal(s) will go home, go on the truck or will be in the sale, **by 1:00p.m. Wednesday – NO LATER!**
20. Market Swine exhibitors must fill out and sign the Swine carcass buyer information sheet that is provided by the office**. Buyer information is due at the office by 2:00p.m. Tuesday.**
21. **All Beef, Swine, Sheep & Goats will be shown, “No Fit” or “Blow & Show”**
	1. Treating any animal internally or externally, with any irritant, counter-irritant, or other substance used to artificially change the conformation or appearance of an animal for show is prohibited. Adding false hair or hair-like material, fleece, or skin at any point, spot or area of the animal’s body is prohibited. This includes, but is not limited to the use of oils, air, powders, or artificial hair coloring. The use of glue/adhesives, dyes, spray paint or other artificial coloring which result in altering an animal’s true and natural appearance and/or color is prohibited. ANY grooming material that allows color or residue to come off from the animal will not be allowed. The Judge has the right to disqualify any animal if he sees or feels any foreign substance on that animal.
	2. The animal diet will not be manipulated to artificially enhance the desired characteristics of the animal, and such practices are prohibited. The use of alcoholic or carbonated beverages in the feed or as a drench, or water loading is not permitted. **The water will be turned off in the barns when weigh-in starts.**
	3. Acceptable practices of physical preparation which are allowed include clipping of hair, trimming of hooves, dehorning, and docking of tails.
	4. SHEEP & GOATS:  Excessive handling (i.e. hitting the animal to increase muscle tone) or excessive bracing of the animal will not be tolerated.
	5. SHEEP & GOATS:  Soft muzzles are permitted in the livestock pen only. Muzzles must be removed from an animal any time they are taken from their pen.
	6. SWINE: Any oil, powder, or other treatments, which may interfere with packer dressing of carcasses, are NOT permitted.
	7. CATTLE: No adhesives, glue, paint, or powder products.
	8. Rules will be enforced, and all exhibits will be subject to inspection by the Judge, Ring Steward, Fair Superintendent, or Fair Board Member. Any animal found in violation will result in immediate disqualification.
22. **If the Livestock Committee sees that an animal is being neglected, or if a complaint is brought to the Livestock Committee about animal neglect, 1 warning will be given to the 4-Her and parents by the Livestock Committee. If the issue continues to persist then premium money will be withheld.**
23. **All 4-H livestock exhibitors must have completed the YQCA certification before showing at their first county fair, except for market beef exhibitors, please see cattle rule #7.**
24. **TRI-STATE ROYAL RULES:** The Overall Grand Champion Market Beef, Sheep, Swine, and Meat Goat will have the opportunity to attend the Tri-State Royal “Champion of Champions” Show in Goodland, Kansas in August. Youth exhibitors will be allowed to collect premium money for their champion species and the animal be non-terminal immediately after the Gray County Fair to attend the show. The animal will not be eligible for the Carcass Show. It is the responsibility of the owner to notify the superintendent, agent and a Fair Board member before the premium sale bill is made that the animal will go on to the Tri-State Royal. At that time photos and any other identification will be taken of the animal. The carcass will be sold at floor price and harvested after the completion of the Tri-State Royal by a previously designated packing house. Immediately after the Tri-State Royal, it is the responsibility of the owner to contact the superintendent, agent, and a Fair Board Member and to take the animal to the designated kill site. Should the Grand Champion choose not to move on, the same rules will apply to the Reserve Champion of that species. **Only Overall Grand & Reserve Champion animals are eligible to show in the Tri-State Royal.** One Youth Showmanship exhibitor **(Junior OR Senior)** per species will have the opportunity to attend the Tri-State Royal “Champion of Champions” Show in Goodland, Kansas in August. A Showmanship exhibitor interested in attending the Tri-State Royal must let the superintendent, agent and a Fair Board Member know of their intent to show PRIOR to the county fair showmanship class. In the event more than one Youth Showmanship exhibitor is interested in attending, the Judge for the species will make the final decision. In the event one Youth Showmanship exhibitor qualifies for multiple species and multiple youth exhibitors are competing for the spot they must designate which species they will show for Showmanship. **The youth exhibitor has the option to take the animal shown at the County Fair to the Tri-State Royal and the same rules apply for the showmanship market animal as they do for the Overall Grand Champion Market animal OR the youth exhibitor may elect to take a different animal of the same species.** It is the responsibility of the owner to notify the superintendent, agent and a Fair Board member before the premium sale bill is made that the animal will go on to the Tri-State Royal.
25. The Gray County Fair Board has voted to follow the new Kansas State Fair Board rule which means that the Gray County Fair is no longer a terminal fair. This will allow exhibitors to continue to sell their animals in the County Premium sale but not put the animal on a truck**.**
26. **DURING THE LIVESTOCK SALE NO CLEAN UP OR PACKING UP WILL BE ALLOWED UNTIL THE LIVESTOCK SALE IS OVER!**
27. If an animal is deemed unworkable at the time of the Round Robin event, then the Superintendent of that species, 2 Fair Board members and the County Ag Agent will make the decision to switch out the animal in question.

**DIVISION 1 – BEEF**

**Read General Livestock Rules and General Rules**

1. The Kansas Animal Health Department requires no test on cattle of Kansas origin. Cattle determined by exhibition staff to have lesions of ringworms, warts, or infested with mange will not be permitted to exhibit.
2. Individuals exhibiting under Section 2 – Breeding Beef, need to bring their breeding animals to the fair on Tuesday from 5:00-6:00 p.m. on the day of the show. Exhibitors may then return home with their breeding animals after the show.
3. Weight classes will be determined by the Superintendent to allow for equal distribution of
	1. weight and number per class.
4. Breeding beef heifer classes will be broken down by breed, if there are three or more heifers for that breed, and if not, then by age.
5. **Neck & tie rope must be on cattle when tied to the fence either in the barn or outside in the tie out areas. Tie outs in rodeo pens or anywhere else outside the barn will require waiver forms & liability insurance. Cattle are not allowed to be tied out to trailers.**
6. **4-H’ers showing market beef must be YQCA Certified by December 31, of the current 4-H year to sell their animal in the premium sale.**

**SECTION 1 – MARKET BEEF**

**110**. Market Steer (class will be broken down by weight)

**111**. Market Heifer

**SECTION 2 – BREEDING BEEF**

A. Shorthorn

B. Angus

C. Hereford

D. Other breeds and crossbreeds

The classes are as follows for these breeds. (Be sure that the letter in front of the breed above is included on the entry.)

**120**. Junior heifer calves, born after January 1st of the current year.

**121**. Senior heifer calves, born between September 1st and December 31st of last year.

**122**. Junior yearling heifers, born between January 1st and April 30th of last year.

**123**. Senior yearling heifer class, born prior to January 1st of previous year.

**124**. Cow and Calf will be pen judged.

**125**. Junior bull calves born after January 1st of the current year.

**126**. Senior bull calves born between Sept. 1sts & Dec. 31st of the previous year,

**SECTION 3 – BUCKET CALVES**

Classes will be judged by conference method based on

1. What 4-H’er learned about caring for and raising a calf.
2. Fitting and showing 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.
3. The general health of the calf and knowledge of 4-H’er in health-related areas.
4. Dairy or beef quality of calf will not be considered when exhibiting in the novice classes. Quality may be a means of criterion in the advanced classes.
5. Enter 4-H bucket calves on **Mon.** from 8:00 a.m. - 11:00 a.m., or **Tues**. 5:00 p.m.-6:00p.m. **Open Class** bucket calves are to be entered from 5:00 p.m. – 6:00 p.m. on **Tues.** and taken home the same day after the show.
6. Two divisions of competition will be offered for the exhibition, Novice and Advanced. Exhibitors may enter their calf in one competition division.
7. Novice judging will be based on what the 4-H member knows about the calf project, as well as care   exhibited to the calf.
8. Advanced judging will be based on 4-H knowledge, fitting, and showing, and calf health. Maturity of the calf may be an additional consideration.
9. Bucket calf bedding must be mat or the natural ground, not wood chips or straw.
10. First year bucket calves should be born between January 1 & May 1 to be eligible to show.
11. Exhibitors showing bucket calves are encouraged to make a full-size poster to be on display in the livestock barn during the fair. The following information should be on the poster:  Your name, calf’s name, breed, and age of calf. What you feed the calf and how you take care of the calf. Any other information the 4-H’er feels is important. Pictures and drawings are encouraged to be included on the poster. All work is expected to be done by the 4-H’er with parental guidance when necessary. Posters will be judged based on the above criteria.
12. **Only one bucket calf per exhibitor, per class.**

**NOVICE**

**130**. Exhibitors age 7-9 on January 1 of the current year.

**131**. Exhibitor age 10-12 on January 1 of the current year.

**ADVANCED**

**140**. Exhibitor age 7-9 on January 1 of current year

**141**. Exhibitor age 10-12 on January 1 of the current year.

**142.** Second year bucket calves with exhibitor age 7-9 on January 1 of the current year.

**143.** Second year bucket calves with exhibitors age 10-12 on January 1 of the current year.

**144**. Second year fitting and showing rules are:  Has to make weight. Must have been shown in previous year as a first-year bucket calf. Will be eligible for premium sale but not eligible for the Round Robin.

**DIVISION 2 – DAIRY CATTLE**

Read General Livestock rules!

A. Holstein

B. Jersey

C. Ayrshire

D. Other Breeds

The classes are as follows for these breeds. (Be sure that the letter in front of the breed above is also included on the entry.)

**210**. Heifer calves, born after July 1 of last year

**211**. Heifer yearling, born between July 1 and June 30 of previous year.

**212**. Heifers or cows, born before July 1, two years prior to fair.

**All Dairy Cattle must be shown with the exhibitor walking backwards & facing the animal.**

**DIVISION 3 – SWINE**

**Read General and Livestock Rules**

1. Gilts farrowed from January of the current year are eligible to show in breeding Gilt class.
2. Read General Rules: Judging and Livestock Rules for ribbon awards procedure.
3. Market hogs will be determined by weight, not by breed. Weight classes will be determined by the superintendent to allow for equal distribution of weight and number per class.
4. Both gilt and barrows may be entered in market class.
5. All swine purchases out of state must have proof of Pseudo-rabies testing or originate from a validated herd.
6. Any swine under 220 lbs. will automatically receive a white ribbon but can participate in showmanship. Swine over 300 lbs. will be marketed at a different selling price.
7. No feed is to be dumped in pens. Animals will be fed and watered out of pans.

**SECTION 1 – MARKET SWINE**

**310.** Market swine (class will be broken down by weight)

**SECTION 2 – BREEDING GILTS**

**320**. Breeding Gilt

**321**. Bred Gilt

**322**. Sow and Litter

**DIVISION 4 – SHEEP**

**Read General and Livestock Rules**

1. The base date for determining ages of breeding sheep is September 1, or for yearling ewes, by yearling teeth.
2. Sheep must be shown with all four feet on the ground. During the Judge’s inspection and handling, sheep may be braced, but all four feet are required to be in contact with the ground. (Lifting sheep in a fluid motion to set the front legs, prior to quickly setting the feet back on the ground is acceptable.)
3. Market lambs will be shown by weight, not by breed. Weight classes will be determined by the superintendent to allow for equal distribution of weight and number per class.
4. USDA tags must be in animal ears before weigh-in.

**SECTION 1 – MARKET LAMBS**

**410**. Market lamb (class will be broken down by weight)

**SECTION 2 – BREEDING EWE**

**420.** Breeding Lamb

**421**. Breeding Ewe

**DIVISION 5 – GOATS**

**Read General and Livestock rules**

**DAIRY GOATS**

1. Registration papers or stamped duplicate registration application will be required for all animals in  the Registered and recorded Grades classes. Papers must be in the name of the 4-H’er by July 1st. Sharpness of horns will be determined by the Livestock Committee.
2. Entries will be placed in classes by age with the day of judging being the base date. Exhibitors are limited to a maximum of two dairy goats per class. Only Does are allowed to show.
3. USDA tags must be in the animal's ears before weigh-in.

**SECTION 1 – REGISTERED DAIRY GOATS**

The following breeds will be shown as listed in classes below:  Alpine, La Mancha, Nubians, Saanen, Toggenberg.

**510**. Junior doe, birth and under 4 months

**511**. Junior doe, 4 months and under 8 months

**512**. Junior doe, 8 months and under 12 months (not in milk and not previously freshened)

**513**. Junior doe, 12 months and under 24 months (not in milk and not previously freshened)

**514.** Junior does, under 24 months in milk

**515.** Senior doe, over 24 months

**SECTION 2 – GRADES AND RECORDED GRADES**

**520**. Junior doe, birth and under 4 months

**521**. Junior doe, 4 months and under 8 months (not in milk and not previously freshened)

**522**. Junior doe, 8 months and under 12 months (not in milk and not previously freshened)

**523**. Junior doe, 12 months and under 24 months (not in milk and not previously freshened)

**524**. Senior doe, up to 24 months (in milk or previously freshened)

**525**. Senior doe, 24 months and older (in milk or previously freshened)

**MARKET GOATS**

1. Market goats shown must weigh a minimum of 60 lbs. and have all milk teeth at time of weigh-in and if horned, the horns must be tipped (not less than the diameter of a dime at the end), have hair no longer than 3/8” from the hocks and knees excluding the tail up. **SHARPNESS OF HORNS WILL BE DETERMINED BY THE LIVESTOCK COMMITTEE.**
2. Goats must be shown with all four feet on the ground. During the Judge’s inspection and handling, goats may be braced, but all four feet are required to be in contact with the ground. (Lifting a goat in a fluid motion to set the front legs, prior to quickly setting the feet back on the ground is acceptable.)

3. Animals are shown with collars or halters and are led in the class.

Market goats will be shown by weight. Weight classes will be determined by the superintendent, to allow for equal distribution of weight and number per class.

**530**. Market meat goat (shown by weight)

**531**. Breeding meat goat

**DIVISION 6 – CARCASS SHOW**

**610**. SWINE: 4-H market swine animals that are shown at the County Fair are eligible to enter the carcass contest. Minimum weight to enter the carcass show is 220 lbs. Carcass will be judged by Ham-Loin Index and Quality Grade (PSE pork will receive a white ribbon.)

**620.** SHEEP**:** All 4-H market sheep animals that are shown at the County Fair are eligible to enter the ultrasound data gathering contest. Minimum weight to enter the carcass show is 90 lbs. **Animals must be loaded on a truck at the end of the Fair to be eligible for carcass premium.**

**630**. BEEF**:** All 4-H market beef animals that are shown at the County Fair are eligible to enter the carcass contest. Minimum weight to enter the carcass show is 950 lbs. Beef animals entered in the carcass show **cannot** be fed Showman Supplement.

**640**. GOAT: All 4-H market goat animals that are shown at the County Fair are eligible to enter the ultrasound carcass data gathering contest. Minimum weight to enter the carcass show is 60 lbs. **Animals must be loaded on a truck at the end of the Fair to be eligible for carcass premium.**

**650. All species attending the Tri-State Royal, KJLS, or Kansas State Fair are ineligible for the carcass show.**

**DIVISION 7 - HORSE**

**Read General and Livestock Rules**

1. 4-H Horse Identification Certificates with a picture of the Horse must be filed in the Extension Office by June 2nd to exhibit in the County Fair Horse Show; otherwise, follow state and district guidelines and due dates.
2. Show will follow the Handbook for Kansas 4-H Horse Shows and Events, except as specified in these rules.
3. 4-H’ers may show only one horse per class. Stallions may be shown only in weaning halter class.
4. **NO COACHING FROM THE RAIL IS ALLOWED, YOU WILL BE ASKED TO LEAVE THE PREMISES IMMEDIATELY.**
5. Dress:  Long sleeved shirt; long pants and hard-soled Cowboy Boots; western cowboy hat to be worn in all but timed events. (See Handbook for Kansas 4-H Horse Show and Events for details.)
6. Horses are shown at the exhibitor’s risk.
7. Exhibitors must be enrolled in the 4-H Horse Project.
8. Champion and reserve champion ribbons will be awarded in each class at the judge’s discretion.
9. Grand and reserve champion horse showmen will be selected from senior and junior champion and reserve champion showman.
10. Grand junior and senior division champion horse showman will compete for the grand and reserve champion livestock showman award in the Round Robin showmanship contest after the beef show.
11. To be eligible for the State Fair exhibit a properly identified horse at a horse show in a class group and be qualified to exhibit in any class included in that group. Qualification for each group is based on one horse/rider combination.
	1. Group 1 Halter, Showmanship
	2. Group 2 Hunter Under Saddle, Hunter Seat Equitation, Hunter Hack, Saddle Seat Equitation
	3. Group 3 Western Pleasure, Western Horsemanship, Trail
	4. Group 4 Ranch Rail, Ranch Pattern, Ranch Trail, Reining
	5. Group 5 Barrels, Poles, Flags
12. The 4-H Horse Show will be on Wednesday, before the fair. Rain date will be determined by the Fair Board.

**PRE-REGISTRATION IS REQUIRED IN ORDER TO SHOW** at the 4-H Horse Show. You may pick up entry forms at the Extension Office if you did not receive a form in the mail.

**SECTION 1 – SHOWMANSHIP AT HALTER**

**710**. Sr. Showmanship (age 14 and up)

**711**. Jr. Showmanship (age 13 and under)

**SECTION 3 – PERFORMANCE**

**720**. Western Pleasure (14 and up)

**721**. Western Pleasure (13 and under)

**722**. Western Horsemanship (14 and up)

**723**. Western Horsemanship (13 and under)

**724**. Reining (14 and up)

**725**. Reining (13 and under)

**726**. Trail (14 and up)

**727.** Trail (13 and under)

**728.** Pole Bending (14 and up)

**729**. Pole Bending (13 and under)

**730**. Barrel Racing (14 and up)

**731**. Barrel Racing (13 and under)

**732**. Flag Racing (14 and up)

**733**. Flag Racing (13 and under)

**DIVISION 8 – FITTING AND SHOWING**

1. All livestock exhibitors are encouraged to participate in the fitting and showing class. The animals used in these must be owned by entrants and exhibited in the 4-H division.
2. Fitting and showing will be judged at the same time as the live animal judging.
3. In each species, a grand and reserve grand champion will be designated from among the senior and junior champion and reserve champion showman.
4. Grand junior and senior division champion showman in each species will then compete for grand and reserve grand champion livestock showman in the Round Robin showmanship contest after the beef show.
5. It will be the responsibility of the 4-H’er to enter the fitting and show class of his/her choice.
6. Age divisions are Junior: 13 years and younger, and senior: 14 and older.
7. **All blowers must remain off during livestock competition.**

**CLASS**

**810**. Beef Senior                            **815**. Beef Junior

**820**. Dairy Senior                           **825**. Dairy Junior

**830**. Swine Senior                          **835**. Swine Junior

**840**. Sheep Senior                         **845**. Sheep Junior

**850**. Horse Senior                          **855**. Horse Junior

**860**. Goat Senior                            **865**. Goat Junior

**DIVISION 9 – POULTRY**

**See General Rules**

1. Breeding classes: Judging will be done primarily based on exhibition qualities as described in the “Standard of Perfection” Disqualification will bar competition in these classes.
2. Production Classes:  Judging will be done on egg production qualities only. Disqualification will not bar competition in these classes.
3. Market classes:  Judging will be done on meat qualities. Imperfections will be considered in placing the class.
4. All fowl should be banded to avoid possible mix up.
5. All birds must have a pullorum-typhoid blood testifier prior to the Fair in order to exhibit on years specified by the State of Kansas. Papers must be presented to the superintendent at time of entry.
6. If less than 4 months old, the bird does not need to be bled.

**SECTION 1 – BREEDING**

**910**. Standard Breeds, Large Fowl, one bird of either sex, young pen.

**911**. Standard Breeds, Large Fowl, one bird of either sex, old pen.

**912**. Standard Breeds, Bantams, one bird of either sex, young pen

**913**. Standard Breeds, Bantams, one bird of either sex, old pen.

**914**. Turkeys, all breeds, Pen: one bird of either sex.

**915**. Ducks, all breeds, Pen: one bird of either sex.

**916**. Geese, all breeds, Pen: one bird of either sex.

**917**. Pigeons, all breeds, Pen: one bird of either sex.

**SECTION 2 – PRODUCTION CLASSES**

**920**. Production pullets, standardbred, crossbred, or strain-cross, Pen: 3 hens of the same breed.

**921**. Production Hens, standardbred, crossbred, strain-cross, Pen: 3 hens of the same

breed.

**SECTION 3 – MARKET CLASSES**

**930**. Broilers, light breeds, three birds of the same sex. (Minimum weight 1 ½ lbs.)

**931**. Broilers, heavy breeds, three birds of the same sex. (Minimum weight 4 lbs.)

**932**. Capons, all breeds, three birds of the same sex.

**933**. Game Birds.

**934**. Other (NO Guineas)

**SECTION 4 – EGGS (4-H ONLY) One dozen eggs in a carton**

**940**. White Eggs

**941**. Brown Eggs

**942.** Colored Eggs

**SECTION 5 - WILDLIFE**

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

**Rules**

1. 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.
2. Exhibits in this division are open to educational displays, promotional posters, or experiential displays. Exhibits should reflect learning in the project area. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select durable materials to withstand State Fair conditions.
3. Wildlife exhibits that reflect harvesting of wildlife must follow National Minimum Standards and Best Practices <https://4-hshootingsports.org/wp-content/uploads/2024/01/12.13.23-Minimum-Standards-Update.pdf>  and Kansas 4-H Shooting Sports Handbook <https://bookstore.ksre.ksu.edu/pubs/kansas-4-h-shooting-sports-handbook_4H1101.pdf> and Kansas Fish and Game laws. Exhibits outside these standards will be disqualified.
4. The exhibit size rule will be strictly enforced. Exhibits exceeding the size guidelines will be disqualified. Maximum exhibit size for all exhibits in this division is 4’X6’. Larger exhibits will be turned away.
5. Educational Display: must be the standard tri-fold board ONLY, must not exceed standard tri-fold: 3’x4’ unless there is a topper that sits on top of the board and does not take up additional table space; no additional table space available for promotional brochures or display items; content not to exceed display board borders.
6. Posters: must be flat and no larger than 22”x30”; content not to exceed display board borders. Exhibits may be displayed on the wall.
7. Notebooks: no larger than 8 ½” x 11”.
8. Exhibits must not display, describe, or depict firearms or firearm components that are not allowed by 4-H Shooting Sports National Minimum Standards.
9. Exhibitors must comply with state and federal laws and Kansas State Fair Management.
10. No “live” ammunition containing propellant or explosive powders may be used in any display. An inert substitution must be used in lieu of powder and “live” ammunition, the substitution must be clearly described on the back of the poster, display or in a notebook.
11. The Kansas State Fair nor the department of 4-H Youth Development, KSRE are liable for the loss or damage of any personal property included as part of your poster, display or notebook.
12. Name, county or district, age and year in the project should be on the back of the poster, display or notebook unless special arrangements are made because of the declination of publicity release.
13. Exhibit topics regarding firearm care, handling, and shooting will only be accepted from Extension Units with 4-H Certified Shooting Sports Programs and enrolled 4-H youth in the specific Shooting Sports Project.
14. Exhibits will not be accepted if they are related to reloads.

**SECTION 1**

**950.** Notebook. Contents pertain to some phase, results, story, or information about the wildlife project.

**951.** Promotional Poster. Must be related to something learned in the wildlife project. (Flat poster board or foam board no larger than 22” x 28”).

**952.** Educational Display. Must be directly related to the wildlife project. Maximum tri-fold size is 3’ x 4’.

**SECTION 2 - Experiential/Other Classes**

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

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

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

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

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

**958. Tanned Hides** - Exhibit of a wild animal hide properly processed by the member. If not mounted, must be in a clear clothing bag with a hanger. Field experiences, study, OR observations that relate to the exhibit should be included with the exhibit.

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

**960. Wildlife Tracks** - Board or diorama-type box exhibit. Make a display of animal tracks using plaster-of-paris casts. There are 3 options. For all options, include a brief description of your experiences in making the tracks so the judges better understand what you did and learned. Positive casts (impressions as they would be in nature) are preferred. - Option 1 should show plaster-of-paris tracks of five or more kinds of wildlife along with a picture or illustration of each kind of animal. (OR) - Option 2 should show two or more plaster-of-paris tracks of one specific kind of wildlife and should include a picture or illustration of the animal, what the animal may eat, and what may eat the animal. (OR) - Option 3 should show two tracks and include the animal’s habitat needs including preferred food, shelter, water, and space in addition to a picture or illustration of the animal.

**961. Wildlife Knowledge Check** - Use electrical circuits, pictures, or other methods of teaching wildlife identification or other wildlife conservation or shooting sports related knowledge. Plan size and shape to fit transportation and display; maximum size 24 x 24 inches.

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

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

**DIVISION 10 – RABBITS**

**See General Rules**

1. Members may make 1 entry per class per breed per variety. A maximum of 18 rabbits can be shown per exhibitor. Crossbreed meat pens may be shown. (County c**o**mpetition only). A rabbit cannot be entered in both fur and meat class.
2. Exhibitors must be present when rabbits are judged. At the judge's discretion. If not present, then they will drop a ribbon placing.
3. Each member will furnish his own feed and watering cup. A pen will be provided.
4. Substitutions will be allowed in the same class, breed, and variety.
5. Any rabbit shown at the fair must be **OWNED AND IN THE POSSESSION OF THE 4-H’ER BY MAY  1 OF THE CURRENT YEAR.**
6. The following breeds may be exhibited in the designated classes:

**BREEDS**

A. New Zealand

B. Champagne

C. California

D. Chinchilla

E. Satin

F. Silver Marten

G. Rex

H. Florida White

I. Dutch

J. Dwarf

K. Other purebred breeds recognized by the American Rabbit Breeders Association.

L. Crossbreed (county Competition only)

**SECTION 1 - BREEDS CLASSES**

**1010**. Junior Doe (under six months of age)

**1011**. 6-8-month doe

**1012**. Senior doe (eight months of age and over)

**1013**. Pre-junior buck (only breeds of Bavarian, California, Champagne, Checkered Giant, American Chinchilla, Giant chinchilla, Cinnamon, Flemish Giant, Hotot, New Zealand, Palomino, Satin, Silver Fox)

**1014**. Junior Buck (under six months of age)

**1015**. 6-8-month buck

**1016**. Senior buck (eight months of age and over)

**1017**. Breeding class doe

**1018**. Breeding class buck

**SECTION 2 - MEAT CLASSES**

Exhibit will consist of a pen of three (3) rabbits. Minimum weight 3 ½ pounds each. Maximum weight 5 ½ pounds each, and not over 70 days of age. Rabbits will be shown by breeds if numbers are enough to merit a class.

**1020**.  Meat Class

**SECTION 3 - SHOWMANSHIP**

**1030**. Showmanship (age 12 and younger.)
**1031**. Showmanship (age 13 and older.)

**SECTION 4 - EDUCATIONAL DISPLAY**

**1040**. Educational poster 4-H (age 12 and younger)

**1041**. Educational poster 4-H (age 13 and older)

**DIVISION 11 – LIVESTOCK SALE**

Any Gray County 4-H club member may enter the market for animals exhibited in the Fair, including beef, swine, sheep, and goat. Any 4-H member may sell a total of two entries.

1. The Livestock Sale is a “premium only sale,” all bids on animals represent premium only. If a buyer wishes to purchase the animal, he must pay the floor price plus his premium bid.
2. 4-H’er must be present to sell his or her animal.
3. The Gray County Fair Board has voted to follow the new Kansas State Fair Board rule which means that the Gray County Fair is no longer a terminal fair. This will allow exhibitors to continue to sell their animals in the County Premium sale but not put the animal on a truck. With the stipulation that the animal will be tagged with an EID and is registered to go on to the Kansas State Fair and, or Kansas Junior Livestock Show. INDIVIDUAL 4-H EXHIBITORS WILL BE RESPONSIBLE FOR MARKETING THEIR OWN SWINE CARCASSES. Rabbits and poultry sold will go to market. A 4-H’er can sell either one rabbit or one poultry exhibit and cannot sell either one if selling a large animal.
4. **One hour after the 4-Her’s last participated market show, they must let the office know which animal is going to the carcass show and through the livestock sale.**
5. Animals sold at the premium sale will be purchased at a floor price for slaughter.
6. Animals must meet the following premium weights to go through the premium sale:  Beef 950 lbs., Sheep 90 lbs., Swine 220 lbs., Goats 60 lbs.
7. For animals going to a carcass show, carcass price will be determined by quality grade and yield grade for Beef.
8. Bucket calves are not eligible for sale. Second year bucket calves can be sold if they meet weight requirements.
9. Reserve and Grand Champion carcass show premiums will be sold in each division that has a carcass show.

**DIVISION 12 – PET SHOW**

1. 4-H’ER MUST BE ENROLLED IN THE PROJECT.
2. Pets will be judged on **Thursday during the fair, at 8:00a.m.** at the fairground’s small livestock arena. Registration will begin 30 minutes prior to judging.
3. All animals must be caged or restrained while on fairgrounds.
4. Animals may **ONLY** be exhibited in one location at the Fair. Individuals must choose where and how their animals will be exhibited.
5. Records of shots given must be provided at registration. **All cats & kittens must be vaccinated for rabies, distemper, feline leukemia. All puppies & dogs must be vaccinated for rabies, distemper, hepatitis, parainfluenza, and parvovirus.**
6. No Kitten or puppy younger than three months may be exhibited as they need shots to show at the pet show.
7. All cats and kittens will be shown first at the fair.
8. No dogs allowed in the arena during the judging of the cat show.
9. No cats allowed in the arena during the judging of the dog show.

**SECTION 1 – CATS**

**1210**. Cats

**1211**. Kittens (3 months – 1yr)

**SECTION 2 – DOG**

**1220**. Family dog

**1221**. Puppy (3 months – 1yr)

**SECTION 3 – HAND PETS**

**1230**. Hand Pets

**SECTION 4 – AQUARIUM PETS**

**1240**. Bowl Show (1 or 2 fish in a bowl)

**1241**. Reptiles & Amphibians (snakes, lizards, turtles, & other)

**Ferrets must be vaccinated for rabies.**

**DIVISION 13 – FIELD CROPS**

**Read General Rules**

1. Exhibits should be as mature as possible
2. Every entry must be identified by hybrid or variety name.
3. All classes calling for a gallon sample may have a 2 1⁄2 - 3 inch in diameter cylinder placed in a glass gallon container to reduce the amount of grain to three quarts. Attach both entry cards with a rubber band around the neck of the jar.
4. If variety is NOT stated where requested OR samples not tied where requested, ribbon placing will drop one placing.
5. 6. Hay samples should be approximately 15”x12”x6”. Maximum thickness of 6’ and minimum of 5’. Hay samples should be tied with a “T”. Wrap

**SECTION 1 – CORN**

**1310**. White - Ten Ear Exhibit. Variety or hybrid must be named.

**1311**. Yellow - Ten Ear Exhibit. Variety or hybrid must be named

**1312.** Corn: Exhibit to consist of one-gallon sample. Variety must be named.

**SECTION 2 – SORGHUM**

**1320**. Hybrid Grain sorghum - Ten Head Exhibit. Hybrid must be named

**1321**. Hybrid forage sorghum. Exhibit to consist of the entire plant; no roots. Hybrid must be named. 5” bundle, tied

**1322**. Other forage sorghums. Exhibit to consist of the entire plant; no roots. Hybrid must be named. 5” bundle, tied

**SECTION 3 – WHEAT**

**One Gallon Sample**

**1330**. Soft red winter wheat. Variety or hybrid must be named.

**1331.** Hard red winter wheat. Variety or hybrid must be named.

**1332.** Hard white wheat. Variety or hybrid must be named.

**SECTION 4 - SUNFLOWERS**

**1333.** Confectionery heads. 3 heads must be submitted.

**1334.** Confectionery seeds in a jar. a 1-gallon jar must be submitted.

**1335.** Oil seed heads. 3 heads must be submitted

**1336.** Oil seeds in a jar. a 1-gallon jar must be submitted.

**SECTION 5 - OTHER CROPS**

**1337.** Oats: Exhibit to consist of 0ne-gallon sample. Variety must be named

**1338.** Barley: Exhibit to consist of one-gallon sample. Variety must be named

**1339.** Brome Grass Seed: Exhibit to consist of one-gallon sample of seed.

**1340.** Other Tame Grasses – One-gallon sample of seed.

**1341.** Edible field beans: Exhibit to consist of one-gallon sample of seed from the most recent harvest.

**1342:** Edible field beans: Bundle of five plants (with roots intact) from the most recent harvest. (Example - Lentils)

**1343.** Miscellaneous Crops: Exhibit to consist of one-gallon sample of seed or 10 heads produced from the current project. Variety must be named. (Ex - Popcorn)

**1344.** Cotton: Provide 10 open bolls, not 10 plants. Place bolls in a bag that can breathe (not a sealed plastic bag), so mold doesn’t develop.

**SECTION 6 - HAY CROPS**

**1345**. Alfalfa Hay: Exhibit consists of one flake or slice from a rectangular bale, or a 10-inch section cut from a round bale. The flake or slice should be approximately 6 inches in thickness and tied in two directions. Variety must be named.

**1346.** Native Grass Hay: Ten-inch flake or slice, 6 inches thick and tied in two directions.

**1347.** Cool Season Grass Hay (e.g., fescue, brome, etc.): Ten-inch flake or slice, 6 inches thick and tied in two directions. Variety must be named.

**SECTION 7 - SOYBEANS**

**1348**. Soybeans: Exhibit to consist of one-gallon sample of seed from the most recent harvest. Variety must be named.

**1349.** Soybeans: Bundle of five plants from the most recent harvest. Variety must be named.

**DIVISION 14 – HORTICULTURE – GARDEN**

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

**Read General Rules**

1. Entries are to be prepared as explained in circular C-505 “Exhibiting Fruit and Vegetables
2. All horticultural exhibits must be grown by the exhibitor.
3. Secure entry form to disposable plate or container with string or tape. Use a sturdy disposable plate, bowl or container that will support the weight of the produce.
4. A member may enter up to a total of 4 produce items, according to the number qualified at the county/district fair, each a different type of produce. Members may enter multiple entries in an individual class, provided each entry is a different type of produce. Ex. Medium Vegetable: member may enter tomatoes, peppers and cucumbers under the same class number.
5. An exhibitor earning a purple ribbon at their county/district fair on an out-of-season vegetable/fruit/herb (ex. Early peas) may substitute another vegetable/fruit/herb (ex. Pumpkin) in its place at the State Fair.

**SECTION 1 – GARDEN DISPLAY**

Garden Display: Each exhibitor in this class will be limited to four square feet of space. The Garden Display must be exhibited in a tray, basket or container that can be easily moved by the fair staff. Exhibit consists of five different types of fresh vegetables or fruits. Canned products and shelled vegetables are not acceptable. Only one variety of each type of vegetable or fruit may be exhibited. The numbers of the five types of vegetables or fruits to be exhibited are as follows:

**1400. LARGE VEGETABLE (ONE EACH)**

Watermelon            Pumpkin      Broccoli

Squash                   Eggplant     Cabbage

Cantaloupe             Cauliflower

**1400. MEDIUM VEGETABLES (FIVE EACH)**

Cucumbers             Carrots                    Onions

Okra                        Potatoes                 Beets

Peppers                  Tomatoes    Radishes

Garlic Similar sized vegetables

**1400. SMALL VEGETABLES (TWELVE EACH)**

Green Snap Beans              Wax Beans English Peas

Cherry and Pear Tomatoes Similar sized vegetables

**1400. SMALL FRUITS (ONE HALF PINT BOX)**

Strawberries Blackberries Raspberries

Similar sized fruits

**1400. TREE FRUITS (5 EACH)**

Apples Pears Peaches

Similar sized fruits

**1400. GRAPES (BUNCHES)**

**SECTION 2 – SMALL VEGETABLES**

**1410**. 12 Beans, green snap

**1411**. 12 Beans, yellow wax

**1412**. 12 Snap Peas

**1413**. 12 Beans of Peas, other

**SECTION 3 – ROOT VEGETABLES**

**1420**. 5 White Potatoes

**1421**. 5 Red Potatoes

**1422**. 5 Sweet Potatoes

**1423**. 5 Green Onions

**1424**. 5 White Onions

**1425**. 5 Yellow Onions

**1426**. 5 Red Onions

**1427**. 5 Table Beets

**1428**. 5 Carrots

**1429**. 5 Turnips

**1430**. 5 Radishes

**1431**. 5 Parsnips

**1432**. 5 Other Root Vegetables

**SECTION 4 – TOMATOES & CUCUMBERS**

**1440**. 5 Red Tomatoes

**1441**. 5 Green Tomatoes

**1442**. 5 Cherry Tomatoes

**1443**. 5 Pear Tomatoes

**1444**. 5 Other Tomatoes

**1445**. 5 Cucumbers -Pickles

**1446**. 5 Cucumbers – Slicers

**SECTION 5 – PEPPERS**

**1450**. 5 Bell Peppers

**1451**. 5 Sweet Peppers

**1452**. 5 Jalapeno Peppers

**1453**. 5 Other Hot Peppers

**SECTION 6 – SQUASH**

**1460**. 1 Zucchini Squash – small

**1461**. 1 Zucchini Squash – large

**1462**. 1 Other Summer Squash

**1463**. 1 Winter Squash

**SECTION 7 – LARGE & MISCELLANEOUS**

**1470**. 1 Pumpkin

**1471**. 1 Watermelon

**1472**. 1 Cantaloupe

**1473.** 1 Honeydew

**1474**. 1 Cauliflower

**1475.** 1 Broccoli

**1476**. 1 Cabbage

**1477**. 1 Eggplant

**1478**. 1 Sunflower

**1479**. 5 Ears of Sweet Corn

**1480**. 5 Okra

**1481**. 5 Stalks of Rhubarb

**1482**. Misc. Vegetables (1 large, 5 Medium)

**1483**. Misc. Fruits (5 mediums)

**1483A**. Strawberries (1 pint) 3 clusters

**1483B**. Plums (10)

**1483C**. Apples (5)

**1483D**. Peaches (5)

**1483E**. Pears (5)

**1483F**. Other

**1484**. Ornamental Products

**SECTION 8 – HERBS & SPICES**

Herbs, six stems of the same variety. Bring specimens on a plate or in suitable clear containers containing water. Suggested that aluminum or clear wrap be used to cover the top of the container and poke holes large enough for stems to go through.

**1490**. Dill

**1491**. Basil

**1492**. Oregano

**1493**. Rosemary

**1494**. Parsley

**1495**. Cilantro

**1496**. Mint

**1497**. Other

**DIVISION 15– HORTICULTURE – FLOWERS**

**Rules**

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

**SECTION 1 ANNUAL**

**1500**. Celosia (cockscomb)

**1501**. Gomphrena

**1502**. Tame Sunflower (if seeds are developed display in gardens)

**1503**. Cosmos

**1504**. Spray Dwarf Marigold (needs foliage)

**1505**. Spray Medium Marigold (needs foliage)

**1506**. Spray Large Marigold (needs foliage)

**1507**. Zinnia (Buttonhole)

**1508**. Zinnia (Small)

**1509**. Zinnia (Medium)

**1510**. Zinnia (Fancy)

**1511**. Zinnia (large)

**1512**. Snapdragon

**1513**. Rose Moss

**1514**. Straw Flower

**1515**. Geranium

**1516**. Bachelor Button

**1517**. Spray Petunia (Single)

**1518**. Spray Petunia (Double)

**1519**. Spray Petunia (Fancy)

**1520**. Larkspur

**1521**. Lantana

**1522**. Nicotiana

**1523**. Salvia

**1524**. Verbenas

**1525**. Canna

**1526**. Vinca Flower

**1527**. Foliage

**1528**. Annual not listed

**SECTION 2 – BIANNUAL**

**1529**. Dianthus

**1530**. Holly Hocks

**SECTION 3 – PERENNIALS**

**1531**. Carnations

**1532**. Delphiniums

**1533**. Gaillardia

**1534**. Phlox any color

**1535**. Shasta Daisy

**1536**. Aster

**1537**. Scabiosa

**1538**. Hibiscus

**1539**. Russian Sage

**1540**. Purple Coneflower

**1541**. Liatris

**1542**. Bee Balm

**1543**. Obedient Plant

**1544**. Chrysanthemum

**1545**. Black Eyed Susan

**1546**. Spike Small Gladiolus (with faded floret intact)

**1547**. Spike Medium Gladiolus (with faded floret intact)

**1548**. Spike Large Gladiolus (florets over 5 inches)

**1549**. Day Lily

**1550**. Other Lily

**1551**. Branch of Flowering of Fruited shrub

**1552**. Perennial not listed

**SECTION 4 – HOUSE PLANTS**

All entries in this division must be grown in soil. Plants must have been owned for at least 3 months.

**1553**. Blooming (Excluding African Violets)

**1554**. Collection of 3 House Plants

**1555**. Terrarium

**1556**. Unusual or Rare Plant

**1557**. African Violet (must be in bloom)

**1558**. Tuberous Begonia

**1559.** Foliage Plant (Such as Philodendron)

**1560**. Ivy

**1561**. Fern

**1562**. Hanging Plant

**1563**. Any Other House Plant

**SECTION 5 - FRESH AND DRIED FLOWER ARRANGEMENT**

Flower materials must be grown and/or collected by the exhibitor, not purchased.

**1564**. Arrangements of green & white in a green or white container.

**1565**. Miniature arrangements (not over 7 inches in diameter)

**1566**. Holiday arrangements

**1567**. Kansas heritage arrangement

**1568**. Any other arrangement

**SECTION 6 – LANDSCAPING WITH HORTICULTURE**

1. Open only to members enrolled in Plant Science.

2. All landscape design exhibits shall be accompanied by a brief story in which the member tells about his project, the area selected. The long-term plan for the improvements made this year and how they were made, approximate cost, record of improvements made to date with not less than four or more than eight pictures before and after.

**1569**. Landscape Design – Landscape Phase

**1570**. Landscape Design – Flower Phase

**SECTION 7 – CACTUS**

**1571**. Cactus or Other Succulent

**1572**. Cactus Collection (Must have more than 1 Variety)

**SECTION 8 – ROSES**

**1573**. Hybrid Tea Rose (in bud stage)

**1574**. Miniature Rose

**1575**. Any Other rose

**SECTION 9 – PATIO PLANTERS – MUST BE GROWN IN SOIL**

**1576**. Collection of at least 3 individual blooming plants.

**1577**. Collection of at least 3 individual foliage plants.

**1578**. Collection of at least 3 foliage and blooming plants combined.

**SECTION 10 – HERBS, MUST BE POTTED AND LABELED**

**1579**. Single Herb

**1580**. Collection of 3 or more varieties

**1581**. Any worthy entry not listed above, Indoor

**1582**. Any worthy entry not listed above, outdoor

**DIVISION 16 – SEWING AND TEXTILE DESIGN**

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

1. All garments will be judged by construction, Monday, July 21st**,** starting at 1p.m. at the Fairgrounds. Please bring hangers for garments with cellophane, plastic, or a transparent garment bag, during exhibition at the fair. Items should be hung on swivel or wire hangers (no plastic hangers). Multiple-piece exhibits should be fastened together and noted on the card how many pieces make up the exhibit.
2. Garments shall be laundered or cleaned before judging.
3. Garments must be exhibited at the County Fair to receive construction ribbon and premium.
4. Identification Labels (sew or use a safety pin, no straight pins may be used to attach these items)
	1. Type or print on 3” x 2 1⁄2” piece of cloth: Class Number, County or District, Name and number of pieces in exhibit, i.e. 1 of 2, 2 of 2.
	2. Attach labels on the inside of the garment with a safety pin or corner stitches(back of neck, center back of waistband, or left end of apron band). Label each piece.
	3. Place entry form and score card on front left shoulder seam of garment or to the left side of waistband with hanger opening facing to the left, as if you were wearing the garment, so that the hanger opening faces the attached entry form.
5. One champion and one reserve champion will be awarded in each level. From the level champions one overall Grand champion and one Reserve Grand Champion will be selected.
6. 4-H’ers are encouraged to participate in consultation judging by signing up for a time when entering.
7. Educational Exhibits share with others what you have learned in clothing construction or buymanship projects. Exhibits may be in the form of a poster, notebook, or display. Follow copyright laws. Take care to select durable materials to withstand fair conditions. No card table displays allowed. Posters must not be larger than 22”x28”. Displays must not be larger than 3’x4’ tri fold.
8. 4-Hers may participate in Constructed Fashion Revue on Tuesday July 15th at 8am Entries must pre-register. Models will then participate in a public fashion revue on Friday July 18th.

**SECTION 1 – LEVEL I (1-3 years)**

**1610**. Article

**1611**. Garment

**1612**. Hand Stitched Article

**1613**. Sewing Box (judged on contents only)

**1614**. Other Article

**1615**. Educational Exhibit (notebook or poster display)

**1616**. Two Piece coordinated outfit.

**SECTION 2 – LEVEL II (4-6 years)**

**1620**. Article

**1621**. Garment

**1622**. Two-Piece or more coordinated outfit

**1623**. Other Article

**1624**. Educational Exhibit

**SECTION 3 – LEVEL III (7-8 years)**

**1630.** Garment

**1631**. Two Piece coordinated outfit

**1632.** Three Piece coordinated outfit

**1633.** Other Article

**1634.** Educational Exhibit

**SECTION 4 – LEVEL IV (9+ years)**

**1640**. Garment

**1641**. Two Piece coordinated outfit

**1642**. Three Piece coordinated outfit

**1643**. Other Article

**1644**. Educational Exhibit

**DIVISION 17 – FASHION REVUE**

1. Exhibitors must be enrolled in their appropriate clothing level.
2. Entry forms are due in the County Extension Office by July 1st **NO EXCEPTION** **TO THE RULE.**
3. Fashion Revue entrants must participate in the Public Fashion Revue to receive Grand Champion or Reserve Grand Champion awards.
4. Fashion Revue Judging, **July 9th**, 8:00 a.m., at the 4-H Center and Extension Office.
5. Clothing construction will be judged at the fair.
6. Champion and reserve champion in senior constructed garments revue and buymanship revue, may participate in the State Fair Fashion Revue.
7. Age Divisions:
* Junior (7-8 years of age)
* Intermediate (9-13 years of age)
* Advanced (14-18 years of age)

Age as of January 1 of the current year.

1. 4-H’er may model two constructed garments at the Fashion Revue.
2. 4-H’er may model two readymade garments at the Fashion Revue.
3. 4-H members will learn what clothing styles look best on them while they also gain skills in building a versatile wardrobe and staying within their budget. Each year enrolled in Shopping in Style should build on previous year’s learning experience. Exhibit one of the following options that align with the 4-H member’s Shopping in Style level.

**Rules**

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

**SECTION 1 – CONSTRUCTED GARMENTS REVUE**

Level I, II, III, and IV.  Classes are the same as construction classes in Division 16 Sewing and Textile Design. Garments must be entered in the same class as construction judging. A top worn underneath a constructed garment can be purchased or made.

**1710**. Article

**1711**. Garment

**1712**. Hand Stitched Article

**1713**. Educational Exhibit (notebook or poster display)

**1714**. Two Piece coordinated outfit.

**READY MADE GARMENTS REVUE**

Garments must be purchased for the 4-H project or made by another individual for the 4-H’er or constructed by another person (vest, jacket, dress, skirt, pants, coats, etc.) A sweater, blouse, or shirt can be purchased or made.

**SECTION 2 – BUYMANSHIP**

**JUNIOR CLASS (7-8 years of age)**

**1720**. Casual outfit

**1721**. Dress Outfit

**1722**. Western outfit

**INTERMEDIATE CLASS (9-13 years of age)**

**1730**. Casual Outfit

**1731**. Dress outfit

**1732**. Western outfit

**SENIOR CLASS (15-18 years of age)**

**1740**. Casual outfit

**1741**. Dress outfit

**1742**. Western outfit

**SECTION 3 – GARMENT MADE BY 4-H’ER FOR SOMEONE ELSE**

**1750**. Garments made by 4-H’er for someone else and modeled by someone other than the exhibitor. This class is not eligible for overall Grand or Reserve Champion in the Fashion Revue but is in Construction at the Fair.

**SECTION 4 – SHOPPING IN STYLE**

**JUNIOR CLASS (7-8 years of age)**

**1760.** Shopping in Style: Choose one of the following activities from Unit 1 or 2 of the curriculum project manuals. Exhibit should consist of poster that showcases

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

**INTERMEDIATE CLASS (9-13 years of age)**

**1761.** Choose one of the following activities from Unit 3 or Unit 4 of the curriculum project manuals. Exhibit should consist of a display that showcases:

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

**SENIOR CLASS (14-18 years of age)**

**1762.** Choose one of the following activities from Unit 5 or Unit 6 of the curriculum project manuals. Exhibit should consist of a display that showcases:

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

**DIVISION  18 – FIBER ARTS**

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

**Read General Rules**

1. Fiber Arts is defined as any method of creating a unique design with fiber, fabric or yarn. This may include: making fabric (such as weaving crochet, knitting, needlepoint); or when existing fabric is changed into something quite different (such as quilting or embroidery or ethnic art.) Ethnic Fiber Arts should use a fiber, yarn or fabric to create the design exhibit. **Non-textile (examples include wood, reed, straw, grass, etc.) baskets/pieces should be entered in the Visual Arts Division.**
2. No exhibit will be released for any other use. State Fair fiber arts exhibits cannot be used for any of the Fashion Revue classes.
3. Identification Label:
	1. Type or print on a 3” x 21/2 “piece of cloth: class number, county or district, and exhibitor’s name.
	2. Sew or safety pin this ID label on the corner of flat articles.
	3. For garments, attach an ID label to the front left shoulder seam, or left side of waistband, as if you were wearing the garments.
4. When articles, which are normally worn as a pair, are exhibited, both articles must be shown together. Fasten articles together securely with yarn.
5. Special consideration will be given to articles which are of original design. Such articles should have a note attached explaining the original design.
6. The exhibitor should attach an index card, no larger than 4” x 6”, with the entry form to give the judge any information on what parts of the exhibit they made, processes used, or other information which the exhibitor thinks would be helpful for the judge. For all items, please indicate if the item was made from a kit. For all items, please indicate fiber content, and specifically if they are made of at least 60% wool. For quilted items indicate who did the quilting and binding.
7. When the exhibit is a sewn garment that also includes one or more Fiber Art techniques (i.e. knitting, crochet, needle arts, or patchwork and quilting), the determination of what division (Clothing or Fiber Arts) and class in which to enter will be left with the 4-H participant.
8. All exhibits which need to be hung MUST have the appropriate saw tooth hanger, rod, wire or other mechanism attached in order to be properly displayed. If necessary, hardware is not attached, it may not be displayed.
9. Fiber Arts Educational Notebook - Share with others what you learned in this project about a particular Fiber Art. Exhibits should be in the form of a notebook or binder. The notebook should include a narrative section describing the fiber art. It should include a clear description of the project, technique, budget, supplies, goals, accomplishments, successes, failures, and future plans. It may include samples of techniques, how-tos, photographs of completed projects, or other ways of educating others about fiber arts. NOTE: A collection of brochures, web pages, patterns, record book forms, etc. does not constitute an educational notebook. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Name, local unit and fiber art covered must be clearly marked in the notebook.
10. There are no age specific classes in fiber arts.

**SECTION 1 – KNITTING**

An article is made either by hand or by knitting machine including felted items.

**1810**. Article

**1811**. Garment or large article

**1812.** Afghan

**1813**. Machine knitted article

**SECTION 2 – CROCHET**

An article including felted items.

**1820**. Article, yarn

**1821**. Article, thread

**1822.** Afghan

**1823**. Garment or large article

**SECTION 3 – NEEDLE ARTS**

An article created by hand using any of the following techniques.

**1830**. Embroidery and Cross-stitch

**1831**. Needlepoint

**1832**. Candle wicking

**1833**. Crewel

**1834**. Lacework

**1835**. Applique

**SECTION 4 – PATCHWORK OR QUILTED ARTICLES**

It is acceptable to practice for the exhibitor to create the patchwork or quilted article and have someone else quit it.

**1840**. Patchwork Article

**1841**. Quilted Article

**1842**. Quilt Top

**1843**. Finished Quilt (quilted by 4-H’er)

**1844**. Finished Quilt (quilted by someone other than 4-H’er)

**1845**. Applique (quilted by 4-H’er)

**1846**. Applique (quilted by someone other than 4-H’er)

**1847**. Miscellaneous (quilted by 4-H’er)

**1848**. Miscellaneous (quilted by someone other than 4-H’er)

**SECTION 5 – RUG MAKING**

Acceptable techniques include braiding, latch hook, tying, floor cloth, etc. The finished product should be an item that would be an item used in the home.

**1850**. Article for floor or wall

**SECTION 6 – SPINNING**

Should contain one skein of yarn (minimum 10 yards in length) illustrating what was learned.

**1860**. Article

**SECTION 7 – WEAVING**

A woven article. Members should attach information about the type of loom or process used. Woven wood reed, basket, should be exhibited in Visual Arts.

**1870**. Article

**SECTION 8 – ETHNIC ARTS**

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

**1880**. Article

**SECTION 9 -  MACRAME**

**1890**. Article

**PEOPLE’S CHOICE FIBER ARTS CONTEST**

Any participant who would like to enter a quilt in Division 18, 41, & 42 & 43 is eligible for People’s Choice.

1. The three Exhibits with the most votes will win 1st, 2nd, or 3rd prize. What prize is received will depend on the total votes the quilt receives during the fair.
2. Each person can only win one of the top three prizes. If a person has two quilts that win more than one, the quilt with the fewer votes will not receive a reward, and the quilt in 4th place will be moved up to 3rd place.
3. In case of a tie, members of the fair board will be asked to make a deciding vote.
4. Awards will be presented on Thursday at 6:00 p.m. during the Awards Presentation Ceremony.

**DIVISION 19 – FOOD & NUTRITION**

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

**Read General Rules**

1. A member can enter two items in each class except for the food gift package class, where a member may enter one.
2. Any baked product that can be removed from the pan should be placed on a plate, covered cardboard, or disposable container of appropriate size for the exhibit.
3. Exhibits should be in food grade plastic bags, disposable containers, or boxes of appropriate size. Only exhibit is judged, container is not judged.
4. Attach the label to the bottom of the plate or cardboard. Label templates are available at the Extension Office or make your own with the following information: Class Number, Food Product Name, 4-H member’s Name, and County or District.
5. Attach the entry form, recipe, and evaluation form to the outside of the wrapped exhibit. Do not wrap forms in plastic.
6. Exhibitors are responsible for attaching a red tag to the top of cardboard if the item is not to be sold. Otherwise, food exhibits in this division will be sold at the 4-H Food Sale at the completion of the judging. Items not for sale will be released following judging.
7. All baked goods must be left whole and uncut. Small items, such as cookies and rolls, should be the same shape and from the same recipe.
	1. Exhibit 3 cookies, 3 muffins, 3 breadsticks, 1 loaf bread, etc.
8. All unfrosted cakes should be exhibited in an upright position with crust showing. The exception is for those cakes made with special designs, such as a Bundt cake, they should have top crust side down.
9. Exhibitors in Level 1 may use commercial mix, not eligible for Kansas State Fair.
10. **Products should be brought in cool.**
11. 8 years of age and younger classes are not available at the State Fair. Must be 9 years of age by January 1 of the current year to be eligible at the State Fair and receive a state fair blue sticker or purple ribbon.
12. Youth enrolled in the Foods and Nutrition project will have the opportunity to sign up for a designated time for consultation and judging of their food exhibits. Food entries still need to be entered at regular designated time, which is prior to when judging begins.
13. Under baked entries will be lowered one or more ribbon placing.
14. **Educational classes**: Exhibits may be in the form of a poster, notebook or display. Follow copyright laws as explained in the General Rules as you are preparing your exhibit. Take care to select materials that will withstand State Fair conditions. No card table displays are allowed. If the exhibit is a poster, it must not be larger than 22” x 28”. Displays are not to exceed a standard commercial 3’ x 4’ tri-fold display board. Name and county or district must be clearly marked on educational exhibits. The educational exhibit evaluation form will be provided at judging time. NOTE: A collection of your favorite recipes in a recipe box or notebook does not constitute an educational exhibit.
15. In the Food Gift Package class, NO alcoholic beverage will be accepted. A Food Gift Package must contain at least three (3) different food items, prepared by the 4-H member in a 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 package. On the back of the entry card, answer these questions:
	1. what the intended use is,
	2. what food safety precautions were taken during and after preparation, this entry will count as a non-perishable food product, not as an additional exhibit. Home canned foods must follow Food Preservations rules. Canning jars should not be used for baking per the manufacturer’s instructions.
16. For food safety purposes, any food with custard and dairy based fillings and frostings (ex. cream cheese regardless of sugar content) raw eggs, flavored oils, “canned” bread, or cakes in a jar, cut fresh fruit, or any food requiring refrigeration (ex. bacon) or unbaked exhibit with raw flour (ex. No bake cookies) will be disqualified and not judged.
17. Exhibits in table setting class will include table covering, one (1) table setting, menu, and centerpiece. Exhibitors must furnish a table.
18. Alcohol (ex. Wine, beer, and hard liquor) is not allowed as an ingredient in food entries. Entries with alcohol will be disqualified and not be judged.
19. For food safety purposes, any entries with frostings and fillings must calculate the amount of sugar in the frosting/filling recipe only. The Calculation must be attached to entry, or the placing will be lowered one ribbon when judged. Frosting and fillings need to contain more than 65% sugar for safety. Examples on how to calculate this percentage are included in the publication located at: <https://bookstore.ksre.ksu.edu/pubs/MF3544.pdf> A worksheet is available at: <https://bookstore.ksre.ksu.edu/item/frostings-and-fillings-worksheet_4H1171>.

**SECTION 1 FOOD LEVEL I (1-3 years in project)**

**1910**. Cookie

**1911**. Muffin & Cupcakes

**1912**. Snack Mix

**1913**. Misc.

**1914**. Educational Exhibit or notebook

**1915**. Food Gift Package

**1916**. Table Setting

**SECTION 2 – FOOD LEVEL II (4-6 years in project)**

**1920**. Cookies

**1921**. Quick bread

**1922**. Cake

**1923**. Muffins & Cupcakes

**1924**. Biscuits

**1925**. Misc.

**1926**. Educational Exhibit or notebook

**1927**. Food Gift Package

**1928**. Table Setting

**SECTION 3 – FOOD LEVEL III (7-8 years in project)**

**1930**. Cookies

**1931**. Muffin & Cupcakes

**1932**. Cake

**1933**. Biscuits

**1934**. Yeast Bread

**1935.** Misc.

**1936**. Educational Exhibit or notebook

**1937**. Food Gift Package

**1938**. Table Setting

**1939**. Quick Bread

**SECTION 4 – FOOD LEVEL IV (9+ years in project)**

**1940**. Cookies

**1941**. Cake

**1942**. Yeast Bread

**1943**. Pie

**1944**. Misc.

**1945**. Educational Exhibit or notebook

**1946**. Food Gift Package

**1947**. Baked product from a modified recipe with improved nutritional value. Include original and modified recipes. Show nutrition values of each.

**1948**. Table setting

**1949**. Quick Bread

**DIVISION 20 – FOOD PRESERVATION**

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

**Rules**

1. Exhibits must have been preserved since the members’ previous year’s county fair and not been exhibited at the previous State Fair.
2. Recipes and processing methods from the sources below are recommended. Recipes must be from current, tested resources listed below AND MUST BE ADJUSTED FOR ALTITUDE based on your processing location, or it will be disqualified. Processing methods that will be disqualified include open kettle-canning, oven canning, sun canning and using electric multi-cookers. If using the Presto Precise Digital Pressure Canner, please indicate the appliance is used for either water bath or pressure canning. Untested recipes will be disqualified for food safety reasons. Tested recipe sources include:

**· K-State Research and Extension Food Preservation publications**

**· Other University Extension Food Preservation publications**

**· USDA Complete Guide to Home Canning, @2015**

**· So Easy to Preserve, 6th edition, the University of Georgia Cooperative Extension Service**

**· Ball Blue Book Guide to Preserving, Edition 38**

**· Ball Complete Book of Home Preserving, @20204**

**· Canning mixes (i.e. Mrs. Wage’s, Ball)**

**· Pectin manufacturers (i.e. SureJell, Ball)**

**· KSRE Rapid Response Center Recipes**

**· National Center for Home Food Preservation**

**· Ball and Kerr**

1. Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol will be disqualified and not be judged.
2. There are no safe recommendations to can white peaches and elderberries.
3. Each exhibit must have the complete recipe and instructions attached with the entry card, or it will be disqualified. Recipe must include exhibitor name, recipe source, date of publication, and altitude, where food was processed. If using Mrs. Wage’s or Ball mixes, indicate the date the mix was purchased.
4. Exhibits must be processed in clean, clear standard canning jars, with matching brand (ex: use Ball lids on Ball jars or Kerr lids on Kerr jars, etc..) two-piece lids. Do not use colored jars, fancy padded lids, fabric over wraps or cozies as they interfere with the judging process. No fancy packs unless the recipe states to do so (ex: Pickles, asparagus). Jars must be sealed when entered. For food safety reasons, the size of jars used must not be larger than the jar size stated in the recipe (ex: Salsa is canned in pint jars only, no quarts). Note: There are 12-ounce, 24-ounce, and 28-ounce canning jars available and may be used. Use a pint jar process recommendation for 12-ounce jars. Use quart jar process recommendations for 24-ounce and 28-ounce jars.
5. Each jar exhibited must be labeled. The label must not cover the brand name of the jar. The label must give: Class number, Product, Altitude where processed, Canning method (water bath, weighted gauge, or dial gauge pressure method), Process Time, Pressure (psi), Date processed including month and year, Name and County/District.
6. Classes 2010-2015 will require one jar for each class.
7. Hole punch entry card and use a rubber band to attach the entry card and recipe around the top of the jar.
8. If dried food product is not in a canning jar, it will be lowered one ribbon rating. Suggested amount: 1/3 – ½ cup, or three or four pieces per exhibit. Dried products must include the recipe, preparation steps and heating instructions.
9. All meat jerky must be heated to an internal temperature of 160 degrees F before or after drying. This is not the drying temperature! Jerky, not heated to an internal temperature of 160 degrees F will be disqualified and not be judged. Heating information can be found in “Dry Meat Safely at Home.”

**SECTION 1 - CANNING**

**2010**. Sweet spread (Fruit/Vegetables), Syrups; one jar

**2011**. Fruits, Juices, Fruit mixtures (Salsa, Pie Filling, etc.); one jar

**2012**. Low Acid Vegetables (green beans, corn, etc., or mixed vegetables); one jar

**2013**. Pickles (fruit or vegetables), Fermented Foods, Relishes and Chutney; one jar

**2014**. Tomato/tomato products, Tomato Juice and Tomato Salsas; (Salsa in pints only, no quarts) ; one jar

**2015**. Canned Meats; one jar

**SECTION 6 – DRIED FOODS**

**One Small Jar**

**2020**. Fruits

**2021**. Vegetables

**2022**. Meats

**2023**. Miscellaneous

**FRUIT PIE CONTEST**

Baking contest of a fruit pie. These entries will be judged first, second and third. **The fruit for 2025 is Blueberry**!

**CONTEST RULES**

1. Crust and filling recipe must be included with the entry. Please include the recipe on an 8 ½ x 11” paper.
2. Only 2-crust pies will be accepted.
3. One entry per person.
4. Main ingredient must be the specific fruit of the contest.
5. For Food Safety purposes, any food with custard and dairy-based fillings and frosting (ex. Cream cheese), raw eggs, flavored oils, “canned” bread or cakes in a jar, cut fresh fruit or any food requiring refrigeration (ex. bacon) or unbaked exhibit with raw flour (ex. No bake cookies) will be disqualified and not judged.
6. Once a person wins with a given recipe, they may not enter that recipe again.
7. Decision of the Judges will be final.
8. All pies must be baked in disposable pie pans.
9. **Pies must be brought in cool.**
10. Exhibitors are responsible to mark pie as not sell or the pie will be used at the concession stand.

**44010**. Adult

**44011**. Youth

**DIVISION 21 – INTERIOR DESIGN & ARCHITECTURE**

**Project Overview:**

Architecture and Design is an important aspect of creating work and living environments that feel good and serve a purpose to those who utilize them. Designing the feel, look or mood of a room with lighting, furniture, wall placement and design elements are all examples of ways to incorporate the design process into your environment. Learning and experimenting with the elements of design – color, line, value, space, shape form and texture, is important. Of equal importance is knowing how to work with the principles of design – proportion, scale, balance, rhythm, unity and variety. Being a designer (architect, industrial/product designer, interior architect or interior designer) starts with having an end goal in mind and using each step of the planning process to support the end goal. Good designers understand how design makes a space look good and the components needed to put it together. The overarching goal is to create a space that is structurally sound, safe, inclusive, functional, and inviting to all.

**Rules**

1. An entry card must be attached to the exhibit with material appropriate to the exhibit: safety pins, tape, string, etc.
2. Projects with missing or insufficient summary will be lowered one ribbon placing.

**SECTION 1: INTERIOR DESIGN FOCUS**

Interior Design Focus:

Interior Designers have a capacity to influence the way we feel when we inhabit a space. In some instances, this impact can be felt emotionally and physically, in other words, it can affect our mood. Tools such as color, light, texture and pattern can all be used to convey or stimulate such a response to a space.

**2110**– **Room Design Board**. Select one room within your home or imaginary/future home (bedroom, bathroom, kitchen, etc.) to design.

* Create a basic floor plan showing wall footprint including any furniture, fixture and/or cabinet layout. Include any other illustrations, drawings or photographs to help support your design. Also include material/finish samples (wall treatments, floor covering, paint samples, etc.) Label any drawings or finishes so the audience understands their intention. All finishes should be attached to the design board.
* To explain your design intent, write a brief description to be included on the design board. (no more than one-page 81/2 x 11).
* Boards must be on foam core or a standard tri-fold display.

**2111**– **Two Collages on the Design Board**. In this project, develop two imaginary interior rooms. Each room should start out with identical dimensions and features (doors, windows, etc.) The function of the room can be up to you (bedroom, coffee shop, art studio, etc.) but should be the same for both rooms. For each space, create a feeling or mood for the occupants of the space. The mood created for one space should be the opposite or contrast to the second space. Choose a pair of contrasting words from the list provided (where do we put the list) to get started.

* Each collage must be on its own page. Page size preference and maximum is 11 x 17; can use smaller dimensions if needed. Collages should cover a space that includes a background, midground and foreground. Once these are established, add as many layers as needed. Use print materials from magazines, colored paper, the internet, or other design materials to find furniture, lighting fixtures, textures and other elements to complete each collage.
* For each collage, write a brief description of your design intent. (one to three paragraphs total).
* Adhere both collages and design intent on a foam core presentation board. Label each collage with the descriptive words you selected from the list.
* Additionally, you may include research, inspiration imagery or any additional drawings that helped you design your space.

**2112**– **Two Diorama Models**. Similar to class 22011, 4-H Members will construct two dioramas, one for each space demonstrating contrasting moods. Each diorama will be designed within similar sized boxes. Boxes should be large enough to be easily viewed but no larger than 12” x 18”. Both rooms being depicted need to be the same size.

* Dioramas should convey a space which includes a background, midground and foreground. Once you have these established, you can add as many layers as needed. Use print materials from magazines, colored paper, the internet or other design materials to find furniture, lighting fixtures, textures and other elements to complete each room or diorama. Elements will need to be cut out and adhered to each background, midground and foreground to reflect the design of the room.
* Focus on selecting materials and colors to create the mood or essence of the space. Use openings in your container to experiment with the effect of light in your space.
* Dioramas should not contain actual figures, miniature furniture/cabinets or moveable parts. All elements should be paper adhered to materials easily found at home. For example: magazine photos, cardstock, plastic, cardboard, chipboard or other material to depict design finishes/elements within the diorama.

**SECTION 2: Architecture Focus**

Architects plan, design and oversee the construction of buildings and other structures beginning with concept development to the final construction phase of projects. It’s also important that they ensure the final product is safe and functional. Architects balance artistic creativity with sound building techniques while also considering how the built environment impacts people’s emotions and lifestyle.

**2120: Marble Maze or Enclosure**. Create a space in which a marble will move through a sequence of rooms, enclosures or spaces. Use different types of elements and materials to enclose your spaces or guide the marble. Consider the size of the marble and how you want the space to feel – big and open or small and enclosed. Pay close attention to the sizes of architectural elements relative to the size of the marble.

* To construct the marble maze or enclosure, use household materials found around the home to create the structure. (cardboard, chipboard, construction paper, paper towel or toilet paper tubes, etc.).
* The base of the structure should be no larger than 18” x 24” (poster board size) and 12” in height.
* In addition to your enclosure/maze, you may also present a small design board with illustrations/drawings to help the audience understand the path of travel for the marble, or the rules for which you designed.
* Write or type a brief description of your design intent (1-3 paragraphs total) to be included on the design board.

**2121:** **Marble Maze Presentation Board Only.** Presentation board should be foamcore with below items attached:

* Include drawings of your marble enclosure/maze design; (examples include floor plan, section, elevations, etc.)
* In addition to your base drawings, include any illustrations/drawings to help your audience understand the path of travel for the marble. You may also include quality photographs that show the sequence of the marble moving through the built design. Images may be annotated, meaning you can use notes to explain your thoughts/design intent, on the board. This sequence of photos should visually tell the story of your design.
* Write or type a brief description of your design intent (1-3 paragraphs in total) to be included on the presentation board.

**DIVISION 22 - PHOTOGRAPHY**

Tell your story through photography. This project helps capture unique and fun photos of friends, family, pets, nature and important events in your life that you want to document. Learn how to plan, compose, light and exhibit your photos. Learn the basics of using a smartphone or camera and advance into wide-angle and telephoto lenses, filters, light meters and computer enhancement. Photos are judged on composition, technique and appeal.

**Read General Rules**

1. Photographs entered must be the result of the current year’s project work by the 4-H member. Photo images must be taken by the 4-H member(exhibitor)
2. Photographs taken with a digital camera and having no more adjustments than exposure, color intensity or correction, one click filter effects, red eye removal, cropping, dodging and burning should be entered in the standard color or black and white classes. HDR photos are to be entered in the standard photo class.
3. The black and white classes are for black and white photos only. Monochromatic prints, including sepia prints are considered color photos and must be entered in the appropriate color photo class.
4. All photos must be no larger than 8” x 10” and no smaller than 7”x 9” after trimming.
5. Appropriate photo subject matter: Photographic subject matter is expected to follow 4-H standards. For a sense of prohibited subject matter, review the Kansas 4-H member Code of Conduct; in general, if it is not allowable at a 4-H event, it is not allowable in a 4-H photograph at the County or State Fair.
6. Photos with live subject(s) on railroad right of way or taken from railroad right of way property will not be displayed in Kansas 4-H Photography and will be DISQUALIFIED and Not Judged.
7. Copyright protections must be observed.
8. Decisions as to display and/or penalties will be made by the Photography Department Superintendent and the 4-H Specialist responsible for the photography project.
9. Photo Mounts: A full coverage permanent mount (spray adhesive recommended or heat mount) must be made. (No household glues, double stick tape, etc.) Each photo is handled numerous times (up to 30) throughout the judging, sorting, and display process. Please see photo mount and ID strip diagrams at the end of this section; also available on Kansas4h.org.
10. Photos are to be mounted across the narrow (11”) dimension of an 11” x 12.5” sheet of white or cream studio matte board. Photos mounted on poster board will not be displayed. Matte boards may be purchased from your local K-State Research and Extension office.
11. Photos must be mounted with the top edge of the print 1” below the top of the mount (board is always oriented narrow side up). The sides of the print must be equal distance from the two sides of the mount.
12. Improperly mounted photos, oversize or undersize photos or photos with the white borders not removed or lettering (including dates) on the photo, will be awarded a ribbon one placing lower than the placing determined by the official judges.
13. No lettering, including dates, is permitted on the front of the mount or on the photo. No underlay or borders are to be used.
14. Photo Release Form; Slide the photo release form in the back of the bag, behind the photo mount with the exhibitor’s signature. Please fill out the photo release form in its entirety. Photo release forms will be removed at check-in for privacy purposes.
15. Photos entered in any class of the 4-H Photography Division at the State Fair may be used in the State Fair 4-H Photography judging contest. Entry of a photo in the 4-H Photography Division contest grants permission to use the photo in the 4-H Photography Judging Contest.
16. My Favorite 4-H Photography Display (See Class #4806) This class is only for those photography project members with 10 or more years of experience. This class is a non-judged, mounted display consisting of four favorite photos from the member’s photography career in 4-H. All four photos will be mounted with a fifth mount reserved for a one page, printed or handwritten narrative/description that details each photo and why the exhibitor regards these photos as their most significant work. Photos and narrative/description will be displayed on one row of the photography racks. This class provides an alternate way to showcase the development and accomplishments of the 4-H member’s photography career. Members who display in My Favorite 4-H Photography Display can still enter two other classes.

**Eligibility & Quota**

1. Exhibitors, first through seventh year in the photography project, may enter one (only) photo print per exhibitor. Exhibitors in their eighth (plus) year in the photography project may enter two prints as long as the prints are in different classes (Color photos and Black & White photos), for a total of two entries per exhibitor.
2. Photos with live subject(s) on railroad right of way or taken from railroad right of way property will not be displayed in Kansas 4-H Photography and will be disqualified and not judged.
3. A member may enter only one portfolio each year. Portfolio must have qualified at the County/District Level beginning with 4-H year 2022-2025.

**SECTION 1 – MEMBERS ENROLLED (1-3 years)**

**2210**. People

**2211**. Animals

**2212**. Plants

**2213**. Scenic

**2214**. Action

**2215**. Abstract

**2216**. Misc.

**2217**. Black & White

**SECTION 2 – MEMBERS ENROLLED (4-6 years)**

**2220**. People

**2221**. Animals

**2222**. Plants

**2223**. Scenic

**2224**. Action

**2225**. Misc.

**2226**. Black & White

**2227**. Video (County level only)

**2228**. Abstract

**SECTION 3 – MEMBERS ENROLLED (7-8 years)**

**2230**. People

**2231**. Animals

**2232**. Plants

**2233**. Scenic

**2234**. Action

**2235**. Misc.

**2236**. Black & White

**2237**. Video (County level only)

**2238**. Special Effects

**2239**. Abstract

**SECTION 4 – MEMBERS ENROLLED (9+ years)**

**2240**. People

**2241**. Animals

**2242**. Plants

**2243**. Scenic

**2244**. Action

**2245**. Misc.

**2246**. Color or Black & White Slides

**2247**. Video (County level only)

**2248**. Special Effects

**2249**. Abstract

**SECTION 5 – STORY BOARD** (County level only)

1. Print size must be no smaller than 3 ¼ “X 3 ½” or larger than 5” X 7”.
2. No less than three prints nor more than eight prints may be used.
3. There must be a cut line under each print explaining it.
4. Only one-story board may be entered.

**2250.** Storyboard

**SECTION 6 – PORTFOLIO CLASSES**

**Please Note:** Art Portfolio books for portfolio classes may be found at art supply stores, big box craft stores or online. They generally contain a black cover with clear pages to hold photos. Portfolio book pages should be 8 ½ x 11” in order to hold an 8 x 10 photo.

**2260**. **Growth Portfolio**

1. Member is eligible for this class beginning with the third year of enrollment in the 4-H photography project.
2. Exhibit will consist of one photo for each year of enrollment. Each photo must have been created in a different year and must be labeled with the year taken/project enrollment year. A maximum of 5 photos may be included if the member has 5 or more years of enrollment. Photos are not required to be in a consecutive order. For example, a nine-year-old with three years enrollment in photography is eligible to enter a growth portfolio. The portfolio in this example should have one photo from the seven-year-olds year, one photo from the eight-year-olds year, and one photo from the nine-year-olds year. The growth portfolio class may start at any time in the member’s photography career. For an older member, the growth portfolio would represent any five years in the project, for example, years 1,3,5,7 and 9 for a member having project enrollment totaling 9 years.
3. Photos must be 8” x 10” and may be color or black & white. Photos must be unmounted.
4. An information sheet must accompany each photo giving the brand and model of camera used to create the photo. Setting for focal length, aperture, mode ad shutter speed must also be listed. The skills set used to create the photo must be given and fully explained. The main goal for each year should also be given. The form for this information is available on [www.kansas4h.org](http://www.kansas4h.org) website, it is a form fillable document and is required.
5. A short introduction of the photographer should be placed in the first page. This introduction should tell why the 4-H member enrolled in the Photography project and why they have continued to enroll. Exhibitor could also tell of a fun event photographed, a learning experience that taught them new skills or other related learning.
6. Beginning with photo 2, a member description of GROWTH in project skill must be included on the information sheet.
7. Exhibit will consist of an introductory page, skill sheet and photo from each year in chronological order and arranged in a portfolio book. Skill sheet will go in the left-hand page and unmounted photos in the right-hand page.

**2261.** **Career Portfolio**

1. Members must have been enrolled in Photography for five (5) or more years OR members must be age 15 – 19 and have been enrolled in photography for at least two (2) years.
2. Exhibit will consist of ten (10) 8 x 10 photos showing skill development in one of the following photography areas: Portraiture, Special Effects (not done with computer), Landscape, Photojournalism, Black & White, Nature/Wildlife or Graphic Design (computer skills with photos). All photos must be the result of the current 4-H enrollment year.
3. Photos may be colored except if the Black and White option is chosen. Photos must be unmounted.
4. An information sheet must accompany each photo giving the brand and model of camera used to create the photo. The settings for focal length, aperture, mode, and shutter speed must also be listed. This sheet may be downloaded from [www.kansas4h.org](http://www.kansas4h.org); it is a form fillable document and is required.
5. A one-page summary should accompany the portfolio listing the goal for pursuing this area of photography and what skills were learned while doing so. Mentors should be acknowledged. Career exploration can also be described.
6. Exhibit will be presented in a notebook designed for portfolio review with pages for required information from #4 & #5.

**PEOPLE’S CHOICE PHOTOGRAPHY CONTEST**

1. Theme is **PATRIOTIC** in Gray County.
2. These photos will not be judged.
3. Photos must have been taken within the last 12 months.
4. Photos must have been taken within the geographic boundaries of Gray County.
5. Photos must measure 8” X 10”.
6. Photos are NOT mounted.
7. Name and address must be on the back of the photo.
8. Photos may be color or black and white.
9. Photos must be enclosed in a one (1) gallon snap and seal storage bag.
10. A participant is limited to two (2) entries.
11. A 1st place prize and a 2nd place prize will be awarded.
12. Only one (1) prize per participant

Ballots and a ballot box will be located at the photography exhibit. Votes must be deposited in the ballot box by 5:00pm. on Thursday. Prize winners will be announced at the Awards Presentation. Prize winners will be posted at the photography exhibit. The theme for next year’s contest will be posted at the photography exhibit at the close of Fair.

**DIVISION 23 – VISUAL ARTS**

The visual arts project teaches artistic skills and the elements and principles of design. 4-H members explore techniques, study art history, culture, and discover their talents. Be creative; draw, paint and work with different mediums. There are five classes that are judged at the Kansas State Fair: Fine Arts, Clay and Ceramics, Leather and Jewelry, Three Dimensional, and General Crafts.

**Read General Rules**

1. The members must be enrolled in Visual Arts.
2. A member may show only two entries in a class with a total of six entries.
3. Original artwork in any medium should be exhibited in Division 23 – Original Art. Explanation of “original art” -
	1. If a 4-H member creates their own pattern or art project that contains paint, diamond art beads, string art or any other medium, then it becomes their own work and in turn can evolve into an allowable project.
	2. Combining parts of different patterns (pictures, photographs, images from the internet or magazine) with the member’s own ideas can result in an original design.
	3. Changing only the color, pattern or size does not make the design original.
	4. If a photo, sketch or other idea source was used, or a new pattern was created by the 4-H member please submit it with the judging rubric.
	5. The design process for original art by the 4-H member must be explained in the judging rubric.
4. Only 5 exhibits between Division 22 and 23 will be selected for the State Fair. One in each class: Fine Arts, Clay and Ceramics, Leather, and Jewelry, Three Dimensional, and General Crafts.
5. Articles exhibited must be an original design created by the exhibitor.
6. All visual arts exhibits are evaluated using a visual arts rubric. The 4-H member is responsible for filling out the top part of the rubric for judging purposes. 4-H members are encouraged to think about this rubric similar to a recipe - if the judge cannot tell how a project was made or the creative process used, it’s difficult to judge the exhibit to its full extent. Exhibits will be lowered one ribbon placing if the rubric is not filled out by the 4-H member.
7. Combining parts of different patterns (pictures, photographs, images from the internet or a magazine) with the member’s own ideas can result in an original design, but simply changing the color, pattern, and/or size of a pattern does not make the design original. If a photo, sketch, or other idea source was used, submit it with your entry, firmly attached to your exhibit. Leather project kits are acceptable due to leather being precut for particular projects. If a 4-H member makes their own leather pattern that should be explained in the rubric and the pattern included.
8. Personal Collections must be entered in the Open Class. As they are considered more of a hobby than an art.
9. 4-H members should exhibit in the project in which they are enrolled. The Fiber Arts Project offers classes for quilting, embroidery, counted-cross stitch, etc.
10. All two-dimensional art, including fine art, intended to be hung, will need to have a wire hanger. (Due to our display system. NO saw tooth hangers, string or tape will be allowed). Exhibits will be lowered one ribbon placing if correct hardware is not used? If art cannot be hung properly, it will not be displayed.
11. Multi-piece items should be marked accordingly for judging and display purposes. Art exhibits are handled several times between check-in, judging and display. Please mark accordingly or place in a container so volunteers are aware of multi-piece exhibits.
12. No plant or plant materials needing watering can be entered as an art display or item.
13. All exhibits are entered at your own risk.
14. No plant or plant materials needing watering can be entered as an art display or item.
15. Explanation of the term “kit” – Any art project that comes pre-packaged or boxed as a “kit” is not an allowable project. While utilizing kits can help build skills, the work needs to be original to the 4-H member. Examples include paint by number, diamond art kits, string art, etc. Exception: Leather project kits, due to the nature of pre-cut leather, are allowed.
16. LEGOS: “Store Bought” sets are considered an arts and craft entry. Original design must be entered in Architectural Block Design in STEM.
17. **LEGOS: Must be placed in a sturdy see-through enclosure with a top, bottom and 4 sides. A clear tub turned upside down with the exhibit placed on the lid would be an acceptable enclosure.**
18. **LEGOS: Total dimensions may not exceed 2 feet high, by 2 feet wide, by 2 feet deep.**

**SECTION 1 – JUNIOR – 12 & UNDER**

**2310**. Fabric or fiber craft

**2311**. Leather craft

**2312**. Drawing & Painting (any medium, non-original)

**2313**. Carving

**2314**. Sculpture

**2315**. Ceramics

**2316**. General Visual Arts

**2317**. Paper craft

**2318**. Jewelry

**2319**. Legos (county only)

**2320**. Stained Glass

**2321**. Diamond Art

**2322**. Other

**SECTION 2 – SENIOR – 13 & OLDER**

**2330**. Fabric or fiber craft

**2331**. Leather craft

**2332**. Drawing & Painting (any medium, non-original)

**2333**. Carving

**2334**. Sculpture

**2335**. Ceramics

**2336**. General Visual Arts

**2337**. Paper craft

**2338**. Jewelry

**2339**. Legos (county only

**2340.** Stained Glass

**2341.** Diamond Art

**2342**. Other

**DIVISION 24 – ORIGINAL ART**

**Read General Rules**

1. Exhibitors may enter three exhibits in each class of each section with a maximum of six entries per painting section and per drawing section.
2. Only 5 exhibits between Division 22 and 23 will be selected for the Kansas State Fair. One in each class: Fine Arts, Clay and Ceramics, Leather and Jewelry, and General Crafts.
3. **All drawings must be matted or framed**.
4. All exhibits which need to be hung must have a way to hang (wire or saw tooth hanger preferred).
5. No plant or plant materials needing watering can be entered as an art display or item.
6. All exhibits are entered at your own risk.
7. Kits and preformed molds are not considered original and are not acceptable. Combining parts of different patterns (pictures, photographs, images from the internet, or a magazine) with the member’s own ideas can result in an original design, but simply changing the color, pattern, and/or size of a pattern does not make the design original. If a photo, sketch, or other idea source was used, submit it with your entry, firmly attached to your exhibit.

**SECTION 1 – PAINTING (11 & Under)**

**2410**. Oil

**2411**. Watercolor

**2412**. Acrylics

**2413**. Mixed Media

**2414**. Opaque

**SECTION 2 – DRAWING (11 & Under)**

**2420**. Pastel

**2421**. Charcoal

**2422**. Crayon

**2423**. Ink

**2424**. Pencil

**2425**. Felt Tip

**SECTION 3 – POTTERY (11 & Under)**

**2430**. Sculpture

**2431**. Wheel Made

**2432**. Wheel Made, altered

**2433**. Story Illustration

Classes will be added in the following areas if entries are received:  Design, Graphic Arts, Original Needlework (Made without pattern), Sculpture, Metal Work, Other Media.

**2434**. Etching

**2435**. China Painting (hand painted)

1. One article

2. Collection of 3 different subjects

**SECTION 4 – PAINTING (12 & OLDER)**

**2440**. Oil

**2441**. Watercolor

**2442**. Acrylics

**2443**. Mixed Media

**2444**. Opaque

**SECTION 5 – DRAWING (12 & OLDER)**

**2450**. Pastel

**2451**. Charcoal

**2452**. Crayon

**2453**. Ink

**2454**. Pencil

**2455**. Felt Tip

**SECTION 6 – POTTERY (12 & OLDER)**

**2460**. Sculpture

**2461**. Wheel Made

**2462**. Wheel Made, altered

**2463**. Story Illustration

Classes will be added in the following areas if entries are received:  Design, Graphic Arts, Original Needlework (Made without pattern), Sculpture, Metal Work, Other Media.

**2464**. Etching

**2465**. China Painting (hand painted)

1. One article

2. Collection of 3 different subjects

**DIVISION 25 – ENTOMOLOGY**

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

**Read General Rules**

1. All entries should be submitted in an 18x24x3.5-inch wooden display box with a clear plastic top (such as Plexiglas). Boxes can be handmade or purchased as long as they are of the correct size.
2. 4-H members may choose to use one of two taxonomies:
* Option A: As printed in “Insects in Kansas” book, or
* Option B: Which follows [www.bugguide.net](http://www.bugguide.net).
1. Each exhibitor is required to identify each box with two identification labels bearing Exhibitor’s name, county or district, the collection class 4-H’er is enrolled in and a statement of taxonomy used. One label goes in the upper left corner of the box (inside) and the other on the lower right corner of the box (outside). Arrange specimens in the box so the box can be displayed lengthwise.
2. The number of orders, specimens (and families where required) must be included on both of the exhibitor’s box identification labels. Only one adult insect per species can be used in the Collection Boxes and Notebook Classes, unless labeled as male or female and correctly identified.
3. Arrange specimens in groups or rows parallel to the short sides of the box. Specimens are to be arranged by Order in the box, then Family where required.
4. Two labels should be centered on the pin beneath each specimen. First (closest to the specimen) is the common name label and the second label should include date/locality. Full county name and state abbreviation should be on the second label. Collector’s name (or host) on the date/locality label is optional.
5. The specimens should be collected by the exhibitor and should focus on Kansas insects. Insects may be collected from one county into bordering states and labeled accordingly. Please refer to “Entomology Collection Exhibit Resource” for full details on out-of-state insects in collections.
6. Only specimens of the class Insecta should be included.
7. Purchased insects are not to be exhibited in collections, but they may be used in educational displays.
8. Specimens of soft bodied insects such as aphids, lice, termites, etc. should be exhibited in alcohol filled vials; however, the use of alcohol filled vials should be limited to only those specimens that lose their shape when pinned, since the vials pose a significant hazard to the rest of the collection if they become loose in transit.
9. Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but are not limited to: incorrect display box size, missing paperwork, feet on display boxes, no special project in notebooks, etc.
10. After the first year in Entomology, all 4-H members need to add an 8 ½ by 11-inch sheet of paper to their collection that states what they did to improve their collection for the current year. This should include how many new insects were added to the display box (please list), how many insects were replaced in the display box (please list), and number of new orders and/or families were added to the display box. Other optional things that could be included are number of insects caught for the year, number of new Orders added this year, number of talks and/or demonstrations given, activities participated in, leadership roles, etc. This paper should be taped to the upper left corner on the front of your display box.
11. The following insects are listed as Threatened or Endangered by the Fish and Wildlife Service. Because of this, no specimens of the below species may be caught or displayed in insect collections or educational displays. If specimens of these species are included in collections or educational displays, it will be counted as a major violation. Any major violation of rules will result in the exhibit being dropped one ribbon placing. Please refer to www.kanas4-h.org on the Entomology project page for more information.
	* American Burying Beetle (Nicrophorus americanus)
	* Monarch Butterfly (Danaus plexippus)
	* Eastern Regal Fritillary Butterfly (Argynnis idalia idalia or Speyeria idalia)
	* Western Regal Fritillary Butterfly (Argynnis idalia occidentalis or Speyeria occidentalis)
	* Great Spangled Fritillary (Speyeria cybele)
12. A minimum of 10 new specimens must be added and/or replaced each year.

**Notebook Rules:**

1. Individual entries are to be placed for display in a three-ring notebook for competition.
2. 4-H members who have been previously enrolled in or are currently enrolled in the other phases of the Entomology project need to start with the Beginning I Phase of Entomology Notebooks, not the introductory phase.
3. 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-H’er is enrolled in and statement of taxonomy used:
	* Option A: “Insects in Kansas” book, or
	* Option B: Which follows [www.bugguide.net](http://www.bugguide.net). The number of orders, specimens and families (required in Intermediate and Advanced classes) must also be included on the Title Page.
4. 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 the identified insect should be used.
5. Date, common name, full county name and state abbreviation should be included for each species. Collector’s name on the specimen page is optional.
6. Specimen pages should have two different views of the insect if possible. If pictures are taken on different dates/localities, include information for both.
7. A statement describing the habitat where found/host plant may be included and is encouraged and will be worth a bonus 10 points total, not per page. For Intermediate and Advanced notebooks, this is strongly encouraged.
8. A divider page is to be placed in front of each order of insects with the order name printed on the tab for the page as well on the front of the divider page.
9. For the Intermediate and Advanced classes, insects are also to be grouped by family behind each order divider.
10. After the first year in Entomology, all 4-H members need to add an 8 ½ by 11-inch sheet of paper to their Photo Collection Notebook that states what they did to improve their notebook for the current year. This should include how many new insect photo pages were added to the Notebook (please list), how many insect photo pages were replaced in the Notebook (please list), and number of new orders and/or families added to the Notebook. Other optional things that could include are number of insects photographed for the year, number of new Orders added this year, number of talks and/or demonstrations given, activities participated in, leadership roles, etc. This paper should be placed right behind the Title Page in your Notebook.
11. A special project must be completed each year and included in the notebook. See project guideline materials for specifications.
12. Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but are not limited to: incorrect photo size, missing paperwork, no special project in notebooks, etc.
13. A minimum of 10 photo pages of new species must be added and/or replaced each year.

**Educational Display Rules:**

1. Share with others what you learned in this project. Exhibit any activity or learning experience related to the field of entomology or the Teaming with Insects curriculum that does not fit into Entomology Collection or notebook classes above.
2. Follow copyright laws as explained in the General Rules.
3. The exhibit may be, but isn’t limited to, original works, digital presentations (must provide printed hardcopy for exhibit purposes for duration of state fair), programs, websites, games, apps, display box, notebook, display or poster which you have made.
4. If the exhibit is a wooden display box, it must be 18 X 24 X 3.5 inches with a clear plastic top (such as plexiglass) and displayed horizontally. If the exhibit is a poster, it must not be larger than 22” X 28”. If the exhibit is a display, maximum size is not to exceed a standard commercial 3’ X 4’ tri-fold display board.
5. Name and county/ district must clearly be marked on educational exhibits.
6. Refer to Entomology General Rule 14 for information on Threatened and Endangered Species specimens that cannot be displayed in Educational Exhibits.
7. Any major violation of rules will result in the exhibit being dropped one ribbon placing. Examples would include, but are not limited to: incorrect display box size, missing paperwork, feet on display boxes, no reference for information and/or photos, etc.

**SECTION 1 - COLLECTION**

**2510. Beginning I Entomology Collection**: Display in one standard box a minimum of 50 and maximum of 125 species representing at least 7 orders. Follow the guidelines listed for Collections. Members can exhibit in this class a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first and then they must move up a division.

**2511. Beginning II Entomology Collection**: Display in one standard box a minimum of 75 and maximum of 150 species representing at least 9 orders. Follow the general guidelines listed for Collections. Members can exhibit in this class a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair, whichever comes first and then they must move up a division.

**2512. Intermediate Entomology Collection**: Display a minimum of 100 and a maximum of 300 species representing at least 10 orders. Two standard boxes can be used. Follow the general guidelines listed for Collections. In addition, family identification is required for all insects in any two of the following six orders: (only two will be counted for judging)

•“Insects in Kansas” book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera. Or

•“Insects in Kansas Book: 2016 Revised Taxonomy,” which follows [www.bugguide.net](http://www.bugguide.net) – Taxonomy - Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera

Members can exhibit in this class for a maximum of 3 years. A 4-H member must move up if they receive a purple ribbon at the Kansas State Fair.

**2513. Advanced Entomology Collection**: Display a minimum of 150 and a maximum of 450 species representing at least 12 orders. Three standard boxes can be used. Follow the general guidelines listed for Collections. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. 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.

**SECTION 2 - NOTEBOOK**

**2520. Introductory Entomology Notebook**: Display a minimum of 10 and a maximum of 30 insect species representing at least 6 different orders. Follow the general guidelines listed for Notebooks, including the Special project. A 4-H member must be of minimum age to compete at the Kansas State Fair. A 4-H member may exhibit in this class for a maximum of two years.

**2521. Beginning I Entomology Notebook**: Display a minimum of 20 and a maximum of 60 50 insect species representing at least 7 different orders. Follow the general guidelines listed for all Notebooks, including the Special project. Members can exhibit in this class for a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair.

**2522. Beginning II Entomology Notebook**: Display a minimum of 40 and a maximum of 70 insect species representing at least 8 different orders. Follow the general guidelines listed for all Notebooks, including the Special project. Members can exhibit in this class for a maximum of 3 years or until they receive a purple ribbon at the Kansas State Fair.

**2523. Intermediate Entomology Notebook**: Display a minimum of 60 and a maximum of 100 species representing at least 9 orders. Follow the general guidelines listed for Notebooks, including the Special project. In addition, family identification is required for all insects in any two of the following orders: (only two will be counted for judging)

* “Insects in Kansas” book - Orthoptera, Hemiptera, Homoptera, Coleoptera, Hymenoptera, and/or Diptera, or
* “Insects in Kansas Book: 2016 Revised Taxonomy” which follows <https://bugguide.net> Taxonomy - Odonata, Orthoptera, Hemiptera, Coleoptera, Hymenoptera, and/or Diptera. Members can exhibit in this class a maximum of 3 years or until they receive purple ribbon at the Kansas State Fair. A 4-H member must move up if they receive a purple ribbon.

**2524. Advanced Entomology Notebook**: Display a minimum of 100 and a maximum of 200 species representing at least 12 orders. Follow the general rules listed for Notebooks, including the Special project. Follow the general guidelines listed for Notebooks. Family identification is required for all insects belonging to the six basic orders as outlined under the Intermediate phase. Only families in the above six orders will be counted for judging. Family identification of insects in the remaining orders is optional, but desirable as long as accuracy is maintained. Members may continue to exhibit in this class for an unrestricted number of years as long as they remain eligible for 4-H membership.

**SECTION 3 - EXHIBIT**

**2530. Beginning Educational Exhibit**: Class for individuals that are exhibiting in the Beginning I and II Collection or Beginning I or II Notebook Classes. If only exhibiting in this category, then ages 9-12.

**2531. Intermediate Educational Exhibit**: Class for individuals that are exhibiting in the Intermediate Collection or Intermediate Notebook Classes. If only exhibiting in this category, then ages 11-14.

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

**DIVISION 26 – GEOLOGY**

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

**Read General Rules**

1. The exhibit box should be 18” x 24” x 3½”. Plexiglas covers are required. Boxes with glass covers WILL NOT be accepted. All specimens are to be arranged across the narrow (18”) dimension of the exhibit box, making the exhibit 18” across the top and 24” deep exactly. If a box has a sliding Plexiglass cover, it must be removable from the top. Screws, locks, or other devices that would prevent judges from removing the cover should not be used. For Lapidary the dimensions of the box should be appropriate for the display but should not exceed 18”x24”x31/2”.
2. Each exhibitor is required to identify each display box by placing an identification label bearing name, county or district, and number of specimens in the upper left-hand corner of the Plexiglas cover and by attaching a label with the same information on the lower right corner of the box (outside).
3. Exhibitor may enter in both geology and lapidary classes. Exhibitor may show in only one of the first four geology. Exhibitor may also show in geology class (special exhibit), Mineralogy, Fossils, and in one lapidary class.
4. Geology specimens should be labeled with the number of the specimen, date collected, specimen name or description, and locality (county only) where collected.
5. All specimens must be collected in the state of Kansas (only exception-see #7) during the current 4-H year, which will be allowed starting on the day after the conclusion of the State Fair.
6. For the geology specimens should be mounted in the box by proper groups: rocks, minerals, fossils. Fossils must be identified to the Phylum, Class and Genus level (if possible or part if Genus cannot be determined). The Genus specimen name is to begin with a capital letter and the whole specimen’s name must either be italicized or underlined, not both. Species name is not required however, if a species name is used it must be all lowercase and either italicized or underlined, not both. The words “Phylum, Class, Genus” on labels are to be spelled out, not abbreviated. More than one specimen of the same kind of rock or mineral or species of a fossil may be exhibited if this duplication represents different geological formations. Specimen label must show this distinction (Fort Hays limestone, not just limestone; calcite from the Greenhorn Formation, not just calcite; Phylum: Brachiopoda Class: Articulata Genus: Composita from the Morrill Limestone Member, not just Phylum: Brachiopoda Class: Articulata Genus: Composita).
7. For geology all specimens must be collected by the participant (not purchased) from locations in Kansas, with the exception of Tri-State Mining Area specimens collected from these three adjacent counties: Ottawa County, OK; Newton and Jasper Counties, MO. Other out of state specimens will not count in the minimum number for the class, nor will they be considered in the judging.

**SECTION 1 – GEOLOGY**

**2610. Geology**. Display at least 15 rocks, minerals, and fossils collected during the current 4-H year. Exhibitor is limited to one exhibit box. Only those exhibiting at the State Fair for the first time may enter this class.

**2611. Geology**. Display at least 30 different rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year**. Exhibitor is limited to one exhibit box. This class is open to those exhibiting either second or third time at the State Fair.

**2612. Geology**. Display at least 45 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year**. Exhibit limited to two boxes. This class is open to those exhibiting either the fourth or fifth time at the State Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

**2613. Geology**. Display at least 60 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current 4-H year.** Exhibit limited to two boxes. This class is open to those exhibiting for the sixth time or more at the State Fair. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

**2614. Geology Educational Exhibit**: Exhibit relating to everyday living; or to a mineral test, a rock formation, geological history, species of a fossil, forms of one mineral, a variation of one kind of rock, archaeological artifacts, or Indian artifacts. Digital formats are accepted. Please make arrangements for the judge to view your exhibit and have a hard copy for display. List your sources used (example – web address or books reviewed as a citation list). Exhibit limited to 4 feet of table space. Care should be taken to use durable materials that will withstand State Fair conditions. Exhibitor may show in the class regardless of the number of times he or she has exhibited at the State Fair or whether the exhibitor has entries. Exhibitor may also exhibit in lapidary class.

**2615. Mineralogy**. Display a minimum of 15 mineral specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. The minerals are to be grouped by mineral class (i.e.: Carbonates, Oxides, Silicates) and at least 3 classes must be represented. The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen, date collected, name of specimen, county where collected and chemical composition (i.e.: CaCO3 for calcite) if known.

**2616. Paleontology**. Display a minimum of 15 fossil specimens collected by the participant in Kansas, at least 5 of which have been collected during the current 4-H year. The fossils are to be grouped by Phylum and Class, and at least 3 phyla must be represented (Brachiopoda, Chordata, Mollusca, etc.) The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen; date collected; county where collected; formation, member, or source; phylum, class, and genus or part; and geologic age (Cretaceous, Permian, Pennsylvanian, etc.) . See #6 for additional fossil labeling expectations.

**2617. Petrology**. Display a minimum of 15 rock specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. Rocks are to be grouped by the 3 rock classes (Sedimentary, Igneous, and Metamorphic). You must display at least one specimen from each of the three classes. The specimens must fit in one standard display box (see #1). Specimen labels must include a specimen number, the date collected, name of specimen, and the county where collected. All rocks must be identified by the formation and member name (Examples: Fort Hays Limestone, Member of the Niobrara Chalk Formation) or source (Examples: Rocky Mountain Outwash, glacial till).

**SECTION 2 – LAPIDARY CLASSES**

The dimensions of the box should be appropriate for the display but should not exceed 18” x 24” x 3½”. The work (polishing/tumbling) must be done by the exhibitor as this is part of the learning process.

All lapidary specimens should be labeled with the following information:

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

**2620. Lapidary**. Display at least 5 varieties of polished (tumbled) specimens and 5 varieties of unpolished specimens that have not yet received lapidary treatment. These do not have to be an example of “before and after”, nor do they have to be self-collected. Locales must be identified. Only those exhibiting lapidary at the State Fair for the first time may exhibit in this class.

**2621. Lapidary**. Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. There is no requirement that the 4-H member collect any of these. Locales must be identified. Lapidary work should be done during the current 4-H year.

**2622. Lapidary**. Display before-and-after examples of at least 6 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least two varieties should be collected from the native site by the 4-H member, 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.

**2623. Lapidary**. Display before-and-after examples of at least 9 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each. At least three varieties should be collected from the native site by the 4-H member, at least two of which come from Kansas. Locales must be identified. Lapidary work on at least three varieties should be done during the current 4-H year.

**2624. Lapidary**. Exhibit at least 6 specimens that have not previously been exhibited, which have received lapidary treatment. Lapidary treatment may consist of polishing, and end, face, or flat lapping. Specimens must represent at least 3 different varieties and include at least three cabochons of any size or shape, only one of which may be free formed. A cabochon is a style of cutting in which the top of the stone forms a domed or curved convex surface. Three of the specimens must be mounted into jewelry findings.

Special lapidary exhibits should be entered in class 5304. Please note that each member is limited to one entry in this class.

**DIVISION 27 – NOTEBOOKS, POSTERS, DISPLAYS**

**Read General Rules**

1. Label each entry with a proper tag, giving class number, name, and club. Can include photographs.
2. Exhibits should possess the following qualities (in no particular order) : a central theme, what you want others to learn, be something a 4-H member is interested in and be designed and constructed in a manner befitting the exhibit.
3. Educational displays are not to exceed 4’ high x 3’ wide x 2’ deep. No card table exhibits will be allowed. Care should be taken to use durable materials that will withstand Kansas State Fair conditions.
4. Posters are limited to commercial 3’ x 4’ tri-fold display boards.

**Educational Exhibits Rules**

1. For notebooks, display boards, and posters, no additional exhibit information is required; no manila envelope is needed for these exhibits.
2. Exhibits are to have a **clear link to their division which it is linked to** their project.
3. Exhibits in posters, notebooks and display boards must contain substantial supporting educational materials.
4. 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. For example, a rocket that may have crashed and/or is highly damaged may be made into an educational display or poster that tells a great story with many lessons learned.
5. Follow copyright laws, citing all sources of information in a standard notation. Sources of information must be cited on the front of your exhibit, including all posters and educational display boards.
6. Educational displays are not to exceed 4’ high x 3’ wide x 2’ deep. No card table exhibits will be allowed. Care should be taken to use durable materials that will withstand Kansas State Fair conditions.
7. Posters are limited to commercial 3’ x 4’ tri-fold display boards.
8. “Construction Kits” that are part of Educational displays must be contained in cases (tackle boxes, sealable containers, etc.) that may not be larger than 1’ x 2’ x 2’ and must have a latch which securely keeps all components contained in the “Construction Kits”. Other components are to adhere to appropriate dimensions as stated elsewhere.
9. Educational Project notebooks must be organized in a 3-ring binder.
10. Any three-dimensional poster or display board exhibits may not be thicker than 2 inches.
11. Engines and igniters for rockets ARE NOT permitted with the exhibit and constitute an immediate disqualification. This is for safety reasons and includes both spent and live engines.
12. Exhibitor’s name, Extension Unit, age, and year(s) in the project must be tagged or labeled in a prominent location on the notebook, and/or “Construction Kit.” For education displays and/or posters the exhibitor’s name, county, or district, age, and year(s) in the project must be tagged or labeled on the back of the exhibit. Exhibit cards are not sufficient as they may be removed or repositioned for display. Failure to label an exhibit may result in one ribbon placing deduction.
13. Exhibits should possess the following qualities (in no particular order):
	1. A central theme
	2. What you want others to learn
	3. Be designed and constructed in a manner befitting the exhibit
	4. Be something you are interested in
14. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judge’s discretion, will receive a participation ribbon.
15. Posters, Notebooks, and Display Boards may be checked out for use in a Kansas State Fair 4-H demonstration or illustrated talk with prior permission. For permission, check with the superintendent(s). The exhibit must be returned to display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified.
16. Wildlife exhibits that reflect harvesting of wildlife must follow National Minimum Standards and Best Practices <https://4-hshootingsports.org/wp-content/uploads/2024/01/12.13.23-Minimum-Standards-Update.pdf> and Kansas 4-H Shooting Sports Handbook <https://bookstore.ksre.ksu.edu/pubs/kansas-4-h-shooting-sports-handbook_4H1101.pdf> and Kansas Fish and Game laws. Exhibits outside these standards will be disqualified.
17. Exhibits must not display, describe, or depict firearms or firearm components that are not allowed by 4-H Shooting Sports National Minimum Standards.
18. Exhibitors must comply with state and federal laws and Kansas State Fair Management.
19. No “live” ammunition containing propellant or explosive powders may be used in any display. An inert substitution must be used in lieu of powder and “live” ammunition, the substitution must be clearly described on the back of the poster, display or in a notebook.
20. The Kansas State Fair nor the department of 4-H Youth Development, KSRE are liable for the loss or damage of any personal property included as part of your poster, display or notebook.
21. Name, county or district, age and year in the project should be on the back of the poster, display or notebook unless special arrangements are made because of the declination of publicity release.
22. Exhibit topics regarding firearm care, handling, and shooting will only be accepted from Extension Units with 4-H Certified Shooting Sports Programs and enrolled 4-H youth in the specific Shooting Sports Project.
23. Exhibits will not be accepted if they are related to reloads.
24. National Minimum Standards and Best Practices <https://4-hshootingsports.org/wp-content/uploads/2024/01/12.13.23-Minimum-Standards-Update.pdf> MUST be followed as well as Kansas 4-H Shooting Sports Handbook. <https://bookstore.ksre.ksu.edu/pubs/kansas-4-h-shooting-sports-handbook_4H1101.pdf> Exhibits outside these standards will be disqualified.
25. The exhibit size rule will be strictly enforced. Exhibits exceeding the size guidelines will be disqualified. Maximum exhibit size for all exhibits in this division is 4’X6’. Larger exhibits will be turned away.

**SECTION 1 – OFFICER NOTEBOOKS**

(NOTE: A SWEEPSTAKES WILL BE AWARDED FOR THE TOP BLUE RIBBON SECRETARY NOTEBOOK SUBMITTED FOR JUDGING)

**2700.** Secretary’s book

**2701.** Reporter’s notebook

**SECTION 2 – CLUB NOTEBOOKS**

**2702**. Club Health notebook

**2703**. Club Safety notebook

**2704.** Club Conservation notebook

**2705**. Club Recreation notebook

**SECTION 3 – ANIMAL SCIENCES**

If photographs are to be part of the exhibit, remember that they will be viewed by the public. Make sure that the photographs are in good taste and will not be offensive to anyone. Graphic photographs of excessive bleeding, trauma or painful procedures are not appropriate. For exhibits related to veterinary surgical procedures, aseptic techniques need to be shown, for example, use of drapes, use of sterile procedures, wearing of gloves and other appropriate veterinary medical practices.

First-Aid Kits: Because of public safety concerns and risk of theft of first-aid kit contents (veterinary drugs/equipment) with perceived potential for drug abuse, animal first aid kits containing any drugs or medications will be immediately disqualified and not displayed. First Aid kits wishing to include medication information should instead utilize written descriptions, photographs, drawings, computer generated printouts or empty packaging of pharmaceuticals.

Because these are science displays, all references and information must be properly cited. Proper sources include but are not limited to: Professional journals and publications, professional AVMA accredited websites, interviews with veterinarians and excerpts from Veterinary Educational Literature. Plagiarism will result in disqualification. Please study your topic and present the information to your audience in your own words.

**2706**. Beef

**2707**. Dairy (Beef & Goats)

**2708**. Dog Care and Training

**2709**. Horse

**2710**. Meats

**2711**. Pets (Aquarium, Cat, Hand Pets)

**2712.** Poultry

**2713**. Sheep

**2714**. Swine

**2715**. Veterinary Science

**SECTION 4 – FAMILY LIVING**

**2716**. Clothing

**2717**. Crochet

**2718**. Family Studies

**2719**. Food Preservation

**2720**. Health

**2721**. Home Improvement

**2722**. Knitting

**2723**. Other

**SECTION 5 – INDIVIDUAL & COMMUNITY**

**2724**. Arts

**2725**. Citizenship

**2726**. Exploring 4-H

**2727**. Leadership

**2728**. Photography

**2729**. Public Speaking

**2730**. Reading

**2731**. Recreation

**2732**. Safety

**2733**. Self-Determined

**SECTION 6 – NATURAL RESOURCES**

**2734**. Entomology

**2735**. Forestry

**2736**. Geology

**2737**. Shooting Sports

**2738**. Wildlife

**2739**. Sport Fishing

**SECTION 7 – PLANT & MECHANICAL SCIENCES**

**2740**. Bicycle Safety & Care

**2741**. Crop Production & Management

**2742**. Electricity

**2743**. Horticulture

**2744**. Rocketry

**2745**. Small Engines

**2746**. Tractor

**2747**. Woodworking

**DIVISION 28 – AG MECHANICS/WELDING**

This project allows youth to explore areas of ag mechanics welding and metallurgy from repairing or repurposing items to the fabrication of new items. The intent is for this program to start with foundational areas, some of which youth may already have, and allow them to continue to build on this knowledge, becoming more experienced.

**Rules**

1. Wheeled exhibits must utilize a braking mechanism which prevents the exhibit from freely rolling while on display.
2. Exhibitors are responsible for providing sufficient braking or “chocks” for trailer exhibits to ensure that the exhibits do not move once positioned. If using a wheel "chocking” mechanism, the two individual blocks should be connected together 49 as a pair of chocks, so they do not become separated. At least one pair of chocks should be placed on each side of the trailer to prevent movement.
3. For trailer exhibits the tongue of the trailer should have a locking mechanism (e.g., padlock) to prevent the trailer from being moved by unauthorized individuals while being displayed. **A key for the locking mechanism should be left with the superintendent and labeled with the exhibitor’s name, county, and phone number.**
4. For exhibits with downward swinging parts, such as tailgates, that could pose a fall/striking/crushing hazard should have a tamper resistant locking mechanism such as a “zip-tie” or a “cotter-key” through a release pin that would prevent the swinging part from being accidentally released and falling on someone.
5. Each exhibit must be free-standing or sufficiently supported by an exhibitor-supplied support system that is moveable and is part of the total dimensions and weight of the exhibit. Exhibit display boards should have a portable and moveable base and examples should be firmly affixed to the board to ensure all parts of the display stay together. No exhibits may be staked to the ground for display.
6. Top heavy items should be braced or placed in a stand sufficient to prevent it from toppling over while on display.
7. Exhibits may not be bound, affixed, or attached to the State Fair buildings, except by the superintendent, State Fair Staff, or State Fair Extension Staff.
8. Painting or spot painting is not allowed on projects after arrival on fairgrounds. If wet paint is detected by judges or superintendents one ribbon placing will be deducted.
9. Repair projects having adequate original finish need not be repainted.
10. Cutting surfaces, such as blades, are to have a protective covering over them to prevent injury. The covering should be easily removed and reinstalled for judging. Foam “pool noodles” and multiple layers of cardboard are acceptable.
11. Display cases for small exhibits are acceptable and must be easily opened so the item can be removed and examined as part of judging.
12. Exhibits that include weaponry of any kind will be disqualified. Weaponry is defined as any instrument, possession, or creation, physical and/or electrical that is intended to be used to inflict damage and/or harm to individuals, animal life, and/or property.
13. Trailers and large exhibits (those larger than 5 feet in any dimension) may be displayed outside, and exhibitors with such exhibits are to contact the Gray County Extension Office NO LATER THAN 1 week before entry date to arrange placement time and location.
14. If the exhibit is powered by flammable liquids (gas, propane, kerosene, etc.) the fuel tank and lines should be drained and allowed to dry, to avoid spills and potential fires.
15. Electric powered (battery, corded, solar, or alternative energy) should have a primary shutoff or disconnect switch.
16. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judge’s discretion, will receive a deduction in ribbon placement or a ribbon participation.
17. The exhibitor’s name(s) and county or district must be tagged or labeled on the display.
18. Each exhibitor is required to complete the “4-H STEM Ag Mechanics Exhibit Information Form” for each exhibit, except for display boards, which is available through your local K-State Research and Extension office or at<http://welding.engtech4ks.com/>. This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit. All revisions of all forms previously released for the STEM division dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year.
19. Each exhibit information packet should include the following items:
	1. Bill of materials for the project with associated costs, scrap items used may be listed as having a $0.00 cost
	2. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state.
	3. If appropriate schematics or working drawings relating to the creation or repair, this is not required for display boards.
	4. If appropriate operating instructions.
20. For the State Fair, the 4-H member can include a video showcasing the project as well as a walkthrough of any project mechanics.
	1. Videos with an accompanying release form (include link) signed by the exhibitor’s parent or guardian may be displayed at the State Fair in the Engineering & Technology exhibit area.
	2. The video must not be more than 8 minutes long and should be included on the USB drive.
	3. FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

**SECTION 1 - Intermediate Division (12 & Under)**

This level is designed for youth with some experience in the project area allowing them to expand on common principles and methods in the given area.

**2810.** Intermediate Welding Ag Repair. Repair of ag equipment with welding.

**2811.** Intermediate Welding Ag Fabrication. Creation of new ag equipment with welding.

**2812.** Intermediate Welding General Repair. Repair of non-ag equipment with welding.

**2813.** Intermediate Welding General Fabrication. Creation of non-ag equipment with welding.

**2814.** Intermediate Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.

**2815.** Intermediate Brazing Repair.

**2816.** Intermediate Brazing Fabrication.

**2817.** Intermediate Smithing. A design forged with at least two different formed elements (twists and spirals for example).

**SECTION 2 - Senior Division (Ages 14 and Older)**

This level is designed for youth with vast experience in the project area allowing them to master common principles and methods and expand on advanced techniques in the given area.

**2818.** Senior Welding Ag Repair. Repair of ag equipment with welding.

**2819.** Senior Welding Ag Fabrication. Creation of new ag equipment with welding.

**2820.** Senior Welding General Repair. Repair of non-ag equipment with welding.

**2821.** Senior Welding General Fabrication. Creation of non-ag equipment with welding.

**2822.** Senior Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.

**2823.** Senior Brazing Repair.

**2824.** Senior Brazing Fabrication.

**2825.** Senior Smithing. A design forged with at least three different formed elements (twists, spirals, and bulbs for example).

**DIVISION 29 - BUILDING BLOCK ENGINEERING**

The BBE exhibit area focuses on using architectural blocks (“Legos”) to construct dioramas. This project allows youth to explore architectural design in a three-dimensional space. The intent is for this program to start with foundational ideas of architecture, some of which youth may already have, and allow youth to continue to build on this knowledge, becoming more and more experienced. This division is not intended for youth wishing to exhibit constructed kits. Kits and non-diorama displays should be considered an arts and crafts exhibit; they should not be displayed in this division.

**Rules**

1. Total exhibit dimensions may not exceed 2 feet high, by 2 feet wide, by 2 feet deep.
2. The minimum exhibit must be at least 6 inches wide and deep.
3. All exhibits are required to be placed in a sturdy see-through enclosure with a top, bottom, and 4 sides. A “clear” tub turned upside down with the exhibit placed on the lid would be an acceptable enclosure. It may be desirable to place a cutting board or other hard surface between the lid and base plate of the exhibit to make it sturdier. This is to keep exhibit components from being “scattered to parts unknown” at the fair. The outer dimensions of the **do not count** towards the total exhibit dimensions but should not be excessive. The entire exhibit should fit in the display enclosure, so the enclosure does not smash into the exhibit during movement.
4. All components used in construction should be dust free, clean, free of chips, scuffs, cracks or broken blocks.
5. Gaps or cracks should not be visible between assembled blocks unless they fit with the story, for example an earthquake.
6. The primary building component should be interlocking blocks, commonly referred to by the brand name of Lego®.
7. Other components can be integrated into dioramas to illustrate architectural aspects that may be difficult to convey with traditional interlocking blocks, for example marbles for small round objects.
8. The use of existing “store bought” sets for major elements of the display is not allowed, use of figurines from sets is allowed as are using individual bricks to create something different than the set it came from. For Example, a car hood or front end from a car kit could be used in a “car museum,” just not the entire car. The intent of this is to ensure fairness among exhibitors and encourage maximum creativity instead of just following a set of plans. “Store bought” sets should be considered an arts and crafts entry.
	1. County Fairs may choose to add classes for kits, but exhibits in those classes are not eligible for the Kansas State Fair.
9. Dioramas should be suitably complex and have multiple elements. For example, a camp site that has a log cabin, a tree fort and a car.
10. All dioramas should have a story, which is part of the information pack, that describes what is happening in the diorama; this can be as simple (the nursery rhyme “Jack and Jill” for example) or complex as needed to explain to someone looking at the exhibit what is happening.
11. Vehicles that are intended to stay in  a single place should be affixed to base plates with sticky tack, hot glue, or other methods.
12. Mechanical enhancements or motion elements that add motion to the diorama are acceptable and encouraged. For example, merry-go-rounds, doors, elevators, gears, marbles going down a channel, flapping wings, animatronics, etc. If included judges should be able to use them and instructions should be provided for operation either in the story or on a separate page.
13. Artistic designs, for example recreating paintings like the “Mona Lisa” or “Starry Nights” and structures like “David” are not permitted as exhibits and one ribbon placing should be deducted, these exhibits should be displayed in Arts and Craft.
14. The exhibitor’s name(s) and county or district must be tagged or labeled on the display. Additionally, the display case should have the exhibitor’s information attached to both the lid and clear container as well, as the case may be separated from the display.
15. Entry of either packet without an accompanying exhibit is not a sufficient exhibit.
16. Each exhibitor is required to complete the “4-H Building Block Engineering Exhibit Information Form” which is available through your local K-State Research and Extension office or at [http://blocks.engtech4ks.com](http://blocks.engtech4ks.com/). This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit. All revisions of forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year.
17. Each exhibit information packet should include the following items:
	1. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state. Final pictures help in determining where a part might go in case something comes loose.
	2. If appropriate operating instructions for mechanical portions of the diorama.
18. For the State Fair, the 4-H member must include a video telling the story of their project as well as a walkthrough of any project mechanics.
	1. Videos with an accompanying release form signed by the exhibitor’s parent or guardian may be displayed as the State Fair in the Engineering & Technology exhibit area.
	2. The video must not be more than 8 minutes long and should be included on the USB Drive.
19. FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

**SECTION 1 - Intermediate (12 & Under)**

**2910.** Interlocking brick diorama built from scratch

**SECTION 2 - Senior (13 & Older)**

**2920.** Advanced Interlocking brick diorama built from scratch

**DIVISION 30 - ASTRONOMY**

The STEM exhibit area is designed to provide youth with the opportunity to explore space through telescopes, research, and observation.

**Rules**

1. Each exhibitor may enter one exhibit per class.
2. Telescopes entered in this division may be built from a kit or by original design. Pre-finished telescopes, which require no construction or painting, are not acceptable exhibits.
3. 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.
4. Each State Fair telescope exhibit must include a “4-H Astronomy Exhibit Information Form,” which is available through your local K-State Research and Extension office or at [http://astronomy.engtech4ks.com](http://astronomy.engtech4ks.com/). This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit. All revisions of forms previously released for the Engineering & Technology division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year. You must also include construction plans (or a photocopy) for the telescope and place it inside the manila envelope.
5. See the last section for full details about exhibiting posters, display boards and notebooks.
6. At least two photographs showing telescope construction and operation are required. Photographs should be mounted on one side of an 8 ½” x 11” page. A brief caption should accompany each photograph. Place photos in the 10” x 13” manila envelope. Up to 10 pages of pictures can be included.
7. The telescope must be properly assembled and painted with a smooth and uniform finish.
8. Telescopes designed by the exhibitor must be original, not a modification of an existing kit.
9. Exhibitor’s name, county or district, age, and year(s) in the project must be tagged or labeled on the telescope.
10. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judges’ discretion, will receive a participation ribbon.
11. FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

**SECTION 1 - TELESCOPE**

**3010.** Telescope made from kit.

**3011.** Telescope made from original design.

**DIVISION 31 - COMPUTER SCIENCE**

The Kansas Computer Science 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).

**Rules**

1. The actual construction of computer hardware (For example, building a computer, which would include computer components plugged into a motherboard, discrete circuitry soldered on a printed circuit board, or wire-wrapped circuitry) will be entered in the Electronics Division., except for exhibits entered in Class 5594.
2. If a safety violation is noted by the judge, superintendent, or other staff, the exhibitor’s exhibit, at the judge’s discretion, will be disqualified. A safety violation could include Malware, a virus, or any similar program that potentially is harmful.

**Exhibit Requirements**

1. All exhibits in the Computer Science division must be entered on a USB drive containing all supporting documents as listed below for each class.
	1. The USB drive should be included in a manilla folder with the Computer Exhibit Form (found at <http://computers.engtech4ks.com/> or your local extension office) attached to the front.
	2. The USB drive should be labeled with the 4-H member’s name and county.
2. Source code must be included on the USB drive for all computer programming projects coded by the 4-H member. This could include a .txt file, python file, Scratch URL, etc. Failure to include the source code will result in one ribbon deduction.
3. Each exhibit must include written operating instructions including how to locate, run, and use the project. Operating instructions should be printed and placed in the manilla envelope and included digitally on the USB drive.
4. Each exhibit must be accompanied by a typed requirements document included on the USB drive. See [link] for a template that can be used for documenting requirements.
	1. The requirements document should be started at the beginning of the project. It will include a list of goals and requirements that the 4-H member wants to include or achieve in their final project.
	2. The project requirements section is formatted as a checklist, with the 4-Her checking off what they accomplished and making adjustments throughout their work on the project as needed.
	3. Flow charts, designs, or other diagrams may be included for computer programs to show the logical flow of the program as needed.
5. For coded computer programs, screenshots of the program will be displayed digitally at the state fair. Screenshots must be included electronically on the USB drive. For county fairs, it is recommended to print screenshots for display at fairs that don’t have electronic displays available.
6. All electric components of micro controlled devices must be adequately covered or concealed with a protective enclosure. Paper is NOT considered an adequate enclosure or covering for electrical components.
7. For the State Fair, the 4-H Member must include a video showcasing how to open and run the project as well as a walkthrough of any project mechanics.
	1. Videos with an accompanying release form (<http://computers.engtech4ks.com/>) signed by the exhibitor’s parent or guardian may be displayed at the state fair in the Engineering and Technology exhibit area.
	2. The video must not be more than 8 minutes long and should be included on the USB drive.
8. FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

**SECTION 1 -  Computer System Division**

**3110.** 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’).

**3111.** Coded website built entirely by the 4-H Member (not using a pre-made template generator such as Wix or Squarespace). Items in this could be coded in HTML, CSS, JavaScript, WordPress, or other web-based programming language or platforms.

**3112**. Microcontroller or microcomputer application - a small circuit board that is programmed to accomplish a specific task (projects built and programmed using Raspberry Pi, Arduino, etc.).v

**DIVISION 32 - ROBOTICS**

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

**Rules**

1. Each exhibit must include a robot; information packets are not a sufficient exhibit.
2. Robots must have automated articulated structures (arms, wheels, grippers, pneumatic, hydraulic, etc.). Game consoles that are displayed on a screen are not considered robots and should either be entered into the computer sciences division or electronics and renewable energy project. Robots requiring no assembly, just programming, such as Ozobots, are considered computer science projects as the skill is focused on programming not on the construction of the robot.
3. Robot dimensions should not exceed 2 feet high, 2 feet wide, by 2 feet deep. If displayed in a case (not required for the state fair but strongly encouraged for county fairs) the outside case dimensions should not be excessive. The display case should have the exhibitor’s information attached to both the lid and cover, as the top art of the case may be separated from the display.
4. Materials including but not limited to obstacles, spare batteries, and mats for testing the robot may be placed in a separate container, which is not included in the robots’ dimensions, that container may not be larger than 576 cubic inches as measured along the outside of the container (Examples: 4” x 4” x 36” or 4” x 8” x 18” or 6” x 6” x 16”). The container, if used, and/or any large objects (such as mats or obstacles) should be labeled with the exhibitor’s name(s) and county or district as they will be stored separately from the exhibit.
5. 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.
6. Robots may be powered by an electrical, battery, water, air, or solar source only. Junk drawer robots may be powered by a non-traditional power source. Robots powered by fossil fuels/flammable liquids will be disqualified. Robots that include weaponry of any kind will be disqualified. Weaponry is defined as any instrument, possession, or creation, physical and/or electrical that is intended to inflict damage and/or harm to individuals, animal life, and/or property.
7. Remote controlled robots are allowed under certain conditions provided that the robot is not drivable. Robots programmed on phones/tablets need to have a specific program created, using motion controls to move the robot are not acceptable, for example “press forward on the screen to make the robot go forward.” Robotic arms (hydraulic or electric) are allowed. A remote is allowed, provided more than a single action happens when a single button is pressed on the remote, for example “a motor spins for 3 seconds, at which point an actuator is triggered, then the motor spins for 3 more seconds.” Remote controlled cars, boats, planes and/or action figures, etc. are not allowed.
8. Each robot must be in working condition. The judges will operate each robot to evaluate its workmanship and its ability to complete its intended task. In the event the robot uses a phone, tablet, or similar device for both programming AND control of the robot a video will be used to evaluate the working condition of the robot. It should follow the instructions provided for operation so that the judge can follow along with the instructions provided. For county fairs, where consultation judging is used the video requirement should be waived in favor of actual operation of the robot.
9. Each exhibitor is required to complete the “4-H Robotics Exhibit Information Form” which is available through your local K-State Research and Extension office or at <http://robotics.engtech4ks.com/>.
10. This form must be attached to the outside of a 10” x 13” manila envelope. All revisions of all forms previously released for the Engineering & Technology division either undated or dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year. Use of old forms should result in the loss of one ribbon placing for exhibits.
11. The exhibit must include written instructions for operation (the instructions should be written as if they were to tell a grandparent or elderly person how to operate the robot), construction plans (do not need to be printed), a video, and one to five pages of project photographs. For robots that can be programmed, robot programming information must be included, this information should be placed inside the 10” x 13” manila envelope mentioned above. Robot programming information can be, but not limited to, source code, block diagrams, screen captures of the coding window, and other images that show the programming logic used. The exhibitor may enter their robotics project listed under the energy electric and renewable energy project if the exhibitor so chooses. No exhibitor will be allowed to set up their robot in person at the state fair.
12. In the event that the robot uses a device like a phone, iPad, or tablet for programming AND operation, DO NOT include the device (phone, tablet, etc.). The device’s safety cannot be ensured. Instead record a video demonstrating the instructions included for your robot. It should show setting up the robot, starting the robot, the robot executing its task, and powering off the robot, just like the instructions are written.
13. For the State Fair, the 4-H Member must include a video following their instructions for operation.
	1. Videos with an accompanying release form signed by the exhibitor’s parent or guardian may be displayed at the State Fair in the Engineering & Technology exhibit area.
	2. The video must not be more than 8 minutes long and should be included on the USB drive.
14. **FOR COUNTY FAIRS** with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.
15. Creativity, workmanship, and functionality will be strong criteria in judging the “Robot designed by Exhibitor” classes. All robots should have a purpose or intended function, examples include, but are not limited to following a line, sweeping the floor, solving a Rubix Cube, sorting colors, or climbing stairs.
16. Exhibitor’s name(s) and county or district must be tagged or labeled on the robot such as on the bottom of the robot, exhibit cards are not an acceptable form of labeling.
17. There are no county or district boundaries that must be adhered to in order to form a Kansas 4-H Engineering & Technology Robotics team. However, as mentioned in the general rules, each team member must be currently enrolled in the Kansas 4-H Engineering & Technology project.
18. Robotics exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the superintendent or the information desk in 4-H Centennial Hall. The exhibit must be returned to display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified. Exhibitors and/or their designees may not remove exhibits from 4-H Centennial Hall prior to the exhibit release time on Sunday evening without the express consent of State 4-H staff, any exhibit removed before release time will be disqualified.

**SECTION 1 - Intermediate (12 & Under)**

**3210.** Robot made from a commercial (purchased) kit (no programming, just assembly).

**3211.** Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.

**3212.** Programmable robot made from a commercial (purchased) kit.

**3213.** Robot designed and constructed by exhibitor or from a commercial kit, which is operated by a remote-controlled device.

**3214.** Junk Drawer Robotics.

**SECTION 2 - Senior (13 & Older)**

**3220**. Robot made from a commercial (purchased) kit (no programming just assembly).

**3221**. Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.

**3222.** Programmable robot made from a commercial (purchased) kit.

**3223**. Robot designed and constructed by exhibitor or from a commercial kit, which is operated by a remote-controlled device.

**3224**. Junk Drawer Robotics.

**SECTION 3 - Team Robotics Project**

**3230**. Robot designed and constructed by two or more 4-H STEM 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 STEM members. As with many high-tech projects today, no one person designs and builds a robot alone. It takes brainstorming, planning, problem solving, and cooperation of an entire team to complete a given robotics project.

**DIVISION 33 - AEROSPACE/ROCKETRY**

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

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

**Rules**

**A. Exhibit Information for ALL rocketry categories**

1. All revisions of all forms previously released for the division either undated or dated prior to current year are void for use and new forms must be obtained and used that are dated by the State 4-H Office for the current year. Use of old forms should result in the loss of one ribbon placing for exhibits.

2. Relevant documents may be obtained from County Extension Offices or from <http://rocketry.engtech4ks.com/>

3. Rocketry exhibits may be checked out for use in a Kansas State Fair 4-H demonstration or 4-H illustrated talk with prior permission. For permission, check with the superintendent or the information desk in 4-H Centennial Hall. The exhibit must be returned to display immediately after the demonstration/illustrated talk, or the exhibit will be disqualified. Exhibitors and/or their designees may not remove exhibits from 4-H Centennial Hall prior to the exhibit release time on Sunday evening without the express consent of State 4-H staff, any exhibit removed before release time will be disqualified.

4. NAR refers to the National Association of Rocketry and its governing board.

5. Tripoli refers to the Tripoli Rocketry Association and governing board.

6. All NAR documents, referenced herein can be found at <http://www.nar.org>. 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 documentation of the launching are suspended for the duration of the ban.

7. For the State Fair, the 4-H Member may include a video showcasing their experience in the project.

1. Videos with an accompanying release form signed by the exhibitor’s parent or guardian may be displayed at the state fair in the Engineering and Technology exhibit area.
2. The video must not be more than 8 minutes long and should be included on the USB drive.
3. c. FOR COUNTY FAIRS with consultation judging, it is recommended that the video elements be waived in favor of talking with the exhibitor.

**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, that has flown under rocket power.” The intent of scale modeling is, according to the NAR, “is to produce an accurate, flying replica of a real rocket powered vehicle that is judged for craftsmanship in construction, finish, and flight performance.” (NAR “Model Rocket Sporting Code” 52.1 <https://www/nar.org/contest-flying/competition-guide/> )
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 Engineering & Technology 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:
	1. Are 2 inches or greater in diameter (not including fins) and taller than 3 feet (36 inches including fins) and do not use an engine(s) exceeding 160.01 Newton seconds of total impulse (an ‘H’ engine equivalent or above).
	2. 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 a high-powered rocket is defined as a rocket that meets any of the following criteria:
	1. Weighs more than 3.3125 pounds (53 ounces or 1500 grams) at the time of launch.
	2. Uses a ‘H’ engine or larger to launch
	3. The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
	4. Includes any airframe parts of ductile metal, though, the use of ductile metal is strongly discouraged.
	5. Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.:
		1. Average thrust in excess of 80.01 Newtons
		2. Contains in excess of 125 grams of propellant and are limited to only H and I motors.
		3. Uses a hybrid motor or a motor designed to emit sparks
5. 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.
6. NAR safety codes for launching and construction of all rockets are assumed to be used by all 4-H exhibitors and will be considered during judging.
7. For the purposes of Kansas 4-H, 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**

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

1. Exhibits can change class numbers between county fairs and the state fair, as counties may not offer all class numbers and an exhibit more appropriately aligns with a different class, all entries must still be part of the rocketry division.
2. The report that accompanies the rocket must be limited to the 4-H Rocket Exhibit Information Form which is affixed to a 10” x 13” envelope. This envelope should NOT be attached to the rocket stand or rocket. The information form should be signed by the exhibitor. This may be downloaded from <http://rocketry.engtech4ks.com/>. Any rocket exhibit not including this completed envelope will receive a participation ribbon.
3. Plans (or a photocopy) must be placed inside the envelope:
	1. This includes original design rockets.
	2. For original design rockets, the exhibitor must provide all necessary details to construct the rocket, require the rocket to be swing tested, and documented to show a stable flight. Failure to test and document flight stability following modifications will result in two ribbon placing deductions.
	3. If a rocket kit has been modified structurally, 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. Failure to test and document flight stability following modifications will result in two ribbon placing deductions. A different pant scheme, changes/reduction in decals, and other non-structural changes are not considered modifications and do not need to be documented.
4. One or more photographs of the rocket during construction and at the launch site are required:
	1. Photographs showing the rocket at the moment of ignition are preferred.
	2. Photographs must be mounted on one side of 8 ½” x 11” page(s).
	3. There must be at least 1 page of photos and no more than 5 pages of photos.
	4. Include at least one photo showing rocket construction, preferably with the exhibitor included.
	5. 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.
	6. Pictures at the launch site are not required in the event of a burn ban.
5. To exhibit in this division:
	1. The rocket must have been flown unless a burn ban is in effect.
	2. Support rods must not extend past the tip of the highest nosecone on the model. This reduces the likelihood of eye pokes.
	3. Support rods must remain in the upright position, 90 degrees to the display base, and do not angle. Support rods may be angled if the rocket itself remains in the upright position, for example if engine tubes are slanted and the best form of support for the rocket is to use an angled support post. If the rocket is not perpendicular to the display base, the judge should deduct one ribbon placings. The exhibitor’s name, and county or district, must be labeled on the base.
	4. No model may be submitted on a launch pad
6. Launches should not be conducted in winds above 20 mph and will constitute a disqualification of rocket exhibit.
7. 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.
8. 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.
9. Flight damage is to be documented by the participant on either the construction plans, an additional sheet of paper titled “flight damage” or the 4-H Rocket Exhibit Information Form.
10. 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.
11. Accidental Damage - Any damage to an entry while it is in the custody of the judges, assistant/superintendents, or extension staff must not be held against the exhibitor. For example, escape towers being knocked off the top of rockets during transport (both the escape tower and rocket may still be judged). Such damage is to be reported and documented.
12. Improvements – May be made to the exhibit prior to the State Fair to improve the overall presentation of the exhibit while maintaining the major substance of the exhibit. For example, a cooking entry of a cookie is re-prepared between a county and state fair, most likely using recommendations from the first judging, it’s the same recipe just with improved technique.
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. Engines used as a display stand will cause the exhibit to be subject to immediate disqualification.
16. Rocket engines **should not** be used to join multi-stage rockets together.
	1. 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.
	2. The different stages must be included to complete the rocketry exhibit; incomplete exhibits will be deducted at least one ribbon placing.
	3. 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 Rules for ALL Rockets**

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

1. Rockets are to be properly assembled according to the assembly instructions.
2. Beginner kits with prefabricated (molded plastic) fin assemblies and pre-finished rockets requiring no painting are not acceptable at the State Fair and will be disqualified. County fairs may consider different rules for junior members.
	1. 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.
	2. This rule does not apply to fiberglass, Kevlar, composite, or wood fins; especially when used for “through-the-wall” fin attachment techniques that are common in larger rockets.
	3. 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.
	4. Fin assemblies that are printed using a 3D printer are excluded from this rule. Though detailed instructions on the creation of the fin assemblies must be provided and an additional page of photos may be included to show the creation/printing of fin assemblies.
3. Angles of fins must fall within a plus or minus 2-degree variation using an approved fin alignment guide (such as KSSTAC10). An official fin guide is available from <http://rocketry.engtech4ks.com/>
4. Fins should be rounded or streamlined according to instructions. If the other edges are rounded to reduce drag on all exposed sides, there should be no ribbon deduction, unless instructions indicate to leave flat, or instructions say to round, and rounding was not done.
5. Fins and body tubes are to be sealed with filler, sanding sealer, and/or primer to eliminate the appearance of body grooves and wood grain.
6. Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.
7. Engine mounts are to be securely attached to the body tube.
8. Any seams on plastic parts are to be sanded smooth.
9. 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.
10. The nose cone is to fit snugly but still allow for easy removal. If the shock cord frequently becomes stuck between the nose cone and body, it should be trimmed.
11. Exhibits must be uniformly painted and smoothly finished or finished as per rocket instructions, and have decals applied smoothly. The rocket should be free of “runs,” “orange peel,” or “crackling” in the finish.
12. Non-standard surfacing (such as textured paint) may be used if directed by the instructions, this includes scratch-built rockets.
13. 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 sufficient, by itself, to move a non-scale model from one ribbon placing to another.
14. “Scale models,” exhibited in the scale mode class, may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.
15. Scale Model Rockets, exhibited in the scale model class are to be finished and completed with a majority (greater than 70%) of decals.

**E. Model Rocketry Specific Guidelines (Ages 9 and older)**

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

1. Rockets classified as high or mid powered may not be entered into 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 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 Engineering and Technology Project Partnership Team may review and implement the modified code.

**F. Original Design Specific Rocket Guidelines (Ages 11 and older)**

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

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 whole from existing kits without crediting the source instructions. For example, “Fin alignment template from Estes Baby Bertha.”
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 strongly encouraged. Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a deduction of TWO ribbon placings.

**SECTION 1 - COUNTY ONLY CLASS**

**3310.**. Rocket made from kit, without pre-assembled fin units. Include plans.

**3311.** Rocket made from “beginners kit.” Include plans. Rockets in this class may have pre-assembled fin units. (This class is for first and second year 4-H members to explore the rocketry project).

**3312**. Scale Model Rocket made from kit, including plans.

**SECTION 2 - Kits (9-13 yrs)**

**3320.** Rocket made from kit. Include plans.

**3321.** Scale Model Rocket made from kit. Include plans.

**SECTION 3 - Scratch Built (11-13 yrs)**

**3330.** Rocket designed by the exhibitor: not merely a modification of an existing kit. Include original plans.

**3331.** Scale Model Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans and stability testing.

**SECTION 4 - Ages 14 and Older**

**3340.** Rocket made from kit. Include plans.

**3341.** Rocket designed by the exhibitor: not merely a modification of an existing kit. Include original plans.

**3342.** Scale Model Rocket made from kit. Include plans.

**3343.** Scale Model Rocket designed by exhibitor: not merely a modification of an existing kit. Include original plans and stability testing.

**SECTION 5 - Team Built**

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

**3350.** 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://rocketry.engtech4ks.com/>
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 Engineering and Technology Project Partnership Team 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 for a copy of the waiver is the Range Safety Officers (RSO’s) contact information, launch location, and date.
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.

**SECTION 6 -Mid-Power Rocketry**

**3360.** Mid or high-power rocket made from kit or original design.

**High Power Rocketry (‘H’ or ‘I’ engines) Guidelines**

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

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://rocketry.engtech4ks.com/>.
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 Engineering and Technology Project Partnership 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).
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, launch location, and date.
9. 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.

**SECTION 7 - High Power Rocketry**

**3370.** High power rocket made from kit or original design.

**Recommended County Fair rules for Rocketry**

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

1. If a rocket qualifies for the Kansas State Fair, exhibitors should read the State Fair Rules for the Rocketry division as they may be different from those at the county fair. Be sure to check class numbers, they may be different.
2. Each exhibitor may enter up to two rocket exhibits that have been constructed during the current year. If two rockets are entered, one rocket must be a “model rocket kit”, the second may be entered into any other applicable class. An exhibitor may not enter two rockets in the same class.
3. 4-H members are to complete and sign the rocketry information form, available from <http://rocketry.engtech4ks.com/> or your local extension office and attach it to a 10” x 13” “manila” envelope. The envelope should contain:
	1. Instructions on how to construct the rocket
	2. Up to 5 pages of pictures, pictures are to be attached to sheets of paper, from both construction and launch
	3. Documentation of any flight damage that occurred
	4. Any modifications made to the rocket except for paint scheme and decals.
	5. An additional page for altitude calculations if the space on the form is not enough.
	6. Additionally, for original design rockets, also known as “scratch built” rockets:
		1. 5 additional pages of photos are allowed
		2. Documentation of how the rocket was tested for stability
4. 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.
5. Rockets are to be displayed upright on a display stand with a sturdy rod that does not extend past the top of the rocket, or stand unassisted, unless the rocket is taller than 4 feet in which case no display stand is required and the rocket may be displayed on its side, rockets are not to be displayed on launch pads to save space and prevent someone from being poked in the eye.
6. Rockets ARE NOT to be displayed with used or unused rocket engines either in the rocket or as part of the stand, if rocket engines are included in the exhibit the judge may disqualify the exhibit.
7. Rockets should be flown unless there is an active burn ban in the county or conditions are too dangerous to safely launch the rocket. Just flying the last stage (the part with the nose cone) of a multi-stage rocket is acceptable.
8. Rockets, **except those in the JR division**, are not to be “beginner kits” or use prefabricated (molded plastic) fin assemblies, or pre-finished rockets requiring no painting. These are only acceptable in the JR division at the county fair. Rockets of this type outside the JR division should be disqualified. Rockets entered in the JR division may not go on to the Kansas State Fair.
9. Angles of fins must fall within a plus or minus 2-degree variation using an approved fin alignment guide (such as KSSTAC10). An official fin guide is available from <http://rocketry.engtech4ks.com/>
10. Fins and body tubes, except those in the introductory division, are to be filled and sealed with putty, sanding sealer, and/or primer or other suitable filler to eliminate the appearance of body grooves and wood grain.
11. Fins and launch lugs are to be filleted to reduce drag and properly secure them to the model.
12. Engine mounts are to be securely attached to the body tube.
13. Any seams on plastic parts are to be sanded smooth.
14. The recovery system (typically a parachute or streamer) should be attached according to the instructions
15. The nose cone is to fit snugly but still allow for easy removal.
16. Exhibits must be uniformly painted and smoothly finished without “runs,” “orange peel,” or “alligator skin” or finished as per rocket instructions (for example, no painting required), and decals, if used, are applied smoothly.
17. Models may not be judged based on their plaint scheme (colors and placement on the rocket), except for rockets that fit the definition of a ‘scale model\*and are entered in the scale model class. 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 sufficient enough, by itself, to move the non-scale model from one ribbon placing to another.
18. “Scale Models\*” entered in the scale model class may be judged based on their paint scheme. The judge may deduct up to one ribbon placing for not following the paint scheme.
19. “Scale Models\*” displayed in the scale model class are to be finished and completed with a majority (greater than 70%) of decals. For all other rockets the use of decals is optional.

**(The following rules (20 – 31) apply to advanced exhibits.)**

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. Exhibitor(s) must be 11 years of age (4-H age) or older to enter an original design rocket.
4. 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.
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 strongly encouraged. Exhibitors must include documentation of the swing test. Failure to swing test a rocket will result in a deduction of TWO ribbon placings.
6. Rockets that use more than one ‘D’ engine or equivalent are considered mid or high-power rockets in 4-H.
7. Mid and High-Power exhibitors must be at least 14 years of age by January 1 of the current year.
8. In addition to the information packet completed for all rockets, a high-power information form is to be completed and placed inside of the information packet. This may be downloaded from <http://rocketry.engtech4ks.com/>
9. Exhibitors in the mid and high-power divisions must hold memberships in either NAR or Tripoli organizations.
10. The NAR High Power Rocket Safety Code applies to the construction and launching of all rockets displayed in this division. As such all mid and high-power rocketry exhibitors must comply with the NAR High Power Rocket Safety Code that is in effect as of October 1st of the current 4-H year.
11. All rockets in the mid and high-power divisions are to be launched under adult supervision by the 4-H member who constructed the rocket.
12. 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 if launching on this large of an engine.

As defined by the National Association of Rocketry (NAR), a scale model is “any model rocket that is a true scale model of an existing or historical guided missile, rocket vehicle, or space vehicle, that has flown under rocket power.” The intent of scale modeling is, according to the NAR, “is to produce an accurate, flying replica of a real rocket powered vehicle that is judged for craftsmanship in construction, finish, and flight performance.” (NAR “Model Rocket Sporting Code” 52.1 <https://www/nar.org/contest-flying/competition-guide/>)

**DIVISION 34 - WOODWORKING**

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

**Rules**

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. Please note: a set of step-by-step instructions is not a plan.
2. Projects with missing or insufficient plans will be lowered one ribbon placing (i.e., a blue-ribbon exhibit will receive a red ribbon).
3. The use of materials other than wood should be kept to a minimum.
4. 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 in front of a gun case or cabinet, etc., is permissible since it cannot be easily removed.
5. Extra pieces that go with your woodworking project (i.e. bean bags to go with a cornhole set, building blocks to go with a play table, etc.) SHOULD NOT be submitted with the project.
6. The entry card plans, and all other paperwork should be enclosed in a zip top plastic bag with a hole punched through it and tied or otherwise secured to the project in some manner. Tape is usually not adequate to accomplish this.
7. Refinished/ repaired furniture should be exhibited in Interior Design and Architecture - Single Exhibit.
8. Projects made from pre-cut kits are not allowed.
9. In judging woodwork articles, consideration will be given to: Workmanship, including accuracy to the plan; Design; Choice of wood; Suitability and quality of finish; and Usefulness.
10. Firearms and weapons are not to be entered or exhibited at the Fair.
11. Eligibility for each exhibitor is limited to one exhibit in this division. Scoresheets, Forms, and Contest Study Materials: • Kansas 4-H Wood science Scorecard Classes
12. Projects with “fractal burning” are NOT ALLOWED in any Kansas State Fair Exhibits in the 4-H Youth Development Department. (Example - electrical burning to wood to make black linework on artwork.) This is in agreement with recommendations from the American Association of Woodturners.

**SECTION 1**

**3410.** Article for farm or shop use

**3411.** Furniture for household or lawn use

**3412.** Other woodwork. Articles not included in the above classes. Examples: bird houses, bird feeders, household equipment such as knife racks, bread boards, door stops, etc.

**DIVISION 35 - ELECTRIC AND RENEWABLE ENERGY**

Through THE Electric/Electronics or Renewable Energy, you will have the opportunity to explore the project areas and share what you have learned.

**Rules**

1. Each Electronics & Renewable Energy exhibit must include a “4-H Electronics & Renewable Energy Information Form” which is available through your local K-State Research and Extension Office or at http://electric.engtech4ks.com/ . This form must be attached to the outside of a 10” X 13” manila envelope. You must also include a wiring diagram or schematic. Place them inside the manila envelope. For notebooks, display boards, and posters, no additional exhibit information is required; no manila envelope is needed for these exhibits.
2. Items that have been in use should be cleaned for the exhibit.
3. A sheet of operating instructions must be furnished and included in the manila envelope for any exhibit not self-explanatory.
4. Projects (classes ) must be operable using only 110 or 120V AC or battery power. If battery power is required, batteries must be furnished.
5. Any project with a complexity of size or electronics must have
	1. instructions for assembly and use and
	2. equipment available at the time of judging for actual testing of the exhibit.
6. No hand dipping solder may be used on exhibits.
7. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judges’ discretion, will receive a participation ribbon.

**SECTION 1 - ELECTRICAL AND ELECTRONICS**

**3510.** **AC Electric**: Electric projects with a 110 or 120 V alternating current (AC) power source. Some project examples are household wiring demonstrations, small appliances extension cords, trouble lights, indoor or outdoor wiring boards, or shop lights. Projects may be a restoration or original construction. The project must be operational and meet minimum safety standards. AC projects must be 110/120 V, no 240 V exhibits are allowed, and must be constructed such that the judges have wiring access to examine the quality and safety of workmanship.

**3511.** **DC Electric**: Electric projects with a battery or direct current power source. This class includes electric kits or original projects. This class also includes demonstration DC powered projects. Examples include wiring two- or three-way switches, difference between series/parallel lighting circuits or wiring doorbells switches. All DC electric projects must include batteries supplied by 4-H’er. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.

**3512.** **Electronic**: Electronic projects with a battery or direct current power source. This class includes electronic kits or original projects. Examples include radios, telephones, toy robots, light meters, security systems, etc. May be constructed using printed circuit board, wire wrap, or breadboard techniques. Include instruction/assembly manual if from a kit. Include plans for an original project. Projects must be constructed such that the judges have access to examine the quality of wiring workmanship.

**3513**. **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 educational displays, exhibits for 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’.

**SECTION 2 - ALTERNATIVE ENERGY**

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

**3520. 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.

**3521. 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.

**DIVISION 36 - SMALL ENGINES**

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

All exhibits should involve engines smaller than 20 horsepower for classes. Engine should contain no fuel in the tank or carburetor.

**Rules**

1. Each Small Engine exhibit must include a “4-H Small Engines Information Form”, which is available at <http://samllengines/engtechrks.com>. This form must be attached to the outside of a 10”x13” manilla envelope. Place them inside the manilla envelope. For notebooks, display boards, and posters, no additional exhibit information is required; no manilla envelope is needed for these exhibits.
2. Items that have been in use should be cleaned for exhibit.
3. A sheet of operating instructions must be included in the packet for any exhibit that is not self-explanatory. All exhibits in this division are limited in size to standard, trifold, display boards (36” X 48”) and items may not extend beyond ”24” from the back board. All displays must be self-standing.

**SECTION 1**

**3610. Display:** Exhibit a display, selecting one of the following options: 1) a display identifying different engine or lawn and garden equipment parts or a display showing the function of the various engine or lawn and garden equipment parts; OR 2) a display identifying and explaining the function(s) of different special tools needed for small engine work; OR 3) a display illustrating and providing the results of any one of experiments that are included in the project books. No complete engines, lawn tractors, tillers, chainsaws are permitted for display. Maximum tri-fold size is 3’ x 4’.

**3611.** **Maintenance**: Exhibit a display that illustrates either: 1) Routine maintenance procedures OR 2) Diagnosing and troubleshooting specific problems in an engine. No complete engines, lawn tractors, tillers, chainsaws, etc. are permitted for display, using a maximum tri-fold size of 3’ x 4’.

**3612.** **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. Engine should contain no fuel in the tank or carburetor.