

OPEN CLASS GENERAL RULES

The following rules set by the Gray County Fair Board apply to all departments of the Gray County Fair. The board reserves the right to interpret these rules and regulations and arbitrarily settle all questions arising in ENTRIES.

1. Exhibitors are responsible for entering their exhibits with completed entry cards. Entry cards are available at the Extension Office prior to the Fair or you can go to <https://fairentry.com/Public/FindYourFair>. All entries are free, and no admission will be charged. Entry time for All Open Class exhibits Sunday July 19th 3:00-5:00 p.m. EXCEPT LARGE LIVESTOCK. Enter all Rabbits & Poultry Sunday July 19th 5:00-6:00 p.m. You can also enter all 4-H & Open Class Exhibits on Monday, July 20th, 8:00 a.m. to 11:30 a.m.. Large livestock will come on the day of the show.
2. Only classes and articles as stated in each division will be accepted. Superintendents shall have the authority to add a class or classes if the number of entries in that classification is more than three. Quilts and Afghan exhibits, made within the last five years, but never exhibited before at the fair, can be entered this year.
3. Exhibitors should carefully note special rules for divisions in which their entries are made. No more than two entries will be allowed in each class by an individual unless special division rules state otherwise.
4. Exhibitors are limited to residents of Gray County or attending a school district in Gray County.
5. Exhibitors are to be the handiwork of the exhibitor where crops or garden exhibits are entered; or the owner and feeder where livestock exhibits are entered and result of work from August to July of the current year. Except for horses, breeding stock, second year bucket calf, and house plants, no item may have been previously exhibited at the Gray County Fair.
6. Exhibits too large to fit in display cases can be entered and taken home after being judged.

JUDGING

1. Exhibits in each class will be placed by the judges into blue, red, white, or green groups based on quality. Ribbon premiums will be given a set value for each blue, red, and white to be determined by the Fair Board each year, based on total premium money value.
2. One champion and one reserve champion ribbon will be awarded in each section, if deemed worthy.
3. One grand champion and one reserve grand champion will be awarded in each division.

4. Only blue-ribbon winners are eligible to compete for Champion and Reserve Champion awards.
5. No one shall act as a judge for any class in which he is exhibiting. A judge, at his discretion, may withhold any or all premiums if the article or animal is not worthy of the award. In such cases only participation ribbons will be given.
6. Any person attempting to interfere with the judges or who publicly voices disapproval of the judge's decision shall forfeit any awards. Decisions of the judges shall be final, subject only to written protest which will be acted upon by the Gray County Fair Board.
7. Open Class exhibitors who qualify for the State Fair are responsible for entering and delivering their entries to the state fair.
8. Only champion ribbons will be given at the fair. Colored stickers will be attached to entry cards, designating the order of placing. If an exhibitor wishes a ribbon, they must show an entry card to the fair office.

PROTESTS

1. All protests must be made and submitted one hour before scheduled judging to the superintendent of the division. Then, 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. Final decision will be made by a majority of the Gray County Fair Board members.

LIABILITY OF EXHIBITORS

1. Management is not responsible for accidents, fire, or theft to exhibits or persons. Exhibits shall be displayed at the owner's risk.

RELEASE OF EXHIBITS

1. Exhibits will be released between 7:00-9:00 p.m. on Thursday, July 23rd, unless other arrangements are made with Superintendents. Exhibits must be removed by Friday, July 24th, at 8:00a.m. All exhibits not claimed within one week of the close of the fair will become property of the Gray County Fair Association.
2. Ribbon premiums will be withheld for any exhibits removed before release time unless prior arrangements have been made for anything but livestock.

PAYMENT OF PREMIUMS

1. Premiums awarded by the judge will be paid by check following the fair. You will have 90 days to cash the checks once they have been mailed out.

OPEN CLASS LIVESTOCK RULES

Read General Rules

1. Open class livestock is to be entered as follows: Swine 7:00-8:00 am on Tuesday, Beef 5:00-6:00 pm. on Tuesday. Sheep & Goats 7:00-8:00 a.m. on Wednesday and taken home the same day after show. Exhibitors must provide their own feed.
2. Only blue-ribbon winners are eligible to compete for Champion or Reserve Champion honors in each breed.
3. 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.
4. Animals are not eligible to be shown in both breeding and market classes.
5. All livestock must be shown by the owner at the time of judging unless the department superintendent has granted permission for a representative of the owner to show them.
6. Open Class exhibitor age for showing livestock is: 5-17 years of age to show swine, sheep, & goats. 5-12 years of age to show bucket calves. 7-17 years of age to show beef & dairy.
7. Open class beef, swine, sheep, or goat entries must be called into the Extension Office by the first Monday in July (620-855-3821).

DIVISION 37– 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 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 fence either in the barn or outside in the tie outs 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.

SECTION 1 – MARKET BEEF

3710. Market Steer (class will be broken down by weight)

3711. 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.)

3720. Junior heifer calves, born after January 1st of the current year.

3721. Senior heifer calves, born between September 1st and December 31st of last year.

3722. Junior yearling heifers, born between January 1st and April 28th of last year.

3723. Senior yearling heifer class, born prior to January 1st of previous year.

3724. Cow and Calf will be pen judged.

3725. Junior bull calves born after January 1st of the current year.

3726. 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. The general health of the calf and knowledge of exhibitors in health-related areas.
2. 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.
3. 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.
4. Two divisions of competition will be offered for the exhibition, Novice and Advanced. Exhibitors may enter their calf in one competition division.
5. Novice judging will be based on what the exhibitor knows about the calf project, as well as care exhibited to the calf.
6. Advanced judging will be based on knowledge, fitting, and showing, and calf health. Maturity of the calf may be an additional consideration.

7. Bucket calf bedding must be a mat or natural ground. No straw or wood chips.
8. First year bucket calves should be born between January 1 & May 1 to be eligible to show.
9. 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 shower feels is important. Pictures and drawings are encouraged to be included on the poster. All work is expected to be done by the shower with parental guidance when necessary. Posters will be judged based on the above criteria.
10. Only one bucket calf per exhibitor, per class.

NOVICE

3730. Exhibitors age 7-9 on January 1 of the current year.

3731. Exhibitors age 10-12 on January 1 of the current year.

ADVANCED

3740. Exhibitor age 7-9 on January 1 of current year

3741. Exhibitors age 10-12 on January 1 of the current year.

3742. Second year bucket calves with exhibitor age 7-9 on January 1 of current year.

3743. Second year bucket calves with exhibitors age 10-12 on January 1 of the current year.

3744. Second year fitting and showing rules are: Has to make weight. Must have been shown in previous year as a first-year bucket calf.

DIVISION 38 – 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.)

3810. Heifer calves, born after July 1 of last year

3811. Heifer yearling, born between July 1 and June 30 of previous year.

3812. 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 39 – 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

3910. Market swine (class will be broken down by weight)

SECTION 2 – BREEDING GILTS

- 3920.** Breeding Gilt
3921. Breeding Sow
3922. Sow and Litter

DIVISION 40 - 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

4010. Market lamb (class will be broken down by weight)

SECTION 2 – BREEDING EWE

4020. Breeding Lamb

4021. Breeding Ewe

DIVISION 41 – 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 exhibitor by July 1st.
2. Sharpness of horns will be determined by the Livestock Committee.
3. 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.
4. 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.

4110. Junior doe, birth and under 4 months

4111. Junior doe, 4 months and under 8 months

4112. Junior doe, 8 months and under 12 months (not in milk and not previously freshened)

4113. Junior doe, 12 months and under 24 months (not in milk and not previously freshened)

SECTION 2 – GRADES AND RECORDED GRADES

4120. Junior doe, birth and under 4 months

4121. Junior doe, 4 months and under 8 months (not in milk and not previously freshened)

4122. Junior doe, 8 months and under 12 months (not in milk and not previously freshened)

4123. Junior doe, 12 months and under 24 months (not in milk and not previously freshened)

4124. Senior doe, up to 24 months (in milk or previously freshened)

4125. 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.

4. 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.

5. Exhibitors may enter a total of four goats, but no more than two market goats.

4130. Market meat goat (shown by weight)

4131. Breeding meat goat

DIVISION 42 – 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 any possible mix up.

5. All birds must have a pullorum-typhoid blood testifier prior to the Fair in order to exhibit. Papers must be presented to the superintendent at time of entry.

SECTION 1 – BREEDING

4210. Standard Breeds, Large Fowl, one bird of either sex, young pen.

4211. Standard Breeds, Large Fowl, one bird of either sex, old pen.

4212. Standard Breeds, Bantams, one bird of either sex, young pen

4213. Standard Breeds, Bantams, one bird of either sex, old pen.

4214. Turkeys, all breeds, Pen: one bird of either sex.

4215. Ducks, all breeds, Pen: one bird of either sex.

4216. Geese, all breeds, Pen: one bird of either sex.

4217. Pigeons, all breeds, Pen: one bird of either sex.

SECTION 2 – PRODUCTION CLASSES

4220. Production pullets, standardbred, crossbred, or strain-cross, Pen: 3 hens of the same breed.

4221. Production Hens, standardbred, crossbred, strain-cross, Pen: 3 hens of the same breed.

SECTION 3 – MARKET CLASSES

4230. Broilers, light breeds, three birds of the same sex. (Minimum weight 1 ½ lbs.)

4231. Broilers, heavy breeds, three birds of the same sex. (Minimum weight 4 lbs.)

4232. Capons, all breeds, three birds of the same sex.

4233. Game Birds.

4234. Other (NO Guineas)

SECTION 4 - 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. Exhibits will not be accepted if they are related to reloads.

14. Taxidermy: The exhibitor is responsible for following all laws, rules, and regulations, and when licenses, tags, etc., are required, to include those and/or the information required with the exhibit. For taxidermy please reference hunting and furbearer laws for Kansas. <https://ksoutdoors.gov/Hunting/Hunting-Regulations/Furbearers>

4240. Notebook. Contents pertain to some phase, results, story, or information about the wildlife project.

4241. Promotional Poster. Must be related to something learned in the wildlife project. (Flat poster board or foam board no larger than 22" x 28").

4242. Educational Display. Must be directly related to the wildlife project. Maximum tri-fold size is 3' x 4'.

SECTION 5 Experiential/Other Classes

4250. 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.

4251. 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.

4252. Casting Target - 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.

4253. 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.

4254. Inventing Wildlife/Fish Harvesting Equipment,

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.

4255. 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.

4256. 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.

4257. 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.

4258. 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.

4259. - 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.

4260. 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 43 – 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 competition 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. 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

- 4310.** Junior Doe (under six months of age)
- 4311.** 6-8-month doe
- 4312.** Senior doe (eight months of age and over)
- 4313.** 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)
- 4314.** Junior Buck (under six months of age)
- 4315.** 6-8-month buck
- 4316.** Senior buck (eight months of age and over)
- 4317.** Breeding class doe
- 4318.** Breeding class buck

4319. Educational poster open class (age 12 and younger)

4320. Educational poster open class (age 13 and older)

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.

4330. Meat Class

DIVISION 44 – PET SHOW

1. 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.

2. All animals must be caged or restrained while on fairgrounds.

3. Animals may **ONLY** be exhibited in one location at the Fair. Individuals must choose where and how their animals will be exhibited.

4. 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.**

5. No Kitten or puppy younger than three months may be exhibited as they need shots to show at the pet show.

6. All cats and kittens will be shown first at the fair.

7. No dogs allowed in the arena during the judging of the cat show.

8. No cats allowed in the arena during the judging of the dog show.

SECTION 1 – CATS

4410. Cats

4411. Kittens (3 months – 1yr)

SECTION 2 – DOG

4420. Family dog

4421. Puppy (3 months – 1yr)

SECTION 3 – HAND PETS

4430. Hand Pets

SECTION 4 - Aquarium Pets

4440. Bowl Show (1 or fish in a bowl)

4441. Reptiles and Amphibians (Snake, Lizard, Turtle, and other)

Ferrets must be vaccinated for rabies.

DIVISION 45 – 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. 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 the twine horizontally around the at and tie, then wrap vertically and tie like a gift package.

SECTION 1 – CORN

4510. White - Ten Ear Exhibit. Variety or hybrid must be named.

4511. Yellow - Ten Ear Exhibit. Variety or hybrid must be named

4512. Corn: Exhibit to consist of one-gallon sample. Variety must be named.

SECTION 2 – SORGHUM

4520. Hybrid Grain sorghum - Ten Head Exhibit. Hybrid must be named

4521. Hybrid forage sorghum. Exhibit to consist of the entire plant; no roots. Hybrid must be named. 5" bundle, tied

4522. 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

4530. Soft red winter wheat. Variety or hybrid must be named.

4531. Hard red winter wheat. Variety or hybrid must be named.

4532. Hard white wheat. Variety or hybrid must be named.

SECTION 4 - SUNFLOWERS

4533. Confectionery heads. 3 heads must be submitted.

4534. Confectionery seeds in a jar. a 1-gallon jar must be submitted.

4535. Oil seed heads. 3 heads must be submitted

4536. Oil seeds in a jar. a 1-gallon jar must be submitted.

SECTION 5 - OTHER CROPS

4537. Oats: Exhibit to consist of One-gallon sample. Variety must be named

4538. Barley: Exhibit to consist of one-gallon sample. Variety must be named

4539. Brome Grass Seed: Exhibit to consist of one-gallon sample of seed.

4540. Other Tame Grasses – One-gallon sample of seed.

4541. Edible field beans: Exhibit to consist of one-gallon sample of seed from the most recent harvest.

4542: Edible field beans: Bundle of five plants (with roots intact) from the most recent harvest. (Example - Lentils)

4543. 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)

4544. 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

4545. 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 should be tied with a "T". Wrap the twine horizontally around the hay and tie, then wrap vertically and tie like a gift package. Variety must be named.

4546. Native Grass Hay: Ten-inch flake or slice, 6 inches thick and tied with a "T". Wrap the twine horizontally around the hay and tie, then wrap vertically and tie like a gift package. Variety must be named.

4547. Cool Season Grass Hay (e.g., fescue, brome, etc): Ten-inch flake or slice, 6 inches thick and tied with a "T". Wrap the twine horizontally around the hay and tie, then wrap vertically and tie like a gift package. Variety must be named.

SECTION 7 - SOYBEANS

4548. Soybeans: Exhibit to consist of one-gallon sample of seed from the most recent harvest. Variety must be named.

4549. Soybeans: Bundle of five plants from the most recent harvest. Variety must be named.

SECTION 8 – MARKET WHEAT SHOW

GUIDELINES

1. All exhibits shall be produced during the current year.

2. Qualified exhibits must be produced in Gray County or be a Gray County producer that is at least 18 years of age.
3. All exhibits shall be COMBINE RUNS ONLY.
4. ANY ENTRY THAT HAS BEEN HANDPICKED OR SCREENED WILL BE DISQUALIFIED.
5. Limitation of entries: Each exhibitor is limited to one (1) entry for each variety of wheat grown on the exhibitor's farm. Property owners may enter if the tenant does not.
6. The decision of the judges will be final; no appeals will be considered.
7. The elevator site which collected the winning sample will display a traveling plaque with the name, producer name, and variety, for one year.

Classes of Wheat Varieties.

Class 1 – KSU HRW Varieties

Class 2 – Other Public HRW Varieties

Class 3 – All HRW Blends

Class 4 – All Agri-Pro/Syngenta HRW Varieties

Class 5 – All West Bred/HRW Varieties/Monsanto

Class 6 – All Hard-White Wheat Varieties

Class 7 – All other HRW Varieties of Hybrids

All entries submitted will be judged by the following criteria:

Variety/Mill Bake	250 Points
Protein	225 Points
Test Weight	200 Points
Dockage	200 Points
Shrunken and broken	100 Points.
Crop Card Data	25 Points
Total	1000 Points

NOTE: All exhibits of wheat become the property of the Gray County Fair Board.

DIVISION 46 – HORTICULTURE – GARDEN

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. 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 (18 yrs & older)

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:

4600. LARGE VEGETABLE (ONE EACH)

Watermelon	Pumpkin	Broccoli
Squash	Eggplant	Cabbage
Cantaloupe	Cauliflower	

4600. MEDIUM VEGETABLES (FIVE EACH)

Cucumbers	Carrots	Onions
Okra	Potatoes	Beets
Peppers	Tomatoes	Radishes
Garlic	Similar sized vegetables	

4600. SMALL VEGETABLES (TWELVE EACH)

Green Snap Beans	Wax Beans	English Peas
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Cherry and Pear Tomatoes Similar sized vegetables

4600. SMALL FRUITS (ONE HALF PINT BOX)

Strawberries	Blackberries	Raspberries
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Similar sized fruits

4600. TREE FRUITS (5 EACH)

Apples	Pears	Peaches
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Similar sized fruits

4600. GRAPES (BUNCHES)

SECTION 2 – SMALL VEGETABLES (18 yrs & older)

4610. 12 Beans, green snap

4611. 12 Beans, yellow wax

4612. 12 Snap Peas

4613. 12 Beans of Peas, other

SECTION 3 – ROOT VEGETABLES (18 yrs & older)

4620. 5 White Potatoes

4621. 5 Red Potatoes

4622. 5 Sweet Potatoes

4623. 5 Green Onions

4624. 5 White Onions

4625. 5 Yellow Onions

4626. 5 Red Onions

4627. 5 Table Beets

4628. 5 Carrots

4629. 5 Turnips

4630. 5 Radishes

4631. 5 Parsnips

4632. 5 Other Root Vegetables

SECTION 4 – TOMATOES & CUCUMBERS (18 yrs & older)

4640. 5 Red Tomatoes

4641. 5 Green Tomatoes

4642. 5 Cherry Tomatoes

4643. 5 Pear Tomatoes

4644. 5 Other Tomatoes

4645. 5 Cucumbers- Pickles

4646. 5 Cucumbers – Slicers

SECTION 5 – PEPPERS (18 yrs & older)

4650. 5 Bell Peppers

4651. 5 Sweet Peppers

4652. 5 Jalapeno Peppers

4653. 5 Other Hot Peppers

SECTION 6 – SQUASH (18 yrs & older)

4660. 1 Zucchini Squash – small

4661. 1 Zucchini Squash – large

4662. 1 Other Summer Squash

4663. 1 Winter Squash

SECTION 7 – LARGE & MISC. (18 yrs & older)

4670. 1 Pumpkin

4671. 1 Watermelon

4672. 1 Cantaloupe

4673. 1 Honeydew

4674. 1 Cauliflower

4675. 1 Broccoli

4676. 1 Cabbage

4677. 1 Eggplant

4678. 1 Sunflower

4679. 5 Ears of Sweet Corn

4680. 5 Okra

4681. 5 Stalks of Rhubarb

4682. Misc. Vegetables (1 large, 5 Medium)

4683. Misc. Fruits (5 mediums, 1 Bunch of Grape

4683A. Strawberries

4683B. Plums

4683C. Apples

4683D. Peaches

4683E. Pears

4683F. Other

4684. Ornamental Products

SECTION 8 – HERBS & SPICES (18 yrs & older)

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.

4685. Dill

4686. Basil

4687. Oregano

4688. Rosemary

4689. Parsley

4690. Cilantro

4691. Mint

4692. Other

SECTION 9 – LARGEST FRUIT OR VEGETABLE (18 yrs & older)

Largest Fruit or Vegetable – Exhibit 1 fruit or vegetable per entry. Select the largest specimen that is typical of its kind.

EXAMPLE: The largest potato, without blemishes or sunburn, which has the correct shape, texture, and color. This class is NOT ELIGIBLE for Grand Champion.

4693. Largest fruit/vegetable

SECTION 10 – GARDEN DISPLAY (17 yrs & younger)

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:

4600Y. LARGE VEGETABLE (ONE EACH)

Watermelon	Pumpkin	Broccoli
Squash	Eggplant	Cabbage
Cantaloupe	Cauliflower	

4600Y. MEDIUM VEGETABLES (FIVE EACH)

Cucumbers	Carrots	Onions
Okra	Potatoes	Beets
Peppers	Tomatoes	Radishes
Garlic	Similar sized vegetables	

4600Y. SMALL VEGETABLES (TWELVE EACH)

Green Snap Beans	Wax Beans	English Peas
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Cherry and Pear Tomatoes Similar sized vegetables

4600Y. SMALL FRUITS (ONE HALF PINT BOX)

Strawberries	Blackberries
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Raspberries

Similar sized fruits

4600Y. TREE FRUITS (5 EACH)

Apples Pears Peaches

Similar sized fruits

4600Y. GRAPES (BUNCHES)

SECTION 11 – SMALL VEGETABLES (17 yrs & younger)

4610Y. 12 Beans, green snap

4611Y. 12 Beans, yellow wax

4612Y. 12 Snap Peas

4613Y. 12 Beans of Peas, other

SECTION 12 – ROOT VEGETABLES (17 yrs & younger)

4620Y. 5 White Potatoes

4621Y. 5 Red Potatoes

4622Y. 5 Sweet Potatoes

4623Y. 5 Green Onions

4624Y. 5 White Onions

4625Y. 5 Yellow Onions

4626Y. 5 Red Onions

4627Y. 5 Table Beets

4628Y. 5 Carrots

4629Y. 5 Turnips

4630Y. 5 Radishes

4631Y. 5 Parsnips

4632Y. 5 Other Root Vegetables

SECTION 13 – TOMATOES & CUCUMBERS (17 yrs & younger)

4640Y. 5 Red Tomatoes

4641Y. 5 Green Tomatoes

4642Y. 5 Cherry Tomatoes

4643Y. 5 Pear Tomatoes

4644Y. 5 Other Tomatoes

4645Y. 5 Cucumbers- Pickles

4646Y. 5 Cucumbers – Slicers

SECTION 14 – PEPPERS (17 yrs & younger)

4650Y. 5 Bell Peppers

4651Y. 5 Sweet Peppers

4652Y. 5 Jalapeno Peppers

4653Y. 5 Other Hot Peppers

SECTION 15 – SQUASH (17 yrs & younger)

4660Y. 1 Zucchini Squash – small

4661Y. 1 Zucchini Squash – large

4662Y. 1 Other Summer Squash

4663Y. 1 Winter Squash

SECTION 16 – LARGE & MISC. (17 yrs & younger)

4670Y. 1 Pumpkin

4671Y. 1 Watermelon

4672Y. 1 Cantaloupe

4673Y. 1 Honeydew

4674Y. 1 Cauliflower

4675Y. 1 Broccoli

4676Y. 1 Cabbage

4677Y. 1 Eggplant

4678Y. 1 Sunflower

4679Y. 5 Ears of Sweet Corn

4680Y. 5 Okra

4681Y. 5 Stalks of Rhubarb

4682Y. Misc. Vegetables (1 large, 5 Medium)

4683Y. Misc. Fruits (5 mediums, 1 Bunch of Grape)

4683AY. Strawberries

4683BY. Plums

4683CY. Apples

4683DY. Peaches

4683EY. Pears

4683FY. Other

4684Y. Ornamental Products

SECTION 17 – HERBS & SPICES (17 yrs & younger)

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.

4685Y. Dill

4686Y. Basil

4687Y. Oregano

4688Y. Rosemary

4689Y. Parsley

4690Y. Cilantro

4691Y. Mint

4692Y. Other

SECTION 18 – LARGEST FRUIT OR VEGETABLE (17 yrs & younger)

Largest Fruit or Vegetable – Exhibit 1 fruit or vegetable per entry. Select the largest specimen that is typical of its kind.

EXAMPLE: The largest potato, without blemishes or sunburn, which has the correct shape, texture, and color. This class is NOT ELIGIBLE for Grand Champion.

4693Y. Largest fruit/vegetable

DIVISION 47 – HORTICULTURE – FLOWERS

Rules

1. 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.

2. 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.

3. All entries must be freestanding, easily moved, and not require any special equipment to display. Hanging entries are not accepted

SECTION 1 ANNUAL (18 yrs & older)

- 4700. Celosia (cockscomb)
- 4701. Gomphrena
- 4702. Tame Sunflower (if seeds are developed display in gardens)
- 4703. Cosmos
- 4704. Spray Dwarf Marigold (needs foliage)
- 4705. Spray Medium Marigold (needs foliage)
- 4706. Spray Large Marigold (needs foliage)
- 4707. Zinnia (Buttonhole)
- 4708. Zinnia (Small)
- 4709. Zinnia (Medium)
- 4710. Zinnia (Fancy)
- 4711. Zinnia (large)
- 4712. Snapdragon
- 4713. Rose Moss
- 4714. Straw Flower
- 4715. Geranium
- 4716. Bachelor Button
- 4717. Spray Petunia (Single)
- 4718. Spray Petunia (Double)
- 4719. Spray Petunia (Fancy)
- 4720. Larkspur
- 4721. Lantana
- 4722. Nicotiana
- 4723. Salvia
- 4724. Verbenas
- 4725. Canna
- 4726. Vinca Flower
- 4727. Foliage
- 4728. Annual not listed

SECTION 2 – BIENNIAL (18 yrs & older)

4729. Dianthus

4730. Holly Hocks

SECTION 3 – PERENNIALS (18 yrs & older)

4731. Carnations

4732. Delphiniums

4733. Gaillardia

4734. Phlox any color

4735. Shasta Daisy

4736. Aster

- 4737. Scabiosa
- 4738. Hibiscus
- 4739. Russian Sage
- 4740. Purple Coneflower
- 4741. Liatris
- 4742. Bee Balm
- 4743. Obedient Plant
- 4744. Chrysanthemum
- 4745. Black Eyed Susan
- 4746. Spike Small Gladiolus (with faded floret intact)
- 4747. Spike Medium Gladiolus (with faded floret intact)
- 4748. Spike Large Gladiolus (florets over 5 inches)
- 4749. Day Lily
- 4750. Other Lily
- 4751. Branch of Flowering of Fruited shrub
- 4752. Perennial not listed

SECTION 4 – HOUSE PLANTS (18 yrs & older)

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

- 4753. Blooming (Excluding African Violets)
- 4754. Collection of 3 House Plants
- 4755. Terrarium
- 4756. Unusual or Rare Plant
- 4757. African Violet (must be in bloom)
- 4758. Tuberous Begonia
- 4759. Foliage Plant (Such as Philodendron)
- 4760. Ivy
- 4761. Fern
- 4762. Hanging Plant
- 4763. Any Other House Plant

SECTION 5 - FRESH AND DRIED FLOWER ARRANGEMENT

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

- 4764. Arrangements of green & white in a green or white container.
- 4765. Miniature arrangements (not over 7 inches in diameter)
- 4766. Holiday arrangements
- 4767. Kansas heritage arrangement
- 4768. Any other arrangement

SECTION 6 – LANDSCAPING WITH HORTICULTURE (18 yrs & older)

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.

4769. Landscape Design – Landscape Phase

4770. Landscape Design – Flower Phase

SECTION 7 – CACTUS (18 yrs & older)

4771. Cactus or Other Succulent

4772. Cactus Collection (Must have more than 1 Variety)

SECTION 8 – ROSES (18 yrs & older)

4773. Hybrid Tea Rose (in bud stage)

4774. Miniature Rose

4775. Any Other rose

SECTION 9 – PATIO PLANTERS – MUST BE GROWN IN SOIL (18 yrs & older)

4776. Collection of at least 3 individual blooming plants.

4777. Collection of at least 3 individual foliage plants.

4778. Collection of at least 3 foliage and blooming plants combined.

SECTION 10 – HERBS, MUST BE POTTED AND LABELED (18 yrs & older)

4779. Single Herb

4780. Collection of 3 or more varieties

4781. Any worthy entry not listed above, Indoor

4782. Any worthy entry not listed above, outdoor

SECTION 11 ANNUAL (17 yrs & younger)

4700Y. Celosia (cockscomb)

4701Y. Gomphrena

4702Y. Tame Sunflower (if seeds are developed display in gardens)

4703Y. Cosmos

4704Y. Spray Dwarf Marigold (needs foliage)

4705Y. Spray Medium Marigold (needs foliage)

4706Y. Spray Large Marigold (needs foliage)

4707Y. Zinnia (Buttonhole)

4708Y. Zinnia (Small)

4709Y. Zinnia (Medium)

4710Y. Zinnia (Fancy)

4711Y. Zinnia (large)

4712Y. Snapdragon

4713Y. Rose Moss

4714Y. Straw Flower

4715Y. Geranium

4716Y. Bachelor Button

4717Y. Spray Petunia (Single)

4718Y. Spray Petunia (Double)

4719Y. Spray Petunia (Fancy)

4720Y. Larkspur

4721Y. Lantana

4722Y. Nicotiana

4723Y. Salvia

4724Y. Verbenas

4725Y. Canna

4726Y. Vinca Flower

4727Y. Foliage

4728Y. Annual not listed

SECTION 12 – BIENNIAL (17 yrs & younger)

4729Y. Dianthus

4730Y. Holly Hocks

SECTION 13 – PERENNIALS (17 yrs & younger)

4731Y. Carnations

4732Y. Delphiniums

4733Y. Gaillardia

4734Y. Phlox any color

4735Y. Shasta Daisy

4736Y. Aster

4737Y. Scabiosa

4738Y. Hibiscus

4739Y. Russian Sage

4740Y. Purple Coneflower

4741Y. Liatris

4742Y. Bee Balm

4743Y. Obedient Plant

4744Y. Chrysanthemum

4745Y. Black Eyed Susan

4746Y. Spike Small Gladiolus (with faded floret intact)

4747Y. Spike Medium Gladiolus (with faded floret intact)

4748Y. Spike Large Gladiolus (florets over 5 inches)

4749Y. Day Lily

4750Y. Other Lily

4751Y. Branch of Flowering of Fruited shrub

4752Y. Perennial not listed

SECTION 14 – HOUSE PLANTS (17 yrs & younger)

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

4753Y. Blooming (Excluding African Violets)

4754Y. Collection of 3 House Plants

4755Y. Terrarium

4756Y. Unusual or Rare Plant

4757Y. African Violet (must be in bloom)

4758Y. Tuberous Begonia

4759Y. Foliage Plant (Such as Philodendron)

4760Y. Ivy

4761Y. Fern

4762Y. Hanging Plant

4763Y. Any Other House Plant

SECTION 15 - FRESH AND DRIED FLOWER ARRANGEMENT

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

4764. Arrangements of green & white in a green or white container.

4765. Miniature arrangements (not over 7 inches in diameter)

4766. Holiday arrangements

4767. Kansas heritage arrangement

4768. Any other arrangement

SECTION 16 – LANDSCAPING WITH HORTICULTURE (17 yrs & younger)

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.

4769Y. Landscape Design – Landscape Phase

4770Y. Landscape Design – Flower Phase

SECTION 17 – CACTUS (17 yrs & younger)

4771Y. Cactus or Other Succulent

4772Y. Cactus Collection (Must have more than 1 Variety)

SECTION 18 – ROSES (17 yrs & younger)

4773Y. Hybrid Tea Rose (in bud stage)

4774Y. Miniature Rose

4775Y. Any Other rose

SECTION 19 – PATIO PLANTERS – MUST BE GROWN IN SOIL (17 yrs & younger)

4776Y. Collection of at least 3 individual blooming plants.

4777Y. Collection of at least 3 individual foliage plants.

4778Y. Collection of at least 3 foliage and blooming plants combined.

SECTION 20 – HERBS, MUST BE POTTED AND LABELED (17 yrs & younger)

4779Y. Single Herb

4780Y. Collection of 3 or more varieties

4781Y. Any worthy entry not listed above, Indoor

4782Y. Any worthy entry not listed above, Outdoor

DIVISION 48 – SEWING AND TEXTILE DESIGN

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

1. All garments will be judged by construction, Monday, July 20th, starting at 1p.m. at the Fairgrounds. Items should be hung on 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)
 - a. Type or print on 3" x 2 1/2" piece of cloth: Class Number, County or District, Name and number of pieces in exhibit, ie 1 of 2, 2 of 2.
 - b. 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.
 - c. Please use a string to tie together the hangers of exhibits that require more than one hanger. Examples: Dress and Jacket, Top and Skirt.
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.

SECTION 1 – ADULTS (18 yrs & older)

- 4810.** Blouses, Shirts
- 4811.** Slacks, Shorts, Skirts
- 4812.** Coat or Jacket
- 4813.** Adult dress or Formal Wear
- 4814.** 2 Piece or More Coordinated Outfit
- 4815.** Recycled Garment or Article
- 4816.** Hand Stitched Article
- 4817.** Article
- 4818.** Miscellaneous

SECTION 2 – YOUTH (17 yrs & younger)

- 4820.** Article
- 4821.** Garment
- 4822.** Hand Stitched Article
- 4823.** Sewing Box
- 4824.** Other Article

- 4825.** 2 Piece or More Coordinated Outfit
- 4826.** Recycled Garment or Article
- 4827.** Pillow
- 4828.** Purse or Bag
- 4829.** Apron
- 4830.** Miscellaneous

DIVISION 49 – CROCHET

Read general rules.

1. An exhibitor may make three exhibits in each class with a total of six entries in the division.
2. Afghans and quilts made within the last 5 years may be exhibited if not previously exhibited at the fair.
3. When articles which are normally worn as a pair are exhibited, both articles must be shown together and will be considered one entry. Fasten articles together securely with yarn.

SECTION 1 – ADULT (18 yrs & older)

- 4910.** Infant garment or article
- 4911.** Child garment or article
- 4912.** Large garment (dress, sweater)
- 4913.** Afghan
- 4914.** Bedspread
- 4915.** Dolls
- 4916.** Large article made with yarn
- 4917.** Large article made with thread
- 4918.** Small article made with yarn
- 4919.** Small article made with thread
- 4920.** Pillow
- 4921.** Potholder
- 4922.** Other than classified crochet

SECTION 2 – YOUTH (17 yrs & younger)

- 4930.** Infant garment or article
- 4931.** Child garment or article
- 4932.** Large garment (dress, sweater)
- 4933.** Afghan
- 4934.** Bedspread
- 4935.** Dolls
- 4936.** Large article made with yarn
- 4937.** Large article made with thread
- 4938.** Small article made with yarn
- 4939.** Small article made with thread
- 4940.** Pillow
- 4941.** Potholder
- 4942.** Other than classified crochet

DIVISION 50 – KNITTING

Read general rules.

1. An exhibitor may make three exhibits in each class with a total of six entries in the division. Afghans and quilts made within the last 5 years may be exhibited if not previously exhibited at the fair.
2. When articles which are normally worn as a pair are exhibited, both articles must be shown together and will be considered one entry. Fasten articles together securely with yarn.

SECTION 1 - ADULT (18 yrs & older)

- 5010. Infant garment or article
- 5011. Child garment or article
- 5012. Large garment (dress, sweater)
- 5013. Afghan
- 5014. Dolls
- 5015. Large article made with thread
- 5016. Large article made with yarn
- 5017. Small article with thread
- 5018. Small article made with yarn
- 5019. Pillow
- 5020. Potholder
- 5021. Machine knitted item
- 522. Other than classified knitting

SECTION 2 - YOUTH (17 yrs & younger)

- 5030. Infant garment or article
- 5031. Child garment or article
- 5032. Large garment (dress, sweater)
- 5033. Afghan
- 5034. Dolls
- 5035. Large article made with thread
- 5036. Large article made with yarn
- 5037. Small article with thread
- 5038. Small article made with yarn
- 5039. Pillow
- 5040. Potholder
- 5041. Machine knitted item
- 5042. Other than classified knitting

DIVISION 51 – FABRIC & THREADS

1. An exhibitor may make three exhibits in each class, with a total of six entries in the division.

SECTION 1 – ADULT (18 yrs & older)

- 5110. Needlepoint
- 5111. Needlepoint Canvas
- 5112. Embroidery, hand
- 5113. Embroidery, machine
- 5114. Crewel Stitchery (wool or acrylic crewel yarn)

5115. Original Needlework

5116. Cross-stitch

5117. Counted Cross-stitch

5118. Applique Class

5119. Wool Applique

5120. Other

SECTION 2 – YOUTH (17 yrs & younger)

5130. Needlepoint

5131. Needlepoint Canvas

5132. Embroidery, hand

5133. Embroidery, machine

5134. Crewel Stitchery (wool or acrylic crewel yarn)

5135. Original Needlework

5136. Cross-stitch

5137. Counted Cross-stitch

5138. Applique Class

5139. Wool Applique

5140. Other

DIVISION 52 – QUILTS

SECTION 1 – ADULTS (18 yrs & older)

All quilts must have an 8” sleeve attached by safety pins or thread to be hung. If no sleeve is attached quilt will not be hung. We will not add a sleeve for you.

1. An exhibitor may make three exhibits in each class with a total of six entries in the division.

2. A quilt may only be entered once, whether finished or unfinished.

5210. Machine applique

5211. Machine Embroidery

5212. Hand Applique

5213. Hand Embroidery

5214. Machine Quilted by exhibitor

5215. Machine Quilted by another; other than exhibitor

5216. Machine Pieced/Hand Quilted

5217. Cheater Quilt

5218. Baby Quilt

5219. Quilt made by 2 or more people

5220. Wall hanging 60” or less

5221. Unfinished Quilt Top

5222. Table Runner

5223. Tied Quilt

5224. Miscellaneous

5225. Scrappy quilt

5226. Novelty

SECTION 2 – YOUTH (17 yrs & younger)

5230. Machine applique

5231. Machine Embroidery

- 5232.** Hand Applique
- 5233.** Hand Embroidery
- 5234.** Machine Quilted by exhibitor
- 5235.** Machine Quilted by another; other than exhibitor
- 5236.** Machine Pieced/Hand Quilted
- 5237.** Cheater Quilt
- 5238.** Baby Quilt
- 5239.** Quilt made by 2 or more people
- 5240.** Wall hanging 60" or less
- 5241.** Unfinished Quilt Top
- 5242.** Table Runner
- 5243.** Tied Quilt
- 5244.** Miscellaneous
- 5245.** Scrappy quilt
- 5246.** Novelty

PEOPLE'S CHOICE FIBER ARTS CONTEST

Any participant who would like to enter a quilt in Division 18, 48, 49, 50, 51 & 52 is eligible for People's Choice.

1. The three Exhibits with the most votes will win 1st, 2nd, or 3rd prize. What prize 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 5th place will be moved up to 3rd place.
3. In case of 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 53 – FOOD

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. Exhibitors can enter two items in each class.
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, Exhibitor's Name, and County.
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.
 - a. 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. In the Food Gift Package class, NO alcoholic beverage will be accepted. A Food Gift Package must contain at least three (3) different non-perishable food items, prepared by the exhibitor 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:
 - a. what the intended use is,

b. 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 instructions. They could break during baking. Any brand name products in the basket must have the labels covered. Do not cellophane wrap your basket. All items in the gift basket must be non-perishable and if they have frosting or glaze, you must include the sugar percentage worksheet.

15. 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.

16. Exhibits in table setting class will include table covering, one (1) table setting, menu, and centerpiece. Exhibitors must furnish a table.

17. 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.

18. 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 –COOKIES (18 yrs & older)

- 5301. Bar cookies (3)
- 5302. Rolled cookies (3)
- 5303. Refrigerator cookies (3)
- 5304. No bake cookies (3)
- 5305. Drop Cookies (3)
- 5306. Decorated cookies (3)
- 5307. Brownies (3)

SECTION 2 - CAKES & PIES (18 yrs & older)

- 5310. Chocolate cake, iced
- 5311. White cake, iced
- 5312. Decorated cake

- 5313. Foam cakes (angel food, chiffon, or sponge), unfrosted, with top side up
- 5314. Bundt cakes, iced or plain
- 5315. Coffee cake, Plain cake, one 8" or 9" layer, round or square (frosted or unfrosted)
- 5316. Cupcakes
- 5317. Other cake
- 5318. Microwave cake
- 5319. Fruit pie

SECTION 3 - BREAD (18 yrs & older)

- 5320. Yeast rolls (3) White
- 5321. Yeast rolls (3) Whole wheat
- 5322. One loaf, white
- 5323. One loaf, whole wheat
- 5324. One loaf, other
- 5325. One holiday bread
- 5326. Raised doughnuts (3)
- 5327. Baking powder biscuit (3)
- 5328. Biscuits, other (3)
- 5329. Muffins (3)
- 5330. Quick bread (plain, nuts, or fruit)
- 5331. Gingerbread
- 5332. Yeast bread made with bread machine

SECTION 4 - CANDY (18 yrs & older)

- 5340. Divinity (3 pieces)
- 5341. Chocolate fudge (3 pieces)
- 5342. Peanut brittle (3 pieces)
- 5343. Other

SECTION 5 – MISCELLANEOUS (18 yrs & older)

- 5344. Snack Mix, 1 Cup
- 5345. Mixes in a Jar
- 5346. Noodles
- 5347. Other

SECTION 6 – COOKIES (17 yrs & younger)

- 5350. Bar cookies (3)
- 5351. Rolled cookies (3)
- 5352. Refrigerator cookies (3)
- 5353. No bake cookies (3)
- 5354. Drop Cookies (3)
- 5355. Decorated cookies (3)
- 5356. Brownies (3)

SECTION 7 - CAKES & PIES (17 yrs & younger)

- 5360. Chocolate cake, iced
- 5361. White cake, iced
- 5362. Decorated cake
- 5363. Foam cakes (angel food, chiffon, or sponge), unfrosted, with top side up
- 5364. Bundt cakes, iced or plain

5365. Coffee cake, Plain cake, one 8" or 9" layer, round or square (frosted or unfrosted)

5366. Cupcakes

5367. Other cake

5368. Microwave cake

5369. Fruit pie

SECTION 8 - BREAD (17 yrs & younger)

5370. Yeast rolls (3) White

5371. Yeast rolls (3) Whole wheat

5372. One loaf, white

5373. One loaf, whole wheat

5374. One loaf, other

5375. One holiday bread

5376. Raised doughnuts (3)

5377. Baking powder biscuit (3)

5378. Biscuits, other (3)

5379. Muffins (3)

5380. Quick bread (plain, nuts, or fruit)

5381. Gingerbread

5382. Yeast bread made with bread machine

SECTION 9 - CANDY (17 yrs & younger)

5390. Divinity (3 pieces)

5391. Chocolate fudge (3 pieces)

5392. Peanut brittle (3 pieces)

5393. Other

SECTION 10- MISCELLANEOUS (17 yrs & younger)

5394. Snack Mix, 1 Cup

5395. Mixes in a Jar

5396. Noodles

5397. Other

FRUIT PIE CONTEST

Baking contest of a fruit pie. These entries will be judged first, second and third. **The fruit for 2026 is Rhubarb!**

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.
- 5398.** Adult
5399. Youth

DIVISION 54 – FOOD PRESERVATION

In this project, you will learn the techniques used to preserve food by slowing or preventing spoilage. These practices help maintain the food's quality, safety and nutritional value over time. You'll gain hands-on experience with several preservation methods, including pressure canning, water bathing, and dehydrating, focusing on safely preserving fruits, vegetables, and meats.

Rules

1. Exhibits must have been preserved since the member's previous year's county fair, and not been exhibited at the previous State Fair.
2. Recipes and processing methods from the sources below are required. Recipes must be from current, tested resources listed below AND MUST BE ADJUSTED FOR ELEVATION 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**

3. Alcohol is not allowed as an ingredient in food preservation entries. Entries with alcohol will be disqualified and not be judged.
4. There are no safe recommendations to can white peaches and elderberries.
5. Each exhibit must have the complete recipe and instructions attached with the entry card, or it will be disqualified. Recipe must include exhibitor name, recipe source, date of publication, and elevation, where food was processed. If using Mrs. Wage's or Ball mixes, indicate the date the mix was purchased
6. Exhibits must be heat processed in clean, clear standard canning jars, with new matching brand (ex: use Ball lids on Ball jars.) two-piece lids. This includes fermented foods. Do not use colored jars, fancy padded lids, fabric over wraps or cozies as they interfere with the judging process. Do not reuse jars from commercial food products (ex: spaghetti sauce jars). 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.
7. Each jar exhibited must be labeled. The label must not cover the brand name of the jar. The label must give: Class number, Product, Elevation 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.
8. Classes 2010-2015 will require one jar for each class.
9. Hole punch entry card and use a rubber band to attach the entry card and recipe around the top of the jar.
10. If dried food product is not in a canning jar, it will be lowered one ribbon rating. Suggested amount: 1/3 – 1/2 cup, or three or four pieces per exhibit. Dried products must include the recipe, preparation steps and heating instructions.
11. 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 – JELLIES (18 yrs & older)

- 5401. Apple
- 5402. Crab Apple
- 5403. Plum
- 5404. Berry
- 5405. Miscellaneous
- 5406. Collection

SECTION 2 - JAMS & PRESERVES (18 yrs & older)

- 5407. Marmalade
- 5408. Cherry
- 5409. Peach
- 5410. Pear
- 5411. Plum
- 5412. Strawberry
- 5413. Miscellaneous
- 5414. Collection

SECTION 3 - FRUITS AND BUTTERS (18 yrs & older)

- 5415. Apple butter
- 5416. Peach butter
- 5417. Pear butter
- 5418. Plum butter
- 5419. Miscellaneous
- 5420. Collection

CANNED FRUIT AND VEGETABLES

Jars will be judged for quality of product, preservation, and pack. All space, except proper head space, should be filled, fancy packs will not receive extra consideration.

SECTION 4 - FRUITS (18 yrs & older)

- 5421. Apples, 1 jar
- 5422. Applesauce, 1 jar
- 5423. Plums, 1 jar
- 5424. Cherries, 1 jar
- 5425. Peaches, 1 jar
- 5426. Pie filling, 1 jar
- 5427. Other fruit, 1 jar
- 5428. Collection, 1 jar

SECTION 5 - VEGETABLES (18 yrs & older)

- 5430. Asparagus, 1 jar
- 5431. Green Beans, 1 jar.
- 5432. Wax Beans. 1 jar
- 5433. Beets, 1 jar
- 5434. Carrots, 1 jar
- 5435. Corn, 1 jar

- 5436. Mixed vegetables, 1 jar
- 5437. Tomatoes, 1 jar
- 5438. Other Vegetables, 1 jar
- 5439. Salsa, 1 jar
- 5440. Tomato Sauce, 1 jar
- 5441. Pizza/Spaghetti Sauce, 1 jar
- 5442. Collection, 3 jars

SECTION 6 - PICKLES AND RELISHES (18 yrs & older)

- 5443. Pickles, Sour, 1 jar
- 5444. Pickles, Sweet, 1 jar
- 5445. Pickles, Bread & Butter, 1 jar
- 5446. Pickles, Other, 1 jar
- 5447. Pickled Beets, 1 jar
- 5448. Pickled Okra, 1 jar
- 5449. Fruit or Vegetable Relish, 1 jar
- 5450. Collection of pickles, 3 jars
- 5451. Miscellaneous pickles

SECTION 7 - CANNED MEATS (18 yrs & older)

Canned meats should be exhibited in pint or quart jars. Products will be judged by neatness, cleanliness, utilization of space in the jar, and quality of product.

- 5452. Meats, 1 jar
- 5453. Miscellaneous

SECTION 8 - DRIED FOODS (18 yrs & older)

- 5454. Fruits
- 5455. Vegetables
- 5456. Meats
- 5457. Miscellaneous

SECTION 9 – JELLIES (17 yrs & younger)

- 5401Y. Apple
- 5402Y. Crab Apple
- 5403Y. Plum
- 5404Y. Berry
- 5405Y. Miscellaneous
- 5406Y. Collection

SECTION 10 - JAMES & PRESERVES (17 yrs & younger)

- 5407Y. Marmalade
- 5408Y. Cherry
- 5409Y. Peach
- 5410Y. Pear
- 5411Y. Plum
- 5412Y. Strawberry
- 5413Y. Miscellaneous
- 5414Y. Collection

SECTION 11 - FRUIT AND BUTTERS (17 yrs & younger)

- 5415Y. Apple butter
- 5416Y. Peach butter
- 5417Y. Pear butter
- 5418Y. Plum butter
- 5419Y. Miscellaneous
- 5420Y. Collection

CANNED FRUIT AND VEGETABLES

Jars will be judged for quality of product, preservation, and pack. All space, except proper head space, should be filled, fancy packs will not receive extra consideration.

SECTION 12 - FRUITS (17 yrs & younger)

- 5421Y. Apples, 1 jar
- 5422Y. Applesauce, 1 jar
- 5423Y. Plums, 1 jar
- 5424Y. Cherries, 1 jar
- 5425Y. Peaches, 1 jar
- 5426Y. Pie filling, 1 jar
- 5427Y. Other fruit, 1 jar
- 5428Y. Collection, 1 jar

SECTION 13 - VEGETABLES (17 yrs & younger)

- 5430Y. Asparagus, 1 jar
- 5431Y. Green Beans, 1 jar
- 5432Y. Wax Beans, 1 jar
- 5433Y. Beets, 1 jar
- 5434Y. Carrots, 1 jar
- 5435Y. Corn, 1 jar
- 5436Y. Mixed vegetables, 1 jar
- 5437Y. Tomatoes, 1 jar
- 5438Y. Other Vegetables, 1 jar
- 5439Y. Salsa, 1 jar
- 5440Y. Tomato Sauce, 1 jar
- 5441Y. Pizza/Spaghetti Sauce, 1 jar
- 5442Y. Collection, 3 jars

SECTION 14 - PICKLES & RELISHES(17 yrs & younger)

- 5443Y. Pickles, Sour, 1 jar
- 5444Y. Pickles, Sweet, 1 jar
- 5445Y. Pickles, Bread & Butter, 1 jar
- 5446Y. Pickles, Other, 1 jar
- 5447Y. Pickled Beets, 1 jar
- 5448Y. Pickled Okra, 1 jar
- 5449Y. Fruit or Vegetable Relish, 1 jar
- 5450Y. Collection of pickles, 3 jars
- 5451Y. Miscellaneous pickles

SECTION 15 - CANNED MEATS (17 yrs & younger)

Canned meats should be exhibited in pint or quart jars. Products will be judged by neatness, cleanliness, utilization of space in the jar, and quality of product.

5452Y. Meats, 1 jar

5453Y. Miscellaneous

SECTION 16 - DRIED FOODS (17 yrs & younger)

5454Y. Fruits

5455Y. Vegetables

5456Y. Meats

5457Y. Miscellaneous

DIVISION 55 – 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.

Classes:

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.

5510– 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 8 1/2 x 11).
- Boards must be on foam core or a standard tri-fold display.

5511– 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.

5512– 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.

5520– 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.

5521– 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 56 – AGRICULTURAL EDUCATION AND SHOP CLASSES

1. The project must be clean and in good condition (painted if possible).

2. All projects must be accompanied with plans and description of use, bill of materials, and approximate cost.

3. All exhibits will be judged by the following scorecard.

a. Workmanship

i. General Appearance (neatness & finish), 10

ii. Quality of workmanship, 15

b. Structure and durability, 15

i. Strength & durability, 15

ii. Originality, 5

iii. Safety features, 10

c. Purpose

i. Labor saving, 10

ii. Convenience & usefulness, 10

d. Material

e. Economic choice of materials, 10

5600. Adult (18 yrs & older)

5601. Youth (17 yrs & younger)

DIVISION 57 – ARTS & CRAFTS

1. Three entries per class per person!
2. Collection – Six pieces, three entries per class per person.
3. Ceramics may be commercial mold.
4. Needlework: Non-original design shall be entered in Division 48, and original design shall be entered in division 57, Original Art.
5. All entries in Section 1 and 2, must be made by the exhibitor.
6. When displaying collections, the exhibit must be in its own container. Collections will not be set up by superintendents.
7. **All exhibits which need to be hung must have a way to hang attached (wire or saw tooth hanger preferred).**
8. All exhibits are entered at your own risk.
9. No plant or plant materials needing watering can be entered as an art display or item.
10. **Legos: “Store bought” sets are considered an arts and craft entry. Original designs must be entered in architectural block design in STEM.**
11. **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.**
12. **Legos: Total dimensions may not exceed 2 feet high by 2 feet wide, by 2 feet deep.**

SECTION 1 – HANDICRAFTS (18 yrs & older)

- 5701. Fabrics and fibers
- 5702. Leather craft
- 5703. Drawing and painting (any medium)
- 5704. Diamond Art
- 5705. Sculpture
- 5706. Wood crafts
- 5707. Paper crafts
- 5708. Jewelry
- 5709. Stenciling
- 5710. Sand art
- 5711. Tin punch
- 5712. Ceramics
- 5713. Stained Glass
- 5714. Legos
- 5715. Imagination Creation
- 5716. String Art
- 5717. Perler Boards
- 5718. Miscellaneous

SECTION 2 – HANDICRAFTS (12-17 yrs)

5719. Fabrics and fibers

5720. Leather craft

5721. Drawing and painting (any medium)

5722. Diamond Art

5723. Sculpture

5724. Wood crafts

5725. Paper crafts

5726. Jewelry

5727. Stenciling

5728. Sand art

5729. Tin punch

5730. Ceramics

5731. Stained glass

5732. Legos

5733. Imagination Creation

5734. String Art

5735. Perler Boards

5736. Miscellaneous

SECTION 3 – HANDICRAFTS (11yrs & younger)

5737. Fabrics and fibers

5738. Leather craft

5739. Drawing and painting (any medium)

5740. Diamond Art

5741. Sculpture

5742. Wood crafts

5743. Paper crafts

5744. Jewelry

5745. Stenciling

5746. Sand art

5747. Tin punch

5748. Ceramics

5749. Stained glass

5750. Legos

5751. Imagination Creation

5752. String Art

5753. Perler Boards

5754. Miscellaneous

SECTION 4 – KITS (18yrs & older)

5755. Car (Model)

5756. Plane (Model)

5757. Legos (Kits)

5758. Miscellaneous (Kits)

SECTION 5 – KITS (12 yrs to 17 yrs)

5759. Car (Model)

5760. Plane (Model)

5761. Legos (Kits)

5762. Miscellaneous (Kits)

SECTION 6 – KITS (11yrs & younger)

5763. Car (Model)

5764. Plane (Model)

5765. Legos (Kits)

5766. Miscellaneous (Kits)

SECTION 7 – PERSONAL COLLECTIONS

1. Must have 6 pieces to be a collection.

2. If an exhibit takes more than 2 square feet, it needs to be displayed in a booth.

3. Exhibit needs a small card with explanation of the following:

a. When the collection on display was acquired.

b. Reason for collection. (History)

4. If the collection is of extreme personal or monetary value, please note exhibits must remain during the duration of the fair.

5. It is strongly recommended that additions to collections previously exhibited be made to enhance the exhibit.

CLASSES

5767. Artifacts

5768. Stamp collection

5769. Shells (arranged in box)

5770. Card collection

5771. Dolls

5772. Vehicle collection

5773. Miscellaneous

SECTION 8 – BARN QUILT

1. Must be 1' x 1' square or larger.

2. Must be on 3/8" or 1/2" thick exterior durable material. MDO (medium density overlay) or HDO (high density overlay) board is recommended.

3. Original designs are encouraged. If copied, credit should be given.

5774. Adult (18 yrs & older)

5775. Youth (17 yrs & younger)

DIVISION 58 – 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. All articles competing for premium must be entirely the work of the exhibitor. The work must be original. **All drawings must be matted or framed.** If copying art, you must change painting or drawing at least three ways to qualify as original art, i.e., size, media, color, etc.

3. All exhibits which need to be hung must have a way to hang (wire or saw tooth hanger preferred).

4. No plant or plant materials needing watering can be entered as an art display or item.

5. All exhibits are entered at your own risk

6. 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 members own idea can result in original design, but simply changing 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 (18 yrs & older)

5810. Oil

5811. Watercolor

5812. Acrylics

5813. Mixed Media

5814. Opaque

SECTION 2 – DRAWING (18 yrs & older)

5820. Pastel

5821. Charcoal

5822. Crayon

5823. Ink

5824. Pencil

5825. Felt Tip

SECTION 3 – POTTERY (18 yrs & older)

5830. Sculpture

5831. Wheel Made

5832. Wheel Made, altered

5833. 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.

5834. Etching

5835. China Painting (hand painted)

1. One article

2. Collection of 3 different subjects

SECTION 4 – PAINTING (12 yrs to 17 yrs)

5840. Oil

5841. Watercolor

5842. Acrylics

5843. Mixed Media

5844. Opaque

SECTION 5 – DRAWING (12 yrs to 17 yrs)

5850. Pastel

5851. Charcoal

5852. Crayon

5853. Ink

5854. Pencil

5855. Felt Tip

SECTION 6 – POTTERY (12 yrs to 17 yrs)

5860. Sculpture

5861. Wheel Made

5862. Wheel Made, altered

5863. 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.

5864. Etching

5865. China Painting (hand painted)

1. One article

2. Collection of 3 different subjects

SECTION 7 – PAINTING (11yrs & younger)

5866. Oil

5867. Watercolor

5868. Acrylics

5869. Mixed Media

5870. Opaque

SECTION 8 – DRAWING (11yrs & younger)

5871. Pastel

5872. Charcoal

5873. Crayon

5874. Ink

5875. Pencil

5876. Felt Tip

SECTION 9 – POTTERY (11yrs & younger)

5877. Sculpture

5878. Wheel Made

5879. Wheel Made, altered

5880. 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.

5881. Etching

5882. China Painting (hand painted)

1. One article

2. Collection of 3 different subjects

SECTION 10 - PROFESSIONALS

5883. Professionals. This means one who teaches painting, makes a practice of selling labor and or completed works.

DIVISION 59– 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.
2. Photographs taken with a digital camera are allowed no more adjustments than exposure, color intensity or correction, one click filter effects, red eye removal, cropping, dodge and burning, and HDR (high dynamic range). Please note: AI (artificial intelligence) modified images are not allowed.
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 Photography and will be DISQUALIFIED and Not Judged.
7. Copyright protections must be observed.
8. Adhere photo to matte board: A full coverage permanent mount using a spray adhesive must be used. Do not use household glues, glue sticks, double stick tape/patches, etc. to adhere photo matte boards. Photos not mounted correctly will be lowered one ribbon placing after judging. Educational video for proper mounting is available at www.kansas4-H.org on the photography project website.

9. 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 the Extension office.

10. 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.

11. 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.

12. No lettering, including dates, is permitted on the front of the mount or on the photo. No underlay or borders are to be used.

13. No lettering, names, addresses, descriptions or personal information pertaining to the photo or exhibitor should be written on the back of the photo matte board. The back of the photo matte board should remain blank.

SECTION 1 – (18 yrs & older)

Add M to classes for 35MM

5910. Abstract

5911. Portraits

5912. Domestic animals

5913. Wildlife

5914. Scenic

5915. Plants

5916. Action

5917. Children

5918. Miscellaneous

5919. Structures

5920. Sports

5921. Special effects

5922. Computer enhanced

5923. Exhibits of snapshots for the current year taken since last year's fair. Exhibit consists of 5 snapshots mounted on white cardboard of a suitable size (as small as possible).

5924. Black & White

SECTION 2 – (12 yrs to 17 yrs)

Add M to classes for 35MM

5930. Abstract

5931. Portraits

5932. Domestic animals

5933. Wildlife

- 5934.** Scenic
- 5935.** Plants
- 5936.** Action
- 5937.** Children
- 5938.** Miscellaneous
- 5939.** Structures
- 5940.** Sports
- 5941.** Special effects
- 5942.** Computer enhanced
- 5943.** Exhibits of snapshots for the current year taken since last year's fair. Exhibit consists of 5 snapshots mounted on white cardboard of a suitable size (as small as possible).
- 5944.** Black & White

SECTION 3 – (11 yrs & younger)

Add M to classes for 35MM

- 5950.** Abstract
- 5951.** Portraits
- 5952.** Domestic animals
- 5953.** Wildlife
- 5954.** Scenic
- 5955.** Plants
- 5956.** Action
- 5957.** Children
- 5958.** Miscellaneous
- 5959.** Structures
- 5960.** Sports
- 5961.** Special effects
- 5962.** Computer enhanced
- 5963.** Exhibits of snapshots for the current year taken since last year's fair. Exhibit consists of 5 snapshots mounted on white cardboard of a suitable size (as small as possible).
- 5964.** Black & White

SECTION 4 – ADVANCED ADULT MATURE:

One who has had some training in photography.

- 5970.** Black & white
- 5971.** Color

SECTION 5 – SEMI-PROFESSIONAL:

One who has sold photos or taken photos for hire.

- 5980.** Black & white
- 5981.** Color

PEOPLE'S CHOICE PHOTOGRAPHY CONTEST

1. Theme is **CROPS** 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 60 – 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.

3. Each exhibitor is required to identify each box with two identification labels bearing Exhibitor's name, county or district, the collection class 4-H'er is enrolled in and 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.

4. The number of orders, specimens (and families where required) must be included on both of the exhibitor's box identification labels. Only one adult

insect per species can be used in the Collection Boxes and Notebook Classes, unless labeled as male or female and correctly identified.

5. Arrange specimens in groups or rows parallel to the short sides of the box. Specimens are to be arranged by Order in the box, then Family where required.

6. Two labels should be centered on the pin beneath each specimen. First (closest to the specimen) is the common name label and the second label should include date/locality. Full county name and state abbreviation should be on the second label. Collector's name (or host) on the date/locality label is optional.

7. The specimens should be collected by the exhibitor and should focus on Kansas insects. Insects may be collected from one county into bordering states and labeled accordingly. Please refer to "[Entomology Collection Exhibit Resource](#)" for full details on out-of-state insects in collections.

8. Only specimens of the class Insecta should be included.

9. Purchased insects are not to be exhibited in collections, but they may be used in educational displays.

10. Specimens of soft bodied insects such as aphids, lice, termites, etc. should be exhibited in alcohol filled vials; however, the use of alcohol filled vials should be limited to only those specimens that lose their shape when pinned, since the vials pose a significant hazard to the rest of the collection if they become loose in transit.

11. 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.

12. 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.

13. 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*)

a. Threatened or endangered species cannot be displayed in collections, BUT pictures are allowed. Pictures must be of the live species. Youth cannot kill the insects to take pictures or damage the habitat.

14. A minimum of 10 new specimens must be added and/or replaced each year.

15. Do not put the spindle-shaped bag of a Bagworm in your collections (as a female example of species.)

These bags must be cut open to determine if the caterpillar inside is a male or female. Opening the box to confirm the ID correctness could pose a significant risk to the collection.

SECTION 1 - BEGINNING ENTOMOLOGY

6010. County Fair Class Only: Collection-Display at least 7 orders, including 25 species labeled with common name, in boxes no larger than 9"x12"x3 ½".

6011. 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.

6012. 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.

SECTION 2 - INTERMEDIATE ENTOMOLOGY

6020. 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 – 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.

SECTION 3 - ADVANCED ENTOMOLOGY

6030. 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.

DIVISION 61 – 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's outside dimensions 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 outside dimensions should not exceed 18"x24"x31/2".

2. Each exhibitor is required to identify each display box by placing an identification label bearing their whole name or first initial with last 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). New specimens must be collected 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.

8. As outlined in the General Rules of the Kansas State Fair 4-H Exhibitor Handbook, "Exhibits at the Kansas State Fair are entered and displayed at the risk of the exhibitor." For projects displayed in box-style exhibits—such as Entomology or Geology—the must be opened for judging, exhibitors may choose to include a closure mechanism on the box. While closures are not required, their use will not result in a ribbon deduction. Acceptable options include Velcro strips or hook-style fasteners. Closures should not interfere with the box's ability to be displayed on a shelf and must not be lockable.

SECTION 1 – GEOLOGY CLASSES

6110. Geology. Display at least 15 rocks, minerals, and fossils collected during the current year. Exhibitor is limited to one exhibit box.

6111. Geology. Display at least 30 different rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current year.** Exhibitor is limited to one exhibit box.

6112. Geology. Display at least 45 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current year.** Exhibit limited to two boxes. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

6113. Geology. Display at least 60 rocks, minerals, or fossils, at least 5 of each. **Fifteen must be collected during the current year.** Exhibit limited to two boxes. Identify the rocks as igneous, metamorphic or sedimentary. These rock types must be spelled out on labels or have a legible key.

6114. 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 Fair conditions. Exhibitor may also exhibit in lapidary class.

6115. Mineralogy. Display a minimum of 15 mineral specimens collected in Kansas, at least 5 of which have been collected during the current 4-H year. The minerals are to be grouped by mineral class (i.e.: Carbonates, Oxides, Silicates) and at least 3 classes must be represented. The member must use one standard display box (see #1). The specimens must be labeled with the number of the specimen, date collected, name of specimen, county where collected and chemical composition (ie: CaCO₃ for calcite) if known.

6116. 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.

6117. 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 outside dimensions 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).

6120. 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.

6121. Lapidary. Display before-and-after examples of at least 3 varieties of specimens, at least 2 tumble-polished and 2 unpolished of each.

6122. 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 year.

6123. 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 year.

6124. 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.

DIVISION 62 – 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 or wheeled exhibits to ensure that the exhibits do not move once positioned. If using a wheel “chocking” mechanism, the two individual blocks should be connected together as a pair of chocks, so they do not become separated. At least one pair of chocks should be placed on each side of the trailer to prevent movement.
3. For trailer exhibits the tongue of the trailer should be equipped with a locking mechanism (e.g., padlock) to prevent the trailer from being moved by unauthorized individuals while on display. **A key for the locking mechanism should be left with the superintendent and labeled with the exhibitor’s name, and phone number.**
4. 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 them from toppling over while on display.
7. No sealed vessels are allowed. All vessels must be properly vented, for example, a water tank with a fill cap, or a drilled hole for empty chambers that allows pressure to equalize. Exhibits not properly vented will be disqualified.
8. Tanks are to be triple rinsed, dried and free of all liquid residue.
9. As exhibitors build their exhibits, appropriate PPE is required.
10. 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.

11. Repair projects having adequate original finish need not be repainted.
12. 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.
13. Display cases for small exhibits are acceptable and must be easily opened so the item can be removed and examined as part of judging.
14. 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.
15. Trailers and large exhibits (larger than 5 feet in any dimension) may be displayed outside. 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.
16. If the exhibit is powered by flammable liquids (gas, propane, kerosene, etc.) the fuel tank and fuel system should be drained and allowed to dry, to avoid spills and potential fires.
17. Electric powered (battery, corded, solar, or alternative energy) exhibits should have a primary shutoff or disconnect switch.
18. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judge’s discretion, may receive a reduced ribbon placement or disqualification.
19. The exhibitor’s name(s) and county or district must be tagged or labeled on the display.
20. 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.
21. Each exhibit information packet should include the following items:
 - a. Bill of materials for the project with associated costs shall be provided. Scrap items used may be listed as having a \$0.00 cost

b. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state.

c. If applicable, schematics or working drawings relating to the creation or repair must be provided. This requirement is not required for display boards.

d. If appropriate operating instructions.

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.

6210. Intermediate Welding Ag Repair. Repair of ag equipment with welding.

6211. Intermediate Welding Ag Fabrication. Creation of new ag equipment with welding.

6212. Intermediate Welding General Repair. Repair of non-ag equipment with welding.

6213. Intermediate Welding General Fabrication. Creation of non-ag equipment with welding.

6214. Intermediate Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.

6215. Intermediate Other Metalwork.

6216. 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.

6220. Senior Welding Ag Repair. Repair of ag equipment with welding.

6221. Senior Welding Ag Fabrication. Creation of new ag equipment with welding.

6222. Senior Welding General Repair. Repair of non-ag equipment with welding.

6223. Senior Welding General Fabrication. Creation of non-ag equipment with welding.

6224. Senior Welding Artistic Fabrication. Creation of artistic or interpretive pieces with welding.

6225. Senior Other Metalwork.

6226. Senior Smithing. A design forged with at least three different formed elements (twists, spirals, and bulbs for example).

DIVISION 63 - 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, or 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.

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. Entry of packet without an accompanying exhibit is not a sufficient exhibit.

15. Each exhibitor is required to complete the “4-H Building Block Engineering Exhibit Information Form” which is available through your local K-State Extension office or at <http://blocks.engtech4ks.com>. This form must be attached to the outside of a 10” x 13” manila envelope. Do not tie the envelope to the exhibit. All revisions of forms previously released for the division dated prior to current year are void for use and new forms must be obtained and used that are dated by the Kansas State 4-H Office for the current year.

16. Each exhibit information packet should include the following items:

- a. 1 to 5 pages of photos showing work on the exhibit, preferably from a beginning state to final or completed state. Final pictures help in determining where a part might go in case something comes loose.
- b. If appropriate operating instructions for mechanical portions of the diorama.

SECTION 1 - Intermediate (12 & Under)

6310. Interlocking brick diorama built from scratch

SECTION 2 - Senior (13 & Older)

6320. Advanced Interlocking brick diorama built from scratch

DIVISION 64 - ASTRONOMY

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

Rules

1. Telescopes entered in this division may be built from a kit or by original design. Radio telescopes are acceptable entries in the is category. Pre-finished telescopes, which require no construction or painting are not acceptable exhibits.
2. 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.
3. Each telescope exhibit must include a "4-H Astronomy Exhibit Information Form," which is available through your local K-State Extension office or at <https://www.engtech4ks.com/astronomy>. 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.
4. 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.
5. The telescope must be properly assembled and painted with a smooth and uniform finish.
6. Telescopes designed by the exhibitor must be original, not a modification of an existing kit.
7. Exhibitor's name, county or district, age, and year(s) in the project must be tagged or labeled on the telescope.
8. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at

the judge's discretion, may receive reduced ribbon placement or disqualification.

SECTION 1 - TELESCOPE

6410. Telescope made from kit.

6411. Telescope made from original design.

DIVISION 65 - COMPUTER SCIENCE

Rules

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.

2. If a safety violation is noted by the judge, superintendent, or other staff, the exhibitor's exhibit, at the judge's discretion, may receive a reduced ribbon placement or 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.

a. The USB drive should be included in a manilla envelope with the Computer Exhibit Form (found at <https://computers.engtech4ks.com> or your local extension office) attached to the front.

b. 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 script (.py), 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 <https://computers.engtech4ks.com> for a template that can be used for documenting requirements.

a. 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.

b. The project requirements section is formatted as a checklist, with the 4-Her checking off what they accomplished, making adjustments throughout their work on the project as needed.

c. 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 please provide, screenshots must be included electronically on the USB drive. A printed display screenshot must be included.

6. All electric components of micro controlled devices must be adequately covered or concealed with a protective enclosure, specifically circuit board. Paper is NOT considered an adequate enclosure or covering for electrical components.

SECTION 1 - Computer System Division

6510. 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').

6511. 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.

6512. 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 66 - ROBOTICS

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

Rules

1. Each exhibitor is required to complete the "4-H Robotics Exhibit Information Form" which is available through your K-State Extension office or at <https://robotics.engtech4ks.com/>.

2. This form must be attached to the outside of a 10x13 manila envelope.

3. Each exhibit must include a robot, information packets are not a sufficient exhibit.
4. Robots must have automated (electric, pneumatic, hydraulic, etc.) articulated structures (arms, wheels, grippers, pneumatic, hydraulic, etc.). Game consoles that display on a screen are not considered robots and should either be entered in the computer sciences division or electronics and renewable energy division. 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.
5. Robot dimensions should not exceed 2 feet high, by 2 feet wide, by 2 feet deep. If displayed in a case the outside case dimensions should not be excessive. The display case should have the exhibitor's information attached to both the base and cover, as the top part lid of the case may be separated from the display.
6. Materials including but not limited to USB drives, 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.
7. All electric components of the robot must be adequately covered or concealed with a protective enclosure, specifically circuit boards. Paper is NOT considered an adequate enclosure or covering for electrical components.
8. Robots may be powered by battery, water, air, elastic energy devices (rubber bands, balloons, etc.) 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.
9. 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.” 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.

a. Robotic arms and hand extensions (hydraulic, mechanical, or electrical) are allowed.

10. 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. The judge can be shown operations during consultation.

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 are required for all robotic exhibits. 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.

12. The exhibitor may enter their robotics project in either robotics or electric and renewable energy project if the exhibitor chooses, but not both.

13. 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.

14. 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.

SECTION 1 - Intermediate (12 & Under)

6610. Robot made from a commercial (purchased) kit (no programming, just assembly).

6611. Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.

6612. Programmable robot made from a commercial (purchased) kit.

6613. Robot designed and constructed by exhibitor or from a commercial kit, which is operated by a remote-controlled device.

6614. Junk Drawer Robotics.

SECTION 2 - Senior (13 & Older)

6620. Robot made from a commercial (purchased) kit (no programming just assembly).

6621. Robot designed by exhibitor. The robot must not be a mere modification of an existing robot kit or plan.

6622. Programmable robot made from a commercial (purchased) kit.

6623. Robot designed and constructed by exhibitor or from a commercial kit, which is operated by a remote-controlled device.

6624. Junk Drawer Robotics.

SECTION 3 - Team Robotics Project

6630. 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 67 - 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.

Rules

A. Exhibit Information for ALL rocketry categories

1. Relevant documents may be obtained from County Extension Offices or from

<http://rocketry.engtech4ks.com/>

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

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

4. All NAR documents, referenced herein can be found at <http://www.nar.org>. **If a fire “burn ban” is in effect, exhibitors are not required to launch their rocket(s).**

5. 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.

6. 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:

- a. Instructions on how to construct the rocket
- b. Up to 5 pages of pictures, pictures are to be attached to sheets of paper, from both construction and launch
- c. Documentation of any flight damage that occurred
- d. Any modifications made to the rocket except for paint scheme and decals.
- e. An additional page for altitude calculations if the space on the form is not enough.
- f. Additionally, for original design rockets, also known as “scratch built” rockets:
 - i. 5 additional pages of photos are allowed
 - ii. Documentation of how the rocket was tested for stability

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, 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/USModelRocketSportingCode>)

1. Adult supervision is defined as being under the direct supervision of someone 18 years of age or older.

2. 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:

- a. 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).
- b. The total impulse of all engines used in the rocket is greater than 20.01 Newton-seconds and less than 160.01 Newton-seconds.

3. For the purposes of Kansas 4-H a high-powered rocket is defined as a rocket that meets any of the following criteria:

- a. Weighs more than 3.3125 pounds (53 ounces or 1500 grams) at the time of launch;
- b. Uses a 'H' engine or larger to launch
- c. The total impulse of all engines used in the rocket is greater than 160.01 Newton-seconds of thrust.
- d. Includes any airframe parts of ductile metal, though, the use of ductile metal is strongly discouraged.
- e. Models powered by rocket motors not classified as model rocket motors per NFPA 1122, e.g.:
 - i. Average thrust in excess of 80.01 Newtons
 - ii. Contains in excess of 125 grams of propellant and are limited to H and I motors only.
 - iii. Uses a hybrid motor or a motor designed to emit sparks

4. 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.

5. 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.

6. 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. New Exhibits should not contain any perishable items, such as eggs.
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. Construction plans (or a photocopy) must be placed.
3. This includes original design rockets.
4. If a rocket kit has been modified structurally, notations need to be given indicating the changes made, by marking on the Rocket Exhibit Information Form and 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 paint scheme, changes/reduction in decals, and other non-structural changes are not considered modifications and do not need to be documented.
5. One or more photographs of the rocket during construction and at the launch site are required:
 - a. Photographs showing the rocket at the moment of ignition are preferred.
 - b. Photographs must be mounted on one side of an 8 1/2" x 11" page(s).
 - c. There must be at least 1 page of photos and no more than 5 pages of photos.
 - d. Include at least one photo showing rocket construction, preferably with the exhibitor included.
 - e. Do not include photos of members catching their rockets as they return to earth. This is an unsafe practice, and we do not recommend or condone this practice.
 - f. Pictures at the launch site are not required in the event of a burn ban.
6. To exhibit in this division:
 - a. The rocket must have been flown unless a burn ban is in effect.
 - b. Support rods must not extend past the tip of the highest nosecone on the model. This reduces the likelihood of eye pokes.
 - c. 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 and if applicable district, must be labeled on the base.

d. No model may be submitted on a launch pad

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

8. 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.

9. 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 or more additional pages may be added to the rocketry information pack.

10. Flight damage is to be documented by the participant on either the construction plans or, an additional sheet of paper titled "flight damage" or the 4-H Rocket Exhibit Information Form.

11. 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.

12. 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.

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

a. 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.

b. 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.

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

14. 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.

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

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

15. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's rocket, at the judge's discretion, may receive a reduced ribbon placement or disqualification. If deemed appropriate 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. 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/>

3. Fins should be rounded or streamlined according to instructions. Additionally, other exposed fin edges can be rounded, unless the directions specifically say to leave the flat. Quality fin rounding, beyond that described in the instructions, should not result in a ribbon deduction.

4. 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.

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

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

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

8. 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.

9. 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.

10. 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.

11. Non-standard surfacing (such as textured paint) may be used if directed by the instructions, this includes scratch-built rockets.

12. Models may not be judged based on their paint 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, by itself, to move a non-scale model from one ribbon placing to another.

13. “Scale models,” exhibited 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 in this class.

14. 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 many hobby stores.

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)

Scratch built or original design rockets allow youth to create 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 else could construct the original designed rocket just like a kit purchased at a store. Instructions can be as many pages as needed to convey full and complete construction techniques.
4. Original design rocket instructions should not include copies of instructions in part or in whole from existing kits 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

6710. Rocket made from kit, without pre-assembled fin units. Include plans.

6711. 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).

6712. Scale Model Rocket made from kit, include plans.

SECTION 2 - Kits (9-13 yrs)

6720. Rocket made from kit. Include plans.

6721. Scale Model Rocket made from kit. Include plans.

SECTION 3 - Scratch Built (11-13 yrs)

6730. Rocket designed by the exhibitor: not merely a modification of an existing kit. Include original plans.

6731. 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

6740. Rocket made from kit. Include plans.

6741. Rocket designed by the exhibitor: not merely a modification of an existing kit. Include original plans.

6742. Scale Model Rocket made from kit. Include plans.

6743. 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.

6750. 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. This is to align with the NAR certification guidelines.

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, and age must be labeled on the base.

SECTION 6 -Mid-Power Rocketry

6760. 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. This is to align with the NAR certification guidelines.

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 are 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 exhibitor should also hold or be attempting to attain their level 1 high power certification and should include supporting documentation of such (for example, 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

6770. High power rocket made from kit or original design.

DIVISION 68 - WOODWORKING

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

Rules

1. The plan from which the project was constructed must be included 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 by one ribbon placing (i.e., a blue-ribbon exhibit will receive a red ribbon).
3. The use of materials other than wood, screws, nails and adhesive should be kept to a minimum.
4. Projects that have unsecured glass, i.e., glass shelves, the 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/refurbished 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. Projects with “fractal burning” are NOT ALLOWED in any Fair Exhibits in the 4-H Youth Development Department. (Example - electrical burning to wood to make black linework on artwork.) This aligns with recommendations from the American Association of Woodturners.
12. During construction of exhibits, PPE (personal protective equipment) is to be worn by those in the workspace.

SECTION 1

6810. Intermediate (17yrs and younger)

6811. Senior (18yrs and older)

DIVISION 69 - 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 Extension Office or at <https://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. All electrical exhibits' wiring and connections must be accessible for examination by the judges. Sealed exhibits that cannot be opened for inspections are not acceptable.
4. Lithium batteries must be accessible or removable in exhibits for safety purposes. The exhibit cannot contain a locked compartment housing a lithium battery.
5. The National Electric Code (NEC) will apply for judging.
6. A sheet of operating instructions must be furnished and included in the manila envelope for any exhibit that is not self-explanatory.
7. Projects (classes) must be operable using only 110 or 120V AC or battery power. If battery power is required, batteries must be furnished.
8. Any project with a complexity of size or electronics must have
 - a. instructions for assembly and use and
 - b. If it requires special test equipment beyond a screwdriver or multimeter, it should be available at the time of judging for actual testing of the exhibit.
9. No hand dipping solder may be used on exhibits.
10. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor's exhibit, at the judge's discretion, may receive a reduced ribbon placement or disqualification.

SECTION 1 - ELECTRICAL AND ELECTRONICS

6910. 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.

6911. 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.

6912. 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.

6913. 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, tri-fold, display boards (36" X 48") and items may not extend beyond 12" from the back board. All displays must be self-standing.

6920. 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.

6921. 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 70 - SMALL ENGINES

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

All exhibits should involve engines smaller than 25 horsepower. Engine should have no fuel in the tank or carburetor.

Rules

1. Each Small Engine exhibit must include a “4-H Small Engines Information packet with form”. The form is available at <https://engines.engtech4ks.com>. The form must be attached to the outside to a 10”x13” manilla envelope. Place exhibit paperwork and/or any pictures 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, tri-fold, display boards (36” X 48”) and items may not extend beyond ”24” from the back board. All displays must be self-standing.
4. As exhibitors prepare their exhibits, appropriate PPE (personal protective equipment) is required.
5. 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.
6. If a safety violation is noted by the judges, superintendent, or other staff, the exhibitor’s exhibit, at the judges’ discretion, may receive reduced ribbon placement or disqualification.

SECTION 1

7010. 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 repair or maintenance; 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 in this class. Maximum tri-fold or display board size is 3’ x 4’, items may not extend beyond the 24” from the back of the display board.

7011. 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 or display board size is 3' x 4', items may not extend beyond the 24" from the back of the display board.

7012. 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. The engine should not contain fuel in the tank or carburetor. All exhibits in this division must be self-standing.